

The World of the
NEWPORT
MEDIEVAL SHIP



The World of the
NEWPORT
MEDIEVAL SHIP



Trade, Politics and Shipping
in the Mid-Fifteenth Century

Edited by
Evan T. Jones and Richard Stone



UNIVERSITY OF WALES PRESS

2018

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FOREWORD



HRH The Prince of Wales

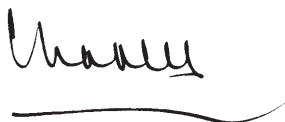


CLARENCE HOUSE

It is always a rare privilege to discover a long-lost piece of history. Having been involved in the project to recover King Henry VIII's great warship, *The Mary Rose*, in 1982, I have some idea of what it means . . .

The Newport Ship is the best preserved fifteenth-century vessel yet found. Apparently built in the Basque country in c.1449, she was wrecked twenty years later while undergoing repairs in Newport's shipyards. We can only speculate as to the ship's purpose – whether it was an Atlantic merchantman, a naval vessel, privateer or even an exploration vessel. Whatever her history, she was certainly the product of tumultuous times, around the period when the Wars of the Roses began. While this was an age of conflict, it was also a time of great opportunity, with voyages of discovery being undertaken by both the Portuguese, who were long-standing allies, as well as mariners from the Bristol Channel.

While the ship is an important artefact, it is only possible to understand how she would have been used if the world in which the vessel operated is understood. This volume helps to achieve that, by exploring the political, economic and social environment of the ship. As such, it greatly furthers our understanding of the maritime world that enabled the Age of Discovery.

A handwritten signature in dark ink, which appears to be 'Charles', followed by a long, horizontal, wavy line.

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Bob Trett is the leading authority on the history of Newport and Caerleon. He was the Museum Officer at Newport Museum and Art Gallery before he retired and has been involved with the Newport Medieval Ship project from its inception. His publications include *Newport Medieval Ship – A Guide* (2010) and *Newport – A History and Celebration* (2012). He has also written or contributed to a large number of historical and archaeological papers in journals and edited collections.



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LIST OF ABBREVIATIONS



BL	British Library
BRO	Bristol Record Office
CCR	Calendar of Close Rolls
CPR	Calendar of Patent Rolls
Foedera	T. Rymer (ed.), <i>Foedera, conventiones, literae et cujuscumque generis acta publica</i> , 10 vols (The Hague, 1739–45)
POPC	Sir N. H. Nicolas (ed.), <i>Proceedings and Ordinances of the Privy Council of England</i> , 7 vols (London, 1834–7)
ODNB	<i>Oxford Dictionary of National Biography</i>
TNA: PRO	The National Archives: Public Record Office

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MANY PEOPLE and organizations have contributed to both the publication of this volume and the conference that preceded it. While our authors have made their individual thanks in their chapters, the editors would like here to thank the chief supporters of the overall project. First among these is Gretchen Bauta, a private Canadian benefactor. She made the initial conference possible via her support of the Cabot Project (University of Bristol, 2009–). Following Mrs Bauta's funding of a part of the conference costs, she donated £13,000 to ensure that this volume could be published. Other significant contributions have come from the Friends of the Newport Ship, Newport City Council and University of Wales Trinity St David. In different ways and at different times they helped finance the conference and elements of the volume's production costs. These contributions included grants from the Friends of the Newport Ship (£1,750) and Newport City Council (£1,364) to ensure this volume could be produced to the desired technical standards.

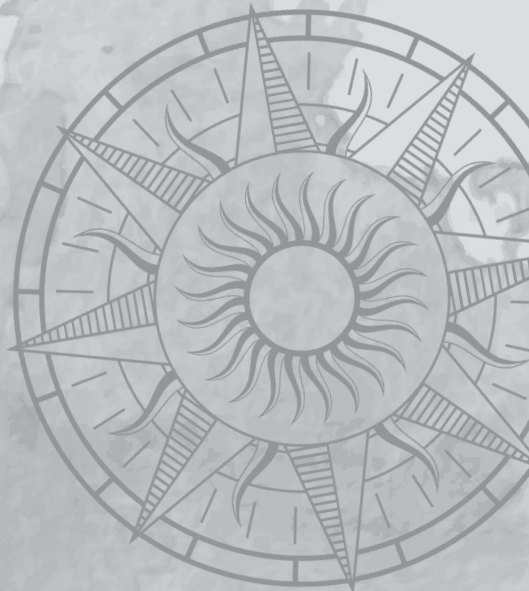
On an individual level we would like to thank HRH The Prince of Wales, for his support of our project and for writing the foreword to this volume. We also owe many thanks to Margaret Condon and Rowena Archer, who were involved in planning the conference from the outset and who contributed valuable papers to it. Margaret Condon is also due enormous thanks for her transcription of the Bristol 'particular' customs accounts of the later fifteenth century. These were employed intensively by many of the contributors, both before and after the conference. Lastly, we would like to thank Toby Jones (Curator, Newport Medieval Ship) for his enthusiasm and support of our endeavours and Sarah Lewis (Editor, University of Wales Press) for her advice and forbearance.

Evan T. Jones and Richard Stone

one

INTRODUCTION

Evan T. Jones



THE NEWPORT MEDIEVAL SHIP is the best-preserved late medieval vessel yet discovered. Built c.1450 in northern Spain, it was abandoned twenty years later while undergoing repairs in an inlet off the River Usk, on the southern edge of the town. Since the ship's recovery in 2002, archaeological investigations of its timbers and associated artefacts have revealed much about the shipping technology of the period. As discussed by Ian Friel in this volume, the fifteenth century saw a flourishing of 'big ships'.¹ The Newport Medieval Ship, with an estimated cargo capacity of 161 tons burden, was such a vessel; it would have been one of the great merchantmen of its day. Ships were the largest, most complex and most expensive machines of the pre-modern world. That made them both major financial investments and symbols of power, whether owned by the Crown, great lords or wealthy merchants. When William Canynges of Bristol died in 1474, a note added to his tomb boasted of the ten great ships he had owned; when a fifteenth-century Florentine merchant wrote about a huge carrack he had bought, he bragged that 'it can load the whole of Spain'.² The Newport Ship thus provides an opportunity not just to understand a technology, but to engage with one of the most symbolically laden artefacts of the pre-modern world. Great ships were important in their time and they remain emotionally charged objects to this day, as the popular reaction to the discovery of the Newport Medieval Ship itself illustrates.

Since it was found, nautical archaeologists have spent a great deal of time, effort and money excavating and preserving the ship, employing some of the most advanced recording techniques yet used. The three-dimensional contact digitising of every timber, followed by the three-dimensional printing of the individual vessel parts to scale, have made it possible not only to understand the ship as a wreck, but to piece it back together, virtually and as a physical scale model, in a way that would have been impossible even a few years ago. It is a unique vessel, which has been recorded and reconstructed in pioneering ways. Meanwhile, developments in the field of dendrochronology mean that the ship's timbers and those associated with its final phase of maintenance and deposition can be dated closely and their provenance identified. So we now know where the planks used in the initial construction came from, where the

ship underwent repairs and, within a year or two, when it was abandoned. When this information is combined with artefact assemblages and environmental samples associated with the vessel's life, it is also possible to say something about how and where it was employed.

The tight dating of the Newport Ship's construction and demise makes it possible to associate the vessel with both specific historical events, such as the Wars of the Roses, and broader economic developments, such as the growth in Anglo-Iberian trade during the second half of the fifteenth century. The ship operated during a tumultuous period, both in England and abroad, which resulted in major realignments to European trade and its associated shipping markets. When I first visited the Newport Ship project in December 2012, it was clear that those investigating the vessel had developed a stunningly sophisticated understanding of it as a piece of technology. Yet, as a maritime historian specialising in the trade and shipping of the Bristol Channel, it was also clear to me that less consideration had been given to the context in which the vessel operated, or to how it might have been employed. What sort of commerce would a ship like this have been involved in? How many voyages would it have made each year? To what extent would it have sailed fully laden? Beyond such economic questions there were others, to do with Newport, its region, the international setting and the general political scene, which needed more attention. What part did the port play in the region's shipping industry during this period? What was the nature and extent of the town's commercial and urban networks? What particular risks and opportunities did those involved in shipping face during the 1450s and 1460s?

A number of people were involved in discussions about how to promote research on the ship's broader context. These included Dr Toby Jones (chief archaeologist and curator of the ship), Professor Nigel Nayling (nautical archaeologist, University of Wales Trinity Saint David), Dr Rowena Archer (medieval historian, University of Oxford) and Margaret Condon (historian of Henry VII's reign and my co-researcher on the Cabot Project in Bristol). We decided that the best way forward would be to hold a conference to bring together a group of leading experts to explore 'The World of the Newport Ship'. The immediate aim was to provide an interpretive framework for the vessel, which could assist ongoing investigations and future curation. With plans to put the ship on view in a museum setting, accompanied by interpretive displays and commentaries, the value of doing this was clear. In this case, historical archaeology would not be 'a handmaiden to history', as Noël Hume controversially proposed in the 1960s.³ Rather, the historians would be 'handmaidens to archaeology'. On the other hand, there was no expectation that they would be passive assistants, merely there to show off the archaeological remains to their best effect. It was anticipated that the interplay between archaeologists and historians would generate fruitful research questions and lead to new lines of inquiry. Lastly, by bringing together a group of specialists to focus on a very particular period, place and object, in what was effectively

a mini research project, we hoped that the result might be more than the sum of its parts. That would be particularly likely if the scholars involved were able to benefit from each other's research both before and after the meeting.

What emerged from our deliberations was a plan for a two-day conference, which I was to convene at the University of Bristol. The idea was to table a set of papers that would start with the ship as an archaeological object and then work outwards. We would explore the vessel's local and regional context, before moving on to the broader international scene. In the process, the conference would take in major aspects of the ship's world. These included the development of maritime trade in the period and the nature of the international shipping market. It would also consider issues that affected the general environment in which ships operated, such as the risks posed by piracy and the nature of navigation on the Severn Sea / Môr Hafren – as the Bristol Channel was then known.⁴ The input of Iberian scholars was particularly important, both because the ship was built from timber that came from northern Spain and because the archaeological evidence suggested that it had traded with Portugal. To ensure that we had a coherent set of papers, the speakers were to be invited experts, chosen for their ability to bring distinct perspectives to the subject. That we were able to propose such a panel was a function of the early financial support received from Gretchen Bauta, a private Canadian benefactor. She acted as the initial underwriter through the auspices of the Cabot Project, which is investigating the Bristol voyages of discovery of the later fifteenth century. With Mrs Bauta's support secured, others came forward with additional funding. These included the Friends of the Newport Ship, Newport City Council and the University of Wales Trinity Saint David. This allowed us to be more ambitious in the speakers we invited and it ensured that we could make the conference accessible and affordable to a large academic and non-academic audience.

Once the speakers had been identified, Margaret Condon facilitated the scholarly endeavour by carrying out an intensive programme of transcription of the surviving Bristol 'particular' customs accounts of the second half of the fifteenth century. These accounts detail the day-to-day trading activity of the Bristol Channel's chief port, which lies just twelve miles across the Severn from the entrance to Newport's haven. England's 'particular' customs accounts provide the most detailed records of international trade for *any* country in the pre-modern era. Their value has long been recognised, with some of the Bristol records of the late fifteenth century having been published, in printed form, as early as the 1930s.⁵ The Bristol records of this period are especially suited to the study of shipping, both because they indicate where vessels were sailing and because they specify whether a vessel was a boat, a small ship or a great ship. As such, the accounts provide an outstanding source for researching the international trade and shipping of the region. Transcribing the accounts into Excel spreadsheets made it possible to conduct detailed statistical analyses of the data. In addition, the information was used to address specific qualitative questions – such as

when and where individual ships sailed, what they were carrying and who employed them. The transcriptions of the customs accounts were circulated to the speakers in draft form before the conference took place and were employed in many of the contributors' papers and subsequent chapters. The accounts used in this volume, along with a number of others, are being published online through the University of Bristol's e-repository, accompanied by detailed introductions.⁶

The conference took place on two sweltering days, from 17–18 July 2014. We had capacity for 110 delegates and 'sold out' two weeks before the meeting. Since then all the contributors have conducted further research, in many cases in collaboration with each other. The current volume is the result of this endeavour, comprising a series of chapters which had their starting point in the conference but which, in all cases, represent significant advances on the original papers.

The value of publishing conference proceedings is sometimes questioned, often rightly. Conferences are frequently disparate in nature and the scholars who give the best papers may wish to publish their results elsewhere. In this case, however, it was clear from the outset that we should produce a volume based on the papers. With the primary intent of the conference being to provide a resource for those involved in curating and interpreting the ship, it behoved us to gather the results together and make them widely available. We owed that to both the ship's present and future curators and to the many members of the public, in Newport and beyond, who have been fascinated by the vessel and who have been instrumental in driving its investigation forward. These include HRH The Prince of Wales, who has a long-standing interest in nautical archaeology. Given his interest in both Newport and the Newport Medieval Ship, he was generous enough to write the foreword to this volume. Thanks are also due to Gretchen Bauta, who followed up on her initial support for the conference with additional funding. This covered some of the later research and publication costs associated with this volume's production.⁷ Other contributors to the book's costs include the Friends of the Newport Ship and Newport City Council.⁸

Although this volume was written with a specific primary purpose, it will be of value to a much wider audience. All the chapters contain new research, the bulk of the material has not appeared elsewhere and some of the findings and methodologies employed are highly original. Taken together, they provide one of the most intensive studies of a pre-modern maritime world ever undertaken. Of the eleven chapters in this volume, ten are based on the original conference papers; that by Dr Richard Stone was a later addition, albeit he was involved from the start as a co-convenor of the conference. Three of the speakers, Dr Rowena Archer, Margaret Condon and Dr Michael Barkham, were unable to submit their chapters due to unforeseen personal circumstances. Although their contributions are not included, all three scholars fed into the wider research project. Since their research had an impact on our interpretation of the ship and its world, their findings are discussed below.

The Chapters

The volume begins with a contribution from the two lead archaeologists working on the ship: Dr Toby Jones (Newport City Council) and Professor Nigel Nayling (University of Wales Trinity Saint David). Professor Nayling's specialism lies in the field of dendrochronology, which involves the study of the tree rings found in timber both to date the wood and to determine where it came from. Much of the basic archaeological research on the ship has been published elsewhere, with the main report now in preparation.⁹ Given this, no attempt has been made to reproduce the archaeologists' technical findings. Rather the function of Jones and Nayling's chapter is to highlight and explain the main results of the archaeological work carried out to date and the interpretations of the ship's life and use that have been constructed from this research. Their contribution thus provides the archaeological 'base point' for the later chapters, which seek to interpret, contextualise and explain the data found by the archaeologists. The most important findings for current purposes have been the archaeologists' ability to date the construction of the ship to within a year or two and to show that the vessel was built using timber coming from northern Spain, most likely from, or close to, the Basque Country. Beyond this, they show that some of the patch repairs conducted on the ship's hull during the late 1450s or early 1460s were carried out using wood from Britain or Ireland. The latest of the ship's timbers seem to have been associated with its final phase of repair in Newport during the late 1460s. Both the wood used for this repair and the props employed to support the vessel during the refitting came from Britain – most probably from Newport's immediate hinterland.

The final repairs carried out on the ship were extensive, involving the replacement of some of its structural timbers. The ship had most likely been taken into the slip on a high spring tide and then propped upright. This would have allowed access to most of the hull's exterior and made it easier to conduct work inside the vessel. Before the repairs commenced it seems likely that the ship would have been emptied of any cargo, stores and moveable fittings. While undergoing repairs the vessel heeled over, apparently as a result of a collapse in the support structure on its starboard side. This resulted in the ship being inundated with water and silt. Given that ships were valuable items, its owner, or owners, may have tried to right the vessel. There is some evidence that salvage was attempted, with holes being drilled into the starboard side, presumably to drain the vessel. When it was clear that the ship could not be saved, any accessible objects that remained were removed and the hull was cut down to, or close to, the muddy bottom of the inlet. This would have allowed the recovered timber to be reused for other purposes and made the waterfront accessible by others. The later construction of a stone slipway over the remains of the ship meant that the same site could have been used by later shipwrights or merchants.

Apart from the work on the timber, Jones and Nayling discuss the environmental and small-find evidence. Perhaps the most noteworthy results of this are that the ship

seems to have visited southern Iberia during the autumn on one or more occasions, as evidenced from the flowering heather and prickly juniper found on board. This was most likely used as dunnage (packing material) to protect casks in transit, such as wine barrels. The main interest of the small-find evidence, such as the pottery fragments and coins found on board, is that little of this 'occupational' material is of British origin; Portuguese coins and ceramics predominate. This material mostly came from the bilges and probably represents accidental loss or discarded waste associated with the ship's daily life. Food remains found in the bilges are also suggestive of a southern European diet. All this implies that, even if the ship was British owned at the time it was being repaired in Newport, it had spent much time in southern Iberia.

The first two purely 'historical' chapters are those by Ian Friel and Susan Rose. These establish some of the broad context in which the ship operated. Dr Friel shows that the mid-fifteenth century was an era of 'big ships', defined as those over 150 tons burden. So, while the Newport Medieval Ship, with an estimated carrying capacity of 161 tons, would have been a large ship by contemporary British standards, it would not have been an exceptional one. Friel suggests that large vessels are likely to have been favoured because they were easier to defend and because they were well suited to the carriage of bulk cargoes on long-distance routes. The Newport Ship was a clinker-built vessel with a hull made up of overlapping strakes of wood, attached to a relatively heavy internal frame. This too was typical for its period. During the second half of the fifteenth century, ships of this type would be progressively phased out, to be replaced by smaller, carvel-built vessels, with more complex rigs. These were cheaper to build, cheaper to repair and probably more flexible to operate. All this suggests that the Newport Medieval Ship represents the final flourishing of a great medieval shipbuilding tradition, rather than it being the forerunner of the vessels that would dominate the seas of the early modern period.

Susan Rose's chapter examines the issue of maritime lawlessness to test the common notion that the seas of the period were infested with pirates. That ships did require defending is well established and, indeed, is evidenced from various items found on the Newport Ship, such as stone shot, an archer's bracer and fragments of a helmet. On the other hand, Rose shows that the seas were not as lawless as is often assumed. Those accused of piracy were rarely said to have committed acts of extreme violence and in most cases the perpetrators claimed that their actions were legal. Murderous attacks undertaken by 'full-time' pirates operating beyond the reach of the law were rare. Rose's research shows that piracy on the open sea, or seizure in port, were real risks and it is possible that the Newport Ship ended up in English hands as a result of such an act. On the other hand, more ships were likely to have been lost to the elements or human error. This may include the Newport Ship itself, given that the most plausible explanation for its final demise is that the props used to support it during renovation collapsed as a result of a strong tide, a storm, or neglect by the shipwrights.

Bob Trett and Professor Ralph Griffiths examine the local context of the ship. Trett introduces Newport as a town and he examines its role in the shipping industry. His work highlights the extent to which Newport was controlled by its Marcher lords, making it less autonomous than many English boroughs. Between 1460 and 1471 the lordship of Newport was alternately in the custody of William Herbert, who became Wales's greatest magnate, and the earl of Warwick, famous for his role as the 'King-maker' during the Wars of the Roses. Both men had personal fleets, in an unsettled era when great lords could have private navies, as well as private armies. Such ships were used for commerce, privateering and military activity. Trett suggests that the Newport Ship could have belonged to one, or both, of these magnates. For reasons of cost or security, either might have chosen to get the ship repaired in a port he controlled. A letter written by Warwick in November 1469, which Trett discusses in detail, shows that the earl ordered repairs on a ship he had in Newport. This could be the Newport Medieval Ship itself, albeit this cannot be proven. More generally, Trett's chapter shows that, although Newport had limited engagement in foreign trade, large merchantman said to be 'of Newport' were not unusual during the fifteenth and sixteenth centuries. These vessels commonly found employment servicing the overseas trade of nearby Bristol, just across the Severn.

Griffiths's chapter explores navigation in the Severn Sea. It was a busy waterway, but one known for its many obstacles. Wrecks and beachings were not uncommon, including along the coast close to Newport. It is thus possible that the Newport Ship was a beached vessel that had been brought into the town for repairs. Alternatively, Griffiths points out that there is evidence of foreign ships being taken by force in the Bristol Channel, particularly during periods of unrest. Such a seizure might explain how a Basque-built ship ended up in English hands. From this general discussion, Griffiths moves on to the more specific historical context of Newport and the Wars of the Roses. Like Trett, he highlights the potential role of Lord Herbert and/or the earl of Warwick as possible owners of the vessel. Griffiths examines all that is known about Herbert's fleet during the 1460s. This included the *Mary*, a great ship that also appears in the Bristol customs accounts of 1465/6, where it is described as the *Mary Herberd*. It is possible that this is the Newport Ship.

Moving from the local to the regional context, Professor Peter Fleming examines the urban hierarchy and commercial relations of the Severn Sea region. In particular, he shows how closely bound Newport and the other communities around the estuary were to Bristol, which was then both England's foremost provincial town and the chief port of the west. In an age when road traffic was slow and expensive, the Severn and its tributaries were important communication arteries that facilitated the movement of goods and people. By mapping Bristol's interactions using a number of sources, such as wills and apprenticeship registers, Fleming defines a region that had the Severn Sea at its heart, extending along the Welsh coast as far as Pembrokeshire and up the River Severn, deep into the West Midlands. For the people of Monmouthshire, Bristol was

a major market, a source of goods and a place to which the ambitious frequently sent their sons to learn a trade. Bristol welcomed the Welsh, many of whom thrived in the port and rose to high civic office. So, while Newport today is very much a Welsh city, in the fifteenth century it might more appropriately be considered a town on the Severn Sea, in a region headed by Bristol.

Rowena Archer's conference paper is one that could not be turned into a chapter. Her paper explored how overseas trade was affected by the Wars of the Roses, examining, in particular, aristocratic involvement in commerce. A common trope of English history is that the country's nobility had an aversion to trade. Whether or not that is true of other periods, Dr Archer demonstrated that such prejudices did not prevail during Edward IV's reign. Indeed, as a king he was not merely interested in promoting overseas trade, he engaged in it himself as a way of raising revenue. If England ever had a 'merchant king', it was Edward. His activities set the tone for the broader aristocracy. It has already been noted that the earl of Warwick and Lord Herbert had their own ships, which they used for commerce, privateering and warfare. They were not the only nobles, however, to own ships or engage in maritime commerce. In this respect, Archer's findings fit with what is known of Robert Sturmy's famous 1457/8 voyage from Bristol to the eastern Mediterranean. This was the most daring English commercial venture of the fifteenth century. The expedition involved an attempt by Bristol merchants, along with a number of aristocratic backers, to exploit the disruption caused by the fall of Constantinople (1453) by breaking the Italian monopoly over trade to the Levant.¹⁰ Given the intense engagement of aristocrats in trade during this period, it would not be surprising if the Newport Medieval Ship was noble owned.

Most of the chapters in the second half of the volume are by economic historians, exploring trade, shipping and the way that international politics affected the nature and direction of both. My chapter uses the Bristol customs accounts to examine the shipping market of this time, the ways in which ships were deployed and the structure of the merchant marine. One of my chief conclusions is that there was a long-standing imbalance between the demand for import and export freight space from England. As a result, ships sailing between the Severn Sea and the Continent almost always sailed out 'in ballast', carrying valuable but lightweight cargoes of cloth. By contrast, when returning home they were typically fully laden with bulky cargoes, such as wine, olive oil, salt and iron. One consequence of this was that shipowners had to make their profits entirely, or almost entirely, from the sale of freight space on the inbound leg of the voyage. By examining the size and composition of the ships appearing in the 1465/6 customs account, I show that the Newport Ship would most likely have been listed as a '*navis*' (great ship), a term reserved for vessels of at least 150 tons burden. Such ships were engaged primarily in the trade to Portugal during the later 1450s and 1460s. Lisbon became the principal destination for Bristol merchants following England's loss of Gascony in 1453. The main voyage of the year commenced around September, to fetch home wine and olive oil. This was typically followed by a second voyage in the spring or early

summer. While the sea passage to or from Portugal would normally have taken about three weeks, ships generally spent about three months in Lisbon between passages, waiting in port while their merchants sold their cloth and bought return cargoes. When an English ship returned home it usually spent several weeks in port, while its owner prepared for the next voyage, assembled a cargo and refitted the vessel. These long turnaround times meant that great ships rarely completed more than two voyages each year. If it can be assumed that ships being refitted at home would have been unmanned, or occupied only by a skeleton crew, this implies that the great bulk of any occupation debris that accumulated on English ships would have been deposited during their time in foreign ports. Given this, the presence of Portuguese coins and broken pottery on the Newport Medieval Ship does not prove that the ship was foreign owned; English ships are likely to have accumulated similar artefact assemblages.

Margaret Condon used the customs accounts alongside other archival sources to explore the nature of the great ships engaged in foreign trade, showing how patterns of ship acquisition shifted in Bristol and other western ports in the later fifteenth century. This included a move away from noble ownership and transfer of title by seizure, to legitimate purchase and wholly merchant ownership. In addition, Condon argued that the expansion of Basque trade during the later fifteenth century and the relationships built with individual Basque masters encouraged Bristol's merchants to engage in more ambitious commercial ventures, particularly in the Mediterranean. As such, her research underlines the extent to which an increased focus on Iberia and Iberian trade, of which the Newport Medieval Ship was a part, promoted Bristol's Age of Discovery. This was to culminate in Europe's discovery and exploration of North America, following John Cabot's famous voyage from the port in 1497. Regrettably, although Margaret Condon did produce a draft of her chapter, illness prevented her from completing it by the time required. It is hoped, however, that in future her valuable contribution will appear in print.

Wendy Childs's chapter starts by providing an overview of English overseas trade in the late Middle Ages, noting the main trade routes and commodities involved. From this she narrows down to the specific conditions of the Severn Sea's trade and the geopolitical developments of the mid-fifteenth century. This included the loss of Gascony to the French in 1453, which put a temporary blight on England's trade with Bordeaux. While this trade would recover later in the century, for most of the period in which the Newport Medieval Ship was operating, trade with Bristol's chief traditional trading partner was limited. Childs's work also highlights the importance of the pilgrim traffic, with one licence being issued in 1462 to a 400-ton vessel called the *Trinity* of Newport. This confirms that Newport did sometimes possess great ships; indeed, the *Trinity* was considerably larger than the vessel excavated. Finally, Childs explores the risks ship owners faced during these uncertain times. She examines the use of 'safe-conducts' and considers what the associated records reveal about the nature of the shipping industry in the period. For current purposes, her most significant finding

is that most of the English safe-conducts issued to foreign ships during the 1450s and 1460s went to Basque vessels. This highlights the region's role as a provider of shipping services to England in general and Bristol, in particular.

Richard Stone's submission was commissioned to augment that of Childs, by providing a detailed statistical analysis of Bristol's trade during the second half of the fifteenth century. This is based primarily on three of the surviving Bristol 'particular' customs accounts. His chapter provides hard data on trade, commodities and markets. One conclusion is that, although great ships sailed to a variety of places and carried a range of goods, Bristol's trade was dominated by a small number of commodities, carried to a limited number of places. Bristol's commerce saw some notable shifts during the second half of the fifteenth century, with a great expansion in the trade to the Spanish kingdom of Castile during the last quarter of the fifteenth century. Yet, at the time of the Newport Medieval Ship, about 80 per cent of Bristol's trade was with Portugal. Exports of fine woollen broadcloth accounted for the great bulk of English exports to Lisbon, while wine and olive oil accounted for most of the imports.

Dr Michael Barkham's paper could not, unfortunately, be turned into a chapter. An expert on the trade and shipping of the Basque Country during the early modern period, Barkham was invited because the Newport Medieval Ship was built using timber from that region. It is well known that the Spanish Basque ports, such as San Sebastián and Bilbao, were heavily engaged in the late medieval shipping industry. Their inhabitants were notable shipbuilders, great mariners and major providers of shipping services to other nations. Drawing primarily on records from the sixteenth century, which is much better documented than the fifteenth, and using local records largely unfamiliar even to native Spanish scholars, Barkham's paper showed how well organised the region's shipbuilding industry was, with vessels being commissioned by both local men and foreign buyers. The success of the shipbuilding industry was based on access to good quality timber, which was obtained from upriver plantations, and on the region's high-carbon iron, which was used to make the nails and other metalwork that held ships together. These factors allowed a relatively small region to become one of the major centres for the European shipping industry. So, it should not be a surprise that the Newport Medieval Ship was Basque built; in its era the same would have been true of a significant portion of Europe's marine.

Professor Hilario Casado Alonso (University of Valladolid) and Dr Flávio Miranda (Nova University of Lisbon–IEM, CITCEM–UP) provide a joint-authored chapter that explores Iberia's economy during the fifteenth century and the development of its maritime trade. It is well known that Spain and Portugal became Europe's leading commercial and maritime powers during the Age of Discovery. They were the first to establish colonies in the Americas after 1492 and by the end of the sixteenth century they had, between them, established extra-European trade routes that encircled the globe. What is less appreciated is that the rise of Portugal and Spain as maritime forces pre-dated the extra-European expansion, both were major players in European commerce by the

time of the Newport Ship sailed the seas. A number of factors account for their success, including the Moors' loss of control over the Straits of Gibraltar during the thirteenth century and Iberia's rapid recovery from the Black Death (1347–9). The former development allowed the growth of maritime trade between the Mediterranean and north-west Europe. Before this occurred, Iberia had been a peripheral zone on the edge of two great maritime worlds: that of the Mediterranean and that of northwest Europe. The opening of trade between the two via the Straits of Gibraltar turned Iberia into the lynchpin of a consolidated maritime economy. This encouraged the expansion of Iberia's ports, facilitated the development of the peninsula's industrial base and stimulated indigenous commercial enterprise. Such changes had turned Iberia into one of the wealthiest and most successful parts of Europe by the mid-fifteenth century. That the Newport Medieval Ship was of Iberian origin and was engaged in trade with southern Iberia is thus not surprising. Whether the ship was owned by Basques, Englishmen or even the Portuguese, much of its trade would have been conducted between Iberia and northern European ports, particularly those of England and the Netherlands.

Professor Francesco Guidi-Bruscoli's chapter concludes the volume. He broadens the context of the study still further to examine Italian engagement in trade and shipping during the Middle Ages. No evidence has been found to suggest that the Newport Medieval Ship sailed to Italy, or indeed to the Mediterranean. Yet the Italians remain relevant because they ran Europe's most extensive and sophisticated commercial networks and employed the greatest ships. As such, the chapter helps to establish the broader maritime context within which the Newport Ship operated. While the ship was a large vessel by the standards of the English shipping industry, many greater vessels sailed the seas. Most of the vessels the Italians employed on voyages to northern Europe were of at least 400–500 tons burden, while the mighty Genoese carracks, which carried alum and oriental products direct from the Ottoman Empire to the Netherlands, were well over 1,000 tons. Much of this activity was organised by official companies, such as the Venetian State Galley Fleet. This is very different from the practices of Atlantic Europe, where ships were typically owned and operated by private individuals acting either alone or in small partnerships. Employing the rich archival records that have been left behind by both the state companies and Italy's wealthy merchant houses, Guidi-Bruscoli examines the nature of the ships employed and how they were used. This focus on shipping is particularly helpful in the context of this volume because England's medieval maritime historians have conducted much less work on shipping than they have on trade.

The Value of the Newport Medieval Ship

When archaeologists are asked to explain the core purpose of their activity, they typically cite the opportunity that excavation and survey offer to investigate the past. That generally is given as the purpose of archaeology: the study of the past through

its material remains.¹¹ Such arguments work well for prehistoric archaeology because material remains are all that exist. Archaeologists working on well-documented periods, however, have often struggled to define their contribution.¹² Most often, they have focused on topics that were not well recorded in their time but are regarded as important today. In the Americas, for instance, historical archaeologists have concentrated on the formation of early colonial societies and their relations with indigenous peoples, or on the cultural life of slave plantations. Meanwhile maritime archaeologists working on historic periods have often identified their contribution in terms of their ability to throw light on poorly documented aspects of mariners' lives, such as the private trade of those employed by the East India Company (as evidenced by wrecks) or the possessions and state of health of the hundreds of soldiers and mariners who went down with the *Mary Rose* in 1545.¹³ While such lines of enquiry are surely valid, it cannot be said that great medieval ships attracted little notice from contemporaries; their monetary and strategic value ensured that they are better documented than most other aspects of the medieval world. Shipping, trade, shipbuilding, piracy and naval affairs are all activities that generated copious written records at the time, and when it comes to late medieval Europe, many of those records have survived, particularly in England. These include fiscal records, court cases, private business accounts and the administrative records of both the state and port towns. All of these sources have been used by maritime historians, all of whom would acknowledge that they have only scratched the surface of what can be done with them. So why conduct archaeological investigation on wrecks such as the Newport Ship at all? A utilitarian approach to research, which seeks merely to maximise the knowledge of our maritime past, might conclude that documentary research is more cost effective.

Concentrating solely on research outcomes, however, misses one of the most significant contributions of archaeology. Material remains provide a palpable connection to the past, which can capture and exercise the imagination in a way that documentary research seldom does. Manuscript records rarely involve much poetry, personality or character and they cannot inspire people in the way that an artefact can. When people hold an object in their hands, or even view it directly, it provides a sense of connection that a transcription cannot give. Historians know this, for even the least romantic appreciate the difference between reading a copy of a document and holding the original. Artefacts, as Jules Prown pointed out in one of the pioneering works of history's 'material turn', 'constitute the only class of historical events that occurred in the past but survive into the present'.¹⁴ Archaeologists have thus often claimed that artefacts provide 'a tangible bridge that compacts time by connecting past and present'.¹⁵ As James Deetz showed in work that has inspired a generation of archaeologists, this may be true of both small objects, such as a pot or clay pipe, and large objects, such as a house.¹⁶ Objects can be 'read' to throw light on the people that made them and they can be used to tell stories about past societies that people seem to be 'hard wired' to connect to. How else can one explain why people undertake billions of visits each year

to view objects, works of art, or monuments that might be examined in greater detail via high-resolution digital images viewed on an electronic device?

It is the sense of connection a great physical object can inspire that explains the campaign to excavate, investigate and display the Newport Medieval Ship. The work done on it was not undertaken because anyone planned to do it and there was initially little enthusiasm on an official level for carrying it out. Rather, the stimulus came from below, from the people of Newport. This Welsh city is best known as a product of the industrial revolution. Yet, while the people Newport are justly proud of their nineteenth-century heritage and the role their city played in the industrial era, they are also aware that their roots go much deeper. Newport Castle, along with other medieval survivals, are reminders that it was a significant town and port during the Middle Ages. For as the name implies, Newport was established as a trading centre and waterborne commerce has always been central to its identity. This may be why the discovery of the ship promoted such excitement; it provided a link to a medieval past of which people were aware, but of which few tangible elements remained. Moreover, this was not just a little coastal vessel; it was a great merchantman, neatly caught by a steel cofferdam and readily perceivable as a large ship (see Fig. 2.1). This helped to ensure that, once discovered, the vessel became, not just an archaeological find, but a relic of the city's medieval past, something to be preserved and cherished.

Although the Newport Medieval Ship can tell us much about nautical technology, with a precision that can seldom be obtained from the written record, its chief value may thus be as an artefact that has captured the popular imagination and helped engage a community with its past. If it has become an icon for Newport, this is something that historians and archaeologists should respect in its own right. On the other hand, that does not mean that the ship should be placed in a modern version of the medieval reliquary, simply to be cherished and venerated. Indeed, that is not something that the local community desire. Both they and the academics involved in the project recognise the value of the ship as a tool for engaging the broader public with the medieval maritime world.

Ships have always captured the public imagination and they still do today. They have meaning for people and this is a meaning around which historians, archaeologists and heritage professionals can gather. For historians to have acted as 'hand-maidens to archaeology' in this project is thus not a demeaning role. Research of any type, be it historical or archaeological, has no purpose if not communicated, and while much of this communication occurs within academia, it has become recognised increasingly that one of the jobs of historians is both to communicate their findings to a wider public and to explain how they reached their findings. In writing this volume, the contributors hope that they will be able to communicate directly and indirectly with multiple audiences. As academics, our primary audience is other researchers, be they historians, archaeologists, students or curators. For them, the chapters in this volume should serve to assist the interpretation of the ship and help

to formulate new research questions. On a broader level, the volume provides a substantial set of original perspectives which, taken together, provide a more holistic interpretation of a fifteenth-century maritime world than any achieved previously. As such, it opens a window on the nature and operations of an industry that was instrumental to the success of both the Age of Discovery and the subsequent commercial, maritime and imperial expansion of Europe.

Beyond the academic audience, we hope that this volume will also be accessible to the general public. Having driven the Newport Ship project forward, we feel that the public have a right to learn more than our broad conclusions, as synthesised by current or future curators. The public have a right to our detailed findings and they have the right to learn our methods. As academics, we thus see this as an opportunity not just to tell the public what we have learnt, but to show them how we *do* history, how we *do* archaeology. For as teachers and researchers, this is at the core of our practice.



Notes

- 1 Ian Friel: a point supported by my own work on the fifteenth-century customs accounts.
- 2 Canynges' ships and their sizes were recorded by the antiquarian William Worcestre, following a visit in *c.*1478 to St Mary Redcliff, where Canynges' tomb is located: John H. Harvey (ed.), *William Worcestre: Itineraries* (Oxford, 1969), pp. 130–3. This suggests there was already a record of Canynges' ships by date, albeit the current plaque above his tomb appears, on stylistic grounds, to be seventeenth century. For the reference to the Florentine ship, see Francesco Guidi-Bruscoli's chapter in this volume, n. 31.
- 3 Noël I. Hume, 'Archaeology: Handmaiden to History', *North Carolina Historical Review*, 41/2 (1964), pp. 214–25.
- 4 The western limits of the 'Severn Sea' extended somewhat further than the Isle of Lundy, which is typically taken as the limit of the Bristol Channel today. The Tudor geographer Roger Barlow, who knew these waters well, defined the 'see called severne' as all those waters east of the Scilly Isles 'betwene the principalitie of wales and englande'; E. G. R. Taylor (ed.), *A Brief Summe of Geographie*, by Roger Barlow (Abingdon, 2016), p. 32.
- 5 E. M. Carus-Wilson (ed.), *The Overseas Trade of Bristol in the Later Middle Ages* (Bristol Record Society Publications, Vol. VII, Bristol, 1937). A number of the sixteenth-century accounts have also been published, both in print and electronically in EXCEL databases: Susan Flavin and Evan T. Jones (eds), *Bristol's Trade with Ireland and the Continent: The Evidence of the Exchequer Customs Accounts* (Dublin, 2009); <http://www.bris.ac.uk/Depts/History/Ireland/datasets.htm>. Several earlier scholars have made significant use of the fifteenth-century Bristol customs accounts, including E. M. Carus-Wilson, 'The overseas trade of Bristol', in E. Power and M. M. Postan (eds), *Studies in English Trade in the Fifteenth Century* (London, 1933); W. R. Childs, 'Ireland's Trade with England in the Later Middle Ages', *Irish Economic and*

- Social History*, IX (1982) and 'The Commercial Shipping of South-western England in the Later Fifteenth Century', *Mariner's Mirror*, LXXXIII (1997); D. H. Sacks, *Trade, Society and Politics in Bristol, 1500–1640*. 2 vols (New York, 1985).
- 6 In future we also hope to publish the records in printed form as a Bristol Records Society volume.
 - 7 In January 2015, Gretchen Bauta donated £13,000 towards the cost of producing the volume and carrying out further research, transcription and publication of the fifteenth-century customs accounts for Bristol.
 - 8 The Friends of the Newport Ship donated £1,750 towards the production costs, and Newport City Council £1,000.
 - 9 See Toby Jones and Nigel Nayling's chapter in this volume for references to published works.
 - 10 Stuart Jenks, *Robert Sturmy's Commercial Expedition to the Mediterranean (1457/8)*, Bristol Record Society, 58 (Bristol, 2006), pp. 16–28.
 - 11 Clive Gamble, *Archaeology: The Basics* (2015, third edition), p. 2.
 - 12 Alan Mayne, 'On the Edges of History: Reflections on Historical Archaeology', *American Historical Review* (2008), 113 (1), pp. 93–118.
 - 13 Joe Flatman and Mark Staniforth 'Historical maritime archaeology', in Dan Hicks and Mary C. Beaudry (eds), *The Cambridge Companion to Historical Archaeology* (Cambridge, 2006).
 - 14 Jules David Prown, 'The truth of material culture: history of fiction?' in Steven Lubar and W. David Kingery (eds), *History from Things: Essays on Material Culture* (Washington, 1993), pp. 2–3.
 - 15 Mayne, 'On the Edges of History', p. 102.
 - 16 James Deetz, *In Small Things Forgotten: The Archaeology of Early American Life* (New York, 1977).

two

THE NEWPORT MEDIEVAL SHIP

Archaeological Analysis of a
Fifteenth-Century Merchant Ship¹

Nigel Nayling and Toby Jones



THE REMAINS of a well-preserved, large wooden ship were discovered buried below the right bank of the River Usk in Newport in the summer of 2002 (see Figure 2.1, colour section). During building works for a new theatre and arts centre, a sheet pile cofferdam was installed to enable the construction team to safely remove sediment in the planned area of the theatre's subterranean stage and orchestra pit. While digging down through this sediment, several archaeological features were noted, including a stone slipway and a wood-lined drain. Underlying all of this was the articulated structure of the ship, along with hundreds of loose timbers and artefacts. The discovery of the vessel came as a surprise, and building work in the immediate area was temporarily suspended to allow archaeologists time to examine and record the remains.²

The Ship 'As Found'

Traditionally, nautical archaeologists have sought to segregate objective description of the usually incomplete and distorted remains of the ships they have excavated from subsequent interpretation and reconstruction. This, at least theoretically, allows the reader to critically assess whether a proposed reconstruction is credible and to be able to discriminate between what was actually observed and/or recovered during excavation and post-excavation documentation, and hypotheses proposed by excavators. In this section, an attempt is made to provide such an objective description of the remains as found by the excavators within a purely happenchance exposure, resulting from the contractors' excavation of an approximately rectangular hole some 22 metres by 10.5 metres, the extents of which were mostly defined by steel sheet piling. A small extension of these artificial limits allowed recovery of the remains of the bow of the ship, but a significant, and unknown, part of the after starboard side and stern remain buried between the excavations and the riverside wall.

The excavated remains of the ship measured some 23.20m from the forward surviving end of the stem (the timber scarfed to the forward end of the keel forming the curving bow of the ship) to the aftmost exposed part of the keel where it was cut by the

sheet piling. The remains were at their widest near the midships sections of the ship, where they measured some 7.65m wide. The ship lay with its bow pointing landward (i.e. upstream within a presumed inlet or small, infilled tributary of the river Usk), sloping slightly downwards towards the stern and heeled over slightly on to its starboard side. In contrast to the port side, the starboard side was noticeably distorted, having collapsed. This appears to have been at least partly due to the collapse of an underlying structure on to which the ship had been manoeuvred when it arrived in Newport.

The ship had clearly been subjected to a determined effort at salvage through the dismantling of its upper works and the cutting away of as much of the hull as possible. The surviving edges of the hull, whether the ends of framing timbers or the edges of the clinker hull planks, exhibited the hack marks of axes used to cut away timbers, presumably down to the point where the ship had become buried in mud. Inside and around the ship, hundreds of loose timbers and artefacts were found. The majority of these loose timbers appear to have been parts of the ship which had fallen into the mud during the dismantling process and never been recovered (see Figure 2.2, colour section).

The surviving intact outer hull of the ship comprised a keel made from a single piece of beech; the lower part of the oak stem scarfed onto the forward end of the keel; up to seventeen strakes (runs of planking) of overlapping hull planks on the port side and thirty-five strakes on the starboard side. This outer hull, which would have been built first, was fastened together in lapstrake (clinker) form, with iron nails and roves (washers) used to fasten the overlapping strakes together. Framing timbers consisting of oak floor timbers and futtocks scarfed together to form continuous frames were found closely spaced in sixty-three frame stations. These had been carefully rebated on their outboard faces to ensure they fitted closely to the outer hull, to which they were fastened with both oak treenails (pegs) and spike iron nails driven from outboard.

The surviving inner hull comprised an oak keelson rebated over the frames along the centreline, with a swelling near amidships into which a rectangular rebate had been cut to form the step for a central mast. The keelson was braced to the lowest run of oak stringers with ten pairs of chocks. Eight runs of stringers survived on the starboard side and three on the port side. The uppermost of these on the starboard side exhibited three swellings with rebates to join to cross beams and knees, none of which were found in place. Ceiling planks nailed to the framing timbers between the stringers, and bilge boards placed between the chocks and between frames at the seventh starboard stringer, show that the hold had been carefully lined to separate cargo from bilge water. At the forward end of the ship four riders were clasped over the stringers and fastened to the underlying frames, in order to strengthen this critical area.

Both within and around the ship numerous detached timbers, many of which were quite clearly ship timbers, included composite beam/knee assemblages, deck planks and beams (ledges and carlings), hatch covers, timber roughouts and staves. Rigging elements including deadeyes and pulley blocks, and numerous smaller artefacts were

also recovered from within and around the ship. Sediment samples, particularly those taken from within the hold of the ship, have been analysed to inform our understanding of life on board and the nature of the cargoes carried by the ship.

Dating, Origin and Deposition

Based on dendrochronological analysis of the outer hull planks, the primary construction of the ship can be dated to some time after AD 1449.³ These planks were radially split from oak trees growing in the upland interior of the Basque coast in north-eastern Spain.⁴ Whilst it is likely that the ship was built somewhere in the local coastal area, it is possible that the timbers may have been traded further afield. Ongoing research into increasing the range and resolution of tree ring data sets in the region should allow for further refinement in pinpointing the origin of the timbers (including the framing) used to construct the hull. A French coin, found purposely inserted into the keel at its join (scarf) to the stem, was minted between May and July AD 1447 (see Figure 2.3, colour section).⁵

Repairs, in the form of tingles (patches) of oak planks attached to the outside of the hull, have provided evidence, again through dendrochronological analysis, that the ship was operating (and being repaired) in the late AD 1450s or early AD 1460s. Some of these repairs were made with timber grown in the British Isles and may be indicative of the ship being repaired in a British port.

The ship was brought into Newport for repairs/refit in the late AD 1460s, with a cradle structure found under the ship being built sometime after the spring of AD 1468 (see Figure 2.4, colour section). Loose timbers found within and above the hull of the ship were dated to the winter of AD 1467/8. The ship appears to have been in the process of being refitted, as certain timbers were found temporarily fitted (but not permanently fastened) to the hull. A timber used in the bow of the ship as a rider was felled sometime between AD 1461 and AD 1490, while a disarticulated beam/knee complex has been dated to the winter of AD 1465/6. While it is currently not possible to provide more precise dates for the building and deposition of the ship, in general terms it was likely in operation between *c.*AD 1450 and *c.*AD 1470.

Construction

The hull of the Newport Ship was constructed in the lapstrake tradition using radially split oak (*Quercus* spp.) boards. The keel was made from beech (*Fagus sylvatica*) and deeply rebated to accept the garboards (first run) of hull planking. The planks were overlapped and attached to each other using regularly spaced wrought iron clench nails driven through and fastened using sub-rectangular wrought iron roves. Framing timbers made from oak were shaped to fit the stepped surface of the planking shell and fastened with oak treenails. A mixture of iron forelock bolts and treenails was used to attach selected larger timbers together like the beams and knees.

The timbers used to construct the vessel planking were fairly consistent in terms of size and quality. The oak hull planking was straight-grained and ranged in length from 1.3–4.5 metres, with an average plank length of 2.7 metres. The planks averaged 212mm in width and 25mm in thickness, with the plank widths along the strakes narrowing towards the bow and stern.

The vessel was heavily framed with large oak timbers, with each frame station consisting of a floor timber and up to three surviving futtocks on each side. The vessel had flat floor timbers in the amidships area and V-shaped floor timbers in the bow and stern areas. Limber holes had been cut in the outboard faces of all the floor timbers in order to allow water to flow towards the pump(s). Floor timbers in the amidships area averaged 3.2m in length, with average scantlings of 211mm moulded by 256mm sided.

Overlying the framing were a mixture of ceiling planks, stringers and bilge boards. Many of the ceiling planks and bilge boards had minimal fastenings, suggesting that they were occasionally removed in order to clean out accumulated material in the ship's bilges. In contrast, the stringers running fore and aft were fastened to the underlying floor timbers with rebated iron spike nails and treenails. There are also several plugged holes in the planking which have been interpreted as drain holes for when the ship was heeled over (careened) and rinsed out.

All the scarf joints and lands were made waterproof with a mixture of wood tar and mixed animal hair.⁶ Isotopic research of tar samples from the original construction of the vessel suggests a Basque origin for the material, while samples taken from known repairs appear to be of a Mediterranean (Southern Iberian?) origin. The animal hair used appeared to be a by-product of the tanning industry and included sheep, cow, goat and horse hair. The mixed nature of the animal fibre might suggest that the use of a variety of sources was necessary to acquire enough material for luting such a large vessel. Given the probable upland origin of some of the sheep's wool, Walton Rogers suggests that the luting materials 'were collected in a port with a hilly or mountainous hinterland'.⁷

Reconstruction and Interpretation

Any attempt to reconstruct a complete ship from its incomplete and distorted archaeological remains requires the synthesis of several lines of enquiry to supplement the direct archaeological evidence. Thus, in addition to detailed documentation of the recovered timbers from the ship, reconstruction was also informed by other archaeological discoveries of broadly contemporary ship finds of similar shipbuilding tradition and by iconographic evidence.

The hull timbers were recorded using three-dimensional contact digitisers and computer-aided design (CAD) software.⁸ A type of three-dimensional printing, called additive manufacturing, was used to create a 1:10 scale model of each timber and these

pieces were reassembled in the original order of construction using original fastening holes. The resultant scale model was used as the foundation for the physical reconstruction of the original hull form (see Figure 2.5, colour section).

In developing a hypothetical reconstruction of an archaeological ship find that goes beyond the production of models of the recovered remains with, where possible, the removal of distortion, it is necessary to consider other archaeological evidence for broadly contemporary ships of similar construction and shipbuilding tradition. Later medieval lapstrake-built ship finds have been relatively infrequent archaeological discoveries, making the Newport Ship internationally important, but also limited in terms of close archaeological parallels.

Similar broadly contemporary ship finds include Aber Wrac'h I, found in Brittany and tentatively dated to *c.*AD 1435, the probable mid-fifteenth century wrecks from Urbietta near Guernica, Spain; the Aviero A vessel from the North/Central coast of Portugal; and a recent find of a fragment of lapstrake hull, dubbed *Barceloneta I*, found on the Mediterranean coast at Barcelona. A clinker-built ship was briefly exposed intertidally at Barreiros on the Galician coast of Spain and limited recording, sampling and dendrochronological analysis undertaken. The precise date of this site is presently unknown, although it exhibited a number of structural features common to the Newport Ship. This direct comparative archaeological evidence needs to be complemented by iconographic evidence such as that seen in ecclesiastical architecture (e.g. the ceiling boss of a clinker-built ship in Bayonne cathedral) or decorations (such as the ship depiction in the church of Zumaia, Gipuzkoa, Basque Country). This proves particularly helpful in addressing reconstruction of structural elements of archaeologically recovered ships which rarely survive, such as upper works, masts, spars and rigging.

Taking into consideration this additional archaeological and iconographic evidence for contemporary clinker-built ships, the physical 1:10 scale model was extended using long plastic ribbands. A reasonably faired complete hull form was achieved, which was then digitised (laser-scanned). This digital model of the complete hull was then used as a starting point for repairing the localised damage and twist still present in the model, in an effort to create an ideal hull form representing the ship when it was newly built. Additionally, a detailed catalogue of the artefacts related to the rigging was produced by McCarthy, which provided clues about how the ship was rigged.⁹

The first widely published reconstruction of the ship was described as a minimum reconstruction and comprised only a single deck, and minimal bow and stern castles.¹⁰ Further research has produced a more credible reconstruction, more consistent with contemporary iconography, with two decks and rigging comprising a square mainmast, a forward mast and after mizzen mast.¹¹ This capital or principal hull reconstruction was created by employing innovative digital modelling methods, and sophisticated software was used to determine the cargo capacity, seakeeping characteristics and performance of the vessel in a variety of situations.

The Newport Ship was reconstructed as a large merchant vessel with two full decks and a bow and stern castle. The ship had a displacement-type hull with a deep draught and full body with flat floors in the amidships area. The vessel had a straight (flat) keel and both a fine entrance and a fine run. The vessel had a transom stern and a centre-line rudder. It originally measured 30.6 metres in length (between posts), and 35.6 metres in length at the extremes (see Figure 2.6, colour section). The vessel had a beam of 8.9 metres and a draught of 3.9 metres and a corresponding freeboard of 2.5 metres. The vessel had three masts, with the mainmast being stepped directly into a mast-step/keelson. Hatches through the main deck and lower deck would have allowed loading of ballast and cargo using the yard or quayside cranes where available.

The hull was tested as an empty shell, ballasted, and fully laden, all states that it would have regularly experienced during its working life. The principal reconstruction of the vessel was found to have an estimated cargo capacity of 174.5 metric tonnes, with an additional 74 tonnes of ballast. Ballast (or a suitably heavy/dense cargo) would have been required for the vessel to sail safely and effectively. The total lightship weight of the ship, that is, the weight of the timbers, fasteners and rigging, would have been around 131.5 tonnes and the ship would have had a total displacement of 392.5 tonnes. The estimated total useable volume for cargo would have been 225m³. This volume would be reduced to approximately 170m³ if a centreline walkway some 900mm wide was left clear, in order to maintain the vessel and cargo while underway. However, for all calculations in this paper, the total useable volume for cargo has been set at 225m³.

The reconstruction suggests that the vessel had an estimated mainmast height of 23.5m, with an 18m long yard. The main sail was estimated to be *c.* 16.25m x 16.25m, with a total area of 254.6m², the weight of which (when coupled with the yard and various rigging) would have required at least 31 mariners to handle. The sail area on the foremast was estimated to be 63.6m², while the sail area of the mizzenmast was estimated to be 76.5m². The total amount of sail area was estimated to be 394.7m². This total amount of sail could potentially propel the ship fully laden at a speed of up to 5.4 knots when sailing on a broad reach in a Force 3 wind (blowing 9–10 knots). When sailing downwind the vessel could potentially attain 4.6 knots, while sailing upwind, it could potentially reach 4.3 knots; however, it is not known how close to the wind the ship could have sailed. Although considerably smaller than the mainsail, the additional sail areas of the fore and mizzen masts would improve speed and manoeuvrability and enhance the windward sailing abilities of the ship.

It should be noted that the performance numbers are computer-modelled statistics, and are based on the hull being clean and smooth, a characteristic rarely, if ever, achieved in the medieval real world. The calculations also assume that the sails are capturing and transferring 50 per cent of the power from the wind into the hull. The above-mentioned figures represent the peak performance that could theoretically be

attained. In reality, the performance was probably considerably less efficient. The only way to truly understand the upwind sailing performance of this type of vessel would be to build a full-scale replica and conduct sea trials.¹²

Evidence for Use and Life on Board

Extent and Nature of the Cargo Hold

While no *in situ* bulkheads or decks were discovered, numerous elements or indirect evidence of such elements were uncovered. Through careful analysis and comparison to other archaeologically studied shipwrecks, it was possible to reconstruct the interior of the vessel with a degree of confidence. There was some level of compartmentalisation, as evidenced by the presence of stanchions and numerous mortises (together indicating the location of internal divisions) on the extant parts of the inner hull. The presence of such divisions of space is also supported by the possible patterning of various environmental residues (see environmental analysis section below).

The nature of the decks and hatch covers can also be deduced. The hatch covers were remarkably similar to the ones found during the excavation of the *San Juan* in Red Bay. Fitted hatch covers with caulked seams, like those found in Newport, imply a watertight deck. The hold of the ship was lined with a combination of ceiling planking, stringers and bilge boards, from the centreline up to the fourth stringer on either side. These boards provided a dry surface on which to place the ballast and cargo. Bilge boards were used to cap the spaces between the braces near the centreline mast step/keelson, while similar boards were used to seal the inter-frame spaces above the fourth stringer on both the port and starboard sides of the vessel. A dry hold was achieved and maintained by the use of a bilge pump located in a purposely cut pump hole immediately aft of the mainmast step. Such a comprehensive dry hold would have ensured that high value cargo, such as wine in casks or iron bars, or perishable cargo, like fruit or nuts, was protected from the weather and salt water.

Loading and Stowage

The Newport Medieval Ship probably carried substantial amounts of cargo in casks, as evidenced by the numerous cask parts (staves, heads, bungs and hoops) recovered during the excavation. Cask staves, representing a variety of sizes of both wet and dry containers, were found (although no complete vessels were recovered). As such, there was no discernible pattern of stowage visible. Casks were readily reusable, with those found on the sixteenth-century Drogheda wreck shown to have first held wine, and later salted herring.¹³ Empty casks destined for reuse might have been knocked down for efficient transport, with cask components repaired or replaced as necessary.¹⁴

Full casks would have been lowered, using ropes and tackle slung from the yard, down through the hatches and carefully manoeuvred into position. The main hold had a height of 2.58 metres when measured from the ceiling planking to the underside of the main crossbeams. Given that a typical wine tun was in the region of one metre in diameter, it would have been possible to stack the casks in two tiers in most areas of the hold. The remaining areas could have been filled in with smaller casks. The first layer of casks were called sleepers, while subsequent higher layers were called riders. The sleepers would have been positioned on a thick bed of dunnage made from plant material and wood and secured using canting coins (or quoins), which were wooden wedges placed under the quarters of the barrels to hold them in place during the voyage (described as 'Canting-Coines' in Smith's *Seaman's Grammar*).¹⁵ In this position, the casks were considered 'bilge-free' and protected from shocks through the hull.

The quarters were the strongest part of the casks, while the area around the bung was the weakest. Coins also served to keep the bilges of the barrels from touching. The casks could be stacked in several layers, always with the bung facing up, with the coins helping to disperse the load through the quarters of a cask on to the quarters of the underlying casks and ultimately into the floor of the vessel. Dunnage was also placed between the casks and the sides of the ship. The discovery of nearly 160 canting coins, made of softwood (alder –*Alnus* spp.) and of broadly consistent size and shape, suggests that the Newport Ship could have carried a large cargo of consistently sized casks in rigid/stable tiers.¹⁶ A number of cork (*Quercus suber*) bungs were recovered during the excavation. Cork bungs would have been used to seal casks and other containers. Small sheets of cork oak were also found, and these might represent remnants of cargo.

Computer modelling of the reconstructed vessel has shown that the main hold area could comfortably fit in 118 tun-size casks, 22 half-tun casks (pipes/butts) and 130 quarter-tuns (lasts), for a combined equivalent total of 161 tun casks (See Figure 2.7, colour section). If these were filled with wine, the total cargo weight (including the weight of the casks) would be c.143 tonnes (assuming a tun = 806 litres, with the tun cask measuring 1,230mm in height and 1030mm in diameter).¹⁷ Pipes/Butts were modelled at 1065mm in height and 422mm in diameter, with a corresponding volume of 422 litres. Last (quarter) casks were modelled at 710mm in height and 514mm in diameter and had a volume of 124 litres.¹⁸

A crew of forty sailors and twenty merchants would have required a substantial amount of provisions and water, even for a relatively short journey. For example, assuming that each sailor would consume 4.88kg of food and water a day (and three times that amount for a merchant),¹⁹ a fourteen-day voyage would have required nearly seven tonnes of provisions (6,830kg). Allowing each sailor to have 10kgs of personal luggage and merchants 20kgs would add another 800kg. Assuming each person averaged 80kg in weight, that would add another 4,800kg. Thus, the weight of the crew and provisions would add up to nearly 12.5 tonnes (12,429.59kg) for a trip with a duration of two weeks.

Using a figure of 12.5 tonnes for the weight of the crew and their provisions/luggage, it is likely that the ship had total available cargo capacity of 174.5 tonnes. It is also possible that the ship could have carried a mixed cargo, including additional passengers. The layout of the ship was such that a full load of dense cargo, like iron or wine, could be carried completely in the main hold, leaving the area between lower deck and main deck free to hold the crew, their supplies and any passengers. For stability reasons the densest cargo (or ballast) was loaded along the centreline of the vessel and spread towards the wings (areas to the port and starboard of the centreline) in the amidships area. Such a cargo was not necessarily carried right at the bottom of the hold, but could be elevated, using dunnage, so that the ship was both stable and responsive in rough weather.

The use of 'paying' ballast was a possibility if it was suitably dense, such as building stone, roof tiles or iron ore. Wine in casks would not be a suitable choice as ballast as it would have raised the centre of gravity of the cargo to the point of making the vessel unstable.

The Artefacts and Environmental Evidence

During the excavation of the ship, numerous small finds and artefacts relating to life on board the vessel were recovered. In addition to these finds, bulk environmental samples were taken from around the excavation area, as well as specifically from the inter-frame spaces of the ship, where material related to the use-life of the vessel accumulated. These environmental samples were processed to recover plant, animal and insect remains. Analysis of the artefacts and environmental evidence recovered has the potential to provide evidence of shipboard living conditions and diet, as well as clues as to the nature of previous cargoes and the geographical sphere of operations. That said, it is not always possible to differentiate between those items that were carried as cargo and those that were specifically carried as supplies for the crew. Factors such as spillage and pilferage can mask the true origin or purpose of a commodity. Likewise, an issue such as differential preservation of material in a waterlogged archaeological site needs to be considered, since certain foodstuffs or cargo residues may have readily dissolved during the site formation process, leaving little or no evidence of their presence. A description of selected finds and the results of the environmental processing are summarised below.

Artefacts

A variety of well-preserved artefacts, including coins, shoes, textiles, ceramics, wooden artefacts and numerous other items identified as the personal effects of crew or passengers were recovered during the excavation. Items relating to conflict, including stone shot, an archer's wrist guard and fragments of a helmet were also discovered. Archaeologists

discovered a total of six coins (five Portuguese and one French) and one jetton (from Nuremburg, Germany). All date to the fourteenth or fifteenth centuries except for the jetton, which has not been dated. Among the Portuguese coins are four *ceitils* of Afonso V (1438–81) and one *real preto* of Duarte I (1433–8). It is likely that these coins were in use by the crew and were lost during voyages, becoming trapped in the bilges of the ship. The jetton, made from brass or latten, a copper alloy common in the medieval period, was a counter used by merchants for account purposes during transactions.

A silver French coin was found purposely embedded in the keel of ship (Figure 2.3, colour section). The uncirculated *petit blanc* coin of Louis II, Dauphin de Viennois (later King Louis XI of France), was minted at Crémieu in France between May and July 1447 and was found hidden in the joint between the keel and stem post.²⁰ It was placed there during the construction of the vessel, likely as a good luck charm. The coin displays a cross along with the motto ‘Blessed be the Name of the Lord’ on the reverse side, which was found facing upwards. Coins were commonly placed in various places within vessels, with such practices dating back to at least Roman times.²¹

A substantial amount of leather was recovered during the excavation, with numerous shoes and fragments identified. Parts of eight different shoes, including pointed-toed poulaines, and three boots were found. Some of the shoes appear to have been made from reused leather that was originally from the upper portions of boots. Such reuse was common during the medieval period, with boots and shoes being resoled or repaired several times, until no longer economically viable.²² A variety of adolescent and adult sizes are represented, with footwear for both right and left feet being identified (although no matching pairs were found). Quantities of waste leather were also found in the bow of the vessel, which has been interpreted as possibly representing debris produced by a shoemaker or cobbler and dumped inside the vessel when it was abandoned.

A variety of textile fragments were recovered, primarily comprising well-spun natural coloured wool woven into heavy, coarse cloth. Such durable cloth would have made ideal work clothes for mariners. All the recovered textiles were woven using a 2/2 twill weave or a tabby weave, with several examples created with darker stripes surrounded by a lighter background. Many of the textile fragments appear to have been used in a secondary function, such as plugging leaks within the vessel.²³

Numerous fragments of pottery were recovered, with most of the sherds being Portuguese Mérida-type ware (also known as Iberian Micaceous Redware). The sherds represent a variety of forms, including jugs, pitchers and lidded jars. Fabric analysis has shown that some of the objects were from the Alentejo area of southern Portugal. The wide range of forms and the presence of sooting (from use in the galley) has led to the suggestion that the ceramics assemblage represents items used on board the vessel, as opposed to cargo.²⁴

A range of well-preserved wooden and composite artefacts were recovered, including wooden bowls, combs, a knife handle, an awl and a carved gaming piece. Several ash (*Fraxinus excelsior*) bowls were found, including one with scratched symbols on

the base, which may indicate ownership. Several boxwood (*Buxus sempervirens*) combs, including a double-sided one with both coarse and fine teeth, were recovered. These combs are similar to ones found on the Cattewater wreck (sixteenth century AD), *Mary Rose* (AD 1545), *San Juan* (AD 1560) and *Trinidad Valençera* (AD 1588). Among the numerous wooden small finds, archaeologists found a boxwood knife handle, a wooden awl and a turned and carved wooden gaming piece, which could have been used for board games such as merels, *tabula* or backgammon.

Items relating to conflict and defence were found during the excavation. A total of five stone shot, ranging from 55mm–82mm in diameter, were recovered. These would have been used in wrought-iron breech-loading weapons, although no guns were found during the excavation. A finely worked and beautifully preserved archer's wrist guard, or bracer, was found. The bracer, made of cattle hide and calf skin, is stamped with the word *amilla* (Latin for bracer) and shows signs of use wear, where a bow string repeatedly struck it. Fragments of an iron helmet decorated with copper alloy strips were also found. The decorative strips were engraved in Gothic Latin script with a biblical verse imparting good luck to the wearer.²⁵

The Environmental Evidence: Cargo and Diet

Extensive analysis of the waterlogged plant and animal remains recovered during the ship excavation was undertaken.²⁶ This research has revealed information about the diet, cargo and dunnage used on board the vessel in the mid-fifteenth century. Most of the material was found within environmental samples taken between the frames of the vessel, down in the bilges of the ship. Substantial amounts of food waste (including nut shells and fruit stones), sewage and spilled or pilfered cargo collected here during the working life of the ship and were preserved by the overlying alluvial mud and waterlogged conditions.

Plant remains found in the bilges included walnuts, hazelnuts, almonds, pine nuts, pomegranates, peaches, apples, grapes, figs and olives. These were nutritious and durable food items that were ideal for sea voyages due to their low risk of spoilage. Traces of flavourings, including mustard, coriander, dill and hops were also discovered along with flax, millet and hemp.²⁷

In addition to plant remains, archaeologists discovered a diverse assortment of insect remains, including various beetles, flies and fleas. Beetles and weevils that typically target stored grain were found, along with insects that typically inhabit decaying straw and hay. The presence of grain on board, either as cargo or provisions, is not surprising; however, the presence of decaying grass may represent animal bedding and food, suggesting the presence of livestock. Thousands of fly larva and flies, along with human and dog fleas, indicate that the conditions below deck were foul, with the mix of sewage and bilge water creating an unhealthy environment full of biting insects and disease-carrying flies.²⁸

Large numbers of animal bones were recovered, representing numerous species, including domesticated cattle, pigs, fowl and goats/sheep. Many bones bore evidence of butchery and jointing, with some of the larger mammal carcasses having been split and quartered. The faunal assemblage was mixed in nature and this suggests that the crew enjoyed a varied diet of fresh and preserved (smoked, salted and brined) meats. Evidence of rats on board was also found, with several mandibles recovered during the excavation.²⁹

Large quantities of fishbone were recovered, with a range of species represented, including Atlantic cod, European hake, ling, tusk, Atlantic herring, skate, ray or small shark, blackspot seabream, European conger, flatfish and Atlantic salmon. Most of these fish can be found in the Atlantic-Iberian area. The presence of Atlantic cod bones suggests that the ship was carrying dried stockfish or saltfish as stores or cargo. Some of the cod were estimated to be over a metre in length. Such fish could also be caught and consumed during a voyage. Native oysters, whelks, mussels and cockles were also found in the bilges of the vessel. These would have been readily available to harvest when the ship visited shallow coastal waters.³⁰

Most of the environmental samples analysed contained substantial quantities of western prickly juniper leaves, either *Juniperus oxycedrus* or *J. navicularis*, species that grow in south-western Portugal. These samples also contained quantities of heather (*Erica* spp.), which, upon close inspection, contained flowering bodies, indicating that they had been harvested in late summer (July–August). Remains of Portuguese Crowberry (*Corema album* L.) were also found during the environmental processing. These berries grow in the same areas as the western prickly juniper and were probably collected at the same time. Dunnage was of low value and could probably be freely collected on the dry coastal areas near the ports on the Iberian Peninsula. It is therefore likely that the Newport Medieval Ship used locally available fresh dunnage when picking up cargoes along the Atlantic–Iberian coast. The evidence of seasonality (late summer) fits well with the ripening of grapes and the production of wine for export.³¹

Distribution patterns of the waterlogged plant remains suggest that there may have been segregated areas of activity on board. For example, a variety of food remains were found in the bow area, indicating that food preparation or consumption might have occurred there. In contrast, cereals, millet and certain weed seeds were found in the stern. These could be used as animal food and bedding, suggesting that the stern was an area used for keeping livestock.

When considered as a whole, this assemblage of food remains is more representative of a southern European diet than of a British one. It is important to emphasise that many of these items could also have been carried as cargo, with small amounts of the inevitable spillage becoming trapped in the bilges. There is also a problem with resolution in the data set. It is likely that the plant remains represent accrual from multiple voyages. For example, there appear to be two different size groups of western prickly juniper leaves. The groups may represent dunnage collected in different regions in the

same year or the same region in different years. Routinely cleaning out the bilges might also erase some or all of the evidence of past voyages, with the recovered evidence representing only the most recent journeys.

Conclusions and Significance

The mid-fifteenth century Newport Ship is a unique and well-studied archaeological resource, providing insight into trade and shipbuilding in the late medieval period. Innovative digital documentation methods have created an accurate and versatile data set that lends itself to widespread dissemination and analysis. Dendrochronological research has pinpointed a Basque origin for the hull planking, while analysis of the artefactual and environmental assemblages suggest that the ship was engaged in trade between Britain and Portugal. The presence of dunnage and cask components reveals that the ship was probably engaged in the wine trade, transporting Iberian products into Britain. Advanced computer modelling and analysis of the digitally reconstructed vessel has created insights into the capacity and sailing characteristics of the original ship. This level of sophistication in documentation, modelling and analysis is unprecedented, and has provided solid factual data to augment historical records relating to the construction and use of large merchant vessels during the late medieval period. The planned reassembly of the conserved vessel in a museum will provide stimulus to researchers and the general public to further explore the important maritime heritage of the medieval period.



Notes

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- 2 A definitive account of the excavation and subsequent documentation can be found in N. Nayling and T. Jones, 'The Newport Medieval Ship, Wales, United Kingdom', *International Journal of Nautical Archaeology*, 43/2 (2013), pp. 239–78. Details on the dendrochronological research can be found in N. Nayling and J. Susperregi, 'Iberian Dendrochronology and the Newport Medieval Ship', *International Journal of Nautical Archaeology*, 43/2 (2013), pp. 279–91.
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three

THE RISE AND FALL
OF THE BIG SHIP,
1400-1520

Ian Friel



ONE OF THE MANY reasons that the Newport Medieval Ship is a find of international importance is that it is an example of a key ship type from late medieval northern Europe – the large, clinker-built vessel. There can be little doubt that medieval people would have seen the Newport Ship as a ‘big ship’. However, what might have been a whale in one era can be a minnow in another. For instance, in 1900 the upper size-limit for a cargo liner was around 8,000 gross registered tons (grt). In 2015 the world’s largest cargo ship, the container vessel MSC *Oscar*, had a tonnage around twenty-four times greater, at 193,000 grt.¹

In the light of these changing definitions of ship size, how is it possible to talk of the ‘rise and fall’ of the ‘big ship’ in the fifteenth and early sixteenth centuries? What, indeed, qualified as a ‘big ship’ in this period? A ‘general movement’ away from larger merchant ships ‘after about 1470, or at the latest 1500’ was noted by the late Geoffrey Scammell, who also referred to earlier discussions of the subject by Fernand Braudel and Michel Mollat. Writing in the 1940s, Braudel identified the change as common to both northern and southern European waters from around the mid-fifteenth century. Contemporaries clearly knew that something was going on. Braudel quoted a Venetian Senate debate of 1451 that mentioned a need for small ships on trans-Mediterranean voyages, and he also cited a letter written in Bruges in 1478, in which the writer noted that the demand for small ships had overtaken that for big ones. Michel Mollat found similar evidence of a declining requirement for larger ships in Normandy in the late fifteenth and early sixteenth centuries.²

Of course, this phenomenon was not the ‘rise’ of the small ship. Big ships, whatever the contemporary standard of ‘big’ happened to be, have always been in the minority. Leaving aside the thorny problem of what was a ‘boat’ and what constituted a ‘ship’, it is in the nature of things that, from seagoing fishing boats to tramp ships, small vessels have always outnumbered big ones. The issue of the ‘rise and fall of the big ship’ is therefore about the extent to which large ships were built and used at different periods. This chapter focuses on evidence from English sources, though this subject also has relevance for the study of shipping in other parts of late medieval Europe. More research is needed in those areas to see exactly how – or if – this change manifested itself.

The Problem of Tonnage

There is a large amount of data from the fifteenth and sixteenth centuries relating to the tonnages of ships. In England, from the thirteenth century onwards, the basic measure of cargo capacity was the large Bordeaux wine tun of between 240 and 252 gallons, which has given us the modern word 'ton'. For example, Henry V's royal ship *Cog John* of 1413 is described as being 'of the portage (carrying capacity) of 220 tuns by estimation'. The word 'portage' could also be rendered as 'burden' or 'load'. In other words, the ship was reckoned to be able to carry 220 tuns of wine. The problem here is the phrase 'by estimation', for there is no evidence as to how tonnages were estimated in England at this period. Barrel hoops were used to measure cargo capacity at Venice, and in late sixteenth-century England there was a tonnage calculation method that used a ship's principal dimensions with a divisor, but we do not know what method was used in fifteenth-century England. The difficulty with the measurement of shipping tonnage is that it has never been just a technical matter, as pointed out long ago by F. C. Lane. If a ship was being charged port tolls based on its stated tonnage, the owner might want to quote a figure that was as low as possible. Conversely, if a ship was arrested for government service, the tonnage figure usually served as the basis for working out the amount of compensation money paid to the owner, a situation in which it was in the owner's interest to quote as high a figure as possible. In early fifteenth-century England, for example, an owner of an arrested ship was paid 'tontight'. This was set at a rate of 3s. 4d per tun for every three months of service, and was meant to cover wear-and-tear.³ There is no shortage of statements of ships' tonnages in the English sources, but unfortunately in most cases we do not know how these were calculated. A further complication is the fact that it is clear that 'tonnage' did not always just mean 'carrying capacity'.

In her pioneering book on late medieval English shipping, Dorothy Burwash cited two examples illustrating some of the problems that medieval people had in assessing tonnage. In 1456 a ship called the *Anthony* of Hull sailed to French-controlled Bordeaux under a safe-conduct that said it was of 400 tons burden. The local authorities arrested the ship on the grounds that it was actually bigger than the safe-conduct stated, but the freighters successfully claimed that, by custom, 249 tons of this was taken up by the ballast, cook-room, ship's boats, tackle, weaponry, provision and the personal belongings of those aboard. In other words, according to this measure, only 151 tons, or slightly less than 38 per cent of the vessel's 'burden', consisted of actual cargo space. In the event, the court resolved the matter by having the ship partly loaded to determine its actual capacity, which led to its release. Interestingly, in November 1448 a vessel called the *Anthony* of Hull loaded a cargo of 174 tons of wine at Bordeaux; if this was the same ship, it suggests that its cargo capacity had been underrated by about 17 per cent in 1456. Three years later, the *Margaret* of Orwell was also arrested at Bordeaux, because its actual tonnage exceeded the 400 tons given in the safe-conduct by a figure of 200 to 300 tons. The owner claimed that this was because the ship was on its first voyage and he did not know

what the vessel's true tonnage was. His claim was accepted, suggesting, as Burwash points out, that there was nothing unusual about the tonnage of a new ship being uncertain. Taken with other evidence, she says, rightly in my view, that there was no common tonnage calculation method used in England at this time.⁴ This suggests that unqualified statements of tonnage from this period are probably best seen as indications of orders of magnitude, rather than as technically precise figures.

The Bordeaux Wine Trade Evidence

Although determining the tonnage of a vessel can be problematic, more reliable figures for the carrying capacities of ships do survive. Customs accounts, which show actual tonnages of wine loaded by vessels, are a very good guide to normal carrying capacities. The Bordeaux wine trade not only gave England its ship tonnage unit, it was also the country's principal bulk cargo trade until Gascony was lost to the French in 1453. Given the value of wine in the medieval economy, it is reasonable to assume that the Bordeaux trade employed a substantial proportion of the country's larger vessels at any one time and that most ships sailing to the port would normally load up with as much wine as they could safely carry. The Bordeaux customs accounts do not survive in a continuous series for the fourteenth and fifteenth centuries, but there are enough left to show changing trends in the carrying capacities of English and Welsh vessels in this period. Figure 3.1 and Table 3.1 record the cargoes loaded at Bordeaux for specific periods between 1307 and 1448. Some of the cargoes loaded represent repeat voyages by the same ship, so the total number of ships was smaller than the total number of cargoes loaded.⁵

Figure 3.1: Bordeaux Wine Ladings, 1307–1449

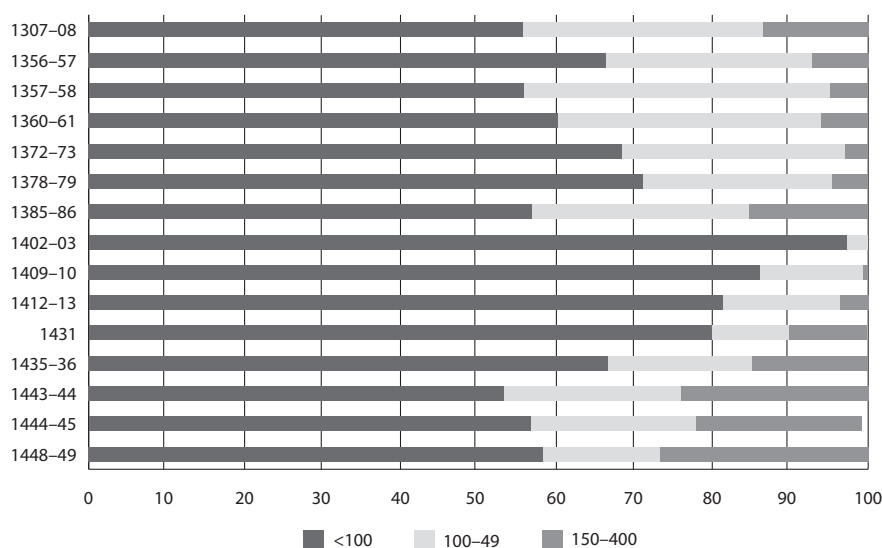


Table 3.1: Bordeaux Wine Ladings, 1307–1449

Year(s)	Percentage of Ladings (tons)			Total	
	< 100	100–49	150–400	Number of Ladings	Total Tonnages
1307–08	55.70	30.80	13.50	133	13,536.00
1356–57	66.40	26.40	7.20	125	10,682.00
1357–58	55.80	39.30	4.80	145	13,364.50
1360–61	60.20	33.70	6.00	83	7,201.50
1372–73	68.40	28.60	3.00	98	8,021.50
1378–79	71.10	24.20	4.70	149	11,430.50
1385–86	56.90	27.80	15.20	151	14,383.00
1402–03	97.20	2.80	–	141	7,186.50
1409–10	86.10	13.20	0.70	144	9,366.00
1412–13	81.30	15.10	3.60	139	9,275.50
1431	79.90	10.00	10.00	119	8,251.00
1435–36	66.60	18.50	14.80	135	11,655.00
1443–44	53.30	22.70	24.00	75	7,938.50
1444–45	56.70	21.20	21.20	104	10,479.50
1448–49	58.30	15.00	26.70	120	12,857.50

The figures show clear trends in the sizes of ships available in the merchant fleet of England and Wales. In the early fourteenth century, ships able to carry at least 150 tons were responsible for about one in eight loadings. The proportion of large ships had declined markedly in the Bordeaux trade by the 1350s and, apart from a brief ‘rally’ in the 1380s, remained in decline for a long time. No ships greater than 150 tons featured in the extant customs returns for 1402–3, a couple in 1409–10, and only a handful a few years later; even the numbers of ships in the 100–149 ton category were at a pretty low ebb. Other evidence from the 1400–13 period and from the reign of Henry V (1413–22) indicates that these figures reflected a problem with the English merchant fleet in general, that it had too few large vessels.⁶ The gap in the Bordeaux figures between 1413 and 1431 is unfortunate, but those for the period 1431–49 point to a consistent trend, that is, the growth in the number of English ships of more than 150 tons’ capacity on the Bordeaux route.

What was a ‘Big’ Ship?

There is an argument, I believe, for classing ships capable of carrying 150 tons or more as ‘big ships’ in the late medieval period. The only overt distinction made between big ships and ‘normal’ vessels by central government in fifteenth-century England was in the description of four royal vessels of 500–1,400 tons, built for Henry V between

1413 and 1420, as ‘great ships’ (though some local customs officers did distinguish between a ‘little ship’ and a ‘ship’ – see below). Smaller sailing vessels in royal service were generally just called ‘ships’, apart from eight Genoese carracks captured by English forces in 1416 and 1417. These carracks were of c.400–600 tons burden. They were of a type first developed in the late thirteenth and early fourteenth centuries, which fused the capacious hull-form, stern-rudder and square sail of the north European cog with the skeleton construction of the Mediterranean. By contrast, north European ships were mostly clinker-built until the mid-fifteenth century. Carracks, known in southern Europe as *coche*, attained considerable size, making them useful both as bulk-carriers and in warfare. They were used by the Genoese and others on long-distance routes to northern Europe from the fourteenth century. The carrack had a distinctive form, with a deep, wide hull, tall superstructures and a forecastle that was higher than the aftercastle. By 1400 images of carrack-like vessels were common in north European iconography, suggesting that northerners were beginning to utilise the shape of the carrack, if not yet its skeleton construction. In late medieval England, the word ‘carrack’ was a synonym for ‘a large ship’ and it is quite likely that Henry V’s great ships were clinker-built versions of carracks.⁷

Until the seventeenth century, larger merchant ships were seen as potentially useful in combat, and from the mid-fifteenth century the English government tried, in a rather desultory way, to encourage the building of ‘defensible’ ships by paying owners a construction bounty. From about 1540, 100 tons burden was fixed as the minimum qualifying size for bounty payments, and one might think that this could be used for the purposes of this paper to define the smallest size of ‘big ship’. The earliest-known grant was made in 1449 for a ship ‘as large as a carrack, if not larger’ (the actual tonnage was not stated), given a licence to trade with Italy. The ship was the *Grace Dieu*, built at Hull by John Taverner. It may well not have been new in 1449, for in December 1444 a ship called the *Grace Dieu* of Holderness (near Hull), with John Taverner as master, loaded 380 tuns of wine at Bordeaux, the second-largest English cargo recorded in the Bordeaux accounts. The great vessel was later broken up in the 1480s to provide materials for building a huge new royal ship, the 1,000-ton *Sovereign*.⁸

The problem with taking 100 tons as the smallest size of a ‘big ship’ in a fifteenth-century context is that, although the numbers of 100–149-ton ships did wax and wane considerably in the Bordeaux returns from the early fourteenth century onwards, the group most severely impacted by changing conditions were vessels of 150 tons and more. For this reason, I describe vessels in the latter category as ‘big’ ships. The 150-ton figure may have had some meaning for contemporaries. Evan Jones observes that in the Bristol ‘particular’ customs accounts between the 1460s and early 1500s the term *navicula*, ‘little ship’, denoted a craft of between 35 and 150 tons burden, and that vessels of more than 150 tons were described as *navis*, ‘ship’.⁹ This is very interesting, suggesting that there was a perception, at least in Bristol, that a ship that was

greater than 150 tons was distinct from smaller vessels. 'Particular' customs accounts from the same era from the south coast of England and Bridgwater in Somerset show that the officials in those places seldom used the term *navicula*, but did refer to many *naves* as well as a wide range of other types.¹⁰ What is clear is that the Newport Medieval Ship would have been classed as a *navis* in Bristol and that it would also have belonged to the what I define as the 'big ship' category, in that it had a cargo capacity of about 161 tuns.¹¹

A Survey of English Shipping, 1439–1451 and 1512–14

One way to test the proposition that the numbers of big ships declined in England in the second half of the fifteenth century is to find some comparative data. To this end, I have compiled two lists of English and Welsh ships, aimed at producing data-sets of actual ships by minimising the double-counting of vessels, as far as possible. The earlier list derives from a combination of the Bordeaux customs returns and rosters of vessels arrested for royal expeditions in the years 1439–51. The second list is based on accounts for ships arrested or hired for English war operations in the years 1512–14. Each list has been compiled by collating information about these vessels. The methodology is straightforward: if a ship's name, home port, master and approximate size are the same in two or more documents, then those instances are taken to refer to the same vessel. The names given to different 'types' of vessel are less significant here, because the vast majority of them were described as a *navis* or 'ship'. The mid-fifteenth century database includes 312 vessels, totalling 31,151 tons of shipping, whilst the early Tudor list has 390 craft, totalling 22,272 tons. Emphatically, this is not a complete list of the English merchant fleet at these periods, or anything like it. It is also possible that the earlier list contains some ships that have been double-counted, because they changed hands and acquired new names over this period of a dozen years. However, this is not a significant problem and must be even less relevant in the case of the Tudor list, which covers just three years. The samples are big enough to identify general trends in ship sizes over these periods. The breakdown of the data is shown in Figure 3.2 and Table 3.2.

The differences between the two periods are striking. In the 1439–51 period, ships of 150 tons and more made up 22.3 per cent of the sample; in the years 1512–14 only 3.8 per cent of the vessels were of this size. Smaller ships were always in the majority, of course. Even in the earlier period, twelve out of every twenty ships were of less than 100 tons' capacity. Yet, in the early Tudor group, seventeen out of twenty were. The vessels in the 100–149-ton bracket showed some decline between the two dates, but the decline was of the order of 38 per cent, rather than the 83 per cent reduction in the number of vessels of 150 tons and above. What we are witnessing then was not so much the 'triumph of the small ship' as 'the eclipse of the big ship'. How and why did it happen?

Figure 3.2: English Shipping, 1439–1451 and 1512–14

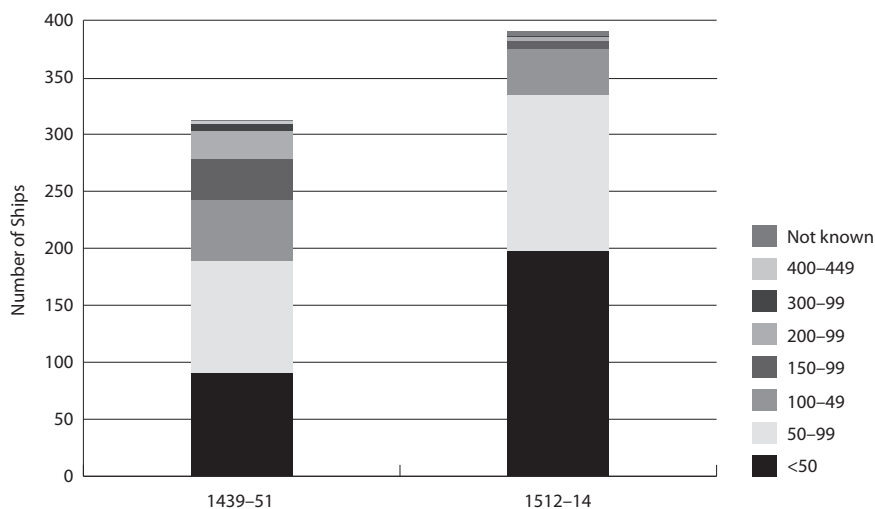


Table 3.2: English Shipping, 1439–1451 and 1512–14

Tonnage Range	Number of Ships			
	1439–51		1512–14	
	Number	%	Number	%
<50	90	28.80	197	50.50
50–99	99	31.70	137	35.10
100–49	53	17.00	41	10.50
150–99	36	11.50	7	1.70
200–99	25	8.00	3	0.80
300–99	6	1.90	1	0.30
400–449:	2	0.60	0	-
Not known	1	0.30	4	1.00
Totals	312	100.00	390	100.00

Sources: 1439–51 – Bordeaux customs returns 1443–48; E101/53/25; E101/53/38; E101/54/4; E101/54/6; E101/54/10; E101/54/14; TNA E364/92, mm. 1r–3r and 14r–15r. 1512–14 – TNA PRO E101/56/1; E101/56/6; E101/56/15; E101/56/16; E101/56/18; E101/62/23; E122/195/10; E36/2; SP 1/229, ff 197–212; SP 1/3, f 87; Brewer 1920, nos. 1413, 1453, 2304, 2686 and 5761; Spont 1897, pp. 6–12, 81–88 and 172.

The Eclipse of the Big Ship

Charting the decline of the big ship in England between the mid-fifteenth century and the early 1500s is not easy, in part because of a dearth of data regarding ship arrests for royal expeditions. The details of the ships used in the two greatest English expeditionary fleets of the second half of the fifteenth century, those of 1475 and 1492, do not seem to have survived.¹² A thorough study of ships listed in surviving English customs accounts for the period might yield quantifiable data on changing tonnages, but this is outside the scope of the present study.

Safe-conducts for shipping from the period might be thought to fill the gap. Burwash analysed English safe-conducts granted to ships in the years 1461–7 and 1472–83, documents which give the maximum tonnage allowed to a ship travelling under the safe-conduct.¹³ Out of sixty-one English ships listed, twenty-one (42.6 per cent) exceeded 150 tons, and of a total English, French, Breton, Spanish and other foreign vessels documented in this way, 107 (27.4 per cent) were in this range. Eight of the English ships had stated maximum tonnages of 450 tons and seven of the foreign ones were monsters of between 600 and 1,000 tons. However, these were maximum figures for *allowed* tonnages, not statements of *actual* tonnages. All that can be concluded from this evidence is that both English and foreign ships of 150 tons or more were still around in English waters between the 1460s and early 1480s.

Before trying to understand the reasons for the decline of the big ship in England, one has to understand the reasons for its 'rise'. Vessels of 150 tons and more were not without precedent. When sailors from Great Yarmouth and the Cinque Ports met in battle in 1297, the two biggest Yarmouth ships lost were each of 220 tons. They were not alone; the Bordeaux customs accounts for 1308–10 list at least nineteen different English ships loading cargoes of 150 tons and more.¹⁴ The primary reason for the existence of these big merchantmen is not hard to seek. The Bordeaux wine trade was at its peak in the first three decades of the fourteenth century, exporting up to 100,000 tons per year, and there must have been a burgeoning demand for ships that could carry large bulk cargoes. The trade fell under the control of English merchants from around the 1340s, but plague, depopulation, and war adversely affected the Gascon wine industry in the second half of the fourteenth century. To judge from the general decline in the numbers of large English ships involved in the trade, these calamities, or at least the general decline in trading volumes they brought about, also affected the demand for sizeable vessels.¹⁵

The growth in the number of big ships in England in the first half of the fifteenth century poses some questions. The first is, why should shipowners invest so much money in building bigger vessels? Common sense suggests that they were expensive to build, and this intuition is backed up by patchy figures for building or rebuilding royal ships in the reign of Henry V (1413–22). The 1,400-ton great ship *Grace Dieu* cost an estimated £2.71 per ton to build, while its contemporary, the *Trinity Royal* (a rebuild

of 500 tons), cost £3.37 per ton. By contrast, rebuilding the ships *Holy Ghost Spain* (290 tons) and *Grand Marie* (140 tons) cost £1.44 and £1.30 per ton respectively, and the newly built oared balinger *Anne* was completed for £1.50 per ton.¹⁶ There was clearly no simple relationship between unit cost and size, but the two great ships of 500 tons and over cost significantly more per ton than smaller vessels. These costs are underrated in any case, because both projects used a lot of free timber from royal forests and other sources that were not available to the average merchant shipowner. The *Grace Dieu*'s giant hull also had triple-skin clinker planking, which would have pushed up the costs of construction drastically. It is not known if double- or triple-skin clinker was widely used in large north European vessels of this time (the Newport Medieval Ship had a single skin of planks), but it seems likely that the cost and technical complexity of building great ships limited the sizes of most large merchantmen of the period.¹⁷

The total costs of the *Holy Ghost Spain* and *Grand Marie* rebuilds were £417 and £182 respectively. As these most likely re-used parts of the existing hulls, this would mean that the cost of a new ship would have been even higher. On these figures, a 250-ton rebuild would have cost somewhere between £325 and £360, so a new ship of this size might have set an owner back more than £400. Even though these figures only provide a tiny sample of building costs, they do illustrate how expensive a larger ship could be. They also underline that building a big ship in fifteenth-century England was not something to be undertaken lightly, or without a substantial reserve of capital.

It is possible that Henry V's four great ships and the eight large (400–600 ton) Genoese carracks captured by his naval forces may have inspired some English ship-owners to think of 'building big'. Certainly, in the mid-1430s, when more and more big ships started appearing, the political poem *The Libel of English Policy* spoke nostalgically of these leviathans. Medieval and Renaissance monarchs certainly used large warships as symbols of their wealth, power, and virility, and there is no reason to think that rich merchants were immune to such vainglory.¹⁸

There were other, more practical, reasons for having a big ship. One easily overlooked fact about medieval merchantmen is that their owners did not always just use them to carry cargo. The height advantage, larger crews and sheer mass of big ships made them especially useful in medieval seaborne conflict, whether it was piracy or warfare. In 1440, to take one well-known example, the 120-ton *George* of Wells was rammed off the Devon coast by the 320-ton *Christopher* of Dartmouth, in a violent piratical attack that seems to have smashed the smaller ship's forecastle.¹⁹ Conversely, bigger ships were more 'defensible' and had a better chance of surviving attacks by sea-rovers, especially if these were carried out using the low-built barges and balingers (and later carvels), favoured by pirates. North-west European waters were badly affected by piracy from the 1420s onwards. For the English, the gradual loss of their possessions in France, culminating in the loss of Normandy in 1450 and Gascony in 1453, made conditions at sea even more dangerous. This instability worsened in the

1450s and 1460s as the country slid into the Wars of the Roses.²⁰ In these circumstances, one can see how shipowners who were perpetrators of piracy, as well as those who were its victims and those who were both, might have thought that bigger ships were a good idea.

Dramatic as they were, by themselves piracy and war are not sufficient explanations for the rise in the numbers of larger English ships from the 1430s onwards. In the reign of Henry IV (1399–1413), the threats from piracy and naval war had been, if anything, greater than they were later in the century. There is no sign that this prompted many English shipowners to build large ships at this time. Indeed, the English merchant fleet was so weak in the reign of Henry V that the king had to hire or arrest large numbers of foreign vessels to fill out his war fleets.²¹

Big ships, of course, had big crews. Ships relied on the muscle power of their men in order to operate effectively; a ship with a big crew might have had a better chance of survival in a storm or combat. However, one other attraction of bigger ships may have been that in relative terms they were cheaper to man, contradictory though this may seem. Crew-size data exists for 158 vessels in the 1439–51 ship survey (thirty-four of them of 150 tons or more). This suggests that at the lower end of the scale, from 150 to 200 tons, ships might normally have between thirty to fifty men on board; the biggest ones, from 300 to 400 tons, could have between seventy and ninety sailors. One might think that a small ship would be less extravagant in its use of manpower than a larger one, but the 1439–51 survey does not bear this out. Analysis of the data suggest that, on average, ships of less than 100 tons needed about one man for every 3.5 tons of ship. Conversely, ships of 150 tons and more needed around one man for just under 4.5 tons, a saving of 25 per cent or more. To put this in concrete terms, moving 180 tons of cargo in six 30-ton ships would have required about fifty-one sailors; moving the same amount in a single 180-ton ship would need forty-one men. As far as their wage-bills went, it seems that the big ships of this time were cheaper to operate. Whilst medieval shipowners did not have the mathematical tools to analyse this statistically, experience would soon have taught them this lesson. Added to this, there are signs that early to mid-fifteenth-century England was short of sailors, so the construction of more big ships may, in part, have been a response to a dearth of seafaring manpower. There was also the problem that the labour shortages brought about by the Black Death had led to a marked rise in wages, peaking in the mid-fifteenth century.²²

Unfortunately, the 1512–14 survey data on crew size and tonnage is much more limited and only survives for sixty-five vessels. This shows an average of around one man for every 3.75 tons of ship in vessels of less than 100 tons, a ratio that declined to 2.5 tons for those in the 100–149-ton range, and to just over two tons in vessels of 150 tons and upwards. In other words, the manning ratios seem to have been going in the opposite direction to those of fifty to sixty years earlier, with smaller vessels moving more tons of cargo per man than the bigger ones. This may have been a result of the introduction of the three-masted square rig (see below), which was commonplace

by the early 1500s. Unfortunately, we do not know how common this rig was in the 1440s and 1450s, and in any event the 1512–14 tonnage/crew size sample is limited. If smaller ships had somehow become more cost-effective in the intervening period, it could offer an additional explanation as to why bigger ships fell out of favour. Yet intriguing as this possibility may be, the size of the sample is too small for drawing hard-and-fast conclusions in this case.

The most compelling reason for building bigger ships in the fifteenth century, I would suggest, is also the most obvious one: they could carry more cargo. This comes out very clearly in the Bordeaux customs accounts. To take just one year as an example, Table 3.3 gives the figures from 1448–9.

Table 3.3: Ladings in the Bordeaux Customs Accounts, 1448–9

Ladings of (tuns)	Number of Ladings	% of Total Cargo
<100	70	30.00
100–49	18	17.40
150–400	32	52.50

The ships able to carry 150 tons and more made up just under 27 per cent of the total of loadings, but carried just over half of the cargo. The 1439–51 ship survey produces similar results: vessels of 150 tons or more made up around 20 per cent of the ships by number, but accounted for 46 per cent of the total wine tonnage moved. There was a clear incentive to carry as much wine as possible, for merchants could make a great deal of money from a wine cargo. The wholesale price of wine in England in the fifteenth century was between about £6 and £8 per ton.²³ Even a 100-ton cargo would have had a value perhaps three or four times that of the ship that carried it, a powerful inducement to invest in greater tonnage, especially if bigger ships were cheaper to man. The medieval big ship was built in the pursuit of greater profits, as is no doubt also the case with vessels like the modern supership *MSC Oscar*.

That a desire to shift more cargo was related to the decision to build large ships is also reflected in the names of the ports which had ships in the 150-ton-plus range in the 1439–51 survey. A review of these reads like a list of the major ports of England at the time. This correlation is not surprising, because only busy ports with active trading economies were likely to possess the concentrations of wealth, shipbuilding skills and supply networks needed to construct larger vessels. Such ports also tended to have the harbour facilities and water depth needed to accommodate larger ships. London and Bristol had the largest numbers of ‘big’ ships in the survey, with eleven and ten respectively, but Dartmouth, the Plymouth Harbour ports and Hull each had between five and nine. Ten other ports had less than five of these vessels apiece. Some were major havens, like Southampton, others were minor ones, such as Hook,

Maldon or Milford. This shows that it was *possible* for a port that had a relatively small trade (like Newport) to possess a big ship. On the other hand, the significant fleets of big ships were only to be found in the bigger ports. The lack of any big vessels from Great Yarmouth or Newcastle in the survey is surprising, but this may be a reflection of deficiencies in the sources.

‘The Triumph of the Small Ship’

Geoffrey Scammell found clear signs of ‘the triumph of the small ship’ in customs returns from the east coast of England. Evidence from Ipswich, Kings Lynn and Hull between the late 1450s and 1520 showed trades that remained more or less stable in terms of their nature and direction over this period. Despite this, they saw very significant increases in the numbers of sailings, indicating that much the same amount of trade was being moved in more – smaller – ships. Scammell also found that the average shipment sizes of coal chalders from Newcastle fell from fifty in the mid-1460s to thirty by 1488–9 and twenty by the end of the century. They remained at an average of twenty to thirty chalders into the 1550s. The Newcastle evidence suggests that the small-ship ‘revolution’ happened – at least on the east coast – between the 1460s and the late 1480s. He pointed out evidence that the change was ‘almost universal’ across Europe and explained the popularity of small ships in a number of ways. Firstly, in the English context, the overseas and coastal trading network was dominated by short routes. Many of the contemporary harbours that served these routes were ill-maintained and shallow, making it difficult for large ships to enter them. Scammell also contended that the ‘really big ship’ was expensive to build and maintain, uneconomic (except on long-distance routes), expensive to crew and a major risk without a well-developed system of marine insurance. The small ship, by contrast, was relatively cheap to build, maintain, load and man, had quick turnarounds, and its shallow draught made a great range of harbours accessible.²⁴

Scammell’s assertions about the build and maintenance costs of big ships are certainly true, as is his point about problems that big ships must have had in accessing harbours. On the other hand, the 1439–51 survey data suggest that he was wrong about the crewing costs of big ships, and one also wonders how much shipowners of the time were concerned about insurance strategies. Medieval attitudes to risk were not necessarily the same as modern ones, given the degree to which people placed their lives and prosperity in the hands of the Almighty.

The fall in the numbers of big English ships between the mid-fifteenth and early sixteenth centuries is undeniable. As Scammell suggested, some of the reasons for this are not hard to seek, at least in the English context. The Bordeaux bulk wine trade ceased for a period after Gascony fell to the French in 1453. The loss of the Bordeaux trade may well have been the biggest blow to the fortunes of the big ship in England, because it had been the country’s premier bulk shipping trade. Likewise, the

long-distance Iceland trade in fish and stockfish, which certainly involved some big vessels, declined from the 1470s. This followed conflict with the Hanse, which led to serious setbacks for longer-distance English trade in the north Atlantic, Scandinavia and the Baltic. English trade with Bordeaux did resume, after a period, but it was mostly carried in small ships of less than 100 tons' capacity; the same was true of the Bordeaux trade conducted by the Bretons, French and Spanish.²⁵

Despite a growth in some longer-distance English trade-routes, such as those between Bristol, Iberia and the Mediterranean, English sea trade was dominated from the mid-fifteenth to the mid-sixteenth centuries by short-sea routes across the English Channel and the North Sea. Chief among these was the cloth trade to Flanders, which was centred on London. Cloth exports and short voyages did not require large ships, so there was much less incentive to build or operate them. The London cloth trade also took commerce away from other ports, and, Bristol apart, the decline in the number of big ships from the provincial harbours is one sign of growing metropolitan dominance. By 1460, over 60 per cent of English foreign trade went through London and its outports Sandwich and Southampton; Bristol was the next most prominent port, but it only had 10 per cent of the trade.²⁶

The big ships did not disappear overnight, but even if people in most provincial ports had wanted to build big ships, they were less likely to have possessed the necessary capital. Bristol was the exception. Ships of 200 tons or more were still in regular use at Bristol in the 1470s. Most famously, of course, it was said that in the early 1470s William Canynges of Bristol had owned ten ships, seven of which exceeded 150 tons, and included the 500-ton *Mary Radcliffe* and the 900-ton monster *Mary and John*. A slightly later list of around twenty-three Bristol-owned ships, from 1480, included four larger vessels of between 180 and 300 tons.²⁷

The explanation for the retention of bigger ships at Bristol is probably that they were dedicated to use on longer voyages, particularly to southern Iberia or Iceland, where their carrying capacity made the voyages profitable and their bulk and crew sizes aided both survivability and defensibility; long-distance voyages could be risky, though, as Canynges lost a 160-ton vessel in the Iceland trade. Bristol traders were not alone in seeing the uses of such ships; in 1497, some London merchants hired Henry VII's 1,000-ton warship *Sovereign* for a trading voyage to the Levant.²⁸

The decline of English bulk and long-distance trades and the primacy of the Flanders cloth route do not explain why the big ship was in decline outside England, however. One of the reasons behind the growing preference for the small ship may have been technological, at least in northern Europe. Until the fifteenth century, all seagoing vessels constructed in medieval northern Europe were clinker-built, but in the course of the 1400s northern shipwrights learned skeleton construction. This technique had previously been developed in the Mediterranean centuries before and its transmission to the north was associated with the Portuguese caravel, which began appearing in northern waters from the 1430s onwards. It can be no coincidence that

in English, French, German, Dutch and various Scandinavian languages the word 'caravel' or 'carvel' became indelibly linked with the idea of skeleton construction. In some cases, craftsmen may have learned the technique by copying caravels that had been captured or bought abroad, though in other instances it is known to have been taught by itinerant shipwrights. The details of the process will probably never be fully known, but from the point of view of this study, the important thing is that caravels were generally small vessels. Out of sixty-five caravels loading cargoes at Bordeaux between 1467 and 1477, for example, only five took on more than 100 tuns of wine and the largest of these loaded 149 tuns. The reasons for the adoption of skeleton construction are a matter of speculation, but it is probable that they were both technical and economic. The skeleton-built hull was stronger and easier to repair than a clinker-built one and also cheaper. The technique used more wooden nails, did not require expensive clench-nails and roves and did not need additional areas of planking to provide the overlapping strakes used in clinker-built hulls.²⁹

It is difficult to judge just how fast skeleton construction was adopted across northern Europe. The English were certainly employing the technique to build big 600-ton carracks like Henry VIII's *Mary Rose* by 1510. It is also possible that over twenty years earlier the lines of John Taverner's old clinker-built *Grace Dieu* were preserved in Henry VII's 1,000-ton warship *Sovereign* of 1487 by the simple expedient of axeing the notched clinker frames smooth so that they could take flush-laid carvel planking. If this was the case, it would mean that English shipwrights were confident enough with the technology by the 1480s to use it to build very big ships.

Evidence from other north European sources points to the spread of skeleton construction to areas as far apart as northern Spain and the Baltic between about 1460 and 1480. A carvel-built ship, estimated to have been some 35 m in length and about 7.5 m wide, has been found in Swedish waters and tentatively identified as the great Danish warship *Gribshunden*, lost in 1495. If the identification is correct, it shows that, like their English counterparts, late fifteenth-century Danish shipwrights were also proficient enough in skeleton construction to build large caravels. Naval building aside, it is difficult to say quite how rapidly the English and other north European merchant fleets were transformed, though three English merchantmen repaired at Bordeaux between 1502 and 1504 were all carvel-built.³⁰

The other technological revolution of the fifteenth century was the development of the three-masted square rig. This innovation undoubtedly made it easier to manoeuvre big ships and part of the original impetus for its development may have come from the need to improve their controllability. However, the three-masted rig spread rapidly, and by the second half of the fifteenth century was to be found on many different types and sizes of ships; except perhaps in its early years it was never a defining characteristic of the big ship. Crew-size information from the 1512–14 survey (see above) suggests a possibility that the increased complexity of the three-masted rig may have increased crewing costs, but the data is too limited for one to be certain about this.³¹

The process by which the fortunes of the big ship rose and fell in the fifteenth and sixteenth centuries remains to be fully understood. For England, the picture is fairly clear; the construction of more ships of 150 tons increased significantly from around the 1430s and ships of this kind remained in relatively widespread use until the 1460s or possibly the 1470s. Bristol, with its growing interests in long-distance trade routes, seems to have held out as a bastion of the big ship for longer than other parts of England, where changes in trade, economics and technology led to the general abandonment of larger vessels. The Basque-built Newport Medieval Ship is a very important representative of the big medieval clinker-built ship. Although ships of this type declined in the later fifteenth century in much of Europe, they lingered on in the Baltic. As late as 1545, some clinker-built German ships of 400 to 500 tons were arrested in the port of London, as prospective additions to the English war fleet. By that time, the seas were dominated by skeleton-built warships able to fire broadsides of heavy cannon. In words that have become well-known in maritime history, the English Lord High Admiral testily dismissed these German giants as ‘clenchers, both feeble, old and out of fashion’.³²

The discovery of the Newport Ship and the existence of the obsolete German ‘clenchers’ in 1545 should serve to remind us that we still have a lot to learn about the rise and fall of the big ship at the end of the Middle Ages. As far as England was concerned, though, the sixteenth century proved to be the ‘century of the small ship’, at least until its last decade or two. This was emphasised by the results of the first reasonably comprehensive census of English merchant shipping, conducted in 1582. It counted 1,630 vessels, of which 1,453 (nearly 90 per cent) were of less than 100 tons burden. The country’s stock of larger ships only really began to increase from the 1590s, as more and more shipowners commissioned big ships to operate on long-distance European and transoceanic routes and to fight the great naval war against Spain. In England at least, the needs of trade and war, and most particularly the lure of large profits, once again led to a new age of the big ship.³³



Notes

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- 2 G. Scammell, ‘English Merchant Shipping at the End of the Middle Ages: some East Coast Evidence’, *Economic History Review*, Second Series, XIII (1961), p. 332; F. Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, 2 volumes, second edition (London, 1986), Vol. 1, pp. 300–1; M. Mollat, *Le Commerce Maritime Normand à la Fin du Moyen Âge* (Paris, 1952), pp. 340–3.

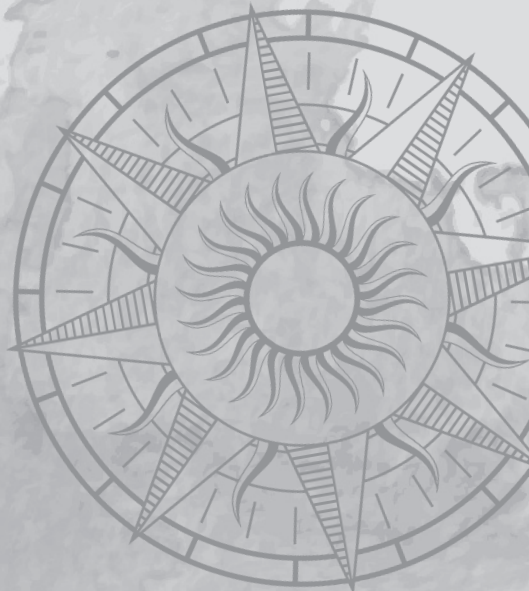
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- 4 Burwash, *English Merchant Shipping*, pp. 89–90; TNA: PRO Exchequer, Accounts Various E101/195/19.
- 5 TNA: PRO, Bordeaux Constable's Accounts, E101/163/1 (1308–9), E101/173/4 (1355–8), E101/182/6 (1378–9), E101/182/2 (1359–61), E101/179/10 (1372–3); E101/183/11 (1385–6), E101/185/11 (1402–3), E101/184/19 (1409–10), E101/185/7 (1412–13), E101/191/3 (1431), E101/192/1 (1435–6), E101/194/3 (1443–4), E101/195/19 (1448–9); British Library Add MSS 15524 (1444–5). Professor Wendy Childs kindly shared copies of her transcripts of these accounts with me. The periods cited for each customs return generally cover no more than around six months at a time.
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- 7 I. Friel, 'The carrack: the advent of the full-rigged ship', in R.W. Unger (ed.), *Cogs, Caravels and Galleons: The Sailing Ship 1000–1650* (London, 1994); Friel, *Henry V's Navy*, pp. 80–2.
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- 9 See Evan Jones's chapter in this volume.
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- 30 D. McElvogue, 'The hull', in P. Marsden (ed.), *Mary Rose Your Noblest Shippe: Anatomy of a Tudor Warship*, Archaeology of the Mary Rose, Vol. 2 (Plymouth, 2009), p. 98; W. Salisbury, 'The Woolwich Ship', *Mariner's Mirror*, 47 (1961); R. Warming, 'Gribshunden: Significance and Preliminary Investigations', in <http://combatarchaeology.org/gribshunden-significance-and-preliminary-investigations> (1 July 2015) [accessed 3 August 2015]; Bernard, *Navires et Gens de Mer à Bordeaux*, I, pp. 359–61 and II, pp. 841–4.
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- 32 TNA: PRO SP1/204, f. 154; M. M. Oppenheim (ed.), *A History of the Administration of the Royal Navy 1509–1660* (London, 1896), p. 54.
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VIOLENCE AT SEA
IN THE LATE
FIFTEENTH CENTURY

Susan Rose



AMONG THE OBJECTS found in the remains of the Newport Medieval Ship are an archer's leather bracer, part of a helmet including a portion of the inscription on the rim, and some stone shot. The existence of these artefacts has been linked to the widely held view that piracy and violence at sea were endemic throughout the Middle Ages.¹ Ever since Charles Kingsford saw piracy as 'a natural incident of the commerce of the time, when all ships went armed for defence and yielded readily to the temptation of a favourable opportunity for attack on a weaker vessel', there has been discussion among scholars of the extent of medieval piracy and also how the act of robbery at sea should be defined.² Nicholas Rodger has suggested that, at this period, 'even in peacetime there was not much peace at sea'.³ The recent book by Thomas Heeboll-Hølm has argued that in the early fourteenth century, far from being unplanned, opportunistic acts of violence, much of the piracy (to use the most convenient term) encountered at sea was a 'tool in longstanding feuds or indeed private wars between ports and maritime communities over collective economic and political interests'.⁴ The article by C. J. Ford, published in 1979, put forward a rather similar interpretation of events in the early years of the fifteenth century, stating that the violence at sea between 1400 and 1403 was 'not the "result of piracy" or "unlicensed privateering" but of the conscious policies adopted by both the English and French governments in their pursuits of wider political objectives'.⁵ Somewhat earlier, in 1952, Michel Mollat made even stronger claims for the effects of piracy in the period after c.1450; '*après 1450, la course, sinon la piraterie pure et simple, fut intense de la mer du Nord au golfe de Gascogne*'. In his opinion, the sea was so insecure that a merchant needed both much boldness and lots of money to undertake trade in this situation.⁶ If we look at the period from around 1420 to the 1480s, are any of these interpretations valid? Can we distinguish opportunistic robbery at sea from a quasi-official policy of reprisals with or without the use of letters of marque with any degree of certainty? Is it possible to reach any sound conclusions on the frequency of violence at sea and to estimate its effect on legitimate trade? And how might our comprehension of the extent, location and nature of piracy during the 1450s and 1460s affect our understanding of both the Newport Medieval Ship and those who sailed in it?

All of the interpretations of piracy discussed above rely to a large extent on documents from royal and legal sources, the reaction of the ruler to complaints of violence at sea and the details of cases taken to court. Any attempt to invoke the law or the protection of the authorities via the courts or by a petition was of course very likely to be expensive and time-consuming, requiring a great deal of persistence with no guarantee of a favourable outcome. The English evidence comes primarily from petitions and writs in the calendars of Patent and Close Rolls dating from *c.* 1420 to the 1480s, relating to the seizure of goods or ships at sea. Yet the number of entries relating to events of this kind does not support the view that piracy was rampant; there were typically only two or three cases per year, with the exception of the years 1446–52, when it doubled to an average of six per year. Even Dorothy Gardiner's collection of Chancery cases relating to West Country shipping (not all of them concerned with any form of piracy) only produces an average of just over one per year for the period of just over a hundred years which it covers.⁷ It may be true that these recorded cases are the 'tip of the iceberg'; that only cases relating to particularly valuable cargoes involving wealthy merchants, or where there was a higher than normal chance of success, reached the courts. Yet, even if that is so, we are left with no clear indication of how prevalent piracy was.

Taking another tack, Mollat sought to assess the frequency of piratical attacks on shipping off the English coasts by examining the number of safe-conducts granted by the English Chancery between 1449 and 1478, this being the only period for which these records survive. He found that the number of safe-conducts issued varied considerably from year to year, with the peaks and troughs relating, as might be expected, to whether England regarded France and other states bordering these waters as friends or foes. The closing years and immediate aftermath of the Hundred Years War between 1450 and 1457 is one peak and another is noticeable between 1468 and 1474. By contrast, in the years 1475–8 virtually no safe-conducts at all were issued by the English Crown, which suggests that shipowners had little fear of state-supported attacks.⁸

None of the available sources can provide a fully satisfactory estimate of the frequency of piratical attacks on shipping in this period. They do, however, perhaps indicate that, while it was a cause for some concern among mariners, merchants and travellers by sea, it was not on the scale suggested by some historians. Evidence from the legal sources, while it does provide some details of the attacks complained of, also needs to be approached with some care. The petitions were rarely written by the complainants themselves; they follow, it has been suggested, a 'paralegal script rather than being a verbatim account' of any particular incident. Lawyers framed their petitions to maximise the chance of their cases being taken up by the court. This may have led them to twist the facts of a case to cover up some wrongdoing on behalf of the plaintive, or to make the case fit a desired scenario. The most common stratagem was to imply that an attack was an act of truce breaking by a foreign power, in the knowledge that the Crown and courts took such matters much more seriously than common

robbery. On the other hand, a petition also had to appear realistic to the court in order to proceed.⁹ Thus, the type of abuse complained of can be presumed to be believable even if the events described may have been exaggerated or even invented. Moreover, at times the wording of a petition rings true and conveys the real sense of outrage felt by either the complainant or by a maligned accused. Something of this emerges from the incident at Mousehole in Cornwall in 1444 when a Portuguese vessel took shelter from a storm and the crew asked for food for which they would pay with some of their cargo. Robbers from the town seized the ship, consumed the cargo and eventually dragged the ship onto dry land and destroyed it.¹⁰ A real sense of outrage also emerges from the story of three Flemish ships anchored in 1457 in the Downs with cargoes of salt and wine. They were attacked by a London ship, the *Elyn*, which struck one Flemish ship below the waterline and holed it so that a large amount of the cargo of salt had to be thrown overboard to save the vessel.¹¹ Another incident also concerns a Flemish vessel, this one with a cargo of 90 quarters of grain and some cloth, taken off the Camber near Rye by a balinger from Pevensey. While on their way to Seaford the pirate crew concocted a tale that the cargo (according to them a very small quantity of grain and only one cloth) belonged to a Frenchman, the king's enemy. All this was their 'sotell imagination' the Flemish shipmaster maintained indignantly in the words of the Chancery petition, and moreover had been backed up by forged bills.¹²

While the most copious sources for violent incidents at sea are to be found in the Patent Rolls and in the records, where they exist, of any subsequent inquisitions as well as the records of proceedings in Chancery, it is also important, to take account of the relevant laws. These include a statute of 1353 which gave the owners of unlawfully taken cargo the right to recover it providing that there were proofs of ownership. This statute (27 Edward III cap. XIII)¹³ is a section of the Statute of the Staple and specifically allows the original owner of goods lost to robbers at sea to recover them on providing proof of ownership without the need for any further legal proceedings. It says nothing regarding the perpetrators of the robbery nor does it prescribe any remedy if the goods are not restored to their owner. The statute 2 Henry V cap. VI from 1414, on the other hand, deals with attacks at sea which involved the breaking of truces, the disregard of safe-conducts and the hiding and support of offenders; all these offences are punishable as high treason. This statute indicates a new and much harsher view of this kind of offence.¹⁴ A petition in the Parliament of 1433 reveals, however, that the situation for merchants who had lost goods at sea was not satisfactory. Both Scots and Bretons were refusing to observe recent truces and seizing both English ships and cargoes. The Commons plea was that English merchants should receive restitution from these malefactors before any claims were allowed from Scots and Bretons who had suffered from reprisal attacks.¹⁵ By 1435 the situation had become even more intolerable. The Commons in the Parliament of that date complained vigorously that English merchants suffered from attacks by French and Flemish vessels but, because they might be faced with the awful penalties for treason, the English were reluctant to

defend themselves by attacking the vessels of their adversaries. This state of affairs had, it was claimed, 'ruined and impoverished' coastal populations.¹⁶ This time in answer to the petition the statute was suspended for seven years. In 1439 and 1441–2 new regulations were made allowing the seizure of the goods of friends in enemy ships and prescribing the limits of the safe-conducts. In 1450 the statute of 1414 was re-enacted but with less severe penalties prescribed, especially for the owners or victuallers of ships involved in an incident of this nature.¹⁷

The political environment at the time a statute was enacted clearly must also not be ignored. Henry V's 1414 act was aimed specifically at malefactors who had broken a truce or ignored a safe-conduct; these were matters which related to the relations between states and issues of war and peace. This act was perhaps an attempt to bring some legal clarity to the state of low level commercial war which existed in the English Channel in the reign of his father. There were prolonged negotiations on the issue of truces and their enforcement, especially with the Flemish authorities, before the statute was promulgated. Pavior has calculated the number of English ships taken by Flemings and vice versa between 1393 and 1416. He points to an increase of attacks by the English in 1402–4, with Flemish reprisals evident in 1403–4, and a similar sequence evident in 1409–c.1415.¹⁸ This would fit in well with the promulgation of the statute by Henry V and indicate that it was possible for the Crown to take action to repress violence at sea. Henry V has in fact been described as suppressing English piracy 'with a ruthlessness and thoroughness unequalled by any medieval English king'.¹⁹ He may well have included this as an aspect of his policy of increasing the number of King's Ships and using them in a much more systematic way to patrol the Channel.²⁰ Under the weak rule of his son, especially as the situation of the English in France began to deteriorate markedly after the mid-1430s, the political situation impacted with greater weight on the situation at sea. Violent incidents seem to have become more common, with uncertainty about the precise validity of truces and the status as friends or foes of mariners and ships from Flanders, Brittany or Castile. Gardiner argued that after 1453, when the French wars were at an end, complaints of truce breaking by foreign merchants become much rarer; perhaps an indication that the nature of robbery at sea was changing, becoming less opportunistic and more akin to licensed privateering.²¹

The lack of firm governance in England in the period before the outbreak of the Wars of the Roses may well have lain behind the rise in the number of cases complaining of violence at sea in 1446–52, noted above. The rebellion in Kent led by Jack Cade took place in 1450 and one of the grievances of the rebels was that 'the sea is lost'.²² The duke of Suffolk was also accused by the Commons in Parliament of neglecting the 'safe-keeping of the sea to the very great impoverishment and harm of this your realm'.²³

Most of the well-known English sea-rovers whose exploits have been described by modern scholars were active in the first half of the fifteenth century. Prominent among these are the two John Hawleys, father and son, of Dartmouth, who between

c.1380–c.1420 happily combined service to the king in several roles with successful piracy which made them ‘known and feared throughout the ports of Europe’.²⁴ Harry Pay from Poole was equally loathed, particularly by the inhabitants of the Spanish province of Finisterre, who called him Arripay.²⁵ Breton merchants complained vigorously in 1432 that it was impossible to obtain any restitution in the courts when all the officials and the jurors supported the pirates.²⁶ If, however, we concentrate on the evidence from the second half of the fifteenth century, when those accused of wrongdoing at sea seem somewhat less colourful characters than earlier ‘pirates’, some interesting themes begin to emerge.

One of the clearest points that can be made from the petitions concerns the geographical distribution of piratical attacks, with certain stretches of water being particular ‘danger areas’ (see Figure 4.1).²⁷ These were partly determined by geographical and navigational imperatives but also by trade routes. The waters off South Devon and Cornwall, especially the area between Dodman Point and Start Point, were those most favoured by some of the most successful sea-rovers. On this coast there was a multiplicity of havens if the need for shelter became unexpectedly urgent, or if it was necessary to wait in ambush for passing vessels. The trade routes from the south, particularly the one leading away from south-west France, Bordeaux and Bayonne, passed not far off shore, vessels having changed course to make the entrance to the Channel at around the ninety-fathom mark. The cargoes (mainly of wine, woad and iron) to be found in ships on this route commanded good prices. The names of certain havens, particularly Plymouth, Dartmouth and Fowey, recur frequently in complaints. In the hinterland of these ports were eager customers who do not seem to have been too scrupulous about the origins of goods suddenly on sale around their harbours, or who may have believed they were far enough from London to escape the notice of the Crown. That this was not always the case is demonstrated by the inquisition held in Truro in the spring of 1450. A barge called the *Makerell* of Fowey and a ship called the *Edward* of Polruan had originally been commissioned ‘to resist the king’s enemies’. However, both vessels were taken over by a group of named persons against the will of the owners and sailed to Plymouth, where the new crews seized a galley, the *St Antony and St Francis*, and its cargo worth the enormous sum of 10,000 marks. The galley was then sailed to Fowey by the malefactors, where it was unloaded and the cargo divided up. At the inquisition into the affray nearly forty individuals were named as having taken possession of some of the goods on board, though all denied having anything to do with the actual seizure of the galley. To give some idea of the diversity of the cargo, one Thomas Gardyner received a great deal of cloth of various kinds (kersey, scarlets, tapestry work and a Flemish carpet) as well as knives, bonnets and pins, a beautiful altar frontal and various dishes and porringers. The need for patience and perseverance on the part of owners who had lost their valuable goods is epitomised in this case. It was not until a date between July 1460 and March 1465 that the case was finally heard in Chancery. Some of the goods had probably been recovered by their owners, Catalan merchants, before

this date, but the master of the galley was prepared to continue litigation to recover the value of goods still missing and his costs and damages.²⁸ A much more mundane case is that of the *Congre* of Fowey. This concerned the robbery of two small French ships carrying wheat and salt. The captured ships were taken into Netley on the Isle of Wight to start with but later ended up in Fowey. Some of the cargo could be traced, while one ship was sold to a Cornishman, but much of the wheat was distributed in the countryside 'to whom the jurors do not know'.²⁹ Bulk commodities like grain could more easily 'disappear' into the surrounding countryside than the luxuries taken from the Catalan galley or even tuns of wine, which carried marks denoting their origin.

The second danger point was in the vicinity of the Isle of Wight. Southampton was a major port importing not only wine and dyestuffs, but visited by the carracks and galleys of Italian merchants with cargoes of extraordinary and desirable luxuries, as well as more mundane goods. Local shipowners also traded frequently with Normandy, the Channel Islands and south to Bordeaux and Spain. The island provided shelter while the voyage up the Solent, with its many navigable creeks and double tides, created opportunities for raiders for shelter and ambush. Southampton was also well-connected overland, with routes to London as well as places like Salisbury, where even stolen goods could find a ready market.³⁰

The final point in a voyage along the Channel where it was necessary for a shipmaster to be particularly on his guard was the area from the Downs off Sandwich up around the North Foreland and into the mouth of the Thames. This area was, of course, very near ports on the other side of the Channel harbouring French and Flemish sea-rovers. It was also the gateway to the lucrative markets of London, while creeks along the estuary and the neighbouring coasts of Essex and Suffolk were also easily accessible. The difficulties of navigation in the estuary and the time-consuming voyage upriver to London were also factors taken into account by unscrupulous seamen to their advantage, as we shall see below.

Off Devon and Cornwall, the evidence seems to suggest that vessels were frequently intercepted at sea, boarded, and then taken into a nearby haven for the cargo to be dispersed among a crowd of willing buyers. This was the case with a ship of Spain called the *Seynt Cruce* laden with the goods of a merchant from Aquitaine, which was stopped at sea on her way to Bristol by the *Palmer* from Polruan and the *Julyan* of Fowey.³¹ At an inquisition held at Liskeard in October 1443 into the taking of the *Cristopher* of Légué, the claim was made that the malefactors 'came upon them took the ship led it where they wished and divided the cargo at will'.³² No fewer than thirty-seven individuals were named as taking possession of either the ship and her tackle or some part of her cargo; even so the jurors swore that there were others involved whose names were not known. In another case involving shipping from Fowey, four caravels were charged with taking the *Marie* of Spain at sea in 1458.³³ A case from July 1469 was more complex. A shipmaster of Fowey, one John Wilcok, master of the *Barbara* of Fowey, was accused with at least twelve others of a whole string of robberies

Figure 4.1: Geographical Distribution of Pirate Attacks



committed against shipping in the waters off Belle Isle in Brittany. It seems that attacks on around fourteen ships loaded with the goods of Breton merchants were involved. The total value of the cargo stolen, mostly wine and iron, came to a considerable sum, with two ships being spoiled of goods worth 1,000 crowns and another two losing wine valued at £100.³⁴ The bad reputation of seamen from this area going back to the end of the fourteenth century is plain, as well as the eventual exasperation of the authorities at their disregard of the law. A general arrest was ordered in 1474 of mariners and shipmasters from Fowey, Bodinick and Polruan because of their depredations on ships protected by safe-conducts and their activities as receivers of stolen goods.³⁵

Cases involving Southampton and the Isle of Wight are particularly noticeable in the 1450s. This may be a reflection of the lack of firm governance at the time due to the weakness of the monarchy. One feature worth mentioning is that the local malefactors tended to take their prizes and their cargoes into Portsmouth in the first instance rather than Southampton, perhaps because this was a much quieter and less frequented anchorage, with no permanent presence of customs officials.³⁶ There are also cases which are much more clearly simple robbery with few political implications, even if breaches of truces and safe-conducts are mentioned in the petition. The large carracks of the Italians could not tie up at the quay at Southampton but had to be unloaded by lighter. In March 1451 Genoese merchants lost goods looted from lighters in Southampton harbour.³⁷ The pilfering of cargoes either from anchored ships or from lighters was also encountered at Sandwich; lighters unloading a Genoese carrack were looted in October 1451 in this port. In 1458, it was claimed that the *Marie* of Rouen was looted during the night while at anchor in Sandwich harbour by men from the carvel of one Thomas de Ros.³⁸

Large ships often put into Sandwich while on the way to their final destination in Flanders, usually Bruges or Sluis. It seems to have been usual for vessels to unload at least part of their cargo in the haven to be transferred to smaller ships for onward transport to London. There are a number of cases which concern the looting of vessels in the Thames estuary or the lower reaches of the river by the crews of ships which seem to have waited in creeks on the Essex coast for a suitable victim to come into view. The most favoured destination for the stolen goods seems to have been Queenborough, on the Isle of Sheppey, where the goods would have been again transferred, probably to river craft to go up the Thames to London, where it was hoped that they would be quietly absorbed into the market and prove untraceable. Venetian goods were seized from boats off Queenborough in this way in 1459.³⁹ The following year the owners of balingers called, significantly perhaps, the *Wolf* and the *Cacche* were accused of hiding in Essex and Suffolk creeks waiting for the opportunity to rob larger vessels.⁴⁰ Even quite low value cargoes might be at risk in this way. In 1462 sixteen quarters of wheat were taken off a ship from Sluis while at anchor in the Thames.⁴¹

Although certain areas were clearly more dangerous than others, opportunistic robbery of ships in trouble might happen anywhere along the English coasts. Ships

forced to take shelter from a gale or driven on shore were vulnerable to the unwanted attentions of local people. The *Christopher* of Lisbon laden with the goods of London merchants including the Grimaldi and Lomelini from Genoa was attacked by a mob from Plymouth, Saltash, Stoneham and Yealm when sheltering in the bay beside Bolt Tail near Salcombe in 1451.⁴² In 1454, Cornish men were accused of acting in much the same way as the fictitious wreckers of Jamaica Inn, when a Genoese carrack was driven onto the beach in a storm and prevented from getting off again when the locals cut the rigging and looted the cargo.⁴³

Despite this catalogue of looting and robbery, what is most noticeable about the petitions is that very few of them mention direct violence against the crew. The reason for this may be that the crew were reluctant to endanger themselves in defence of a cargo of which they owned little, if any. In addition, the mariners may have hoped that if they capitulated quickly to the pirates, they would be treated leniently. They might be put ashore far from home in some cases but as professional seamen could hope to find another berth rapidly in a busy port. What little is revealed in the sources about the *modus operandi* of the pirates also makes another line of reasoning plausible. On many occasions when attacking a ship at sea the pirates greatly outnumbered their prey. The most notable incident is probably when in 1455 eleven ships from Fowey held up four French ships, the *Magdalen* of Boulogne, the *Christopher* of Dieppe, the *Jaket* of Dieppe and the *Katherine* of Honfleur. There was perhaps little chance of a successful defence in these circumstances; it was better to let the victors put you ashore, in the ports of Brittany in this case, and get on with your life.⁴⁴ The attackers would in any case have usually been anxious not to cause undue damage to the ship, which was a valuable part of their booty.

In the petitions, the attacking ships are, it is true, sometimes described as 'warships' or 'arrayed for war', but it is hard to be sure to what extent this is true or merely the use of a phrase which had become almost part of the necessary template. By highlighting the martial nature of the attackers, the plaintive might hope that the case would be taken up as an act of truce breaking by a foreign power. There are few details available of the armaments routinely carried by trading vessels. The only detailed account is that for the weapons purchased for the *Margaret Cely* in 1486. These consisted of four small serpentines with seven chambers, two greater serpentines with six chambers, three arquebuses, two hand guns, six longbows, thirty sheaves of arrows and lead and a mould for making pellets.⁴⁵ This was for a voyage to Zealand. Further supplies of pellets and gunpowder and three more arquebuses were bought for her next voyage to Calais, but on this occasion the *Margaret* was an official armed escort for the wool fleet with twenty-eight soldiers embarked as well as her crew.⁴⁶ It should also be remembered that the spring and summer of 1486 were a time of tension for the regime of Henry VII, with a rebellion by the Staffords and the imposture of Lambert Simnel and his web of supporters, including France, Flanders, Scotland and Ireland, seeming more and more of a threat to the king's rule. It seems probable that the arms carried by the

Margaret may have been a response to this situation rather than an indication of what scale of armaments might be expected on any trading ship. Indeed, later voyages of the *Margaret* to Bordeaux for wine involved no expenditure on armaments of any kind.

It is also easy to overlook the way in which the cases of piracy or robbery at sea were pursued in the courts. Petitioners were prepared to spend time and money on these cases, at what must have been grave personal inconvenience at times. The already mentioned case of the attack on the Catalan galley *St Andrew and St Francis* of Barcelona by the *Edward* of Polruan and the *Mackerel* of Fowey in the harbour of Plymouth in 1449 is a case in point. The owner of the vessel, Francesc Junyent, an Aragonese, doggedly pursued his claim for restitution and the imprisonment of the malefactors till at least 1465. The cargo was of exceptional value, but even so to conduct lengthy litigation in a foreign state using somewhat dubious agents required a great deal of persistence and also perhaps a belief that right would win in the end. Those who had suffered much smaller losses were equally prepared to go to court. Henry Harmonson of Dordrecht was robbed of a cargo of Rhenish wine in Orwell harbour in around 1473 by a group of six English ships. He was able to discover the names of the owners of these ships and named them in his petition to the chancellor. Damyon de Pere, one of those named as owning a vessel called the *James* of Southampton, denied that he had any interest in the *James*, which he had sold to a Thomas Yokefield in Sandwich. Harmonson came back with the claim that de Pere as victualler was still closely involved with the ship. Unfortunately, documents relating to the end of the case do not survive but it is clear from those that do how much work on the part of the petitioners, in collecting information, collating it and presenting it, was necessary to have any chance of success in this kind of case.⁴⁷

What happened at sea was not completely beyond the reach of the Crown and the courts in the second half of the fifteenth century. Petitioners and litigants were prepared to seek justice and recompense by this route and must have had at least some hope that they would succeed. The usual first step when it had been established that the incident lay within the jurisdiction of the court was to order an inquisition into the matter. Where records of the results of these inquiries survive they often show a determined attempt to get to the truth. Corruption and skulduggery of various kinds did occur but were by no means universal. An inquisition in 1460 taken by the sheriff of Cornwall at Lostwithiel untangled the story of the attack on the *Mary* of Dordrecht. A group of Bristol merchants had claimed that this ship and its cargo had been unlawfully taken by two ships, one owned by Hugh Courtenay, a prominent Devon shipowner often in the service of the Crown, and the cargo of wine, woad, iron and saffron looted. The inquisition found that the ship had been chartered by the Bristol merchants but for an illegal voyage to Bordeaux, which at this date still constituted trading with the enemy. On the return voyage, although some cargo was looted by the *Galyot* of Polruan while the *Mary* was at anchor in the Scillies, the carvel the *Peter Courtenay* later encountered the vessel at sea and took it and the remaining cargo

into Fowey as legitimately forfeit to the king. The precise shares of the cargo owned by each petitioner are carefully recorded and it is specifically stated that the jurors have examined documents, including the original charter party with the owner of the *Mary*. The restitution of the ship and cargo was not possible in these circumstances as the record states in conclusion.⁴⁸ In a case like this the available legal processes seem to have produced a reasonable result and hardly support the view that the sea was an entirely lawless realm.

How much danger therefore would the Newport Medieval Ship or similar traders have encountered on a commercial voyage most probably heading south towards the wine and woad of Bordeaux, or to northern Spain or Portugal? Clearly things could go badly wrong given the uncertainties of wind and weather, but the risk was clearly worth taking and probably the majority of voyages were successfully and safely completed. If disaster did strike there were some possibilities for restitution if the merchants or ship-owner concerned were persistent in pursuing their claims and managed to get hold of the information vital to their case. A piratical attack could never be entirely ruled out, but the trade records for the period both for the export of cloth and for the import of wine are hard to relate to known periods of a high incidence of robbery at sea. In both cases either warfare abroad or political instability at home seem to have had a much bigger influence. The figures for cloth exports show something of a decline in the early fifteenth century but otherwise reveal a steadily rising trend throughout the remainder of the century. There is a sudden dip at the time of the collapse of the English alliance with Burgundy in 1433–4 and exports through London declined in the 1450s and 1460s when the political climate was most unstable, but there are no noticeable causes of unrest in the 1440s when, as we have seen, complaints of piracy rose.⁴⁹ The wine trade from Bordeaux was even more clearly affected by the ebb and flow of the wars with France. After 1453 it never recovered the heights seen between 1408 and 1420, when imports varied between c.10,000 and c.18,000 tons a year. It might be possible to see the very low figure of 3,199 tons in 1406–7 as related to piratical attacks but that is all. After the middle of the fifteenth century, the level of imports changed from year to year within the range of just over 2,000 tons to around 8,000 tons, with some signs of a recovery to c.10,000 tons at the end of the century.⁵⁰ There are no signs of piracy being a factor in this; what influenced the volume of this trade at this time was the attitude of the French monarch to English traders visiting Bordeaux and the state of relations between the two realms.

Are there in fact any very satisfactory answers to the questions with which this chapter began? There is insufficient evidence to come to any firm conclusions regarding the frequency of and the disruption caused by robbery on the high seas, or from ships in port. It is clear, however, that while this was a recognised hazard of seaborne trade it was not on such a scale as to make merchants abandon their enterprises. The question which has perhaps been most discussed by modern historians, the distinction between plain robbery at sea and some form of licensed privateering using letters of

marque, does not seem to have been of much consequence to seafarers and merchants frequenting the English courts in the second half of the fifteenth century.⁵¹ The system established by the act of 1414 and its later amendments was that most often referred to in petitions or court cases. The important issues were those relating to truces or treaties. Were those attacked, their attackers or the owners of the disputed goods the king's enemies or not? If not covered by a truce, anyone or anything connected with the king's enemies was 'fair game'. If ships from a state allied or friendly to the English were attacked, it was a serious issue and often treated as such. This applied to the seizure of goods from a Breton ship in 1470; the vessel and cargo were taken to Newcastle upon Tyne by named offenders whose arrest and imprisonment was ordered by the Crown.⁵² A somewhat similar attitude was taken in 1455 when a ship from Guernsey, a territory subject to the English Crown, was attacked by vessels from West Country ports including Exeter and Weymouth, with the cargo of cloth taken to Dartmouth.⁵³

It is surely hard to maintain that the sea lay completely outside laws and treaties when looking at this body of evidence, almost entirely from legal sources. There was a well-recognised and frequently used system of petitions, inquisitions and cases in Chancery, backed up by the provisions of statute law. It is certain many malefactors got away with their ill-gotten gains, but equally clear that there were persistent and angry merchants and shipmasters who were determined to enforce their rights in the courts and who, at least on occasion, did so with success.

The situation at sea cannot of course be compared with the much more complex situation with regard to law and order on land. It is, however, worth noting that the authority of the ruler and the zeal with which this problem was treated were crucial elements in the effectiveness of royal rule.⁵⁴ In the fifteenth century, Henry V's Act of 1414 marked a new and robust approach to the issue of violence at sea. This faltered under the ineffective regime of his son, particularly as the situation in the territories conquered by the English in France deteriorated and the French recovered control of their northern coast.

In his *Governance of England*, presented to Edward IV in 1471, Sir John Fortescue included the 'repressing of pirates' as an essential duty for the naval fleet that he felt it was necessary for the king to have always at his command. In his view the proceeds of poundage and tunnage 'ought to be applied only to the keeping of the sea', as was stated in Parliament at the time when the life-time grant of this tax was made to the king.⁵⁵ Fortescue and his contemporaries knew very well that this tax was seldom spent on 'keeping the sea'. The fact, however, that this was well known to be its ostensible purpose reveals an attitude to robbery at sea which had undergone much development since the time of Edward III. Pirates might well escape punishment but the seas were no longer wholly 'beyond laws treaties and truces'.

To conclude, when the Newport Medieval Ship was constructed in c.1450, the seas around England seem to have been particularly prone to piracy, with concentrations of activity along the English Channel. There is evidence that efforts to control piracy were

more consistent and more successful once open warfare between France and England came to an end after 1453. Yet piracy continued to occur and, as Margaret Condon pointed out, most known transfers of ships from Castilians to Englishmen during the 1450s to 1460s were the result of seizures.⁵⁶ Long-established Castilian ordinances forbade the sale of ships to foreigners, with purchases by Englishmen being particularly rare before the Treaty of Westminster (1466). Condon therefore suggested that the Newport Medieval Ship is likely to have come into English hands as result of a seizure.

When it comes to interpreting the Newport Medieval Ship itself and trying to understand the lives of those who sailed it, perhaps the main point to be drawn from my chapter is that piracy of the type practised around the British Isles rarely involved great violence to either the ship or the crew. In the popular imagination, piracy requires hardened outlaws and bloody murder. This was rarely the case. The Newport Medieval Ship certainly carried arms and its crew was no doubt willing to use them. But if a ship was set upon by a serious force, its sailors typically capitulated immediately. In most cases the mariners were then treated relatively well by their captors, being put ashore somewhere where they could seek aid and a passage back home. It was exceptionally unusual for a crew to be butchered by prototypes of the latter-day 'Blackbeards' of popular fiction. Those who sailed the Newport Medieval Ship are thus unlikely to have feared piracy of the type found in northern waters. For the most part, piratical attacks off the shores of Britain did more damage to the profit margins of merchants and shipowners than to those who sailed the vessels.



Notes

- 1 For example, by Jill Eddison, in *Medieval Pirates: Pirate, Raiders and Privateers 1204–1453* (Stroud, 2013), p. 17.
- 2 C. L. Kingsford, 'West Country Piracy: The School of English Seamen', in *Prejudice and Promise in Fifteenth Century England* (Oxford, 1925), p. 79.
- 3 N. A. M. Rodger, *The Safeguard of the Sea; a Naval History of England, I* (London, 1997), p. 115.
- 4 Thomas K. Heebøll-Holm, *Ports, Piracy and Maritime War: Piracy in the English Channel and the Atlantic c.1280–c.1330* (Leiden, 2013), pp. 245–8.
- 5 C. J. Ford, 'Piracy or Policy: the Crisis in the Channel, 1400–1403', *Transactions of the Royal Historical Society*, 5th Series (1979); included in S. Rose (ed.), *Medieval Ships and Warfare* (Aldershot, 2008), item 7, p. 106.
- 6 Michel Mollat, *Le Commerce Maritime Normand à la fin du moyen âge* (Paris, 1952), pp. 76–7.
- 7 Dorothy M. Gardiner, *A Calendar of Early Chancery Proceedings relating to West Country Shipping, 1388–1493*, Devon and Cornwall Record Society (Torquay, 1976).

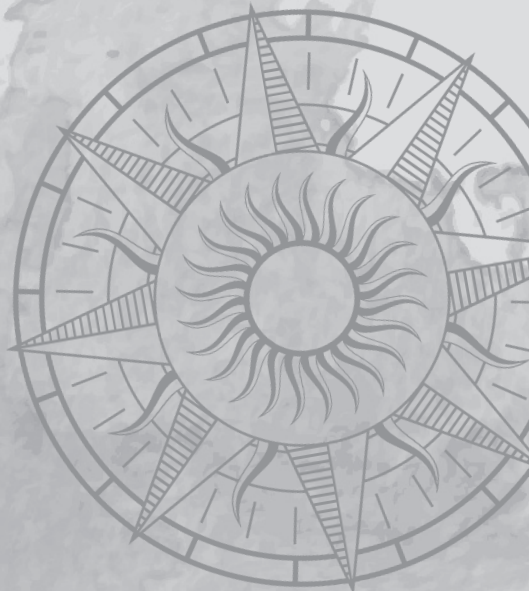
- 8 Mollat, *Le Commerce Maritime*, p. 79. Mollat has taken his figures for safe-conducts from the Treaty Rolls (TNA: PRO C76 rolls 132–61).
- 9 Heebøll-Holm, *Ports, Piracy and Maritime War*, pp. 28–9.
- 10 *CPR* (1441–46), pp. 289–90.
- 11 *CPR* (1452–61), p. 411.
- 12 TNA: PRO Early Chancery proceedings; C1/74/41
- 13 ‘sanz autre suite faite a la commune ley’; in the words of the Statute.
- 14 Gardiner, *A Calendar of Early Chancery Proceedings*, pp. xiv–xvi.
- 15 TNA: PRO SC8/128/6370.
- 16 Chris Given-Wilson (ed.), *The Parliament Rolls of Medieval England*, Scholarly Digital Editions, Parliament of 1435, item 28 (2005).
- 17 Statute 29 Henry VI cap.VI.
- 18 Jacques Paviot, *La Politique Navale des Ducs de Bourgogne, (1384–1482)* (Lille, 1995), pp. 226–7.
- 19 Rodger, *The Safeguard of the Sea*, p. 147.
- 20 For Henry V’s naval policy, see Susan Rose, *England’s Medieval Navy: Ships Men and Warfare* (Barnsley, 2013), p. 139.
- 21 Gardiner, *A Calendar of Early Chancery Proceedings*, pp. xvii.
- 22 A. R. Myers (ed.), *English Historical Documents 1327–1485* (London, 1969), p. 267.
- 23 Chris Given-Wilson (ed.), *The Parliament Rolls of Medieval England*, Scholarly Digital Editions, Parliament of 1450; item 38.
- 24 *Oxford Dictionary of National Biography*, John Hawley; Rodger, *The Safeguard of the Sea*, p. 147.
- 25 Joan Evans (ed.), *The Unconquered Knight; a Chronicle of the Deeds of Don Pero Niño by his Standard Bearer Gutierre Diaz de Gamez* (London, 1928), pp. 122–3.
- 26 TNA: PRO C1/11/45; printed in Gardiner, *A Calendar of Early Chancery Proceedings*, item 28, pp. 29–30.
- 27 See Francesco Guidi-Bruscoli’s chapter in this volume for a similar point regarding the geographical distribution of piracy on the routes between Italy and the North.
- 28 This is a well-known case; the proceedings in Chancery appear in Gardiner, *A Calendar of Early Chancery Proceedings*, items 71 a–l, and are printed in Kingsford, *Prejudice and Promise*, pp. 183–94. The Inquisition in the case is *Calendar of Inquisitions Miscellaneous*, VIII, item 219.
- 29 *Calendar of Inquisitions Miscellaneous*, VIII, item 207.
- 30 For Southampton’s extensive inland trade, see Michael Hicks (ed.), *English Inland Trade, 1430–1540: Southampton and its Region* (Oxford, 2015).
- 31 *CPR* (1452–61), p. 118 and Gardiner, *A Calendar of Early Chancery Proceedings*, item 65.
- 32 *Calendar of Inquisitions Miscellaneous*, VIII, item 181.
- 33 *CPR* (1452–61), p. 441.
- 34 *CPR* (1467–77), pp. 197–8. This case is mentioned in conjunction with a case arising out of the wreck of the *Barbara* in 1471 in Gardiner, *A Calendar of Early Chancery Proceedings*, item 97.
- 35 *CPR* (1467–77), p. 492.
- 36 TNA: PRO Early Chancery proceedings C1/16/358 is a case in point.

- 37 *CPR* (1441–46), p. 442.
- 38 *CPR* (1452–61), p. 436.
- 39 *CPR* (1452–61), pp. 494, 256.
- 40 *CPR* (1452–61), p. 605.
- 41 *CPR* (1461–67), p. 101.
- 42 *CPR* (1441–46), p. 536.
- 43 *CPR* (1452–61), p. 169.
- 44 *CPR* (1452–61), pp. 302–3.
- 45 Alison Hanham, *The Celys and their World: An English Merchant Family of the Fifteenth Century* (Cambridge, 1985), p. 363.
- 46 Hanham, *The Celys and their World*, pp. 367–8.
- 47 TNA: PRO Early Chancery proceedings, C1/50/385.
- 48 Calendar of Inquisitions Miscellaneous, VIII, item 255.
- 49 E. M. Carus-Wilson and Olive Colman, *England's Export Trade 1275–1547* (Oxford, 1963); total exported tables, 138–9; London exports, pp. 140–1.
- 50 Margery Kirkbride James, *Studies in the Medieval Wine Trade* (Oxford, 1971), appendix 6, pp. 57–8.
- 51 Michel Mollat's article, 'De la piraterie sauvage à la course réglementée (xiv-xv siècle)', in *Mélanges de l'école française de Rome*, 87 (1975); pp. 7–25, is frequently cited.
- 52 *CPR* (1467–77), p.197. There was a group of similar cases involving Spanish ships in 1471–2; *CPR*, (1467–77), pp. 319, 354.
- 53 *CPR* (1452–61), p. 258.
- 54 John Bellamy, *Crime and Public Order in England in the later Middle Ages* (London, 1973), p. 199.
- 55 Shelley Lockwood (ed.), *Sir John Fortescue, on the Laws and Governance of England* (Cambridge, 1997), pp. 96–7.
- 56 Margaret M. Condon, 'Mirror or mirage: the Newport ship and the shipping of the Severn Sea', paper presented at 'The World of the Newport Ship' conference (Bristol, 17–18 July 2014). Although illness prevented Miss Condon from turning this paper into a chapter for the current volume, it will hopefully be published as an article at some future point.

five

NEWPORT DURING
THE FIFTEENTH
CENTURY¹

Bob Trett



SINCE ITS DISCOVERY in 2002, one of the ‘mysteries’ of the Newport Medieval Ship has been why such a large vessel was undergoing repairs in the town. Although Newport has always been a port, it has generally been assumed that its medieval maritime trade would have been limited to the Bristol Channel, its tributaries, and the nearer parts of Ireland and France. As discussed by Evan Jones in this volume, such trade was normally conducted on boats and small ships.² By contrast, ships as large as the one found at Newport were typically associated with long-distance trade, such as that to Biscay, Portugal and Andalusia. What then was the Newport Ship, a great ‘*navis*’ with an estimated minimum cargo capacity of 161 tons, doing in this small Welsh port?

The purpose of this chapter will be to set the immediate context for the Newport Medieval Ship, by examining what the town was like in the fifteenth century, how it had developed and what is known of its size, topography and administration. This will lead on to a consideration of the port’s maritime links, which will show that it had a greater association with long-distance trade and great ships than has generally been supposed. Finally, the archaeological evidence relating to the ship, along with documentary evidence from the 1460s, will be examined with the aim of throwing light on how long-lasting the ship’s relationship with Newport and its region might have been.

Medieval Newport

Today, Newport is a city and port on the Welsh side of the Severn Estuary. It lies within the historic county of Monmouthshire, which in 1974 became the county of Gwent. This was abolished in 1996 and Newport became a county borough in its own right. Within the Gwent area Newport, on the river Usk, is one of only two ports capable of providing deep enough water for larger ships to berth. The other similarly favoured port is Chepstow on the river Wye. Nowadays, Newport is a large industrial and commercial city with a population in excess of 140,000.

One of the earliest identified references to Newport is in a grant made in 1132 by Robert Fitz Roy, earl of Gloucester, to Montacute Priory. In addition to the earl’s

confirmation of a grant of land at Malpas, the monks were henceforth to receive thirty-six shillings yearly from the revenues of Newport. While the settlement was then known as *Novo Burgo* (that is, a new town or burgh), by 1265 the name *Newport* was in use, showing that it was regarded as a port as well as a borough.³ The borough, including the town and surrounding area, appears to have been carved out of the existing manor of Stow, as many of the original fields are split in half by the new borough. Stow and Newport are on the west bank of the Usk and the parish church for Newport, St Woolos (a corruption of St Gwynllŵg), stands on Stow Hill, just outside the medieval boundary of the borough.

In the Middle Ages the borough of Newport was primarily a market town with an estimated population of around one thousand. It was the urban and administrative centre of the Marcher lordship of Newport. This included not only the borough of Newport, but also lands extending to the west as far as the river Rumney near Cardiff and to the north as far as the Brecon Beacons near but not including Abergavenny. The lordship enjoyed many of the rights and privileges of the former Welsh rulers. In 1198 it passed into the hands of King John, and in 1217 to the de Clare family, who might have used Newport as a port for supplying material for the building of Caerphilly Castle.⁴ Following the death of Gilbert de Clare III in 1314, the lordship was seized by Hugh Despenser the Younger, who was married to Eleanor de Clare, one of Gilbert's three daughters. His brother-in-law, Hugh Audley, was married to Eleanor's sister, Margaret de Clare, who had the rightful claim. In 1321 Audley and others seized Newport after a devastating siege, but subsequently lost control to Despenser. It was Despenser who, in 1324, secured for seven Welsh boroughs, including Newport, release from all tolls of murage, pontage, picage, pavage, quayage, terrage, lastage, stallage, tronage and other local dues levied on traders or their merchandise.⁵ The burgesses of Newport obtained confirmation of this charter when Richard II passed through the town in September 1394.⁶

Following the fall of the Despensers in 1327, Audley regained Newport. In 1347 he was succeeded by his son-in-law, Ralph Stafford, first earl of Stafford. The Staffords retained the lordship of Newport until 1521, when Edward Stafford, third duke of Buckingham, was executed for alleged treason.

At the beginning of the fifteenth century Newport suffered badly from the campaigns of Owain Glyndŵr. A survey of lands that had been held by Edmund Stafford in 1403 shows that the town of Newport, together with the lordship, had been worth £215 17s. yearly in fees before the insurrection 'but now nothing because all burnt, destroyed, wasted and made nought by Owain and other rebels in his company'.⁷ The town and lordship revived, however, to become a source of considerable income for its lord. Between 1465 and 1469, during the minority of the second duke of Buckingham, the annual net profits of the lordship were £358, most of which came from the town.⁸

Newport Castle served as headquarters for the government of the lordship and here the lord's courts were held, including the courts baron and the courts leet. The

town was also the sole centre for trade for the entire lordship in Gwynllŵg, for by confining this trade to the town the lord was able to control the collection of tolls.⁹

The site of the medieval town is in the heart of modern Newport, close to the river Usk, where a bridge crossed the river, as one still does today. The town and the bridge were protected by a castle, and the river frontage of the castle still survives, albeit as a ruin (see Figure 5.1, colour section). The bridge is known to have been built by the twelfth century and was the key factor in the growth of Newport. It provided the means of crossing a river with one of the highest tidal ranges in the world, a major obstruction to travel across south Wales. The town was also an ideal landing place for boats and ships, with many tidal creeks or pills. The construction of the bridge would have restricted the size of ships going further upstream to Caerleon.

Newport was described in a survey made for Henry VIII in 1521 as a 'goodly haven, well occupied with small crayes, whereunto a very great ship may resort'.¹⁰ A survey of the ports of south Wales conducted in the 1550s also describes it as having a good haven, which was accessible by vessels when the wind was westerly or southerly. Like Chepstow, Newport's haven was said to be three fathoms deep (18 foot), but its approach was safer, for while vessels sailing to Chepstow had to negotiate the rocky passage through the English Stones, known as The Shoots, the river and estuary below Newport was 'all sand'.¹¹

Newport Castle was the administrative centre of the lordship of Newport. In 1444 Humphrey, sixth earl of Stafford and the lord of Newport, was created duke of Buckingham. Following Humphrey's death in 1460 the vast estates of the Staffords were held by the Crown on behalf of Henry, the grandson of the first duke, and at that time a minor. The lordship of Newport was placed in the custody of Richard Neville, earl of Warwick, enabling him to administer and receive the income of the lordship. The following year custody of Newport was transferred to William, Lord Herbert of Raglan, in whose hands it remained until Herbert's defeat by Warwick at the Battle of Edgecote, traditionally dated to 26 July 1469.¹² Control then reverted to the earl of Warwick until he fled the country in 1470. Returning later the same year, Warwick was killed at the Battle of Barnet, 14 April 1471. After this control of Newport is unclear until the second duke of Buckingham gained possession of his estates in 1473.

Apart from the recovery of the Newport Ship there has been little archaeological investigation of the early borough. Most of the evidence relating to the medieval town thus comes from later maps, illustrations, documentary records and the surviving topography of the pre-modern landscape (including street patterns, property boundaries and standing buildings).

Early maps show the land routes, from Chepstow in the east and from Cardiff and Caerphilly in the west, running towards the river Usk at Newport bridge. Four miles further up the river Usk from Newport lay the town of Caerleon, where another bridge crossed the Usk. It would appear that Newport gradually superseded Caerleon as the main port on the Usk, albeit smaller vessels were still using Caerleon in the eighteenth

and nineteenth centuries. Moreover, even if large ships could not sail beyond Newport's bridge, that did not stop Caerleon from having an interest in overseas trade and shipping. For instance, in the late 1530s William Jones of Caerleon, 'gentleman', owned a ship about 135 tons burden variously described as the *Trinity* of Caerleon, the *Trinity* of Newport or the *Trinity* of Wales. The vessel, which is unusually well documented, spent most of its time servicing Bristol's trade to Lisbon and Andalusia and was later bought by a Bristol merchant, William Ballard.¹³ The *Trinity* appears to be by far the largest ship associated with either Newport or Caerleon at that time. Indeed, it was probably the greatest ship in Wales, being the only large Welsh ship to be called up for service in Henry VIII's navy when England was threatened with invasion during 1539 and 1545.

The earliest-known map of Newport dates to about 1750, but now survives only in copy. It shows how the town was built along the High Street leading towards the Church of St Woolos (now the cathedral) just outside the borough boundary.¹⁴ The importance of Newport as a market town can be seen in the way the High Street broadens out to create a market place. Even today much of the original street system survives. A charter granted by Hugh Stafford in 1385 and renewed by his grandson Humphrey Stafford in 1427 gave the burgesses many rights, including the right to elect a mayor and establish a guild. The 1427 copy of the charter is the earliest still to survive and is in the collections of Newport Museum and Art Gallery.¹⁵

The present Newport castle was probably first built by the de Clares in the late thirteenth century or early fourteenth century, with substantial alterations in the fifteenth century. The castle was extensively repaired and remodelled in the twentieth century by the then Ministry of Works. The site of the earlier Norman castle is not known, although a motte stood, until the mid-nineteenth century, on Stow Hill outside the original Newport borough boundary. While the castle bailey no longer exists, the impressive towers along the riverfront still stand.¹⁶ The castle bailey was roughly rectangular, with its north wall at a slant to the rest of the bailey. There was also evidence for a moat surrounding the castle. The central tower of the main frontage contains an audience chamber with a magnificent vaulted roof. Beneath the audience chamber is a watergate through which the castle could be supplied by boats coming in on the high tide. The castle protected the adjacent bridge over the Usk, which also had a gate. The bridge was of wooden construction, and needed regular repairs.

Although there was formerly some debate about whether Newport had walls, recent research reveals both physical and documentary evidence for them.¹⁷ There are many more references, however, to Newport's three gates, with the east gate, on the bridge, depicted on an engraving of 1732 by Samuel and Nathaniel Buck. John Leland, writing sometime between 1536 and 1539, refers to the three gates and evidence still exists to show where they were situated.¹⁸ The Westgate is commemorated in the name of the Westgate Hotel at the south end of the High Street. The history of this gate is complicated and the original Westgate appears to have been a short distance

away, at the top of what is now Skinner Street. This was replaced soon after 1476 with a new gate on the site of a later hotel.

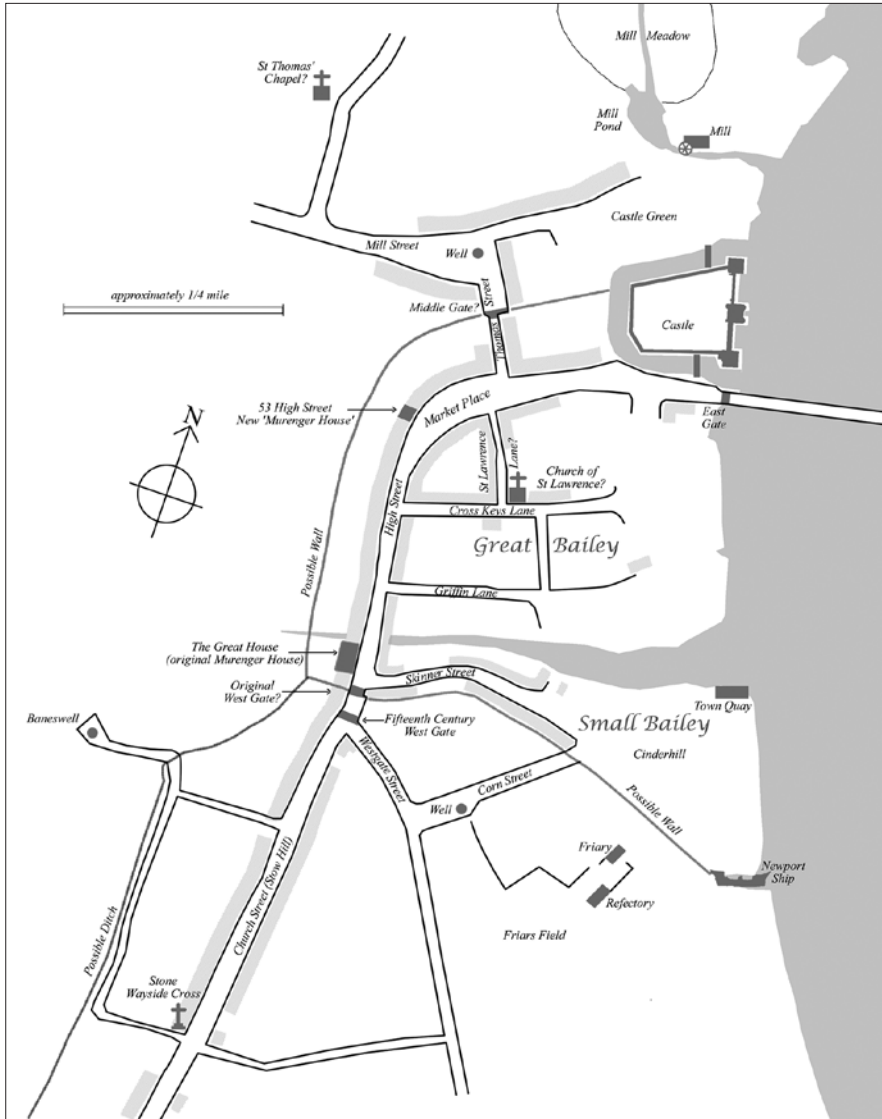
By looking closely at later maps of Newport it is possible to see property boundaries following the line of the north wall of the castle bailey. Further inspection shows that this line of property boundaries continued beyond the castle, suggesting that the castle's north wall reused an earlier town wall. A third middle gate was likely to have been positioned in this wall, across a road called Thomas Street, which is no longer there. At the end of the eighteenth century a canal destroyed the rear west wall of the castle bailey.

Even without much archaeological evidence it has been possible to produce a conjectural plan of fifteenth-century Newport (see Figure 5.2). Early rentals show that the town was divided into two walled baileys, separated by the town pill (also known as Arthur's Pill). These baileys were within the borough boundaries. An Augustinian friary was founded in 1377 outside the Small Bailey and to the south of the town. This was still standing in 1859, when an engraving of the ruins was made. The Austin Friars is of particular significance to the Newport Medieval Ship because the vessel was found in a silted-up inlet or channel between the Friars and the town quay, which lay a hundred yards upriver. The landing stage for the town quay was at the entrance to the town pill (creek) with the quayside covering an area to the south of this pill.

A crudely shaped access door was cut into the starboard side of the Newport Ship and shows that dismantling was carried out from the north side of the channel but still close to lands belonging to the Friars. In the spring of 2014 there was a unique opportunity to examine part of the friary, when an archaeological excavation was conducted prior to a large redevelopment project. The excavation showed at least two building periods, with stone tracery thought to be from the first phase reused as building material in a later wall. The edge of a relict channel was also found, which may represent the continuation of the channel in which the Newport Ship was serviced and later abandoned.¹⁹

Leland suggested of Newport that 'the fairest of the town is on one street', that being the High Street. The chief buildings, other than the castle, thus lay away from the river and the quay. The oldest building in High Street that still survives is known as the Murenger House, although the frontage is post-medieval and clad with twentieth-century timber framing. A murenger was originally a custodian of the town walls, but the house appears to have been misnamed in the nineteenth century and was in fact the town house of the Herbert family of St Julians, just north of Newport. By 1630 the house was in the possession of Edward, Lord Herbert of Cherbury. The Murenger House has a fine plaster ceiling on the first floor, which incorporates a Tudor rose and what may be open pomegranates, suggesting a date early in the Tudor period. However, the thickness of the walls, apart from the frontage, suggest it might be a stone building and of medieval date.²⁰

Figure 5.2: Conjectural Plan of Fifteenth Century Newport



The main church of Newport, St Woolos, lay outside the original town boundary. While much altered, it has a late fifteenth-century tower, thought to have been built when Jasper Tudor had custody of the lordship, and a fine Romanesque arch leading into the nave. The arch has naïve but ornate stone capitals, possibly including a representation its founder, the early Welsh saint St Gwynllŵg. In 1949 St Woolos was formally designated the cathedral church of diocese of Monmouth (established 1921).

Early names sometimes survive in Newport, such as Cinder Hill, Skinner Street, Baneswell, Thomas Street, Mill Street, Corn Street and the West Gate, all mentioned in medieval or sixteenth-century documents. Skinner Street may be an indication of a trade in hides, given its proximity to the town quay. Cinder Hill was located by the town quay and it is interesting to note that the iron slags found under the Newport Ship are consistent with exploitation of ores from the Bristol Channel Region.²¹

A number of medieval artefacts have been found in Newport over the years, including part of a fine fifteenth-century cross head, deposited in the river near the town bridge. More medieval artefacts were discovered in 1934, during the rebuilding of a bank where the Town Pill once crossed the High Street. Fragments of a possible barge were found, including what was thought to be a rudder and also another 'Y'-shaped timber. From the same location a quantity of medieval pottery and tile was recovered, later identified as thirteenth- or fourteenth-century Bristol Redcliffe ware, illustrating the close trading connections between Bristol and Newport during the Middle Ages.²²

Newport Trade and Shipping

As noted at the start of this chapter, the presence of a vessel as great as the Newport Medieval Ship might seem odd, given that the ports of south Wales were engaged primarily in coastal trade or fishing, which employed much smaller vessels. As already mentioned there is, however, evidence to suggest that south Wales did possess some great ships during the fifteenth and sixteenth centuries. Newport seems to have been to the fore among these, both because of its proximity to Bristol and because it had a good haven with a relatively safe approach. That the town was capable of accommodating great ships is noted in a 1521 survey of the duke of Buckingham's estate, which stated that 'The said toune of Newpoort is a burgh and a propur toune and haith a goodly haven commyng unto hit, well occupied with small Crayes whereunto a veray great shippe may resoorte and have good herbour.'²³ So, while the survey indicates that most of the vessels using Newport were crayes, which were small coastal trading vessels, it could certainly accommodate great ships.

Unlike Bristol, there are few references to Newport ships in the middle of the fifteenth century, in part because the Exchequer made no attempt to collect customs duties in south Wales until the 1560s. Occasional notices of both merchants and ships break this dearth. For instance, in 1397 and 1400 John Banham of Newport-on-Usk was shipping wool through the Carmarthen staple, and, probably, Rhuddlan also, and one Geoffrey Newport, his name suggestive of his origins, was trading through Bristol in 1437–8 on Tenby boats. Newport ships, like those of Tenby, were free of certain local dues in Bristol's port. In addition to the *Trinity* and the *Christopher*, both of Newport and discussed below, one other known locally owned vessel is the *Swan*, which in 1440 had its home port at Newport.²⁴

During the fifteenth century the Bristol customs accounts record a number of Chepstow vessels carrying wine and other goods from Chepstow to Bristol. For instance, in 1461 six Chepstow boats delivered wine, rosin and lye ashes to Bristol. These included the *Christopher* (Henry Gared or Garret master), the *Margaret*, the *Julian* and one or more boats called the *Marie*.²⁵ Similar references occur in later years, which suggest vessels from the continent sometimes dropped off cargo in Chepstow, expecting it to then be shipped across the Severn to Bristol in local lighters.²⁶ While Newport does not seem to have been involved in this trade, there are occasional references in the Bristol accounts to Newport vessels carrying goods directly between foreign ports and Bristol, such as the *Christopher* of Newport, which imported fish and hides from Ireland to Bristol on 17 February 1480.²⁷

Although references to Newport ships are unusual, a number have recently been identified by Margaret Condon and Wendy Childs from the period in which the Newport Medieval Ship was in service. These include a reference to a carvel ship built in Newport around 1454 for Morgan ap Jenkyn ap Philip and William Kemeys, requiring a shipwright to be brought over from Bristol.²⁸ At the time William Kemeys was the receiver of income for the lordship of Newport and in 1456 Morgan ap Jenkyn ap Philip became receiver. It thus seems likely that the vessel had been commissioned by their master, the duke of Buckingham.²⁹ This ship may be the *Trinity* of Newport, John Lloyd master, which received a safe-conduct to trade overseas in 1460.³⁰ On 20 April 1461 the Bristol customs accounts show that the *Trinity* of Newport, John 'Thloyde' master, was shipping woollen broadcloth from Bristol to Ireland.³¹ Another reference shows that in May 1462 the *Trinity* of Newport of 400 tons burden was granted a licence by Edward IV to carry 300 pilgrims from the port of Bristol to St James of Compostela in Spain.³² This is particularly significant in view of the large size of the ship; there are no other ships of this size known in south Wales at this time.

The Newport Ship has provided us with a number of merchant marks carved on to wooden boards or barrel staves found either under or within the ship. Whilst we cannot be certain of attributions, merchant marks came in a wide variety of types, and two of the Newport marks have close similarities with two known fifteenth-century Bristol merchants, William Fish and Robert Baron.³³

The most interesting document relating to a ship at Newport is dated 22 November 1469 and is an instruction from Richard Neville, earl of Warwick, authorising re-imbursements for the 'making of the ship at Newport'.³⁴ Subsequent references to a purser and wares taken from the ship make clear that this was for renovation work, rather than a new vessel, the term 'making' being used at this time for both new builds and repairs.

'Richard earl of Warwick and Salisbury, Great Chamberlain of England and captain of Calais' instructed Thomas Throkemorton, his receiver for the lordship of Glamorgan and Morgannwg, to repay 'Thrahairon ap Merik' £10, which he had paid John

Colte for 'the making of the ship at Newport'. In addition, the ship's purser, Richard Port, was paid 53s. 4d, William Toker, mariner, was given 6s. 8d for 'the carriage of iron from Cardiff unto Newport for the said ship' and Matthew Jubbez was paid 'in money, yron (iron), salt and other stuffe belonging to the seid ship' £15 2s. 6d.

Trahairon or Trahagren ap Merik (also referred to in other accounts as Trahaiarn ab Ieuan ap Meurig) lived at Pen-rhos, near Caerleon. He had been the agent and receiver of money due in the lordship of Newport for William Herbert, earl of Pembroke, from 1461 until July 1469. Given that the earl of Warwick's instruction was dated 22 November 1469 and that Herbert had by then been executed, it is clear that Trahagren ap Merik retained his post when control of the lordship of Newport was seized by Warwick.³⁵

John Colt(e) is likely to be a gentleman soldier from Northumberland who acted for the earl of Warwick. Amongst his other duties he paid £51 0s. 8d for the expenses of Edward IV on his visit to York and in 1464 was repaid out of the revenues of a number of lands seized from Ralph Grey.³⁶ He received a general pardon by Edward IV in 1471 for his part as a retainer of Warwick. In the pardon he is referred to as a soldier of the town of Calais, also as a merchant late of Newcastle upon Tyne, a gentleman late of London, and late of the county of Essex.³⁷

Richard Port is almost certainly Richard Port *alias* Roberts, merchant of Bristol, who was active in Bristol's trade during the 1460s and has a known connection to Warwick, in that he was granted letters of protection for service with John Wood, victualler of Calais, but had this revoked in 1462.³⁸ William Toker was the master of a small trading ship, and therefore probably not William Toker or Toket who was Bailiff of Bristol in 1470, Constable of the Staple in 1481, MP for Bristol in 1489 and Mayor of Bristol in 1491.³⁹ Matthew Jubbez is most likely the Bristol merchant Matthew Jubbes, who appears occasionally in Bristol's 'particular' customs accounts and later became Sheriff of Bristol, 1494–5.⁴⁰ That he was paid partly in iron and salt taken from the ship suggests that its previous voyage had been to Biscay, which was a major supplier of Basque iron and Bay salt. The fragment of an iron ingot found on the Newport Ship may be a product of this trade.⁴¹

Given that the ship's purser, Richard Port, was a Bristol merchant, it seems likely that it had undertaken at least one commercial voyage under local ownership prior to undergoing repair work at Newport. At this time pursers seem to have been employed only on the greatest ships, the financial management of smaller vessels being left to shipmasters.⁴² Indeed, all known fifteenth-century instances in which Bristol shipowners engaged a purser or 'attorney', to oversee the financial management of their vessel, relate to very large ships. These include the *Julian Bagot*, a *navis* of at least 152 tons burden that was more or less contemporary with the Newport Ship, as well as the *Trinity* of Bristol (c.300 tons burden) and the *Anthony* of Bristol (c.380 tons burden), both of which were in operation during the 1480s.⁴³ It thus seems likely the ship mentioned in Warwick's letter was also a great ship.

If the Newport Medieval Ship had arrived in port before July 1469, it was probably at the instigation of William Herbert, earl of Pembroke, when Herbert had control of the lordship of Newport. However, if it arrived after that date it almost certainly would have been brought to Newport on behalf of Richard Neville, earl of Warwick, who had control of Newport until he fled to France in April 1470.

Both Warwick and Herbert had their own fleets of ships, as discussed in the chapters in this volume by Ralph Griffith and Evan Jones. Many of the ships owned by Warwick are well documented and included a number of large war ships such as the *Mary Warwick* of 500 tons, the *Trinity* of 350 tons and a new *Trinity* commissioned on 12 June 1469 at Sandwich.⁴⁴

The Welsh bard Howel Swrddwal refers to Herbert's commercial activities and states that he had two ships trading in wine.⁴⁵ In March 1465 Herbert was granted by the king 'all the gear fittings, wines and other merchandise on a great ship of his called *Gabriell* which he had sent at great expense to foreign parts and which on its return from thence . . . was wrecked off the coast of Ireland'. However, there is no known connection with Newport.⁴⁶

Although there is limited evidence of great merchant ships operating from Newport in the fifteenth century, there is much more information from the sixteenth century. Following the Acts of Union from 1535 to 1542 the governance of Wales was brought into line with England; the new shires replaced the old lordships and a customs officer for south Wales, based at Cardiff, began to collect duties there from the 1560s. Thereafter records are more frequent, albeit the oldest surviving 'Port Book' for the port of Cardiff dates to 1579.⁴⁷

A survey of shipping undertaken in 1572 shows that Newport possessed two large merchantmen: the *White Eagle* (100 tons burden) and the *Black Lyon* (80 tons), as well as ten other vessels ranging from 10 to 40 tons.⁴⁸ Similarly, a survey of 1577, which sought to identify the larger vessels available for naval service, indicates that Newport then had six 'topmen' – ships that were big enough to have a top on their mainmast – two of which were of 100 tons.⁴⁹ While none of the vessels were as big as the Newport Medieval Ship, the larger ones were typical of the vessels engaged in the region's trade to France, Spain and Portugal during the Elizabethan era. These included the *Dragon* (or *Grenne* [Green] *Dragon*) of Newport (100 tons burden), which is recorded in Bristol's overseas Port Books as undertaking a voyage between the city and Lisbon in November 1579, carrying goods belonging to Bristol merchants.⁵⁰ In addition, on 5 January 1580 the *Griffand* of Caerleon (50 tons) undertook a voyage from Bristol to Sanlúcar de Barrameda in Andalusia, carrying lead for a Bristol merchant.⁵¹

Apart from servicing Bristol's trade, some of Newport's vessels were carrying goods direct to Newport by 1580. For instance, the *Steven* of Newport (30 tons) transported salt and iron from La Rochelle to Newport, while the *Griffine* of Caerleon (35 tons) returned to its home port from Lisbon on 25 March 1580 laden with 18 tons of salt

belonging to a local merchant. This was presumably the aforementioned '*Griffand* of Caerleon', which departed from Bristol eleven weeks earlier, bound for Andalusia.⁵²

The coastal Port Books (and sometimes also the overseas ones), record some of Newport's local trade by the 1570s to 1580s. All of this was conducted on small vessels. For example, in 1566 the *Jesus* of Caerleon (17 tons) sailed from Bristol to Carmarthen with 'merchandise', and the *George* of Caerleon (18 tons) sailed from Bristol to Caerleon with brass and pewter ware. Later the same year the *Jesus* (now said to be 18 tons) sailed from Caerleon to Bristol with 80 stone of wool, the *Myghell* or *Mychell* of Newport (13 tons) sailed from Newport to Bristol on the forenoon tide with unspecified goods, and the *Marie Roze* (or *Marye Rosse*) of Newport (20 tons) sailed from Bristol to Newport with 15 tons of brass and pewter ware. Also in 1566 the *Trynnetie* of Caerleon (10 tons) sailed from Bristol to Caerleon with iron and Manchester 'cottons', and the *Marie Roze* of Newport (now only 16 tons) sailed from Bristol to Aberthaw in the county of Glamorgan, with 6 tons of brass and pewter ware.⁵³

By the late sixteenth century the smaller Newport and Caerleon ships maintained a regular traffic with Bristol and other local ports, while some of the larger vessels traded overseas. Part of this foreign commerce was being conducted with Newport itself but much, particularly on the larger ships, belonged to Bristol merchants and was conducted to or from that city. The use of great ships for servicing Bristol's trade appears to mirror what had happened with the *Trinity* of Caerleon/Newport during the 1530s and 40s, discussed above. It seems likely that the ship mentioned in the 1469 letter had been doing likewise, in that its purser was a Bristol merchant and the ship had most likely returned from Biscay, which had a long-established trade with Bristol.

The Newport Medieval Ship

One basic question to be answered is whether the Newport Medieval Ship was in fact a ship from Newport with a Newport owner and crew, or indeed a British ship, possibly from Bristol, with a British crew. The archaeological evidence suggests that the ship was in foreign ownership for most of its life. Evidence for its construction and its Basque origins are given elsewhere and more evidence for its use is given in the Newport Ship Project specialist reports.⁵⁴ The environmental evidence, the coin evidence and, in particular, the pottery and tile evidence all indicate that the ship had strong Portuguese connections. For example, Dr Mark Redknap examined over 220 fragments of pottery from the ship, mostly from deposits in the lower part of the hold or bilges. These were from a small number of individual pottery vessels. The lack of repetitive forms suggests they were not cargo, while sooting on some jars and lids points to them being used in the ship's galley. The pottery was Iberian ware, referred to as Mérida-type ware, made in different fabrics from the area of southern Portugal inland from Lisbon. There was also a single sherd of refined earthenware maiolica,

possibly from a plate in the private possession of an officer or other wealthy person on board. Although some of this pottery could potentially have been acquired by a British crew during stays in Lisbon, if the ship had been in British ownership for a significant period one might expect there to be at least *some* British pottery. Yet the only Bristol wares and other British pottery found were in post-ship or non-ship contexts. This implies that, even if the ship was British-owned at the end of its life, it had been foreign-owned for the bulk of it.

The evidence from the ship's timbers is more equivocal. The hull shows signs of earlier repairs that had almost certainly taken place prior to it reaching Newport in *c.* 1468. This includes tangles (patch timbers) that had been fastened to the hull near the turn of the bilges, where the ship would rest during loading or unloading at low tide. This area would have been subject to heavy wear, necessitating frequent repairs. Five tangles cross-matched against British chronologies suggest these repairs took place in the late 1450s or early 1460s. While this implies work had been carried out in Britain prior to its final arrival in Newport, these could be merely running repairs, of the type that any ship, be it British or foreign, might need to carry out in port. So, while the repairs imply that the ship had been in Britain before, they do not demonstrate British ownership. Other timbers of British origin found with the ship are not fastened to the body of the vessel. These date from timbers felled in the winter of 1465–6 and the winter of 1466–7, but could be associated with the final phase of repair work, which commenced on or after 1468.⁵⁵

This begs the question of why Newport? The most likely explanation is that the ship had been acquired by William Herbert, earl of Pembroke, or Richard Neville, earl of Warwick, who took over the lordship following Herbert's death in July 1469. Both are known to have had an interest in shipping, employing vessels during the 1460s for both commercial and naval/privateering purposes. Either could have bought or seized the Newport Medieval Ship at an earlier stage, but feasibly as late as 1468–9. If the vessel was not in a seaworthy condition, either magnate might have felt that Newport would be logical place to get it repaired.

There are many examples of ships being seized, and in Bristol there is an interesting case in 1460 when a commission of inquiry was set up after a complaint by Stephen de Maison Nau, master of a ship called *Le Marie* of Bayonne (200 tons) and the master of another smaller ship called *La Marie* of La Rochelle. Despite having letters patent of safe-conduct and security promised by the earl of Warwick, their ships were seized by Sir John Clinton and others to bring Richard, duke of York to England from Ireland. They faithfully served the duke with their ships but because of 'certain plotting to injure them' it was alleged that they resisted John Clinton and others taking their ships and fired cannon at them. The inquisition found that the master did not resist as claimed and that *Le Marie* of Bayonne was still in Bristol.⁵⁶ What happened next is unclear, but if the ship remained in Bristol it could potentially be a candidate for the Newport Medieval Ship.

The latest timbers associated with the renovation work conducted on the Newport Ship are support struts, used to hold the vessel in position in the slip. Most of these struts come from trees felled in 1467, albeit one, which still has bark on it, was not cut down till the spring of 1468. It can thus be assumed that work commenced on the ship sometime after that. Given that the timbers in question would not have required seasoning, it seems unlikely that they would have been stored for long prior to use.⁵⁷ On the other hand it is possible that they had lain around in the shipyard for a year or eighteen months, before being used to support a ship brought to the slip for repair in the latter part of 1469. Warwick's letter, dated 21 November 1469, could thus be referring to the ship excavated in 2002. If they were the same vessel, then the ship may have been brought to Newport from Bristol for political and military reasons, to be in a secure haven where it could be repaired. All this would imply that the Newport Ship was closely associated with both the Wars of the Roses, in which Warwick played a leading part, and with nearby Bristol. The letter indicates that Matthew Jubbez, who was almost certainly the Bristol merchant of the same name, was paid the largest amount associated with the rebuilding work, which implies that he was heavily involved. It seems likely that John Colt would have been acting for the earl when he incurred his expenses, possibly having sailed on it to Newport as a shipmaster, or possibly even as a privateering 'captain', if the ship had been combining commerce with more martial activities. Whilst there is no proof of these suggestions there are many clues that may still lead to the discovery of what actually happened. These include the archaeological evidence, part of which derives from trade, the high-status artefacts and the evidence for military activity.



Notes

- 1 I am grateful to many people and organisations for their assistance in my researches into medieval Newport and I can only mention a few of them here. Professor Carole Rawcliffe pointed out the Warwick connection and the Warwick Record Office supplied a copy of the Warwick document. This was transcribed for me by Tony Hopkins of Gwent Archives and Margaret Condon of the University of Bristol. Dr Susan Rose provided a reference to this document and Professor Michael Hicks advised me and includes references to it in his book, *Warwick the Kingmaker*. The late Dr Christopher Phillpotts, Richard Barker, Dr Spencer Dimmock and Professor Ralph Griffiths gave me much help, advice and encouragement. I am especially grateful to Dr Evan Jones and Margaret Condon for their valuable help and patience with me. The illustrations were prepared by Anne Leaver. Newport City Council and the Newport Medieval Ship Project gave vital support and advice. I also received assistance from the Friends of the Newport Ship. My historical research

- relied greatly on advice and information from Dr Toby Jones, Professor Nigel Nayling and Dr Mark Redknapp. Finally, the late Kate Hunter gave me the impetus to undertake this work, and to her I am especially grateful.
- 2 See Evan Jones's chapter in this volume.
- 3 R. B. Patterson (ed.), *Earldom of Gloucester Charters* (Oxford, 1973), p. 3 and n. 156; Richard Morgan, *Place-names of Gwent* (Llanrwst, 2005), p. 162.
- 4 Personal communication from Will Davies, Cadw, Welsh Assembly Government Historic Environment Service.
- 5 *Calendar of Charter Rolls 1300–1326*, p. 461. The grant did not include exemption from the Royal customs on wools, leather, hides, woodfells and wines. Murage was a tax levied for the building or repair of a town wall. Pontage was a bridge toll. Picage (pickage) was a toll paid for the setting up of a booth by breaking ground. Pavage was a charge paid towards the costs of paving a highway. Quayage was a charge on a ship landing or shipping goods. Terrage was a charge on ground used for setting up a stall. Lastage could be a toll paid by a merchant or trader attending a fair or, alternatively, a payment for the liberty to load a ship. Stallage was a charge for setting up a stall. Tronage was a charge relating to the weight of goods. Definitions from the *Oxford English Dictionary* (1971).
- 6 *Calendar of Patent Rolls 1391–96*, p. 499; TNA: PRO, C81/550 no. 9774 for Richard at Newport. I thank Margaret Condon for these.
- 7 *Calendar of Inquisitions Post Mortem Volume XVIII, 1–6 Henry IV (1399–1405)*, p. 272.
- 8 Carole Rawcliffe, *The Staffords, Earls of Stafford and Dukes of Buckingham 1394–1521*, (Cambridge, 1978), p. 124. The wealth of the lordship of Newport was unevenly distributed. Immediately before the Glyn Dŵr attack ascribed to 1402, the borough of Newport contributed more than three-quarters of the revenues paid to the receiver of Newport: T. B. Pugh, *The Marcher Lordships of South Wales 1415–1536* (Cardiff, 1963), p. 150.
- 9 William Rees, *The Charters of the Borough of Newport in Gwynllwg* (Newport, 1951).
- 10 *Letters and Papers, Foreign and Domestic, Henry VIII (1519–23)*, Vol. III, pt. I, no. 1286 [p. 507].
- 11 W. R. B. Robinson, 'Dr. Thomas Phaer's Report on the Harbours and Customs Administration of Wales under Edward VI', *Bulletin of the Board of Celtic Studies*, 24 (1972), pp. 493–4.
- 12 Michael Hicks, *Warwick the Kingmaker* (Oxford, 1998), pp. 183–4, 256; D. H. Thomas, *The Herberts of Raglan and the Battle of Edgecote, 1469* (Enfield, 1994); Pugh, *Marcher Lordships*, p. 240.
- 13 E. T. Jones, 'The Bristol shipping industry in the sixteenth century' (unpublished PhD thesis, University of Edinburgh, 1998), pp. 265–7.
- 14 'Plan of the Town and Borough of Newport shewing the Proprietors of Various Properties', dated to about 1750, but now known only from a copy of 1834: National Library of Wales, Tredegar 919 140/1/1. Reproduced Bob Trett, 'A Topographical Survey of Medieval Newport', *Monmouthshire Antiquary*, XXV–XXVI (2009–10), p. 78.
- 15 Newport Museum and Art Gallery, NPTMG.1996.670. The charter is now on long-term loan to Gwent Archives.
- 16 These are in the care of Cadw, Welsh Historic Monuments; see also Trett, 'Topographical Survey of Newport', pp. 63–4; Julian Mitchell, 'Francis Grose in Monmouthshire, 1775', *Monmouthshire Antiquary*, XXV–XXVI (2009–10), p. 97 and plates 3, 5 (between pp. 96–7).

- 17 Trett, 'Topographical Survey of Newport' pp. 57–61.
- 18 L. Toulmin Smith (ed.), *The Itinerary in Wales of John Leland in or about the years 1536–1539* (London, 1906), p. 14; Trett, 'Topographical Survey of Newport', pp. 58–9, 79, 82, 84.
- 19 P. Jorgensen, 'Friars Walk Newport, Gwent, Wales. Assessment of an archaeological excavation FNNW14' (Newport Museum and Art Gallery, unpublished report by Pre-Construct Archaeology Ltd., November 2014).
- 20 Trett, 'Topographical Survey of Newport', p. 59; Bob Trett, 'The Two Murenger Houses of Newport', *Gwent Local History*, 106 (2009), pp. 20–31.
- 21 Gerry McDonnell, *Report on the Analyses of the Slags from the Newport Ship*, Report for the Newport Ship Project, 2 March 2012.
- 22 Newport Museum and Art Gallery, accession no. NPTMG 1984.34
- 23 *Letters and Papers, Foreign and Domestic, Henry VIII*, Vol. 3, pt I, no. 1286 [p. 507], from TNA: PRO, E36/150, p. 24.
- 24 E. A. Lewis, 'A Contribution to the Commercial History of Wales', *Y Cymmrodor*, 24 (1913), pp. 127, 143, 145–6; *Calendar of Patent Rolls 1436–41*, p. 411; Henry Bush, *Bristol Town Duties: A Collection of Original and Interesting Documents* (Bristol, 1828). For the wool staples at Carmarthen and Rhuddlan, see E. A. Lewis, 'The Development of Industry and Commerce in Wales during the Middle Ages', *Transactions of the Royal Historical Society*, 17 (1903), pp. 151–3.
- 25 E. M. Carus-Wilson, *The Overseas Trade of Bristol In the Later Middle Ages*, Bristol Record Society (Bristol, 1937), Vol. VII, pp. 210–12; TNA: PRO, E122/19/1. Although Carus-Wilson did not include the type of vessels in her transcription, the manuscript indicates that all were boats (*batella*) rather than ships (*navicula/navis*).
- 26 For instance, in 1479–80 vessels sending overseas goods from Chepstow to Bristol included the *Clement* of Worcester, the *Christopher* of Chepstow, the *Paul* of Chepstow and the *Michael* of Milford: Carus-Wilson *Overseas Trade of Bristol*, pp. 225–6, 286–8. See also Lewis, 'A Contribution to the Commercial History of Wales', *passim*.
- 27 Carus-Wilson, *Overseas Trade of Bristol*, pp. 256.
- 28 Stafford Record Office, D641/1/2/22, receiver's account for Newport, 1454–5. I am grateful to the late Dr Christopher Phillpots for this reference.
- 29 Pugh, *Marcher Lordships*, pp. 157–8, 180, 290–1; Rawcliffe, *The Staffords*, p. 213.
- 30 TNA: PRO C76/142, m. 18; similar protection and licence February 1462, C76/145, m. 8. I thank Margaret Condon and the University of Bristol's Cabot Project for providing me with these references.
- 31 Carus-Wilson, *Overseas Trade of Bristol*, p. 209. The account states the ship was a 'nav', which could be an abbreviation for either a *navicula* (little ship) or a *navis* (great ship): TNA: PRO, E122/19/11 fo. 1.
- 32 TNA: PRO C76/146, m. 15. My thanks to Wendy Childs and Margaret Condon for this reference.
- 33 See Alfred Hudd, 'Bristol Merchant Marks', in *Clifton Antiquarian Club Proceedings* (1910–11), Volume VII, Part II, no. 206 for a mark matching an incomplete mark from the Newport Ship and attributed to William Fish in 1437. See also E. M. Elmhirst, 'Merchants Marks', in Leslie Dow (ed.), *The Publications of the Harleian Society*, Vol. CVIII (1959) for a number of similar merchant marks arranged by 'type'. Another merchant

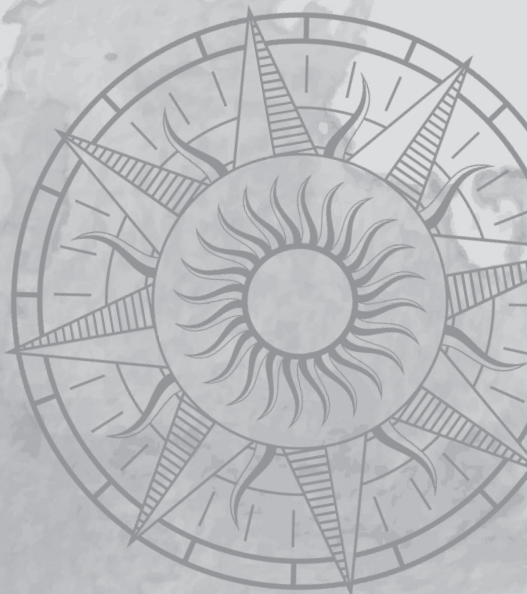
- mark from the Newport Ship closely matches Hudd's mark dated 1479 for Robert Baron, also a Bristol merchant.
- 34 Warwick Record Office, CR1998/J2/177.
- 35 See Rawcliffe, *The Staffords*, p. 213.
- 36 *CPR* (1461–67), p. 294.
- 37 *CPR* (1467–77), p. 290.
- 38 *CPR* (1461–67), 22 October 1462; TNA: PRO, C76/146, m. 8. I thank Margaret Condon for the latter reference.
- 39 I am grateful to Evan Jones for his comments about William Toker.
- 40 *Calendar of Fine Rolls* (1485–1509), p. 155.
- 41 Information from Toby Jones, in a personal communication to the author.
- 42 Robin Ward, *The World of the Medieval Shipmaster: Law, Business and the Sea, c.1350–1450* (Woodbridge, 2009), pp. 69–121.
- 43 T. F. Reddaway and Alwyn A. Ruddock, 'The Accounts of John Balsall, Purser of the *Trinity* of Bristol, 1480–1', *Camden Miscellany*, 23 (1969), pp. 1–25; Margaret M. Condon and Evan T. Jones (eds), 'William Weston v Thomas Smith: Chancery Petition, 1490' (University of Bristol, PURE, 2012); TNA: PRO, C1/24/211–17; <http://hdl.handle.net/1983/2539979c-d80a-4238-9798-244735e73e20>; TNA: PRO, C1/24/211–17. There are other examples.
- 44 Hicks, *Warwick the Kingmaker*, pp. 250–1. Hicks refers to the Warwick letter and suggests that this could refer to the *Trinity* having been built and fitted out at Newport. It would now seem unlikely that two large ships could have been built or repaired at Newport at the same time. In any case, Warwick would not have had control of Newport until July 1469.
- 45 H. T. Evans, *Wales and the Wars of the Roses* (Cambridge, 1915; republished Stroud, 1995), p. 146.
- 46 *CPR* (1461–67), p. 464; see also Ralph Griffiths's chapter in this volume.
- 47 Duncan Taylor, 'The maritime trade of the smaller Bristol Channel ports in the sixteenth century' (unpublished PhD thesis, University of Bristol, 2009), p. 123.
- 48 TNA: PRO, SP15/22 fo. 23v; cf. J. W. Dawson, *Commerce and Customs: A History of the Port of Newport and Caerleon* (Newport, 1932), pp. 12–13, where the *Black Lyon* is said to be 34 tons.
- 49 TNA: PRO, SP12/96, p. 267. Neither list completely matches the list of named ships in Dawson. This is a composite, including information derived from the currently inaccessible customs accounts, which he is known to have used. The *Green Dragon* and the *White Eagle* may, however, be the two unnamed 100 ton ships in the 1577 list; cf. Dawson, *Commerce and Customs*, pp. 12–13 and below, n. 52.
- 50 TNA: PRO, E190/1130/3, ff. 4v–6v; searcher's particulars, E190/1130/2, ff. 4r, v; cf. Dawson, *Commerce and Customs*, pp. 7–9. Dawson, who conflates the entries from the documents, mistakenly read them as three separate voyages rather than as sequential loadings for a single voyage in November 1579. I thank the National Archives for prioritising these documents for conservation treatment so that they could be consulted for this article.
- 51 Dawson, *Commerce and Customs*, p. 8; TNA: PRO, E190/1130/3, fo. 7v.
- 52 Dawson, *Commerce and Customs*, p. 7, from the Cardiff port book 1579–80, TNA: PRO, E190/1270/3. This is currently (2016) embargoed for consultation on account of its physical condition, and could not be checked.

- 53 Dawson, *Commerce and Customs*, pp. 5-6, from TNA: PRO, E190/1128/4, f. 5v (6v); E190/1128/6, ff. 2v, 7v, 9r, 10r; E190/1128/7, ff. 3v, 4r; E190/1128/8, f. 8v, 9v. Dawson's notes include several minor errors.
- 54 Nigel Nayling and Toby Jones, 'The Newport Medieval Ship, Wales, United Kingdom', *International Journal of Nautical Archaeology*, 43 (2014), pp. 239–78; Newport Medieval Ship Project Specialist Reports. Available online at archaeologydataservice.ac.uk/archives/view/newportship/2013/
- 55 Nigel Nayling and Josué Susperregi, 'Iberian Dendrochronology and the Newport Medieval Ship' *International Journal of Nautical Archaeology*, 43 (2014), pp. 279–91.
- 56 *Calendar of Inquisitions Miscellaneous*, Vol. VIII (1422–1485), 258, pp. 162–3.
- 57 Shores for the repair of the *Sovereign* in 1496 appear to have been newly cut, with some then being recycled to be used for ship repair: M. Oppenheim (ed.), *Naval Accounts and Inventories of the Reign of Henry VII* (London: Navy Records Society, 1896), p. 175.

six

SAILING THE
SEVERN SEA IN THE
MID-FIFTEENTH
CENTURY

Ralph A. Griffiths



THE DISCOVERY OF THE so-called Newport Medieval Ship in 2002 was a glorious accident. In the fifteen years since then, the identification of objects and the expert analysis of remains, to say nothing of the scrupulous dismemberment of the timbers in the challenging circumstances that inevitably surround an accident, have been exciting. Many of the historical questions which the ship poses were brought to the fore at the wide-ranging international conference held in 2014; they inevitably outnumber the confident explanations emerging from a decade of comparative archaeological investigation of the ship's remains. Among these historical questions are several that spring from the circumstances of the ship itself: when and why did the ship arrive in a small inlet on the river Usk, a little below the modest town of Newport, and why was much of it seemingly left there to decay; where did it come from, whose was it, and what was the nature of its final voyage? To the extent that no contemporary is known to have commented specifically on the ship and its fate, none of these questions can yet be answered with certainty. However, over a decade of spectacular archaeology has laid the foundations for some answers to be proposed; to quote the Conference's website, 'Built about 1450 in northern Spain, she foundered at Newport twenty years later while undergoing repair'.¹ But short of discovering a stern timber with a name and home port carved on it (did later medieval shipbuilders include such things?) we may never know for certain which ship this was.² In any case, that is not the only important question that historians can usefully address. They might be more comfortable asking why the Newport Medieval Ship is where it is. In other words, what is the context of its arrival in the river Usk and its apparent neglect there? To identify part of that context requires us to imagine sailing into the Severn Sea in the fifteenth century.

Historians of later medieval England and Wales – including those who have written about the Hundred Years War with France, which at one time or another involved every state in western Europe from the Mediterranean to the Baltic, or about coastal and overseas trade which was just as expansive – have mostly been landlubbers, with a few honourable exceptions. Yet even the exceptions have tended to focus mainly on activities in the English Channel, with much less attention paid to what was known

Figure 6.1: Map of the Severn Sea Region



in the mid-fifteenth century as the Severn Sea, or Môr Hafren, or the Gulf of Bristol, and especially to the inner channel east of the peninsular lordship of Gower, and east of the duchy of Cornwall (see Figure 6.1).³

It was a busy gulf. The channel was much travelled in both directions, and criss-crossed more than in the railway age between modest ports and small havens, more numerous (and with deeper anchorages) on the northern shore than on the southern. The opposite shores of much of the channel are usually within sight of one another: Minehead is less than a dozen miles from the Vale of Glamorgan, and the distance between Swansea and Ilfracombe is less than thirty miles.⁴ Coastal and overseas shipping, and the trows and boats that went up the Severn from Cardiff and Bristol as far as Shrewsbury – and down again – operated within the hinterland of the realm's third largest city, Bristol, itself situated half a dozen miles up the river Avon from the main channel. That the Newport Ship was finally berthed not two miles from the entrance to the river Usk, especially if it were in need of repair, may well reflect circumstances in the Severn Sea in the mid-fifteenth century, rather than the attractions of the town of Newport except as a port of refuge.⁵

The Channel

The masters of relatively large ocean-going vessels, such as the Newport Ship, with an estimated carrying capacity of 161 tons burden, were evidently knowledgeable about the coastal geography of western Britain. Even Mediterranean vessels made frequent

voyages to southern and eastern English ports and to and from the havens of Wales and southern Ireland. The portolan charts (or illustrated sailing directions) of continental mariners were in frequent use by the fifteenth century and they depicted in detail the English Channel, the southern coast of Ireland and the Gulf of Bristol. They, in turn, were derived from French *routiers de la mer* (or sea-charts), whose frequent use in often hazardous conditions helps to explain why they rarely survive today. Such charts gave sailing directions – including in English by the mid-fifteenth century – for circumnavigating much of England, Wales and Ireland, and information about tides and depths of water.⁶

When a large French fleet sailed from Normandy to exploit the war in England and Wales between Lancaster and York in May 1461, the commanders were advised to take the westerly route ‘to test the loyalty of the people of Wales who are Lancastrian’. The French did not get further than a naval encounter off Cornwall and were forced by weather, wind and the seas to return to Normandy to refit their ships. The envoy in Bruges of Francesco Sforza, duke of Milan, reported ruefully to his master: ‘if they had gone into the Gulf of Bristol, as was thought they would by those who understand the political sympathies of the English, and as I thus signified by the map of the country which I sent to Your Excellency’, they would have better tested the loyalties on both sides of the channel to Henry VI of Lancaster. [One wonders where that map is now.] Ships’ masters – and merchants too – could also rely on experience and memory of voyages made and on the oral transmission of directions.⁷

The Milanese envoy acknowledged the hazards of the Gulf of Bristol, even during the month of May, other than for ‘small coasting vessels, because of a tide that lasts six hours’. And well he might; the combination of what was known in the inner channel as the Higre or Severn Bore and the extensive sandbanks and grounds and occasional rocks in the channel from the mouths of the Usk and Avon northwards could be lethal – more so for larger, long-distance vessels like the Newport Ship than for smaller ships of less than 100 tons, whose homes were the modest ports of Watchet, Minehead, Ilfracombe and Barnstaple, Swansea, Neath, Newport and Cardiff.⁸

In the early months of 1331 a ship all but sank in the estuary on its way home from Gascony. It was driven onto Goldcliff beach on the Welsh shore, not far from Goldcliff priory near Uskmouth, scattering its cargo on both sides of the channel. The survivors abandoned ship and reached firm ground at Portishead and Clevedon on the opposite side of the river, while forty-five inhabitants of Goldcliff and nearby Nash, and others from the opposite shore, made off with the merchandise.⁹ Towards the end of the century, in January 1394, a Bristol-owned ship with Gascon wine and other merchandise on board was thrown by a winter tempest upon the sands at ‘le Neweground in Severne’, near Goldcliff; the name suggests that these were also slowly shifting sandbanks. Despite help from the English side of the channel, three or four hundred folk from communities between Newport and Chepstow were accused of hacking the ship to pieces and stealing its tackle and merchandise, worth 2,000 marks,

and then assaulting a seaman and his servants who were sent to salvage the vessel and its cargo. Because of the difficulty of securing redress in the courts of Welsh lordships, the owner, John Banbery of Bristol, decided to petition the Commons in Parliament, but it is doubtful that anything was recovered.¹⁰ In short, there was a history of shipwrecks near Newport, to which a stricken vessel might be taken for shelter and repair – if it were lucky!

The available sailing directions warned about the rocks and sandbars that needed to be negotiated as ships made their way past ‘the holmes’ (Steep Holm and Flat Holm) towards the entrance of the river Avon.¹¹ Writing a little later, in 1480, William Worcestre the antiquarian, and a knowledgeable Bristolian to boot, noted the various obstructions encountered by ships in the channel as they approached or left the Avon. The Blackstones were close to the river’s entrance and before proceeding to Bristol ships and large boats had to drop anchor and wait for the incoming tide at one of the roadsteads – Kingroad first, or at Hungroad, or at Ghyston cliffs in the gorge itself. Only when the tide rose to cover the Blackstones could ships – including, as Worcestre noted, those from Spain, Portugal, Gascony, Iceland, Ireland and Wales – weigh anchor and proceed past these roads to or from Bristol. Some incoming (and outgoing) voyages ended at Kingroad (and others departed from the anchorage), their cargoes brought by smaller lighters to or from Bristol’s wharves. Further up the Severn, midway between Aust Cliff and the mouth of the River Wye near Chepstow, was another rock, expressively called the Bench; only when it was covered by the tide could a ship safely cross the channel.¹²

The masters of large ships made a virtue of necessity and frequently anchored in the channel off Chepstow or Newport, discharging their cargoes to smaller boats for the final journey up the Avon to Bristol; that had the additional merit of being liable to lower customs duties, which were a fraction of those imposed in the great city. Moreover, in Bristol itself, the building and repair of large ships were straining the port’s resources by the mid-fifteenth century. The Back – the southern part of which was later known as Welsh Back, so frequently were vessels from Wales tied up there – had to be repaired in 1449, ‘al the egis of it and of the sylppes, with free stone’. Twenty-five years later, there had been so much shipbuilding work taking place that the city fathers decided to prohibit unlicensed construction work there.¹³

Thus, the unpredictable seas, wreckers on both shores (romantically portrayed by seascape artists in the late eighteenth century), obstructions in the inner Severn, the care needed to negotiate the Avon and the over-crowded Bristol quays may help to explain the limping of a damaged largish ship – whatever its intended destination – into the river Usk rather than into the Avon or into the Wye, further up-channel. Bad weather, common in winter, might make it even more likely.¹⁴ As a vivid example: early in 1472 a ship from Ireland, probably en route to Barnstaple, was driven by a tempest into Ilfracombe. A passenger, who was carrying forged charters in order to lay claim to some north Devon properties, thought he was about to perish and hurriedly made

his confession of forgery to a priest from Bridgwater who was also on board; as it happened, the ship and its passengers survived, if blown off course, and so fortunately (for the historian) did the penitent's confession. The incident admittedly took place further out in the channel ('in mari Sabine'), but it illustrates the natural perils awaiting large ships in the Severn Sea – and also the fortuitous survival of historical records.¹⁵

The Human Hazards

In addition to the hazards of sea and weather, ships in the Severn Sea might encounter pirates and privateers and, in the mid-fifteenth century, those with political axes to grind during the Wars of the Roses. It is somewhat easier for historians to differentiate these three categories than it was for contemporary victims to do so.¹⁶

The evidence is reasonably ample and sometimes graphic, if unsystematic in its survival. Ocean-going vessels offered the richest pickings – even luxuries or exotic merchandise – while the crew and merchants on board might be held to ransom and the ships themselves sold to new owners or broken up. This in turn demonstrates that ships in British waters changed hands frequently, if involuntarily, sometimes altering their names and their masters, which makes it difficult for historians to track them over time. It suggests too that investment in foreign tonnage was not uncommon; English and Welsh owners and merchants might invest in foreign (including Spanish and Portuguese) vessels and trade in the mid-fifteenth century. French and Breton ships and merchants sailing to and from the English Channel and the Gulf of Bristol might be captured by English and Welsh ships regardless of safe-conducts and even when truces had been concluded during the long war with France. In the approaches to the Severn, Biscayan and Iberian ships were frequently liable to attack. Piracy was usually, of course, committed at sea, but occasionally it took place close to, or even in, port, and in the Severn Sea the folk of Ilfracombe, Pembroke and Tenby, at the entrance to the outer channel, were notorious.

For the king's subjects and foreigners in English coastal shires, redress at common law for offences committed on the high seas was not always easy; recourse to the king's Chancery, to Parliament and the Admiralty court was possible but presents the historian with other problems, while the semi-autonomous Marcher lordships bordering the northern shore of the Severn Sea were an added complication at law and in the survival of records. When states were at peace with one another, the owners and masters of foreign ships that were attacked could have recourse in England to the law, but that was not straightforward either. Efforts by a Bristol merchant to recover his merchandise from the wrecked ship at Goldcliff in 1331 were resisted by the prior of Goldcliff on the Welsh side, and commissions of *oyer and terminer* in Gloucestershire and Somerset on the English side encountered repeated obstacles over the next three years.¹⁷ But all was not necessarily lost; as the wreckers of 1394 discovered, in default of the common law a petition to Parliament by aggrieved shipowners might elicit a

commission of *oyer and terminer* from the king and stern letters to the lords of Marcher lordships where wreckers lived, in order to compel them to make restitution or other satisfaction. As for courts overseas, such as the Admiralty court in Lisbon, where there was a resident English community, and the commercial court in Bordeaux after 1453, both of which might interest themselves in incidents in the Severn Sea, little systematic study of their surviving records appears to have been made.¹⁸

Attacks on commercial vessels seem to have increased in number during the middle decades of the fifteenth century: Breton, French, Castilian and Portuguese wine-ships were especially vulnerable to Severnside pirates, sailing most notably out of Pembroke and Ilfracombe, and ships were not safe even when at anchor in Ilfracombe itself.¹⁹ In 1477 two West Country owners lost a ship in Irish waters when it was seized by *La Pykard* of Minehead; the owners' agents were imprisoned for nine days and all their clothes were seized before they were put ashore naked at Kinsale.²⁰ A few years later, in 1483, Matthew Cradock of Swansea, the young captain of a king's ship, audaciously seized a Breton ship as it lay at anchor in Ilfracombe. This vessel, *La Julyan*, had been chartered by Bridgwater merchants for a voyage to Lisbon. On its return with a rich cargo, it was attacked at the instigation of two Ilfracomers; they doubtless shared the proceeds by ransoming the cargo of gold, harness, wine, ropes, weapons and mangonels (machines for throwing stones), worth 50 marks, while the ship and its rigging were ransomed back to the unfortunate Bridgwater merchants for £50. The vessel – like others in similar incidents – may have sustained some damage during the encounter.²¹

From further afield came daring pirates from Brittany and Spain who occasionally ventured into the Severn, as Sir Edward Stradling's son and heir, Henry, discovered in 1449 when he and his family crossed from the Stradlings' Somerset estate near Watchet (at Combe Hawey or Halsway) to the haven near their castle at St Donat's on the Glamorgan coast. Their ship was boarded by Breton pirates and its cargo and personal possessions, valued at £200, were seized and the family held to ransom and transported to Brittany. There is a strong tradition that the celebrated watchtower near St Donat's castle, with its panoramic views down and across the channel and a gun-port high on the structure, was built as a precaution against future piratical encounters.²² Twenty years earlier Thomas Erle's ship, sailing from Kingroad rather late in the season, had been captured by Spaniards on 24 November 1430.²³

Nor was it unknown for shipowners to collude with the pirates. About 1443 the *Antony* of Faro, a Portuguese vessel laden with fruit and wine from the Algarve, was seized by West Country pirates but rescued by the *Trinity* of Bristol with the help of some of the Portuguese on board, presumably while approaching the Gulf of Bristol. It was retaken by the pirates, the crew put off in Brittany and the vessel taken to Fowey in Cornwall, where the ship and its cargo were sold, evidently with the collusion of Henry May, the owner of the rescuing ship, the *Trinity*, and one of Bristol's prominent merchants. It was an unsavoury episode that led to the arrest of Henry May's brother,

Richard, in Lisbon, and to the appearance of both brothers in court in England. It suggests, too, friendly collaboration between Bristol and Portuguese merchants and the case was quietly dropped. If there were victims, it was the *Antony* of Faro and the sailors stranded in Brittany.²⁴ Such records as these pointing unmistakably to the Newport Ship have not so far surfaced, but they illustrate the context of misfortune and the damage that might be done to commercial vessels in encounters with pirates and privateers in the Severn Sea.

Politics and the Shipowner in the 1460s

In contrast to land travel, the ability of states to 'keep the seas' (as the phrase went) was limited, especially by conditions at sea and problems in anticipating sailings and destinations. Moreover, English and Welsh waters were less well supervised after the disposal of most of King Henry V's ships following his death in 1422. In 1475 Bristol shipowners were forced to collaborate in order to raise £190 for a five-month sea-patrol using five of their own vessels, probably in order to combat pirates.²⁵ At the same time, those Welsh Marcher lords who also had estates on the English side of the channel and upriver in the Vale of Severn acquired their own fleets for commercial and other purposes. William, Lord Herbert of Raglan, King Edward IV's so-called 'master-lock' in Wales after 1461, had estates and interests in both south Wales and Somerset; he owned ships and Newport, of which he had custody from 1461, is likely to have been one of their home ports. Richard Neville, earl of Warwick, Edward IV's so-called 'Kingmaker', was lord of Glamorgan and of extensive estates in southern and midland England, and he had a dozen or so ships by the late 1450s, some seized by acts of piracy. John Mowbray (died 1461) and his son, successively dukes of Norfolk and Lords of Chepstow and Gower, are not known to have been prominent shipowners, though their cousin, John, Lord Howard (and later duke of Norfolk), certainly was, but his ships operated mostly from eastern England. Edward IV himself acquired a number of vessels which were used for commercial voyages as well as for security. He bought one from a Portuguese merchant for 250 marks, and several others had originated in Spain or Portugal, presumably because these were larger than the average – most Portuguese ships were of 200 tons or more.²⁶ The lords around the Severn Sea may have done the same.

The resumption of civil war in 1468–71, including in the Severn region, underscored the need for both maritime transport and commercial protection. Although in 1461 the Milanese envoy had judged the region to be predominantly Lancastrian in sympathy, its loyalties were seriously fractured after Edward IV seized the Crown and in this Herbert and Warwick, his allies, were central figures. The new lord of Newport, Henry, son and heir of Humphrey Stafford, duke of Buckingham (died 1460), was a boy of five; custody of his lordship was soon given by the king to William, Lord Herbert. The inland estate and castle at Raglan which Herbert inherited from his own

father had access to the Severn down the river Usk to the ports of Caerleon and, for ocean-going vessels, Newport, or else down the river Wye to the port of Chepstow; but none of these ports was in his own lordship. During the 1460s the situation changed; from 1461 he could treat Newport as his own. The Mowbray dukes of Norfolk were lords of Chepstow; with interests mainly in East Anglia, in 1468 the duke decided to sell the lordship to William Herbert, who thereby acquired control of an important commercial hub in the Severn Sea region. Moreover, the mainly oak forests in the hinterland of Newport were gradually being stripped during the fifteenth century, probably for shipbuilding and to exploit the iron deposits, the smelting of which was leased in 1459 to a German engineer who paid a 10 per cent royalty to the duke of Buckingham and, afterwards, to Lord Herbert. Thus, in the 1460s, Herbert was able to enhance his strategic and commercial interest in ship ownership.²⁷

A particular example of Edward IV's favour towards William Herbert occurred in March 1465. At Herbert's request, Edward IV granted him the gear and fittings, wines and other merchandise from Herbert's own 'great ship', the *Gabriell*, which (Herbert said) he had despatched at great expense overseas, but which on its return – probably from Iberia, to judge by the cargo – was wrecked by tempestuous seas near the Irish coast. The ship therefore belonged to the king as Lord of Ireland, while the ship's contents and cargo were cast ashore. They were now to be returned to Herbert, more than likely to be brought to his port at Newport, the ship for repair and the wines for Raglan castle.²⁸ One wonders how Herbert had acquired the *Gabriell*, and how long it would have taken to recover the damaged ship, perhaps undergoing some repairs in southern Ireland, and whether, if it returned to Newport, it was worth repairing further for another voyage. In submitting his request to the king, Herbert seems to have thought so. A ship called the *Gabriell* of Bristol had been despatched by Henry Holland, duke of Exeter and a West Country landowner, to bring wine from Bordeaux in 1452; if it was able to return to Bristol after the French overran Gascony the following year, it may have been among Exeter's possessions declared forfeit in 1461, when he went into exile with the Lancastrians. It might even have been among the ships whose arrest in Bristol and other ports of the West Country and Wales by William Herbert and his brother Thomas was authorised by Edward IV on 1 March 1462, in order to overcome Lancastrian resistance in south-west Wales.²⁹ Relevant to the question of the *Gabriell*'s repair is the conclusion of archaeologists that the felling of timbers for the repair of the Newport Ship is datable by dendrochronology to the 1460s, including the winter of 1467–8 and the following spring, and that these timbers may be associated with 'the south-west of Britain' (including, in one instance, with Ireland).³⁰

Lord Herbert owned a second ship, the *Marie* (or *Mary*), and although its size is unknown, it is described as a large ship (*navis*) by Herbert's officers. On 10 December 1463 it was anchored in the vicinity of Herbert's west Pembrokeshire lordship of Castle Walwyn, taking on board two bullocks to victual the ship, probably during one of Herbert's visits to south-west Wales to combat Lancastrian rebels or in preparation

for a commercial voyage to or from Ireland.³¹ During 1461–4 Herbert was in active command of forces in west Wales to combat Lancastrian resistance by land and sea. Herbert's own ship, the *Mary*, is likely to have been part of the squadron assembled in 1462 and deployed on this mission.³² Furthermore, on 23 June 1463 a group of Yorkist retainers including Lord Herbert, his brother Richard and his receiver of Newport, Trahaiarn ab Ieuan ap Meurig, were commissioned to confront those Lancastrians who still refused to be reconciled to the Yorkist regime; by October 1464 their efforts were being focused on the impregnable castle at Harlech, a sure indication that naval operations were essential to Herbert's campaign. Like the Herberts, Trahaiarn ab Ieuan ap Meurig patronised several Welsh poets, among them Guto'r Glyn, whose compliments may allude to Trahaiarn's service at sea with William Herbert in west Wales in the 1460s:

Eight hundred thousand do praise you
 From Bristol to Pembroke yonder,
 From beautiful Milford Haven, where the wave stirs,
 As far as Caledon . . .
 One of Earl Herbert's hawks . . .³³

William Herbert's commercial use of the *Mary* is revealed during 1466–7, when the ship returned from a voyage to Gascony with wine for Lord Herbert's household; his receiver-general, James Prower, presumably based at Raglan castle, authorised payment of the bills.³⁴ Moreover, if Herbert's *Mary* can be identified – as is likely – with the *Mary Herberd* recorded in the Bristol customers' accounts for 1465–6, the ship had undertaken an even longer journey the previous year. On 2 October 1465 the *Mary Herberd* was recorded as leaving Bristol bound for Lisbon with a cargo of 94 pieces of cloth of assize belonging to a dozen merchants. Its return is recorded on 15 March 1466, laden with 38 tuns of wine and substantial quantities of wax, oil, honey, vinegar and cork.³⁵ The latter may not seem a large cargo for a *navis*, but the ship may have unloaded in other ports beyond the responsibility of the Bristol customers towards the end of the voyage, including Newport. Had the account of Herbert's receiver-general for 1465–6 and the account of Bristol's customers for 1466–7 survived, it might have been possible to turn the likelihood that the *Mary* and the *Mary Herberd* were one and the same into a certainty: as it is, the recorded voyages do not preclude it. Neither the *Gabriell* nor the *Mary* (or *Mary Herberd*) can be certainly identified with the Newport Ship, but both may have required repair as they approached the inner Severn channel and the *Mary* at least is known to have engaged the attention of Lord Herbert's receiver-general at Raglan castle.

After 1461 Herbert's most powerful neighbour among the Marcher lords was Warwick the Kingmaker, Lord of Abergavenny and Glamorgan, which of course had its own port of Cardiff in the inner channel. Together, the two magnates dominated

south-east Wales in the interest of Edward IV, whose own lordships of Monmouth, Usk and Caerleon lay nearby. But a bitter rivalry between the former allies, Warwick and the intensely ambitious Herbert, soon surfaced. Nor was this rivalry confined to the Welsh side of the Severn; in June 1463 Herbert was granted the Luttrell estates in Somerset, served by the ports of Minehead and Bridgwater and including Dunster castle, the manor of Bridgwater and much of coastal Somerset, to which Warwick also had a claim.³⁶ Moreover, members of William Herbert's affinity also benefited from the forfeitures of land to the Crown which followed the revolution of 1461. On 20 January 1462, two of Herbert's esquires and tenants in south-east Wales – his receiver of Newport, Trahaiarn ab Ieuan ap Meurig, and John ap Jankyn – were granted by the king for life the manor of King's Nympton in north Devon, in the valley of the River Taw, a dozen miles south-east of Barnstaple. Three years later, on 5 March 1465, Herbert's brother, Thomas, received property in the same manor from the king.³⁷ These grants strengthened Herbert's interests astride the Severn Sea and the contemporary Welsh poet, Guto'r Glyn, seems to refer to his maritime power when he lauded Herbert's role in capturing Harlech castle from the Lancastrians in 1468:

Take now the men of Wales,
constable from Barnstaple to Anglesey.
Take Glamorgan and Gwynedd,
make all one from the Conwy to the Neath.³⁸

Warwick's resentment of Herbert's growing influence with Edward IV – he was created earl of Pembroke on 8 September 1468 – caused the Kingmaker to reassess his own loyalties. By this stage he was preparing to desert the Yorkist monarchy he had helped to establish and instead give his support to the exiled Lancastrians. Warwick's interest in the Severn Sea was bound to be more intermittent than Herbert's and perhaps less commercial than political and strategic. Nevertheless, from 1456 his maritime responsibilities on behalf of the Crown extended to keeping safe the whole of the southern seas as well as defending England's colony of Calais and its rich trade. These responsibilities explain how he was able to assemble a fleet of his own, perhaps the second largest in the kingdom, which included commandeered Bristol ships, fitted out and with impressed crews to serve in them. Warwick acquired his ships by various means, among them sheer piracy, for he was prepared to prey on the shipping of friendly, neutral and hostile states by turns, whether or not they had royal safe-conducts. By this means, Warwick quickly acquired a fleet of about a dozen ships; when he suffered losses he took command of others or built new ones, including at Bristol.³⁹ For nine months continuously each year from 1457, it was his duty to safeguard the sea lanes against the king's enemies, with a substantial force of soldiers and as many ships as he needed. He was funded largely from the royal customs duties imposed at all of England's ports and he had the authority to nominate

his own customs collectors, including in Bristol and Bridgwater, which gave him a direct interest in the Severn region. These interlocking maritime commissions of his were renewed by Edward IV, whom Warwick supported in 1461; when his post as keeper of the seas was terminated in 1465, against his wishes, he nevertheless maintained his personal fleet. This is the likely context of his major refit and re-launch of his capital ship, the *Trinity*, at Sandwich in June 1469, and his 'making' and stocking of a ship at Newport in the same year.⁴⁰

The year 1469 was significant for the Severn Sea. The rivalry between Warwick and Herbert came to a head and one consequence was an alteration of the balance of maritime power regionally. At the Battle of Edgcote in Northamptonshire in July, Warwick defeated Herbert, executed him (and his brother Richard) and seized the person of the king. Soon afterwards, Thomas Herbert was executed at Bristol and their ally, the earl of Devon, was lynched by a mob in Bridgwater. Both shores of the Severn Sea now seemed under the control of the earl of Warwick, for whom command of the seas was even more vital than before. Following the battle, Warwick took custody of the lordship of Newport and its port, where he seems to have found a large ship – perhaps one of Herbert's own – laid up. Although Warwick was not formally granted the lordship of Newport until February 1470, he evidently sought to establish his authority there some months earlier, when several of his councillors visited Cardiff. Doubtless acting with their advice, on 22 November the earl ordered his receiver of Glamorgan, Thomas Throckmorton, to provide funds *inter alia* for 'the making [or refit] of the Shippe at Newport' and its stocking with certain commodities, in preparation for military use or for a commercial sailing late in the winter season. It is significant that some of the cash was channelled through Trahaiarn ab Ieuan ap Meurig, William Herbert's former receiver of Newport, who evidently retained responsibility for the vessel now that his master was dead. The largest sums were paid to Warwick's servant and merchant, John Colt (£10) and to a Bristol merchant, Matthew Jubbes (£15 2s. 6d), for iron, salt and other 'stuff' for the ship; the ship's purser, Richard Port, also a Bristol trader, received £2 13s. 4d.⁴¹

Warwick had little opportunity in the following months to put the ship at Newport to either commercial or military use. Shortly after Edward IV was induced to grant the earl the lordship of Newport in February 1470, the king reasserted his independence and in April Warwick fled to Calais to plot Edward's downfall. On this occasion, speed seems to have been of the essence, and although Warwick made his way from the midlands south to Bristol, there was little opportunity to assemble ships there (or at his ports of Cardiff and Newport); instead, he made his way overland to Exeter and left Dartmouth for Calais on 9 April. When he returned to south Devon in the following September, intent on restoring Henry VI to the throne, he swiftly made his way overland to his estates in the midlands, pausing only briefly at Bristol to collect the baggage and artillery he had abandoned some months earlier. There was perhaps no time or need to gather ships in the Severn channel. Edward IV having fled abroad, Warwick was thereafter preoccupied with restoring the regime of Henry VI. After the

returning Edward landed on the Yorkshire coast on 14 March 1471, the forces of the two kings prepared for the inevitable confrontation and at Barnet in Hertfordshire, on 14 April 1471, Edward IV triumphed and Warwick was slain.⁴²

The ship which the earl had sought to repair and provision at Newport in November 1469 may still have been in port. Is it possible that by 1471, with Herbert and Warwick dead and the duke of Buckingham still a child, the impetus to re-launch the Newport ship was removed – and yet no one dared to break it up completely? At the very least, political turmoil around the Severn Sea in the 1460s is a third context for the arrival, repair and possible neglect of the Newport Ship. In these delicate circumstances, Trahaiarn ab Ieuan ap Meurig, who had been in Herbert's service in south-east Wales and at sea, may have felt it wise to avail himself of the king's general pardon issued on 27 November 1471.⁴³

The existence of the Newport Medieval Ship raises a number of pertinent historical questions. Several circumstantial answers may be offered to help explain its fate, even its identity. Such answers at least provide a context for the Newport Ship in the Severn Sea: the hazards, both natural and human, and the nature of ship ownership in a period of political turmoil. Further study of the ship's remains, along with some inspired historical research, might explain with even greater certainty the ship's final voyage and the identity of its last owners.



Notes

- 1 <http://www.bristol.ac.uk/history.research/newportship2014.html>. A full account of the excavation is N. Nayling and T. Jones, 'The Newport Medieval Ship, Wales, United Kingdom', *International Journal of Nautical Archaeology*, 43/2 (2014), pp. 239–78; the Friends of the Newport Ship have published the more popular R. Trett (ed.), *Newport Medieval Ship: A Guide*, revised edn (Newport, 2012).
- 2 Earlier ships had carried carved and painted symbols and insignia as means of identification.
- 3 J. H. Harvey (ed.), *William Worcester: Itineraries* (Oxford, 1967), pp. 66–7 ('mare Sabrini'), p. 111 ('Severn Sea'), pp. 140–1 ('mare de Severn'); Frances Neale (ed.), *William Worcester: The Topography of Bristol*, Bristol Record Society, Vol. 51 (Bristol, 2000), p. 228 ('mare de Severne'); D. Johnston (ed.), *Gwaith Lewys Glyn Cothi* (Cardiff, 1995), pp. 39, 305 ('Môr Hafren'); P. M. Kendall and V. Ilardi (eds), *Dispatches with Related Documents of Milanese Ambassadors in France and Burgundy, 1450–1483*, 2 vols (Athens, Ohio, 1971), Vol. 2, pp. 426–7 ('gulf of Bristol'). For shipping in Welsh waters generally in the Middle Ages, see M. Redknapp, 'Shipping in medieval society', in R. Turner (ed.), *Archaeology of the Severn Estuary*, Annual Report of the Severn Estuary Levels Research Committee, Vol. 21 (Cardiff, 2010), pp. 1–20.

- 4 For the close physical and cultural relationship between the northern and southern shores of the channel in the Middle Ages, see R. A. Griffiths, 'Medieval Severnside: the Welsh connection', in R. R. Davies, R. A. Griffiths, I. G. Jones and K. O. Morgan (eds), *Welsh Society and Nationhood: Historical Essays presented to Glanmor Williams* (Cardiff, 1984), pp. 70–89, reprinted in R. A. Griffiths, *Conquerors and Conquered in Medieval Wales* (Stroud and New York, 1994), pp. 1–18.
- 5 The most recent study of medieval Newport's urban landscape is R. Trett, 'A Topographical Survey of Medieval Newport', *Monmouthshire Antiquary*, XXV–XXVI (2009–2010), pp. 53–84; see also Bob Trett's chapter in this volume.
- 6 D. W. Waters, *The Rutters of the Sea: The Sailing Directions of Pierre Garcie* (New Haven, Conn., 1967), especially pp. 222–327 (a French pilot in the 1480s); T. O. Neill, *Merchants and Mariners in Medieval Ireland* (Dublin, 1987), pp. 114–16. For a context, see R. A. Griffiths, 'The Island of England in the Fifteenth Century: Perceptions of the Peoples of the British Isles', *Journal of Medieval History*, 29 (2009), especially pp. 187–9. A mid-fifteenth century ruttier (or route guide), belonging to an unknown English mariner, for voyages to and from Gibraltar – doubtless assisting the flourishing pilgrim traffic to northern Spain as well as commercial sailings to Spain and Portugal – was copied early in Edward IV's reign by a professional scribe. G. A. Lester, *Sir John Paston's 'Grete Boke': a Descriptive Catalogue, with an Introduction, of BL Ms. Lansdowne 285* (Woodbridge, 1984), pp. 36–42, 164–6. For a recent comparison of this and another, slightly earlier, copy of such directions (Pierpoint Morgan Library, Hastings Ms. 775), see R. Ward, 'The Earliest-known Sailing Directions in English', *Deutsches Schifffahrtsarchiv*, 27, (2004), pp. 49–92.
- 7 Kendall and Ilardi, *Dispatches . . . of Milanese Ambassadors*, II, pp. 380–1, 426–7; M. Bochaca, 'Sea Travel at the End of the Middle Ages, based on the account of the embassy to Spain and Portugal given by Roger Machado (1489)', *Mariners' Mirror*, 98/4 (2012), pp. 436–47; on the return journey, Machado's ship landed at Padstow, while a second ship proceeded to Bristol.
- 8 The derivation of 'Higre' or 'Eagre' to describe the Severn and other bores remains uncertain. R. Hayman, *Severn* (Almeley, 2012), 227–8; *A New English Dictionary*, sub 'Eagre'.
- 9 K. L. Gruffudd, 'Wrecks and Wreckers in Welsh Waters during the later Middle Ages', *Maritime Wales*, 23 (2002), pp. 55–70, and Gruffudd, *Maritime Wales in the Middle Ages, 1039–1542* (Wrexham, 2016), ch. 9, with the details of the 1331 incident in *Calendar of Patent Rolls (CPR) (1330–34)*, p. 139; *Calendar of Close Rolls (CCR)*, (1330–33), p. 422.
- 10 CPR (1391–96), p. 433; W. Rees (ed.), *Calendar of Ancient Petitions Relating to Wales* (Cardiff, 1975), pp. 148–9. The Commons and Lords were sympathetic. For a later example of wreckers despoiling the *Raphael*, a Bristol ship stricken during 'a vehement tempest' in Bude bay in November 1467, see CPR, 1467–77, pp. 101, 168. The Bristol merchants had great difficulty in recovering this cargo, worth £1,000, which had been sold to local people.
- 11 Ward, 'The Earliest-known Sailing Directions in English', p. 81.
- 12 For this paragraph, see Worcestre, *Itineraries*, pp. 76–7, 303, 309; Worcestre, *Topography of Medieval Bristol*, pp. 4–6, 52, 63–6, 69, 455; A. H. Smith, *The Place-Names of Gloucestershire*, Part III (English Place-Name Society, XL, Cambridge, 1964), pp. 131–2 (Kingroad and Hungroad); R. Coates and J. Scherr, 'Some Local Place-names in Medieval and Early-Modern Bristol', *Transactions of the Bristol and Gloucestershire Archaeological*

- Society*, 129 (2011), pp. 156–8 (The Back), pp. 177–9 (Ghyston cliff). For the importance of Kingroad and Hungroad to the voyage of the capital ship, the *Trinity*, in 1480–1, see T. F. Reddaway and A. A. Ruddock, ‘The Accounts of John Balsall, Purser of the *Trinity of Bristol*, 1480–1’, in *Camden Miscellany* 23 (Camden Society, 4th series, VII, 1969), pp. 8, 11. See A. J. Webb, *Maritime Surveys, Charts and Sailing Directions of the Somerset Coast, circa 1350–1824*, Somerset Record Society (Somerset, 2014), pp. 1–9 and 39–40, for the channel’s dangers and their depiction on Captain Holliday’s map published in 1728 (based on the Society of Merchant Venturers of Bristol’s survey of 1712).
- 13 L. T. Smith (ed.), *Robert Ricart: The Maire of Bristowe is Kalendar* (Camden Society, 1872), p. 40; E. M. Carus-Wilson (ed.), *Overseas Trade of Bristol in the Later Middle Ages*, 2nd edn (London, 1967), no. 192.
 - 14 See, for example, the two versions of ‘The Wreckers’ (1790–1) by George Morland (1763–1804), now in Nottingham Castle Museum and Art Gallery and Southampton City Art Gallery; they are thought to represent a Cornish scene.
 - 15 North Devon Record Office, 48/25/9/7: an exemplification of the confession by Richard Hey of Dublin, made in the Exeter consistory court on 24 March 1484.
 - 16 See Susan Rose’s chapter in this volume.
 - 17 *CCR* (1330–33), p. 422 (17 December 1331), p. 553 (26 March 1332); *CPR* (1330–34), p. 574 (13 March 1334). For the poor survival of records of the Admiralty court, and relationships with common law courts and the chancellor’s jurisdiction, see R. G. Marsden (ed.), *Select Pleas in the Court of Admiralty*, Vol. 1 (Selden Society, VI, 1894), pp. xiv–xvi, li–lvi; little is added by M. J. Prichard and D. E. C. Yale (eds), *Hale and Fleetwood on Admiralty Jurisdiction* (Selden Society, CVIII, 1993), pp. xxix–xxxvii.
 - 18 Rees, *Calendar of Ancient Petitions*, pp. 148–9. A Portuguese wine ship on its way to Ireland was seized by Ilfracombe pirates despite the peace with Portugal; the Portuguese merchants petitioned, first, the king of Portugal and then the English king for justice, seemingly in their respective Admiralty courts, c.1445–6: TNA: PRO, C47/28/7/35; *CPR* (1441–46), p. 422 (3 February 1446).
 - 19 See M. E. Meehan, ‘English piracy, 1450–1500’ (unpublished University of Bristol MA thesis, 1971), passim; K. L. Gruffudd, ‘Piracy, Privateering and Maritime Wales during the later Middle Ages’, *Maritime Wales*, 24 (2003), pp. 24–40; 25 (2004), pp. 10–20, and Gruffudd, *Maritime Wales in the Middle Ages*, ch. 9.
 - 20 *CPR* (1476–85), p. 79. The incident took place off Youghal in south-east Ireland; the master and crew of *La Pykard* looted the captured ship of its cargo to the value of £60.
 - 21 *CPR* (1476–85), p. 356.
 - 22 R. A. Griffiths, ‘The Rise of the Stradlings of St Donat’s’, *Morgannwg: Transactions of the Glamorgan History Society*, VIII (1963), pp. 25–6, reprinted in Griffiths, *Conquerors and Conquered in Medieval Wales* (Stroud, 1994), p. 34. *An Inventory of the Ancient Monuments in Glamorgan, Volume III – Part 1b: Medieval Secular Monuments: The Later Castles, from 1217 to the present* (Aberystwyth, 2000), pp. 315, 338–9, considers the watchtower to be ‘Tudor’, but that need not preclude its original building in the late fifteenth century.
 - 23 Worcestre, *The Topography of Bristol*, p. 439.
 - 24 The story is fully recounted (from TNA: PRO, C1/9/488–491) in E. M. Carus-Wilson (ed.), *The Overseas Trade of Bristol in the Later Middle Ages*, Bristol Record Society,

- Vol. VII (Bristol, 1937), pp. 74–9 (no. 87); Carus-Wilson, ‘The overseas trade of Bristol’, in Carus-Wilson, *Studies in English Trade in the Fifteenth Century* (London, 1933), pp. 222–3, and again in Carus-Wilson, *Medieval Merchant Venturers: Collected Studies*, 2nd edn (London, 1967), pp. 62–3.
- 25 *CPR* (1467–77), pp. 543, 545. For disposal of Henry V’s ships, see S. Rose (ed.), *The Navy of the Lancastrian Kings: Accounts and Inventories of William Soper, Keeper of the King’s Ships, 1422–1427* (London: Navy Records Society, 1982), pp. 52–5.
- 26 R. A. Griffiths, ‘Lordship and society in the fifteenth century’, in R. A. Griffiths, T. Hopkins and R. Howell (eds), *The Gwent County History, Volume 2: The Age of the Marcher Lords, c.1070–1536* (Cardiff, 2008), pp. 245–9; C. F. Richmond, ‘English Naval Power in the Fifteenth Century’, *History*, LII (1967), especially pp. 14–15; A. Crawford (ed.), *The Household Books of John Howard, Duke of Norfolk, 1462–1471, 1481–1483* (Stroud, 1992), pp. xxi–xxiv.
- 27 Griffiths, ‘Lordship and society in the fifteenth century’, pp. 245–9, 255, 276 n.77. For Chepstow’s importance as a market and deep-water port, see S. Dimmock, ‘Urban and Commercial Networks in the Later Middle Ages: Chepstow, Severnside and the Ports of Southern Wales’, *Archaeologia Cambrensis*, 152 (2005 for 2003), pp. 53–8.
- 28 TNA: PRO, C66/512 m.2, calendared in *CPR* (1461–7), p. 427. Ships bound from Bristol to Iberia frequently sailed via Milford Haven or Haverfordwest to Kinsale in south-east Ireland for victualling or the recruitment of crew and returned via Kinsale; see, for example, Reddaway and Ruddock, ‘The Accounts of John Balsall’, pp. 8, 11.
- 29 Carus-Wilson (ed.), *Overseas Trade of Bristol*, pp. 100–1 (no. 107); *CPR* (1461–7), p. 100. For Thomas Herbert and his later commercial links with Bristol, see D. H. Thomas, *The Herberts of Raglan and the Battle of Edgecote, 1469* (Enfield, 1994), pp. 87–93.
- 30 Some of the timbers have been dated to the beginning of the decade, perhaps implying more than one programme of repair: Nayling and Jones, ‘The Newport Medieval Ship’, pp. 241, 246–9, 255; compare N. Nayling and J. Susperregi, ‘Iberian Dendrochronology and the Newport Medieval Ship’, *International Journal of Nautical Archaeology*, 43, no. 2 (2014), p. 5, for possible repair of the ship in an Irish port.
- 31 National Library of Wales (NLW), Badminton Manorial Records 1567 m.4d. 15s. was authorized for the ship’s purser, Humphrey (‘Humfre’) Cock, by Herbert’s receiver-general, James Prower. For the duties of the purser as factor, victualler and accountant on board ship, see Reddaway and Ruddock, ‘The Accounts of John Balsall’, especially pp. 6–7; M. Kowaleski, ‘The shipmaster as entrepreneur in medieval England’, in B. Dodds and C. D. Liddy (eds), *Commercial Activity, Markets and Entrepreneurs in the Middle Ages: Essays in Honour of Richard Britnell* (Woodbridge, 2011), p. 173. Walwyn’s Castle, an estate of the Lancastrian earl of Wiltshire, had been placed in Herbert’s custody in 1462. For Herbert’s several visits to south-west Wales during 1461–4 to assert Yorkist power, see R. A. Griffiths, *The Principality of Wales in the Later Middle Ages: South Wales, 1272–1536* (Cardiff, 1972), pp. 155–6; H. T. Evans, *Wales and the Wars of the Roses*, 2nd edn (Stroud, 1995), pp. 89–90.
- 32 *ODNB*, s.n. It may be noted that excavation of the Newport ship has revealed several military artefacts – a few cannon balls, weaponry and armour – which may indicate the ship’s military use as well as being for commercial protection: Nayling and Jones, ‘The Newport Medieval Ship’, pp. 269–70. Herbert had been made justiciar of Merioneth in June 1463,

- doubtless in preparation for the assault on Harlech castle: Evans, *Wales and the Wars of the Roses*, pp. 89–90; *CPR (1461–7)*, pp. 280, 355.
- 33 *CPR (1461–7)*, p. 280. Trahaiarn ab Ieuan ap Meurig, of Pen-rhos near Caerleon, was Herbert's neighbour and had been his deputy as steward of the Yorkist lordships of Usk and Caerleon since the 1450s: Gwent Record Office (GRO), D43/M290/6125 (1452); D2/32 (1454); D443/M390/6131 (1460); C. Rawcliffe, *The Staffords, Earls of Stafford and Dukes of Buckingham, 1394–1521* (Cambridge, 1978), p. 213 (1465–6). For the poem, which seems to have been written later, c.1480–5, see www.gutorglyn.net.114.23–9 (edited with commentary by A. P. Owen); and for other poets evidently patronised by Trahaiarn, see T. Roberts (ed.), *Gwaith Dafydd ab Edmwnd* (Bangor, 1914), pp. 111–13, 163–4 (which notes the connection with William Herbert and south-west Wales) and D. Johnston (ed.), *Gwaith Lewys Glyn Cothi* (Cardiff, 1995), pp. 264–5, 581–2, with comment in D. F. Evans, 'The Welsh language and its literature', in Griffiths, Hopkins and Howell, *The Gwent County History, Volume 2: The Age of the Marcher Lords*, pp. 293–4.
 - 34 Peter of Cardiff was paid £5 for shipping the wine, Roger Bromfeld £4 10s. for employing a vintner, John Fort, and £10 13s. 4d went to the ship's purser, Thomas Hugyn(s), who was still purser in 1467–8. NLW, Badminton Manorial Records, 1502, 1503.
 - 35 Small sheets of cork oak have been identified among cargo items in the Newport ship: Nayling and Jones, 'Newport Medieval Ship', p. 274. For these two journeys of the *Mary Herberd*, see TNA: PRO, E122/19/3 f. 2 and /4 f. 9v, brought to my attention by Margaret Condon and Dr Evan Jones.
 - 36 For the rift between Warwick and Herbert, see T. B. Pugh, 'The Marcher lords of Glamorgan and Morgannwg, 1317–1485', in Pugh (ed.), *Glamorgan County History, Vol. III: The Middle Ages* (Cardiff, 1971), pp. 198–9; Thomas, *The Herberts of Raglan and the Battle of Edgecote*, pp. 29–30, 43–6; *ODNB*, s.n., Herbert's son, also called William, took the title of Lord Dunster before his marriage to the queen's sister, Mary Woodville, in September 1466.
 - 37 *CPR (1461–7)*, pp. 76, 424. The manor was valued at £30 per annum in 1462.
 - 38 www.gutorglyn.net.21.65–9 (edited with commentary by B. J. Lewis); H. Fulton, 'Guto'r Glyn and the Wars of the Roses', in D. F. Evans, B. J. Lewis and A. P. Owen (eds), *Gwalch Cywyddau Gwŷr: Essays on Guto'r Glyn and Fifteenth-Century Wales* (Aberystwyth, 2013), p. 59. It is significant that both Herbert and his neighbour and servant, Trahaiarn ab Ieuan ap Meurig, were among the patrons of Guto'r Glyn: E. Salisbury and H. M. Griffiths, "'Llif Noe yw'r llefain a wnawn": Genre ac afonydd ym marddoniaeth Guto'r Glyn', in Evans, Lewis and Owen (eds), *Essays on Guto'r Glyn and Fifteenth-Century Wales*, pp. 436, 466.
 - 39 See Carus-Wilson (ed.), *Overseas Trade of Bristol*, pp. 122–4 (nos. 142–3), for ships commandeered by Warwick at Bristol in 1460. For Warwick's capture of Genoese and Spanish ships in 1457–9, see R. Flenley (ed.), *Six Town Chronicles of England* (Oxford, 1911), pp. 112–13, 147, 160–1; *Calendar of Inquisitions Miscellaneous*, VIII (1422–85), pp. 162–3 (no. 258); M. A. Hicks, *Warwick the Kingmaker* (Oxford, 1998), p. 147.
 - 40 For Warwick's ships and commissions, see C. F. Richmond, 'The Earl of Warwick's Domination of the Channel and the Naval Dimension to the Wars of the Roses, 1456–60', *Southern History*, 20–1 (1998–9), pp. 1–19; A. J. Pollard, *Warwick the Kingmaker: Politics, Power and Fame* (London, 2007), pp. 80–1, 131–8; and Hicks, *Warwick the Kingmaker*,

pp. 138–48, 250–1 (though it is unlikely that the Newport ship was the *Trinity* itself, which seems to have been based in Southampton water after its commissioning at Sandwich).

- 41 Trett, *Newport Medieval Ship*, pp. 28–9, reproduces Warwick's letter (Warwick Record Office, CPR 1998/J2/177, signed by the earl himself at Warwick castle). If Richard Port, purser of the Newport ship, is identifiable with the Bristol merchants' agent in 1462 and 1466, he may provide a further link with the *Mary Herberd*: CPR (1461–7), p. 200; TNA: PRO, E122/19.4 f. 6v. By November 1469 Richard Port, merchant of Bristol (*alias* Richard Robertes of Bristol, merchant) was granted a protection for one year in Warwick's company as captain of Calais: TNA: PRO, C76/153 m.6. Matthew Jubbes occupied a tenement, 'Cokkyns Place', in St Nicholas Street, Bristol, by 1463, and thirty years later (in 1494–5) was sheriff of Bristol: R. H. Leech (ed.), *The Topography of Medieval and Early Modern Bristol, Part I*, Bristol Record Society Vol. XLVIII (Bristol, 1997), p. 148; C. Burgess (ed.), *The Pre-Reformation Records of All Saints' Church, Bristol: the Churchwardens' Accounts*, Bristol Record Society, Vol. LIII (Bristol, 2000), p. 132. For John Colt, see Pollard, *Warwick the Kingmaker*, p. 142.
- 42 Hicks, *Warwick the Kingmaker*, pp. 285–6, 300.
- 43 TNA: PRO, C67/48 m.31, a reference provided by Dr Roger Thomas. In the pardon, Trahaiarn is described as a gentleman of Caerleon, where he had been one of Herbert's officials in the 1450s and where he re-emerged as deputy-steward of the lordship in 1481 and secured the patronage of the poet Guto'r Glyn: Gwent Record Office, B.3.ii.219.

seven

THE SEVERN SEA

Urban Networks and Connections
in the Fifteenth Century

Peter Fleming



AS DISCUSSED ELSEWHERE in this volume, it seems fairly certain that the Newport Medieval Ship was locally owned and would have been used to service the long-distance trade of the Severn Sea. That trade was largely in the hands of Bristol merchants, albeit Newport's leading citizens did sometimes engage in Bristol's continental trade directly as both merchants and shipowners. This was possible because Bristol was not an isolated community, divorced from its region. Rather it served as the regional hub for long-distance overseas trade, providing an outlet for goods produced in the area and as a market and distribution point for foreign imports. Such activity required Bristol to maintain close commercial links with its customers and suppliers, which both fostered and was fostered by social and family links. This chapter will examine the range and nature of these connections. In particular, it considers the links between the northern coast of the English south-western peninsula (Somerset, Devon and Cornwall) and south Wales from the point of view of Bristol. Bristol was by far the most important urban centre in the region, being, in effect, the regional metropolis for south-east Wales and the English West Country, with a sphere of influence that covered north Somerset, abutting Exeter's sphere, south-east Wales, abutting Carmarthen's (but perhaps with an important outlier in south Pembrokeshire), north-east Wiltshire (as far as Salisbury Plain), and going as far north, along the Severn, as Coventry. Bristol performed important market functions for the Severn Sea region and was its largest centre of population by a considerable margin; in the early sixteenth century it had a population of perhaps 8,000, making it the second or third largest provincial centre of population in the realm.¹

The primary sources available from which to attempt a reconstruction of Bristol's contacts within this region are limited. Exchequer customs accounts do not exist for Wales, nor for internal trade within England. Not many records of fifteenth-century Bristol's local courts have survived, nor do we have records of traders and their merchandise passing through Bristol's gates, or registers of freemen, while Bristol's equivalent of the panoply of civic records of which London can boast is but a pale shadow in comparison.² Therefore, reconstructing Bristol's domestic commercial networks demands resort to less direct indicators of economic activity and, of course, beyond economic activity there were a host of social, political and administrative links.

Last wills and testaments give something like an overview of an individual's interests, albeit within certain closely defined boundaries. Medieval wills, almost always drawn up when the end of life threatened, can easily mislead if they are assumed to be the complete picture of an individual's social networks.³ However, wills can be used to reconstruct networks of personal associations and property ownership, at least as they appeared at the end of the testator's life.

Figure 7.1 and Table 7.1 are based on an analysis of around 330 wills of Bristol testators proved between 1400 and 1500.⁴ This is a mere fraction of the total number of wills that must have been made in Bristol over this period, even though wills were not made by those under age or without property and men figure disproportionately (married women with living husbands are rare among testators). Given Bristol's population, and a period that would have encompassed three to four generations, many more wills must have been lost to posterity. This is a significant sample, but what percentage it represents of the total number of Bristol wills made in this period is unknowable.

Unsurprisingly, most contact was made with Somerset and Gloucestershire, the two counties adjoining Bristol, and most of these wills occurred in south Gloucestershire and north Somerset. The strong showing of Wales is attributed almost entirely to links with the south and east of the country. There was relatively little contact with

Figure 7.1: Wills Referring to Locations Outside Bristol, 1400–1500



Table 7.1: Wills Referring to Locations Outside Bristol, 1400–1500

County/ Country	Property (number of recorded instances of testators holding property outside Bristol)	Religious Bequests (number of recorded instances of testators making bequests to churches and religious houses outside Bristol)	Individuals (number of recorded instances of testators making bequests to individuals identified as living outside Bristol)	Burials (number of recorded instances of testators requesting burial outside Bristol)	Total
Somerset	8+5=13	4+3=7	5+7=12	1+5=6	38 (26 wills)
Gloucestershire	8+4=12	3+9=12	3+6=9	2+0=2	35 (23 wills)
Wales:					20 (14 wills)
Monmouthshire	1+2=3	1+4=5	1+2=3	0+0=0	8+3=11
Brecknockshire	0+0=0	0+0=0	0+1=1	0+0=0	0+1=1
Glamorganshire	0+0=0	4+1=5	1+0=1	0+0=0	5+1=6
Pembrokeshire	0+0=0	0+0=0	0+1=1	0+0=0	0+1=1
Montgomerys.	0+0=0	1+0=1	0+0=0	0+0=0	1+0=1
London	0+0=0	1+1=2	12+1=13	0+1=1	16 (13 wills)
Wiltshire	1+2=3	2+2=4	1+1=2	1+1=2	11 (8 wills)
Ireland	0+3=3	0+3=3	2+0=2	0+0=0	8 (5 wills)
Dorset	0+1=1	1+1=2	1+0=1	0+0=0	4 (3 wills)
Staffordshire	1+1=2	1+0=1	0+1=1	0+0=0	4 (3 wills)
Herefordshire	0+0=0	2+0=2	1+0=1	0+0=0	3 (3 wills)
Warwickshire	0+0=0	1+0=1	1+0=1	0+0=0	2 (2 wills)
Shropshire	0+0=0	1+0=1	1+0=1	0+0=0	2 (2 wills)
Leicestershire	1+1=1	0+0=0	1+0=1	0+0=0	2 (2 wills)
Oxfordshire	0+0	0+0=0	2+0=2	0+0=0	2 (2 wills)
Berkshire	0+0=0	2+0=2	0+0=0	0+0=0	2 (2 wills)
Devon	0+0=0	1+0=1	0+0=0	0+0=0	1 (1 will)
Cornwall	0+0=0	1+0=1	0+0=0	0+0=0	1 (1 will)
Hampshire	0+0=0	1+0=1	0+0=0	0+0=0	1 (1 will)
Lincolnshire	0+0=0	0+0=0	1+0=1	0+0=0	1 (1 will)
Worcestershire	0+0=0	1+0=1	0+0=0	0+0=0	1 (1 will)
Yorkshire	0+0=0	1+0=1	0+0=0	0+0=0	1 (1 will)
Total	38	53	53	11	155 (114 wills)

For each county/country, the first figure represents a will in which this is the only mention of the county/country; the second represents a will in which the county/country is mentioned more than once in different categories, so that this will is represented more than once. Hence, the 'Total' column sometimes records more mentions than wills. The counties are the 'historic' pre-1974 counties, while 'Bristol' is interpreted as the town and county within the boundaries established from 1373.

England's south-western peninsula (Devon and Cornwall together figure only twice), probably because Exeter's hinterland, stretching into south Somerset, effectively precluded much of Bristol's social interaction with this region.⁵

In broad terms the distribution of property and religious bequests – both, in some cases indicating migration, although to an unquantifiable degree – fits the pattern established by Simon Penn's discussion of migration to Bristol in the first half of the fourteenth century.⁶ Penn's analysis was based on personal toponyms held by Bristol residents and depended on the assumption that for the most part surnames only began to be inherited after the middle years of the century, so that before then they can be used to indicate the place of origin of their bearer. Obviously, such a methodology cannot be employed with any confidence for the fifteenth century, but the patterns revealed by Penn may still have existed a century later. His evidence suggests that around one-third of migrants came from within twenty miles of the town. The rest, however, could have travelled much further. In fact, early fourteenth-century Bristol appears to have been second only to London in the size of its potential catchment area for migrants. While a few personal names corresponded with places as far away as Norfolk and Yorkshire, there was a strong correlation with locations in the Severn and Wye valleys, an area with which a number of fifteenth-century Bristol testators were

Figure 7.2: Bristol Staple Court Cases, 1489–1497 and 1509–1513



Table 7.2: Bristol Staple Court Cases, 1489–1497 and 1509–1513

Place of Origin of Defendant/Plaintiff	Defendant	Total 1489–97 and 1509–13 (% – rounded to nearest integer)	Plaintiff/ Burgess of the Staple	Total 1489–97 and 1509–13 (% – rounded to nearest integer)	Total Defendant and Plaintiff, 1489–97 and 1509–13 (% – rounded to nearest integer)
Bristol	23 (19)	42 (68)	12 (15)	27 (44)	69 (56)
Cheshire	1 (0)	1 (2)	0 (0)	0 (0)	1 (1)
Gloucestershire	0 (5)	5 (8)	1 (2)	3 (5)	8 (6)
London	0 (0)	0 (0)	2 (4)	6 (10)	6 (5)
Oxfordshire	1 (0)	1 (2)	0 (0)	0 (0)	1 (1)
Shropshire	0 (0)	0 (0)	2 (1)	3 (5)	3 (2)
Somerset	1 (4)	5 (8)	10 (5)	15 (24)	20 (16)
Sussex	0 (0)	0 (0)	0 (1)	1 (2)	1 (1)
Westmorland	0 (2)	2 (3)	0 (0)	0 (0)	2 (2)
Wiltshire	0 (0)	0 (0)	0 (4)	4 (6)	4 (3)
Wales	1 (3)	4 (6)	0 (1)	1 (2)	5 (4)
Ireland	1 (1)	2 (3)	0 (0)	0 (0)	2 (2)
France	0 (0)	0 (0)	0 (1)	1 (2)	1 (1)
Spain	0 (0)	0 (0)	1 (0)	1 (2)	1 (1)
Total	28 (34)	62 (100)	28 (34)	62 (102)	124 (101)

familiar, as well as the Cotswolds and central-southern Somerset which, however, were less well represented in the wills.

Many of the personal contacts made by Bristol testators would have been generated through trade. Some idea of Bristolians' business networks can be gained through the evidence of debts generated when credit agreements were not fulfilled and the creditor had recourse to the law. The cases used here are the products of the establishment of certain port towns as 'staples', with their own staple courts for resolving local commercial disputes, supported by the provision of the certification of credit arrangements and the consequent prosecution of debt, if necessary, before Chancery.⁷ Bristol's earliest dedicated Staple Court Book begins in 1509, but before then Staple Court business was recorded in its Tolzey books. The earliest of these covers the period 1489 to 1497.⁸ Only those individuals admitted as 'burgesses of the staple' could plead before the court, but this privilege was clearly not restricted to Bristol merchants. In Figure 7.2 and Table 7.2, all cases from the years between 1489 and 1497 and 1509 and 1513 have been included, provided they involved at least one non-Bristolian. In some cases, creditors and debtors are not individuals but groups, and in these instances they are treated as one entry provided they all came from the same place.

Over these periods, the court was used more often by outsiders to sue Bristolians for debt than vice versa. The largest number of non-Bristolian parties came from Somerset, Gloucestershire, London and Wales, but outsiders could come from as far afield as Spain and France. They all had to have been admitted as burgesses of the staple before they could plead, and there are numerous instances throughout the extant early Tudor Staple Court records of would-be plaintiffs being admitted in order to use the court, and so Figure 7.3 includes all such admissions over the same years, including Bristolians.⁹

These data strengthen the impression that the Bristol Staple Court was used almost as much by outsiders as by Bristolians: nearly half of the admissions come from outsiders. After Bristol, most admissions came from the immediate hinterland of Somerset and Gloucestershire, but next came London. Admissions from Wales exceeded those from nearby Wiltshire. In particular, the importance of Somerset is apparent from both cases and admissions. While we can draw few conclusions from so small a sample, the parties' and admittants' counties of origin are mainly clustered around the immediate hinterland, with an important London component and a slightly lesser showing from south Wales.

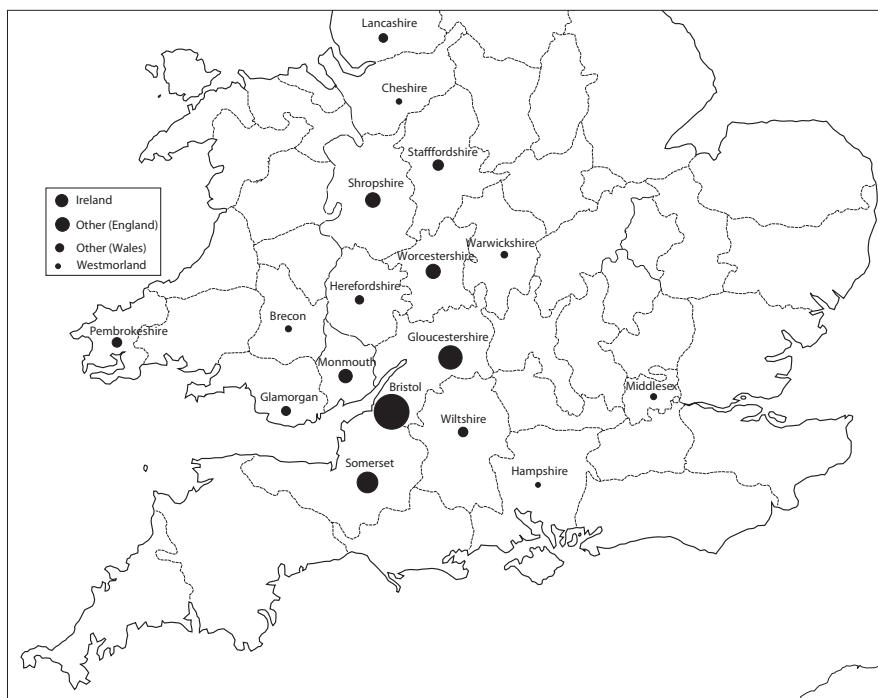
Figure 7.3: Admissions to the Bristol Staple, 1489–1497 and 1509–1513¹⁰



The final set of data comes from the registration of apprentices. Apprentices were a major source of new blood to pre-modern towns, and relationships sealed with apprenticeships presumably depended on existing ties forged from commercial or family associations. The evidence provided by the registration of Bristol apprenticeship certificates, by which the apprentice's new master agreed terms with the apprentice's parents or guardians, would be invaluable for the study of migration to fifteenth-century Bristol. Unfortunately, the Bristol Apprentice Books which record this information are only extant from 1532. They are still worth considering, however, since they may indicate trends that had been present more than thirty years earlier. On this assumption, Figure 7.4 is based on data from the first decade represented in the Bristol Apprentice Books.¹¹

The figures for 1532 to 1542 reinforce the impression already created of the importance of Bristol's connections with its immediate hinterland in Gloucestershire and Somerset. Wales was the third largest source of apprentices, contributing 169 individuals (14 per cent of the total), nearly two-thirds of whom came from the south-eastern counties of Monmouthshire, Glamorgan and Brecknockshire, but with a sizeable contingent from Pembrokeshire. That nearly one-fifth of

Figure 7.4: Bristol Apprentices registered, 1532–1542¹²



Welsh apprentices should have come from the most westerly tip of South Wales is in part testimony to the strength of Bristol's coastal trade with this region, but may also be explained by south Pembrokeshire's heavily Anglicised character. Carmarthen may have been a rival magnet for Welsh apprentices from the more purely Welsh-speaking areas of the central and west regions of south Wales.¹³ The south-western peninsula of England supplied few apprentices to Bristol, presumably because Exeter was the obvious destination for apprentices from Cornwall, Devon and south Somerset.

Looking across all the datasets so far analysed, the south-west figures less prominently than might be expected, given that Bristol did have a significant trade with Bristol Channel ports along the north coast of the peninsula; again, the explanation probably has much to do with Exeter, whose hinterland stretched across Devon and south Somerset.¹⁴ The strength of the apprentice contingent from south Wales, when seen beside the high incidence of fifteenth-century Bristol testators' interests in south Wales, does suggest the importance of this region to Bristol but the Welsh seem to have figured more prominently as migrants to Bristol than as business partners. The significant number of Bristolians who held Welsh property were probably migrants or their descendants, but there is the possibility that some were investing in real estate across the Severn. Taken together, the testamentary, legal and apprenticeship evidence for the fifteenth and early sixteenth centuries fits well with the early fourteenth-century pattern based on toponyms described by Penn; most contact, perhaps predictably, was with the immediate hinterland, particularly Gloucestershire and north-central Somerset.¹⁵

The second half of this chapter puts some flesh on these dry statistical bones. This section does so by discussing Bristol's water-borne communications within the Severn Sea region. Two fifteenth-century accounts, separated by forty-two years, indicate the importance of this region to Bristol.

The first is a unique survival of the return for the town toll (rather than those customs returns made up for the Exchequer) in 1437–8 and promises to allow us to make some sort of comparison between all the ports, foreign and domestic, with which Bristol traded. In this year, according to the return, Bristol's most significant trading partners in the Severn Sea region were Padstow, St Ives and Minehead, and the cargoes mostly consisted of fish, with tin, hides and cloth also being carried. Twenty-eight voyages between Bristol and ports in the English south-western peninsula were noted in this year, approaching the number of voyages from Bristol to Ireland (at least thirty-two, but perhaps as many as forty) and nearly twice as many as the trips from Bristol to Welsh ports (around seventeen). Apart from these ports, Bristol's other trading partners, according to this return, lay in Gascony.¹⁶

The second account was produced in 1480 by William Worcestre, the famous Bristol-born antiquary. In a section of his notes on Bristol's Avon quayside, known then as the Back, Worcestre remarked on the:

Ships . . . from the ports of the Welsh towns. They are from the towns and havens of Tenby, Milford Haven, Haverfordwest, Laugharne haven, Llanstephan haven, Kidwelly haven, Swansea haven, Neath haven, Cardiff haven, Newport haven, Usk haven, Caerleon haven, Tintern abbey on the river Wye, Chepstow haven, 'Betyssley water' on the river Wye [Beachley], and other harbours or havens from the counties and ports of Cornwall, laden with tin, fish etc., and from the ports of Devonshire and Somersetshire. They moor their ships at The Back on the rising tide, to unload and discharge their ships of their goods.¹⁷

Nowhere else is mentioned by Worcestre as the home port of the vessels tied up at the Back, and so for him it was the Welsh ports that were the most important in this respect.¹⁸ Probably this was an accurate reflection of reality.

Worcestre methodically lists the ports along the south Wales coast with which Bristol traded, beginning with the westernmost, Tenby and Milford Haven in Pembrokeshire, and ending with Beachley, at the confluence of the Wye and the Severn. In assessing the nature and scale of Bristol's commercial links with Wales we are faced by a problem. Customs were not collected by Crown officials in the Welsh ports with which Bristol traded, since this was left to the Marcher lords, whose customs records have generally not survived, so that we have to piece together the picture from a range of more or less tangential and fragmentary materials.¹⁹

Bristol's merchants had long enjoyed exemption from tolls in south Wales.²⁰ However, even for other merchants the lower customs duties within the Marcher lordships that extended across the region meant that the coast provided a number of attractive entrepôts, so that Gascon or Iberian wine was regularly imported here, before being transferred to small coasting vessels to be shipped to Bristol. This allowed the merchants to avoid the duty of 'prisage', which was only imposed on English-owned wine imported on vessels carrying more than ten tuns.²¹ One indication of the strength of Bristol's waterborne trade with south Wales is the fact that for nine months in 1479–80 an average of one ship per month from Tenby or Chepstow docked at Bristol. Notwithstanding that the Bristol customs area extended as far as Chepstow, this port seems to have played its part in the systematic evasion of English customs. As well as benefitting from 'tax-avoidance', Wales also produced a range of its own commodities, among which cheap cloth, hides, beans and grain were prominent, and these too were regularly imported through Bristol.

William Clifford was among those Bristolians with interests in the Welsh cloth trade. In his will of 1498 he left a number of bequests to his brother-in-law, Richard Draper, in Brecon, including Brecon cloths purchased from John Goldsmythe of Tenby and such debts as the landlady of the New Inn at Chepstow, and Thomas, the little barber of Chepstow, owed him. He also mentioned a servant who was probably Welsh, William Cradocke. So we can surmise, without pushing the evidence too far,

that Clifford married into a Brecon family and probably also in the textile business to judge by his brother-in-law's surname, and traded with them and with merchants in Tenby; the journey west often involved a stay at Chepstow's New Inn, where he would avail himself of the services of a local barber, also lending money to both the barber and the landlady of the inn.²²

Unlike English migrants, distinctive Welsh naming practices – the use of the patronymic 'ap/b' or 'm/ferch' – enable the ready identification of some of the Bristol Welsh, although in most cases we cannot know if the bearers of such names were migrants of the first generation or of subsequent ones.²³ Bristol's Welsh population seems to have been well integrated. There is no evidence that the Bristol Welsh were subjected to discrimination at civic or guild level, even during Glyn Dŵr's rebellion.²⁴ The Bristol Welsh elite held high positions in civic society throughout the long fifteenth century; between 1390 and 1525 twenty-two men with Welsh names, or known to have Welsh origins, held the highest civic offices (of bailiff, sheriff or mayor) a total of thirty-nine times, representing around 10 per cent of the total number of office holders for the period. The last quarter of the fifteenth century witnessed a flowering of Welsh talent in Bristol. This was apparent even before 1485. The most impressive single example of the significance of the Bristol Welsh is provided by Henry Vaghan. He is described by Ralph Griffiths as early Tudor Bristol's 'most successful and respected merchant'. He had been trading in Bristol since at least 1467, and two years later began his rise through the civic *cursus honorum* as bailiff, ending as mayor in 1483/4 and 1493/4, as well as representing Bristol in the Parliaments of 1487 and 1497. Identifying Henry's relatives is complicated by the fact that Vaghan was a common name, held by several different Welsh families, but at least one of the two John Vaghans, Bristol bailiffs in 1483/4 and 1498/9 respectively, or Thomas and William Vaghan, bailiffs in 1486/7 and 1515/6, or another John Vaghan, who died in 1491/2, were probably related to him. Bristol Vaghans had links with Cardigan, Aberystwyth, St David's and Cardiff and are recorded in Bristol from at least 1405.²⁵ Accompanying the Vaghans in early Tudor Bristol's Common Council were ap Howells, Rhyses, Joneses, a Griffith, Williams, Edwards, ap Merick and Davies, so that in the last twenty years of the century the Welsh probably made up around 20 per cent of the civic elite. This figure matches the proportion of Welsh among the town's total population as calculated from the returns to the 1524/5 Tudor subsidy.²⁶ Indeed, the Welsh continued to make up around 20 per cent of Bristol's population until at least the 1690s and were by far the largest minority within the town's ethnic mix.²⁷

In a handful of cases it is possible to demonstrate a direct connection between the Bristol Welsh and their putative homeland. In his will of 1407 the Bristol burgess Henry Culmer left bequests to his former parish church of Holy Trinity, Caerleon and to the bridge at Caerleon, and mentioned his tenements there. In 1471 Joan, the widow of John Packer of Chepstow, while evidently by now a Bristolian, desiring burial and funding an obit at Bristol's St James's Priory, nonetheless left a number

of bequests to churches and chapels in Chepstow. She also established a perpetual chantry there, endowing it with her Chepstow property, and gave money to both the cathedrals at Worcester (Bristol north of the Avon was part of its diocese until 1542) and Llandaff.²⁸ The following year the pardon of Thomas Marys described him as late of Bristol, mercer, alias late of Monmouth, gentleman, and in 1507 Richard Vaghan, merchant, asked to be buried in Bristol, but also provided for prayers to be said in the parish church of Aberystwyth, 'wherin I was crystined'.²⁹ In several wills testators mention Welsh property but with no indication of their place of birth; in such cases we cannot be sure whether they were Welsh immigrants or had bought or inherited the property.³⁰ In the case of Thomas Erle, an early fifteenth-century Bristol merchant and shipowner, his property in Swansea and Cardigan, associations with John Nichol, abbot of Neath and with John Erle of Cardigan (very probably a relative) all point to him being of Welsh extraction.³¹

Such associations would help to maintain a continuing sense of 'Welshness' among the émigré community living in Bristol, and there are instances of what appear to be Welsh networks linked to Welsh Bristolians. For example, the legatees of Edward Rede, who made his will in 1463, included Thomas David, alias 'Madoc of Wales', Robert David, William and Edith Davy and Rede's servant Hywel, and he was owed money by William Wodynton of Cardiff and William ap Thomas ap Preve.³² In 1491 Richard Erle, probably son or grandson of Thomas, appointed as his executors William Jones, clerk, and Thomas Howell, and made bequests in his will to Hugh Jones and John Davy; all four had been enfeoffed by Erle a few months previously, and an earlier group of his feoffees included John Williams, John Kemys, Thomas ap Rys, John Haywardyn, John Davy, John Griffith, John ap Morgan and John ap Meryk.³³ Some Bristol Welsh merchants may have banded together in trading ventures, as appears to have been the case with David and John Vaghan, William Aphowell and John Thomas, who shipped cargoes in the *Jhesus* of Bristol in 1508.³⁴ However, these apparent Welsh networks were exceptional and are greatly outnumbered by associations between the Bristol Welsh and Bristol English. This is an indication of how well the Welsh were integrated into Bristol's society, but of course such integration runs the risk of diluting cultural-ethnic identity.

The chapel of St Mark's Hospital, Bristol, may have had a particular Welsh connection. In 1470 and 1471 two members of the Welsh Mathewe family, Thomas and Reynborn, desired burial there; the latter described himself as an esquire of the Welsh March, and dated his will at the hospital. Neither made any other Bristol bequest other than those to St Mark's. In addition, the chapel contains the tomb of Miles Salley, an Englishman consecrated as bishop of Llandaff in 1500, who died at the hospital in 1516 and may have paid for the partial rebuilding of its chapel. St Mark's may have been a regular stop on Salley's journeys between Oxfordshire, where he was active in county affairs and local government, and his see. St Marks may also have provided hospitality for Thomas and Reynborn Mathewe on their journeys to and from their Welsh homes.³⁵

Fifteenth-century Bristol's English population appears to have been very much at ease with the Welsh. The Welsh towns with which Bristol had most contact, such as Chepstow, Newport, Cardiff and Tenby, were among the most Anglicised. It is tempting to assume that Bristolians thought that there was practically no difference between the cultures of their town and of the urban inhabitants of south Wales. Yet one Chancery case brought in the 1530s suggests otherwise. The plaintiff, Thomas Jones of Bristol, brother and executor of William Jones of Newport, claimed that William had requested that his children be brought to Bristol, 'to the Intente to have hys chylderan browght upp according to the man[n]er & condicones of the nurture of Inglonde'.³⁶ If we are to believe Thomas Jones, then Bristol and Newport were separated by more than just three miles of water. Set against this, we may cite the case of another William Jones, a gentleman of nearby Caerleon, who was the owner of a ship of about 135 tons burden until at least 1541. Variouslly described as the *Trinity* of Caerleon, the *Trinity* of Newport, or the *Trinity* of Wales, Jones's ship was used to service Bristol's trade, carrying goods belonging to Bristol merchants, although Jones sometimes also laded goods in his own right. The *Trinity* was almost certainly Wales's greatest ship, being the only one deemed large enough to be recruited into the king's navy during the crises of 1539 and 1545.³⁷ This case highlights both the close commercial connections between Newport and Bristol and the Welsh port's significance for shipping. It certainly demonstrates that the Newport Medieval Ship could have been owned by a native of the town, albeit, like the *Trinity*, the primary function of such a great ship would have been to service Bristol's long-distance trade, possibly interspersed by periods of naval service.

Despite the Chancery case brought by Thomas Jones of Bristol, it may be misleading to dwell upon his insinuation that the customs and manners of the people of Newport were considered inferior to those of Bristol. As the nearest Welsh town, Newport was well known and frequented by Bristolians. For example, in her will of 1410 the Bristol widow Alice Wylkyns mentions property in Newport, as does the Bristol burgess John Seynte in 1471, in his case the ownership being disputed between himself and Morgan Jenkyn ap Philipp. Seynte was probably originally from Newport.³⁸ In 1472 a Bristol gentleman, Maurice Griffith, was accused before King's Bench of having stolen silver cups from the houses of two Bristol burgesses in consort with two Newport yeomen.³⁹

Bristol's elite seem to have displayed an untroubled acceptance of the Welsh; indeed, an increasing proportion of the civic and commercial elite were themselves Welsh-born or of Welsh parentage. Most fifteenth-century Bristolians had either migrated to the town from elsewhere in England, Wales, or Ireland, or were the children or grandchildren of migrants. The broad elite of merchants and traders, and those sailors and carriers below them in the socio-economic hierarchy, travelled widely beyond the immediate hinterland. Within Britain, many had regular business in the Welsh Marches and south Wales. Even those who did not travel regularly would have

rubbed shoulders every day with visitors and migrants from many different parts of the realm, and particularly from within the region of the Severn Sea.

The close connections between Bristol and south Wales has implications for the way the Newport Medieval Ship should be interpreted. The ship may have been owned and operated from Newport, or by its Marcher lords, or it may have been a Bristol vessel that was being serviced in Newport, or part-owned by people connected to both places. All of these scenarios are possible, given the close integration of the Severn Sea region. Many of Bristol's leading merchants came from south Wales and many people in Newport had family and business connections with Bristol. Moreover, the lords who controlled Newport during the 1460s, William Herbert and the earl of Warwick, were engaged themselves in Bristol's trade and commercial shipping, as discussed by Bob Trett and Ralph Griffiths in this volume.⁴⁰ So, whatever the precise nature of the Newport Medieval Ship's ownership, it would, at least during its later life, have been part of those connections.



Notes

- 1 Alan Dyer, 'Urban Decline in England, 1377–1525', in Terry Slater (ed.), *Towns in Decline, AD 100–1600* (Aldershot, 2000), pp. 266–88, at 277–8. In 1377 Bristol ranked third in terms of the total number of its poll taxpayers, with 6,345; the next most populous town in the region was Gloucester, with a total taxpayer population of 2,239, while in 1524/5 Bristol ranked third among English towns and cities with a taxpaying population of 1,166, and Exeter, the next largest town in the region, ranked sixth with 1,050: Alan Dyer, 'Appendix: ranking lists of English medieval towns', in David M. Palliser (ed.), *The Cambridge Urban History of Britain, Vol. 1: 600–1540* (Cambridge, 2000), pp. 758, 761. Cardiff was undoubtedly the largest of the Welsh towns, but had a fifteenth-century population that probably hardly exceeded 2,000: Richard Britnell, 'The Economy of British Towns, 600–1300', in Palliser (ed.), *Cambridge Urban History of Britain, Vol. 1*, pp. 105–26, at 124.
- 2 The major later medieval records for Bristol have mostly been edited and published by the Bristol Record Society. The list of these publications can be found at: <http://www.bris.ac.uk/Depts/History/bristolrecordsociety/publications.htm>. The relative paucity of Bristol's extant archives is made clear by comparison with those of such provincial towns as Ipswich (Nicholas R. Amor, *Late Medieval Ipswich: Trade and Industry* (Woodbridge, 2011), pp. 25–7); Norwich (Carole Rawcliffe, 'Introduction', in C. Rawcliffe and Richard Wilson (eds), *Medieval Norwich* (London and New York, 2004), pp. ix–xxxvii, at xxix–xxx); and York (Lorraine C. Attreed (ed.), *York House Books, 1461–1490*, 2 vols. (Stroud, 1991)). What can be done with later medieval London's civic archive was demonstrated many years ago by Sylvia Thrupp, *The Merchant Class of Medieval London, 1300–1500*

- (Chicago, 1948), and much more recently by Caroline Barron, *London in the Late Middle Ages: Government and People, 1200–1500* (Oxford, 2004).
- 3 There is now a vast literature on medieval English wills. A useful recent introduction, although focused on the early modern period, is Nigel Goose and Nesta Evans, 'Wills as an historical source', in Tom Arkell, Evans and Goose and (ed.), *Till Death Do Us Part: Understanding and Interpreting the Probate Records of Early Modern England* (Oxford, 2000), pp. 38–71. Bristol wills are discussed in Clive Burgess (ed.), *The Pre-Reformation Records of All Saints' Church, Bristol (Part 3): Wills, the Halleyway Chantry Records and Deeds*, Bristol Record Society Vol. 56 (Bristol, 2004), pp. 1–8.
 - 4 Prerogative Court of Canterbury wills are to be found as copies in the registers of wills at TNA: PRO, PROB 11, and the wills from the Great Orphan Book are in Bristol Record Office JOr/1/1, and abstracted in Thomas Procter Wadley (ed.), *Notes or Abstracts of the Wills Contained in the Volume Entitled the Great Orphan Book and Book of Wills, in the Council House at Bristol* (Bristol, 1886) (henceforth cited as Wadley, *Wills*). A few other fifteenth-century Bristol wills are edited by Burgess in *Pre-Reformation Records of All Saints', Part 3*, pp. 11–33, and in E. W. W. Veale (ed.), *The Great Red Book of Bristol, Text (Parts I–IV)*, Bristol Record Society, Vols 4, 8, 16, 18 (Bristol, 1933, 1938, 1950, 1953), *passim*. The c.330 wills used here represent every will, written by a testator describing or otherwise indicating themselves as of Bristol, proved between 1400 and 1500, which could be found in these sources. Bristol testators had their wills proved before the mayor, rather than in the consistory courts of the bishop of either Worcester or Bath and Wells (the two dioceses in which Bristol lay), but in addition many also had their wills proved and registered in the Prerogative Court of Canterbury.
 - 5 Marianne Kowaleski, *Local Markets and Regional Trade in Medieval Exeter* (Cambridge, 2003), pp. 279–324, demonstrates that Exeter's commercial hinterland in the later 14th century covered much of Devon and south Somerset.
 - 6 This paragraph is based on Simon Penn, 'The Origins of Bristol Migrants in the Early Fourteenth Century: The Surname Evidence', *Transactions of the Bristol and Gloucestershire Archaeological Society*, 101 (1983), pp. 123–30. For the usefulness of surname evidence for migration until the mid-14th century, see Peter McClure, 'Patterns of Migration in the Late Middle Ages: The Evidence of English Place-Name Surnames', *Economic History Review*, 2nd ser., 32 (1979), pp. 167–82, at 168.
 - 7 For Staple jurisdiction, see E. E. Rich (ed.), *The Staple Court Books of Bristol*, Bristol Record Society, Vol. V (1934), pp. 1–102; Angela Conyers (ed.), *Wiltshire Extents for Debts, Edward I–Elizabeth I*, Wiltshire Record Society, 28 (1972), 'Introduction', pp. 1–16; Kowaleski, *Local Markets and Regional Trade*, pp. 212–21, for their operation in Exeter.
 - 8 BRO 08154/1a, Action Book, Tolzey Court, 1489–1497; Rich (ed.), *Staple Court Books*, *passim*.
 - 9 Rich (ed.), *Staple Court Books*, pp. 61–2. An example of this is provided by Sir Robert Poyntz of Iron Acton, just north of Bristol, who became a burgess of the Bristol Staple in order to prosecute Edmund Dykes, an esquire of Dursley, with whom he was in a property dispute; Sir Robert, allegedly, sued Wykes for debt before the Staple Court and the latter was imprisoned without bail. Wykes brought the case to Chancery between 1486 and 1515: TNA: PRO C1/178/45–7.

- 10 Number of individuals admitted from each county, including the percentage of the total, rounded to the nearest integer: Bristol 58 (57 per cent); Berkshire 1 (1 per cent); Devon 1 (1 per cent); Gloucestershire 8 (8 per cent); Herefordshire 1 (1 per cent); London 5 (5 per cent); Oxfordshire 1 (1 per cent); Rutland 1 (1 per cent); Somerset 18 (18 per cent); Wiltshire 3 (3 per cent); Worcestershire 1 (1 per cent); Wales 4 (4 per cent)*; Spain 1 (1 per cent). TOTAL: 102 (103 per cent). 'Wales' can be disaggregated: 2 came from Monmouthshire, and 1 each from Carmarthenshire and Pembrokeshire. The sole Spaniard is simply described as being from Spain.
- 11 D. Hollis (ed.), *The Calendar of the Bristol Apprentice Book 1532–1565: Part 1 1532–1542*, Bristol Record Society, 14 (1949), Appendix B, p. 197, discussed in Ann Yarbrough, 'The Geographical and Social Origin of Bristol Apprentices, 1542–1565', *Transactions of the Bristol and Gloucestershire Archaeological Society*, 98 (1980), pp. 113–30.
- 12 County of origin of apprentices (including the percentage of the total (rounded to nearest integer)): Bristol 404 (29 per cent); Gloucestershire 185 (13 per cent); Somerset 147 (11 per cent); Shropshire 75 (5 per cent); Worcestershire 72 (5 per cent); Monmouthshire 65 (5 per cent); Staffordshire 41 (3 per cent); Pembrokeshire 36 (3 per cent); Wiltshire 35 (3 per cent); Glamorgan 31 (2 per cent); Lancashire 30 (2 per cent); Herefordshire 28 (2 per cent); Warwickshire 18 (1 per cent); Breconshire 16 (1 per cent); Cork 16 (1 per cent); Middlesex/London 15 (1 per cent); Cheshire 13 (1 per cent); Hampshire 11 (1 per cent); Westmorland 11 (1 per cent); Carmarthenshire 10 (1 per cent); Waterford 9 (1 per cent); Devon 8 (1 per cent); Dorset 8 (1 per cent); Oxfordshire 6 (1 per cent); Berkshire 5 (1 per cent); Dublin 5 (1 per cent); Kilkenny 5 (1 per cent); Lincolnshire 5 (1 per cent); Yorkshire 5 (1 per cent); Isle of Man 5 (1 per cent); Leicestershire 4 (1 per cent); Louth 4 (1 per cent); Cardiganshire 3 (1 per cent); Montgomeryshire 3 (1 per cent); Nottinghamshire 3 (1 per cent); Cambridgeshire 2 (1 per cent); Caernarfonshire 2 (1 per cent); Cumberland 2 (1 per cent); Denbighshire 2 (1 per cent); Derbyshire 2 (1 per cent); Essex 2 (1 per cent); Hertfordshire 2 (1 per cent); Meath 2 (1 per cent); Northamptonshire 2 (1 per cent); Suffolk 2 (1 per cent); Wexford 2 (1 per cent); Anglesea 1 (1 per cent); Bedfordshire 1 (1 per cent); Durham 1 (1 per cent); Kent 1 (1 per cent); Limerick 1 (1 per cent); Sussex 1 (1 per cent); Tipperary 1 (1 per cent). TOTAL 1366 (100 per cent).
- 13 Spencer Dimmock and Jinx Newly, 'Apprentices', in Madge Dresser and Peter Fleming, *Bristol: Ethnic Minorities and the City, 1000–2001* (London, 2007), pp. 36–7.
- 14 Kowaleski, *Local Markets and Regional Trade*, pp. 99, 169–70, and Figures 6.1 and 7.1.
- 15 A pattern also found among the canons of St Augustine's Abbey between 1350 and 1539, to judge by those of their surnames that appear to have been toponymic: James G. Clark, 'St Augustine's in the Later Middle Ages', in Jon Cannon and Beth Williamson (eds), *Medieval Art, Architecture and History of Bristol Cathedral* (Woodbridge, 2011), pp. 247–62, at 250.
- 16 Henry Bush, *Bristol Town Duties: A Collection of Original and Interesting Documents* (Bristol, 1828), Chapter 1, 'Origins of the grant of the town of Bristol', pp. 5–42, <http://www.british-history.ac.uk/no-series/bristol-duties/pp5-42> [accessed 9 June 2015]. While this is a valuable source, there are problems with its interpretation which preclude the extrapolation of precise, meaningful statistics from it: not all of the ports can be identified, and there are seventeen Bristol-based ships for which details of voyages are not given; also, while a number of voyages to and from ports for whom freedom of toll had been granted

- are included and noted as 'free', there must be a suspicion that in these cases record-keeping may have been less than complete. For an undated list of exempted places, see Bush, *Bristol Town Duties*, Chapter 2, 'Origin of the town dues', pp. 43–83.
- 17 Frances Neale (ed.), *William Worcestre: The Topography of Medieval Bristol*, Bristol Record Society, Vol. 51 (Bristol, 2000), no. 251. Beachley continued to be recorded as 'Beatsley', or variants thereof, until at least the seventeenth century. See, for example, the well-known plan of Bristol: James Millerd, *An Exact Delineation of the Famous Citty of Bristoll and Suburbs* (Bristol, 1673), border illustration showing Bristol's region.
 - 18 Larger vessels, able to sail to Ireland and across the Bay of Biscay, tied up at the Key, on the Frome to the north of the Avon.
 - 19 Maryanne Kowaleski, 'Port towns: England and Wales, 1300–1540', in Palliser (ed.), *Cambridge Urban History of Britain*, Vol. 1, pp. 467–94, at 474; E. M. Carus-Wilson and O. Coleman, *England's Export Trade, 1275–1547* (Oxford, 1963), p. 176.
 - 20 This paragraph is drawn from: Tim Bowly, 'The land divides, the sea unites: the communities of Bristol and its hinterland and their relationships with Ireland and South Wales in the long fifteenth century' (unpublished PhD thesis, University of the West of England, 2013), *passim*; Simon A. C. Penn, 'Social and economic aspects of fourteenth-century Bristol' (unpublished PhD thesis, University of Birmingham, 1989), pp. 33–4, 42–4; T. A. James, 'The boroughs of medieval Pembrokeshire: Haverfordwest', in R. F. Walker (ed.), *Pembrokeshire County History, Volume II: Medieval Pembrokeshire* (Haverfordwest, 2002), pp. 431–60, at 451; John Howells, 'The boroughs of medieval Pembrokeshire: Pembroke', in Walker (ed.), *Pembrokeshire County History*, pp. 468–76, at 471–2; R. F. Walker, 'The boroughs of medieval Pembrokeshire: Tenby', in Walker (ed.), *Pembrokeshire County History*, pp. 479–503, at 496–7; Spencer Dimmock, 'Haverfordwest: an Exemplar for the Study of Southern Welsh Towns in the Later Middle Ages', *Welsh History Review*, 22 (2004), pp. 1–28, at 16–17; Dimmock, 'Reassessing the Towns of Southern Wales in the Later Middle Ages', *Urban History*, 32 (2005), pp. 33–45, at 42; Ralph A. Griffiths (ed.), *Boroughs of Medieval Wales* (Cardiff, 1978), pp. 30, 147–8, 152–3, 308, 317; Griffiths, 'After Glyn Dŵr: An Age of Reconciliation?', *Proceedings of the British Academy*, 117 (2002), pp. 139–64, at 152–3; R. R. Davies, *The Age of Conquest: Wales, 1063–1415* (2nd edn., Oxford, 2000), pp. 24–55; Tony Hopkins, 'The towns', in Ralph A. Griffiths, Tony Hopkins and Ray Howell (eds), *The Gwent County History, Volume 2: The Age of the Marcher Lords, c.1070–1536* (Cardiff, 2008), pp. 115–41, at 126–7.
 - 21 E. T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol* (Farnham, 2012), 187–91.
 - 22 TNA: PRO PROB 11/11/552.
 - 23 For a fuller account of the Welsh in Bristol, see Peter Fleming, 'Identity and belonging: Irish and Welsh in fifteenth-century Bristol', in Linda Clark (ed.), *The Fifteenth Century, VII: Conflicts, Consequences and the Crown in the Later Middle Ages* (Woodbridge, 2007), pp. 175–93.
 - 24 The standard modern account of the rebellion is R. R. Davies, *The Revolt of Owain Glyn Dŵr* (Oxford, 1995).
 - 25 Ralph A. Griffiths, 'Medieval Severnside: the Welsh connection', in R. A. Griffiths, R. R. Davies, I. G. Jones, and K. O. Morgan (eds), *Welsh Society and Nationhood: Historical Essays Presented to Glanmor Williams* (Cardiff, 1984), pp. 70–89, at 88–9.

- 26 Peter Fleming, 'The Welsh diaspora in early Tudor English towns', in Helen Fulton (ed.), *Urban Culture in Medieval Wales* (Cardiff, 2012), pp. 270–93, Table 12.1, at 277.
- 27 Madge Dresser, 'The Welsh in the eighteenth century', in Dresser and Fleming, *Bristol: Ethnic Minorities and the City*, pp. 59–72, at 59.
- 28 TNA: PRO PROB 11/2a/252, PROB 11/6/60.
- 29 TNA: PRO C67/48, m. 2; PROB11/15/28.
- 30 For example: Thomas Wellys, 1405, Caerleon (TNA: PRO PROB 11/2A/147); Thomas Aisshe, 1457 (TNA: PRO PROB 11/4/172); Thomas Jones, 1496, Monmouthshire (TNA: PRO PROB 11/11/5).
- 31 BRO 26166/274, 276a-b, 325.
- 32 Wadley, *Wills*, pp. 126–7.
- 33 TNA: PRO PROB 11/9/5; BRO 26166/282, 287–9, 290–1, 294, 305. John Kemys may have been a member of the Kemeys family of Glamorgan (R. B. Pugh (ed.), *The Marcher Lordships of South Wales, 1415–1536: Select Documents* (Cardiff, 1963), pp. 291–3); John Haywardyn may have taken his name from Hawarden, Flintshire.
- 34 TNA: PRO KB9/453, no. 279.
- 35 TNA: PRO PROB 11/5/461, PROB 11/6/10; Robert R. Dunning, 'Miles Salley, Bishop of Llandaff', *Journal of Welsh Ecclesiastical History*, 8 (1991), pp. 1–6.
- 36 TNA: PRO C1/831/60.
- 37 Evan T. Jones, 'The Bristol shipping industry in the sixteenth century' (unpublished PhD thesis, University of Edinburgh, 1998), p. 265. For some additional discussion of William Jones and his ship, see Bob Trett's chapter in this volume.
- 38 TNA: PRO PROB 11/2A/369, 11/6/6; Fleming, 'Identity and Belonging', p. 189.
- 39 TNA: PRO KB29/102, rot. 43; KB29/103, rot. 23.
- 40 For the possibility that the ship was owned by Herbert and/or Warwick, see Bob Trett and Ralph Griffiths's chapters in this volume.

eight

THE SHIPPING
INDUSTRY OF THE
SEVERN SEA

Evan T. Jones



WE NOW KNOW a fair amount about the Newport Medieval Ship. Thanks to the dendrochronological evidence, it is clear that it was built *c.*1449, wrecked *c.*1468 and was almost certainly a product of the Basque shipbuilding industry.¹ It may not, however, have remained in the Basque Country for long; ships are transportable by nature and the market for them was international. Bristol merchants, for example, sometimes bought vessels in Continental ports during the late fifteenth and sixteenth century, including ones that were commissioned directly from Basque shipyards.² Moreover, ships could be acquired as 'prize' after being taken at sea by force, change hands as a result of a legal dispute, or simply be sold to merchants from another port.³ So knowing the origin of the ship does not necessarily tell you who owned and operated it.

Why the Newport Ship ended up in Wales is uncertain and, given its seventeen-year history, it might have had a number of different owners during its life. On the other hand, the very fact that it was undergoing an extensive refit in a Welsh port at the time it was wrecked, combined with the use of British oak in earlier repair work, suggests that it was locally owned by the time it foundered and that it had sailed to Britain previously. So, while the ship began life as a Basque vessel, it almost certainly ended it as a British one.

Apart from the Newport Ship's origins and end, the archaeology has thrown some light on its employment. The Portuguese pottery fragments and lost coins found in its bilges, which seem to represent the detritus of the ship's daily life, suggest that it was engaged in the trade to southern Iberia. Moreover, pollen analysis implies that large quantities of late summer heather had been present in its hold.⁴ This was not an 'economic cargo'; rather, it was a plant commonly used in southern Iberia as dunnage (packing material) to help stow goods for shipment to northern Europe. Such evidence fits well with what is known about the maritime trade of the Severn Sea during this period. The most recent estimates of the Newport Ship's size suggest it was a two-decked vessel with a carrying capacity of 161 tons burden, which meant that it could stow 161 tuns of wine in its hold.⁵ A merchantman of that size would have been considered a great ship by contemporary standards and used almost exclusively for long-distance trade, such as the routes that linked Bristol to south-west France, Iberia and Iceland.⁶

During the 1450s and 1460s, when the Newport Ship sailed the seas, Bristol's most important trading partner was Lisbon, which replaced Bordeaux following England's loss of Gascony in 1453. The surviving sections of Bristol's 'particular' customs accounts for 1465/6 indicate that Lisbon accounted for about half of Bristol's trade that year.⁷ This commerce was centred on the export of English woollen cloth to Portugal, which was exchanged for wine, olive oil and fruit, particularly during the autumn and winter months. The pollen found on the ship is thus likely to have been a by-product of this trade, used to help pack and protect wooden barrels of wine and oil during their voyage.

The purpose of this chapter is to supplement and extend the work that has been done on overseas trade, by exploring the Severn Sea's shipping market and the industry that served it. Trade and shipping are different matters, in that while merchants were concerned with the profits that could be generated from their wares, the income of shipowners relied, for the most part, on the sale of freight space. As such, the size, nature and revenue of the shipping industry was dependent on the volume of goods that needed to be transported and the distance they had to be carried. To get a fuller understanding of the economic world in which the Newport Medieval Ship operated, it is necessary to treat shipping and trade as distinct. This indeed is still true today, as a modern example might illustrate.

The Shipping Market

In July 2014, the cost of hiring a 40-foot 'Dry Van Container' from Shanghai to Felixstowe was US\$2,350. Yet the hire of the same container for the return journey was just US\$550 (£320).⁸ The reason for this discrepancy is that while the United Kingdom imports large amounts of manufactured goods from China, it exports few physical wares in return. The supply of shipping containers to China thus vastly exceeds the demand for them and, when the supply of any product exceeds demand, its price can be expected to fall. Since the shipowners must send the containers and ships back to China anyway, they are forced to take whatever they can get for their hire on the return leg of the voyage, even if the charge barely covers their transaction costs. The chief consequence of this for the shipping companies is that their revenues, and still more their profits, are dependent almost entirely on the China-England leg of their voyages.

This contemporary example is relevant to the Newport Ship because, as will be shown, the medieval shipping market of the Severn Sea has some similarities with the modern one between China and the United Kingdom. The following section will examine this market by using the customs accounts for Bristol relating to three financial years: 1465/6, 1485/6 and 1503/4.

The 'particular' customs accounts of the English medieval Exchequer are one of the best sets of commercial records that exist for the late medieval world. Where they

survive, they detail every ship, merchant and item of merchandise that entered or left an English port. They do not, it should be noted, include the Welsh ports, since Wales, along with Chester, only became subject to royal customs during the 1560s. On the other hand, that is not a serious problem because, from what we know of late sixteenth-century trade, Bristol accounted for the great bulk of the region's foreign trade.⁹ Moreover, even when the Severn Sea's other ports did engage in overseas trade in the later period, their merchants rarely went beyond Ireland or the closer parts of the Continent, often employing the same small vessels that were used for coastal and river traffic. So, if the Newport Medieval Ship was locally owned, its prime commercial purpose, as a great ship, would have been to serve Bristol's long-distance trade. A study of Bristol's fifteenth-century shipping market is thus of direct relevance to understanding how vessels like the Newport Ship would have been employed. For this study, the Bristol 'particular' customs accounts of the later fifteenth century are especially useful because, apart from detailing the goods carried, the owners of those goods, and the ships employed, the accounts also include information about the size of the vessels and the places they were sailing to or from.

For the historian of shipping, the chief limitation of the 'particular' customs accounts is that they do not detail the tonnage of all the cargo, or the tonnage of the ship itself.¹⁰ They thus fail to record explicitly the two key pieces of information needed for a detailed study of the shipping market. On the other hand, the accounts do indicate the *quantity* of all merchandise on the ship. That is helpful because, in practice, the goods that were responsible for the vast majority of Bristol's trade in this period were either recorded in tons, or were documented using units of measurement that can be translated into a 'freight ton', that, being the weight of a tun of wine in its cask (c.2,240 lbs.) or forty cubic feet, whichever was the greater.¹¹ So, in practice, goods that were as dense, or denser, than wine (such as olive oil, soap, salt and iron), paid freight charges according to their weight, while goods that were light (such as wool or cork) paid by volume.

The analysis in this chapter is rooted in calculations of the number of freight tons each ship was carrying, based on an assignment of a unit of tonnage to each type of merchandise listed. Those interested in seeing how this was done can find a fuller discussion and the relevant figures in an online article that acts as an appendix to this chapter.¹² Although the assignment of tonnage estimates for some goods was difficult, the most problematic cases involve forms of merchandise that were either shipped infrequently, or would have taken up very little freight space. This means that even if substantial errors have been made in estimates of how much space a dozen fox skins, a hundred bowstaves, or an alabaster altarpiece took up, the impact on the overall analysis will be negligible.¹³

The discussion will begin with an examination of the shipping market based on the surviving 'particular' customs account for 1485/6, which covers the period from Michaelmas (29 September) 1485 to Michaelmas 1486. This account has been

chosen because it is the earliest surviving account for Bristol that is both in good condition and covers a complete year. Following this, the customs account for 1503/4 will be considered, to illustrate both the ways in which the shipping market changed over time and the extent to which it remained the same. Finally, two accounts will be examined that cover seven-and-a-half months from Michaelmas 1465 to 14 May 1466. The importance of these accounts is that they relate to a period when the Newport Medieval Ship was in operation.¹⁴ The data from this time will be further analysed to investigate the nature and operation of the vessels that carried Bristol's overseas trade. All the analysis in this chapter is based on spreadsheet transcriptions of the 'particular' customs accounts. These transcriptions follow the template and conventions earlier employed for an ESRC-funded project using sixteenth-century Bristol customs accounts.¹⁵ The transcriptions are to be published separately via the University of Bristol's e-repository and as a Bristol Record Society volume.

1485/6

Figure 8.1 records the value of overseas trade shipped to or from Bristol in 1485/6; Figure 8.2 indicates the tonnage shipped that year. Although this chapter is concerned with shipping, rather than with trade, it is useful to compare the two sets of data, in part because they illustrate the extent to which the figures relating to trade and shipping differ.¹⁶ In both graphs the data is divided according to the places to or from which ships were recorded as sailing. It can generally be assumed that this is the place the goods themselves came from, or were being sent to, since most commercial voyages in the period were straightforward affairs, involving a ship leaving Bristol and going directly to a single port, or a small number of ports, in a region. Once the ship reached its destination, the cargo would be discharged and a new lading acquired, using the revenue generated from the sale of the outbound cargo. The ship would then normally go straight back to Bristol. While more complex voyages did occur, multi-stop ventures appear to have been relatively unusual during this period.¹⁷ So in most cases, when a local ship was entered in the customs accounts as leaving Bristol for Ireland, Bordeaux or Lisbon, that entry was followed, after a gap of some months, an entry recording the same vessel's return from the specified area with a cargo that was typical of that region. For example, on 15 October 1485 the *navicula Michael* of Bristol, left the port under shipmaster John Corbet, bound for Huelva, the outport of Seville. On 17 March, Corbet returned with the *Michael* from Huelva with 138 tons of wine, olive oil and sugar. The ship then departed again for Andalusia on 18 April, still with Corbet as master. Finally, on 18 September, Corbet and his ship returned home from Lisbon, carrying 144 tons of salt, olive oil, vinegar and wine.¹⁸ Lisbon lay 200 miles back up the Atlantic coast from Andalusia, on route to Bristol. This made it a logical stopping-off point for a ship returning from southern Spain, particularly given that Lisbon was a major destination for Bristol merchants.

Figure 8.1: Value of merchandise, imported and exported from Bristol by destination, 1485/6

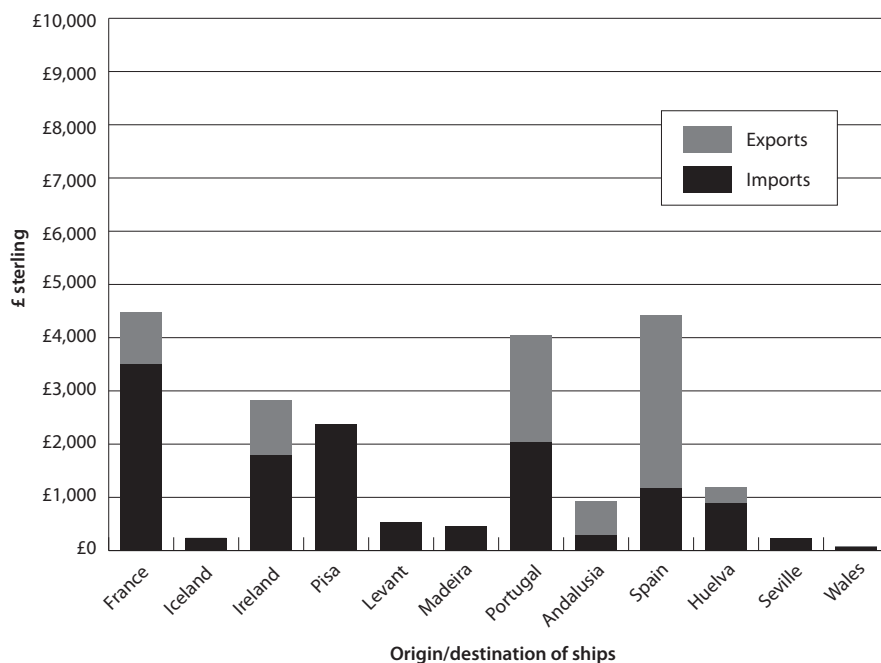
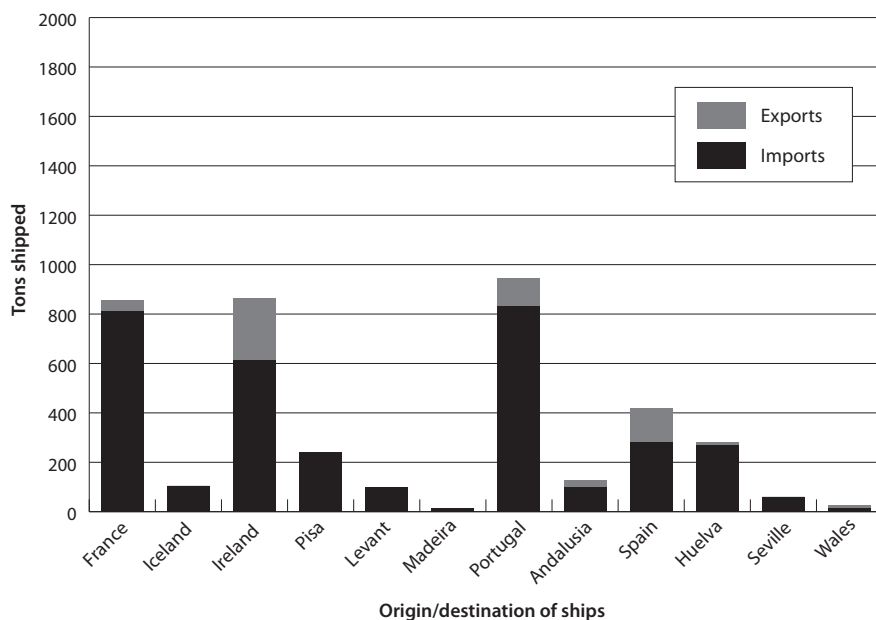


Figure 8.2: Tons of merchandise, imported and exported from Bristol by destination, 1485/6



Although the customs accounts seem to provide an accurate record of ship movements, one set of destinations listed in Figures 8.1 and 8.2 requires additional explanation: those in England or Wales. Since the Crown only levied customs duties on overseas trade, it may seem odd that vessels are sometimes recorded as arriving from, or departing to, a port in England or Wales. This occurred when overseas goods had not paid any duty following an initial arrival in the country, or when an outbound ship was planning to call at a port down the Bristol Channel, such as Minehead, before going abroad. Welsh ports feature fairly frequently in Bristol's customs accounts of this period because the Crown did not maintain customs officers in Wales. This meant that foreign goods sent to Wales were not subject to the Exchequer's customs duties so long as the goods remained in Wales.¹⁹ On the other hand, any overseas merchandise that was subsequently sent on to an English port was subject to customs duties at that point. A typical example of this would be the arrival in Bristol of a *batella* (boat) called the *Mawdelen* of Chepstow, from Chepstow, on 30 May 1486, laden with eight tuns of wine.²⁰ This should not be taken as evidence of the success of the vineyards of the Wye Valley, or even as proof that Chepstow vessels were involved in international trade. Rather it implies that a ship arriving from France, Spain or Portugal had landed wine in Chepstow and that part of the cargo was subsequently dispatched across the Severn in what was probably no more than a small lighter.

Figures 8.1 and 8.2 illustrate the importance of certain key trade routes, such as those to France, Portugal and 'Spain'. The latter designation ('Hispania' in the Bristol customs accounts) was only used to refer to ports in northern Spain, the trade to southern Spain typically being identified by the port (usually Seville or Huelva) or by the regional descriptor Andalusia. In practice, most of the trade to 'Hispania' was with Basque Country ports such as San Sebastián, Erretereria, Pasajes and Fuenterrabía, which all lay within a few miles of each other close to the French border. Besides these continental destinations, Bristol's other main trading partner was Ireland, with most of the trade occurring with the ports of south-east Ireland, such as Waterford, Wexford and Cork. The entries relating to Pisa, Madeira and the Levant in Figures 8.1 and 8.2 are highly unusual ones for this era. They concern three ships that arrived at Bristol at different points in the year with large and valuable cargoes.²¹ Of these, only the expedition from the Levant seems to have been a 'Bristol' one, in that most of the merchandise belonged to Bristol merchants. It seems possible that the other two ships only sailed to Bristol because of the political uncertainty that followed the overthrow of Richard III by Henry Tudor in August 1485. As Susan Rose notes in this volume, piracy was particularly prevalent during periods of instability, with 1486 being a period of especially high tension.²² So while ships sailing to England from Italy and Madeira normally went to Southampton or London, it may be that the two shipmasters felt it was safer to run up to Bristol that year, rather than risk the English Channel.²³

Although Figures 8.1 and 8.2 tell the same broad story, there are important differences. For example, while the value of trade with northern Spain greatly exceeded

that of Ireland, the *tonnage* of goods sent to/from Spain was much less than that sent to Ireland. This was because much of the Irish trade involved preserved fish, which was bulky relative to its value. More generally, it should be noted that while there was little difference between the recorded value of imports and exports at Bristol, import tonnages greatly exceeded export tonnages. Indeed, the combined tonnage of goods imported was more than five times greater than that exported. This meant that, rather as occurs today on the route between China and the United Kingdom, ships sailing to Bristol with full cargoes normally left nearly empty. Indeed, many would have departed in ballast, meaning that they needed to partially fill their hold with stones or mud to provide the stability required to stop the ship from capsizing. The difference between Bristol's fifteenth-century shipping market and the modern Chinese one is that the imbalance in shipping demand was not a result of a basic imbalance of trade. Rather it was because, while England imported a lot of goods that were of fairly low value relative to their weight, the country exported products of much higher value. So, even if overseas trade was fairly balanced in terms of value, the demand for shipping was not. Given this, it is worth reflecting on the nature of these goods.

Figure 8.3 illustrates the overwhelming importance of the wine trade to shippers, along with other wares produced in southern France, northern Spain, Portugal and Andalusia. These goods included olive oil, salt, fruit, woad dye and Basque iron. By contrast, woollen cloth, which accounted for almost all of Bristol's export trade by value, consumed much less freight space. Indeed, while cloth was responsible for

Figure 8.3: Tons of merchandise imported to Bristol by commodity, 1485/6

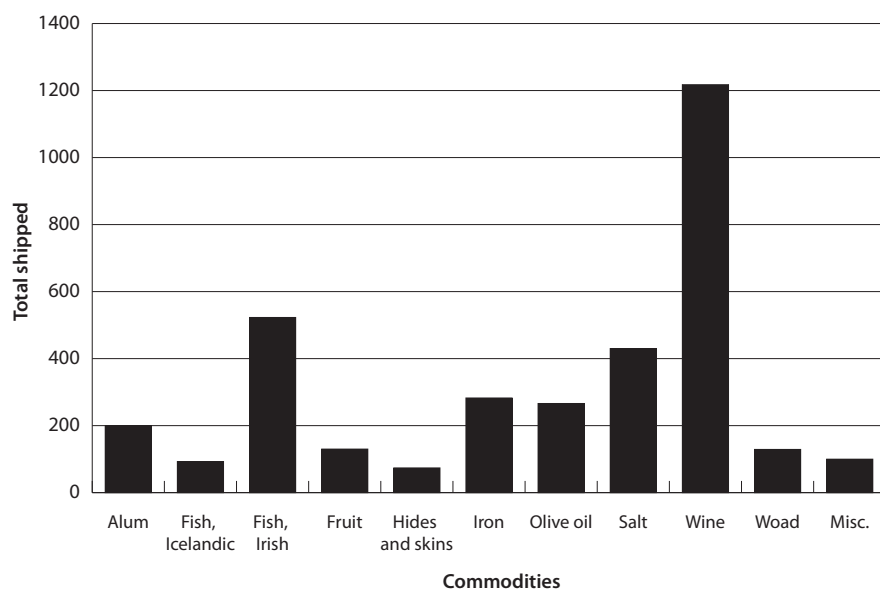
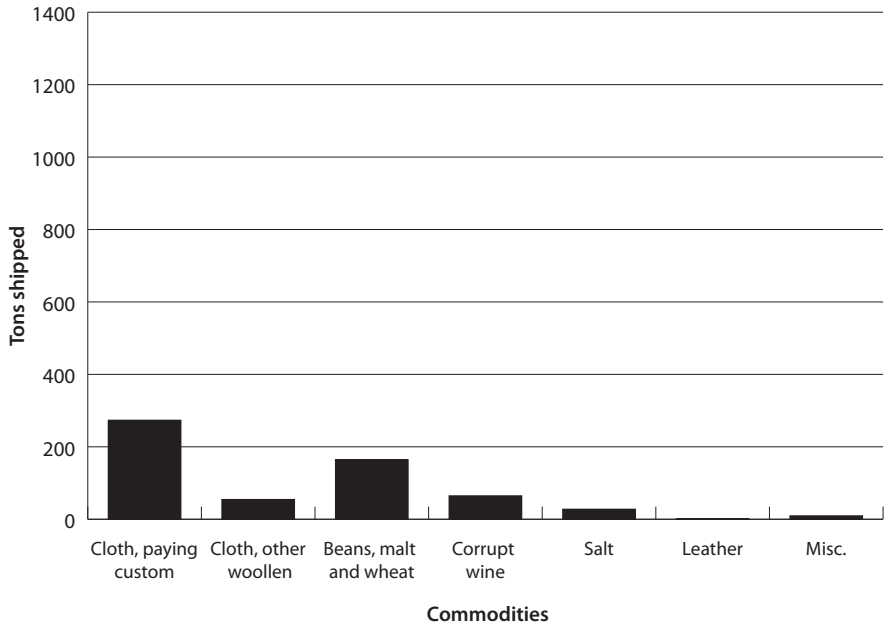


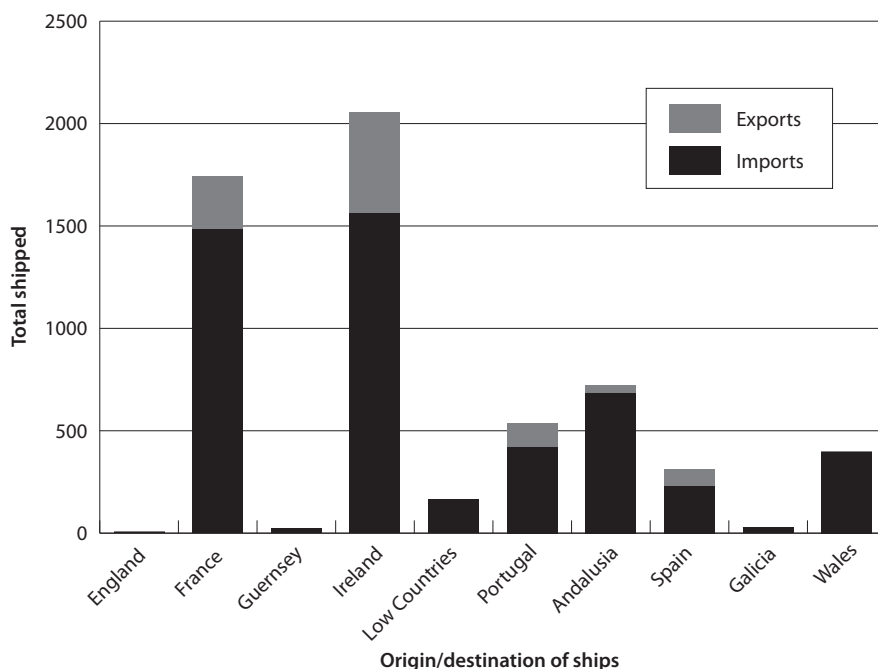
Figure 8.4: Tons of merchandise exported from Bristol by commodity, 1485/6

97 per cent of exports by value, the total tonnage was only twice as great as the exports of beans and grain, which were cheap but bulky products.²⁴ This is even though, to allow for the fact that cloth is less dense than wine, the calculations make the generous assumption that a ton of cloth by weight occupied three ‘freight tons’.

1503/4

Having established some of the core features of the shipping market, the account for 1503/4 can be considered more briefly. When dealing with the ‘particular’ customs accounts, an issue that has to be accepted is that every year was to some degree an ‘exceptional’ year. The account for 1485/6 was atypical because it included three ships sailing from Pisa, Madeira and the Levant. As Figure 8.5 illustrates, 1503/4 is somewhat unusual in that the volume of Irish trade was especially high. Perhaps more significantly, the twenty-year gap between this account and that for 1485/6 witnessed some notable developments. In particular, Portuguese trade declined relative to Spanish, while there was a strong growth in French trade, most of which was a result in the resurgence in the export of wine from Bordeaux. These developments occurred in response to the geopolitical changes discussed in this volume by Wendy Childs – including the improvement of Anglo-Castilian relations and the stabilisation of Anglo-French relations. The growth in ‘Welsh’ trade, meanwhile, was a result of more ships

Figure 8.5: Tons of merchandise, imported and exported from Bristol by destination, 1503/4



dropping off wine and woad in Welsh ports, most notably at Chepstow. An increase in this practice relative to the earlier period can probably be ascribed to a Navigation Act of 1489, which required English merchants to lade their wine and woad in English vessels.²⁵ This regulation could be circumvented by chartering a foreign ship to a Welsh port, where there were no customs officers to check on compliance.²⁶

Although there are differences in the places ships sailed to in 1485/6 and 1503/4, it is perhaps more interesting to note the similarities. In particular, the fundamental imbalance between import and export shipping demand remained the same, since the goods shipped changed little. Cloth remained the main export, imports from Ireland still consisted primarily of preserved fish, shipments from the Continent were dominated by wine, oil, salt, fruit, woad and iron.²⁷

1465/6

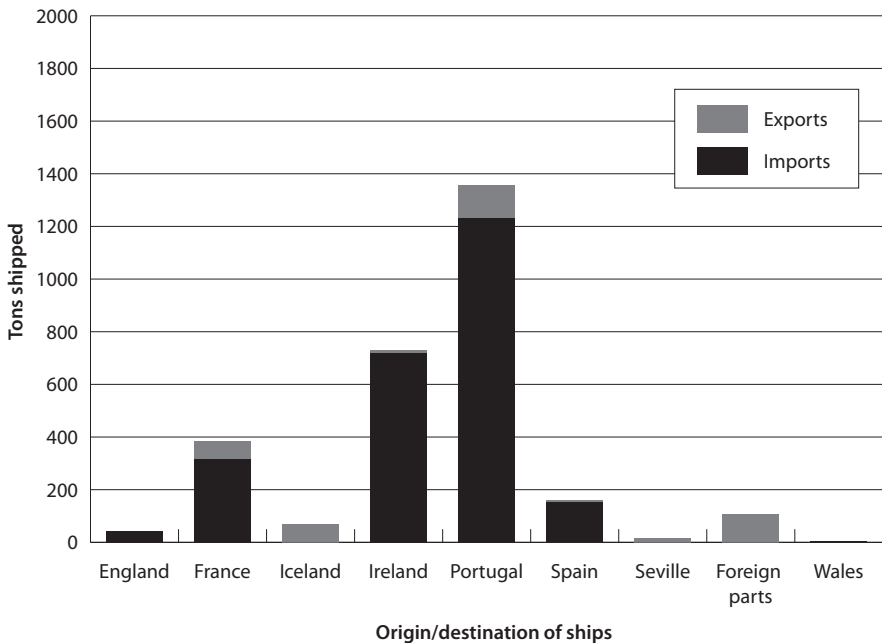
Moving back forty years, the account for 1465/6 presents a somewhat different picture. Since the data only covers seven and a half months (29 September 1465–14 May 1466) it is not directly comparable to the data from 1485/6 and 1503/4, which both cover a full year. This has an impact on both the total amount of goods shipped and on the composition of the goods. Since much trade was seasonal, the data may exaggerate

the significance of places that were heavily involved in the export of products, such as wine, that were shipped primarily in the autumn and winter.

What Figure 8.6 reveals most strikingly is the predominance of Portuguese trade in 1465/6. This was probably typical for this decade, since the Gascon wine trade was badly affected by the disruption associated with the end of the Hundred Years War in 1453. French fears that England might try to reinstate the province led to restrictions being placed on English merchants in Bordeaux, while England, for its part, imposed an embargo on trade with the region that could only be circumvented by obtaining a special licence from the Crown. Meanwhile, relations with Castile had yet to improve to the extent that commerce with Spain was as safe or secure as it was with Portugal, a long-standing ally of England. The result was that Bristol's continental trade during the 1460s focused heavily on Lisbon. Nevertheless, in many respects the shipping market is similar to that discussed earlier; the demand for import shipping remained much higher than export shipping and the range of goods shipped was largely the same.²⁸

The key points to be made about Bristol's international shipping market in the second half of the fifteenth century is that, although the countries Bristol traded with varied, the goods carried changed little. The most important consequence of this was that there was a persistent imbalance between the demand for import shipping

Figure 8.6: Tons of merchandise, imported and exported from Bristol by destination, 1465/6



and that for export. Shipowners would have had to accept that, for most voyages, their vessels would sail out almost empty. The income of shipowners would thus have depended almost entirely on the import trade. It seems likely that these features of the shipping market were long standing, since they were rooted in the basic nature of Bristol's overseas trade, which changed relatively little between the mid-fourteenth century and the mid-seventeenth century.²⁹ Indeed, such an imbalance in shipping demand is likely to have been a feature of much of the English shipping market during these centuries. That is because, throughout this era, English exports consisted primarily of high-value woollen broadcloth, while its imports included goods that were typically of lower value relative to their weight.

The Shipping Industry in 1465/6

Having examined the Severn Sea's shipping market, the following section will investigate how it was served. This will be done by analysing the size and origin of the vessels that appear in the Bristol customs account for 1465/6, when the Newport Medieval Ship was still in operation. The results are summarised in Table 8.1.

Table 8.1: Vessels Appearing in the Bristol 'Particular' Accounts in 1465/6

Ship name	Type	Min. tonnage	Destinations
<i>Edward of Bristol</i>	<i>Navis</i>	309	Lisbon, Bordeaux
<i>Mary Redcliffe</i> [of Bristol]	<i>Navis</i>	247	Bordeaux
<i>Christopher Damme</i> [of Bristol]	<i>Navis</i>	232	Lisbon
<i>Trinity of Bristol</i>	<i>Navis</i>	225	Lisbon
<i>Julian Bagote</i> [of Bristol]	<i>Navis</i>	152	Lisbon
<i>Mary Grace of Bristol</i>	<i>Navis</i>	103	Lisbon, ?Iceland
<i>Anthony of Bristol</i>	<i>Navis</i>	69	Iceland
<i>Mary Herbert</i>	<i>Navis</i>	59	Lisbon
<i>St Mary Grace of Lisbon</i>	<i>Navicula</i>	99	Ireland
<i>James of Guipúzcoa</i>	<i>Navicula</i>	97	Northern Spain
<i>George of Warwick</i>	<i>Navicula</i>	70	Bordeaux
<i>St Martha of Lisbon</i>	<i>Navicula</i>	60	Algarve, Lisbon
<i>St Michael of Viana do Castelo</i>	<i>Navicula</i>	54	Viana do Castelo
<i>Mary of Guipúzcoa</i>	<i>Navicula</i>	54	Northern Spain
<i>Mary Sharlok</i> [? of Bristol]	<i>Navicula</i>	51	Ireland
<i>Katherine of Lisbon</i>	<i>Navicula</i>	40	Lisbon, Ireland
<i>Trinity of Waterford</i>	<i>Navicula</i>	36	Ireland
<i>Mary of Waterford</i>	<i>Navicula</i>	34	Ireland

Table 8.1: Vessels Appearing in the Bristol 'Particular' Accounts in 1465/6 (cont.)

Ship Name	Type	Min. tonnage	Destinations
<i>Michael</i> of Bideford	<i>Navicula</i>	16	Seville
<i>Mary</i> of Cork	<i>Batella</i>	37	Ireland
<i>Nicholas</i> of Cork	<i>Batella</i>	30	Ireland
<i>James</i> of Ballyhack	<i>Batella</i>	28	Ireland
<i>Mary Waddon</i> [of Bristol]	<i>Batella</i>	26	Ireland
<i>Mary</i> of New Ross	<i>Batella</i>	23	Ireland
<i>Katherine</i> of Bristol	<i>Batella</i>	21	Ireland
<i>Mary</i> of Kinsale	<i>Batella</i>	21	Ireland
<i>Patrick</i> of Bristol	<i>Batella</i>	20	Ireland
<i>Christopher</i> of 'Combe'	<i>Batella</i>	18	Ireland, Bristol Channel
<i>James</i> of Minehead	<i>Batella</i>	15	Ireland
<i>Mary</i> of Youghal	<i>Batella</i>	15	Ireland
<i>Christopher</i> of Cork	<i>Batella</i>	14	Ireland
<i>Samson</i> of Minehead	<i>Batella</i>	14	Ireland
<i>George</i> of Minehead	<i>Batella</i>	13	Ireland
<i>George</i> of Waterford	<i>Batella</i>	13	Ireland
<i>Katherine</i> of Waterford	<i>Batella</i>	13	Ireland
<i>Trinity</i> of Minehead	<i>Batella</i>	12	Ireland, Bristol Channel
<i>Michael</i> of Minehead	<i>Batella</i>	11	Ireland
<i>Peter</i> of Kinsale	<i>Batella</i>	11	Ireland
<i>Patrick</i> of Kinsale	<i>Batella</i>	10	Ireland
<i>Clement</i> of Bristol	<i>Batella</i>	10	Ireland
<i>Margaret</i> [of] 'Rode'	<i>Batella</i>	6	?River Avon
<i>Mary</i> of Shirehampton	<i>Batella</i>	6	River Avon
<i>Swan</i> of Bristol	<i>Batella</i>	4	River Avon
<i>George</i> of Tenby	<i>Batella</i>	3	Ireland, Bristol Channel
<i>Jesus</i> of Pill	<i>Batella</i>	3	River Avon
<i>John</i> of Minehead	<i>Batella</i>	2	Ireland
<i>Katherine</i> of Wexford	<i>Batella</i>	2	River Avon
<i>Brian</i> of Newnham	<i>Batella</i>	1	River Severn
<i>Katherine</i> of Minehead	<i>Batella</i>	1	Bristol Channel
<i>Mary</i> of Minehead	<i>Batella</i>	1	Ireland
<i>Mary</i> of Cardiff	<i>Batella</i>	1	?Ireland
<i>Nicholas</i> of Kinsale	<i>Batella</i>	1	Ireland
<i>Trinity</i> of 'Comber'	<i>Batella</i>	1	Ireland

Table 8.1 shows the name and port of every vessel that appears in the ‘particular’ customs account over the seven-and-a-half month period, along with the type of vessel as described in the account. The customs officers recognised three ‘types’, or sizes, of vessel, which they recorded in Latin – that being the language of Bristol’s ‘particular’ accounts. These were the *navis* (great ship), the *navicula* (little ship) and the *batella* (boat). The table also provides the minimum tonnage of each vessel, which is based on the largest lading the vessel was recorded with that year. It should be noted that most of the vessels would have been larger than this, with a few being much larger. In part this was because, in some cases, only export shipments are available and, as pointed out earlier, ships rarely achieved a full lading on their outbound voyages. So, for example, the *navis* the *Anthony* of Bristol is listed as having a minimum size of 69 tons, based on an outbound lading to Iceland. Yet other sources indicate that the *Anthony* was around 200 tons burden.³⁰ The figures relating to some ships would also be low because a given vessel had not achieved a full lading on the leg of the voyage in question. It seems probable, for example, that in some cases the capacity of the *batella* would have been substantially larger than the one to three tons of merchandise recorded in the accounts. Lastly, even if a ship had been fully laden on a return journey, the amount noted in the customs account would often have been lower than the amount originally loaded. This was because customs duties were only levied on the marketable merchandise that remained at the end of a voyage; wares that had spoilt or been lost were not taxed or recorded. The loss of cargo was a particular problem with liquid goods, such as wine and olive oil. These were transported in wooden casks that were susceptible to ‘ullage’ (leakage) during a voyage, to the extent that contemporaries expected to lose about 10 per cent of a wine cargo in the voyage from Bordeaux to England.³¹ So a ship laden with 200 tuns of wine in Lisbon might only have 180 tuns in it by the time it reached Bristol. Given the centrality of the wine trade to Bristol’s continental shipping market, it can be assumed that most of the *navis* and *navicula* recorded in Table 8.1 would have had a greater carrying capacity, in tons burden, than the recorded ‘minimum tonnage’.

The figures for 1465/6 reveal that Bristol’s international shipping market in this period was served by a wide variety of vessels from Bristol, Ireland, Portugal, Gipuzkoa (the Basque country) and the smaller ports of the Bristol Channel. On the other hand, many of the vessels were mere boats and some, such as the *Jesus* of Pill or the *Mary* of Shirehampton, were probably no more than tiny lighters of a few tons burden. Such small craft were probably only used in the Severn Sea and its tributaries, with some rarely venturing beyond Avonmouth.³² By contrast, a vessel described as a *batella* could be up to 37 tons burden and were used primarily for the Irish trade. Moving up the scale, the term ‘*navicula*’ seems to have been applied to vessels of c.35–150 tons burden.³³ Some of these served the Irish trade but were capable of sailing much further. The *Matthew* of Bristol, for example, which John Cabot employed for his famous discovery voyage to North America in 1497, was a *navicula* of 50 tons burden.³⁴ Finally, the greatest ships were those described as *navis*, of which eight appear

in the customs accounts for 1465/6. These were used almost exclusively in Bristol's long-distance trade, such as that to Lisbon. The great ships are of special interest for current purposes because the Newport Medieval Ship, with an estimated 'portage' of 161 tons, would have been classed as a *navis*.

In the table, the ships have been listed first according to their 'type' and then by their minimum recorded tonnage. The exact size order of the vessels would have been somewhat different from that given here. Nevertheless, the table demonstrates a strong correlation between the size of ships and the markets they served. The great ships were used for long-distance trade, while the little boats were employed in coastal traffic or for trips to Ireland. The length of the voyages, and probably also the size of the vessels, also had an impact on the duration of the voyages. The boats engaged in the Irish trade could complete a return voyage in little more than a month. For instance, the *Patrick* of Bristol, under shipmaster Richard Haket, departed to Ireland on 12 October 1465 but had returned by 22 November. Similarly, the *Samson* of Minehead, under master William Codd, entered Bristol from Ireland on three occasions in a five-month period: 9 October 1465, 3 December and 28 February 1466. Such vessels could have completed half a dozen trips to Ireland each year. As for the *navicula*, it was observed earlier that in 1485/6 the *Michael* of Bristol completed two round-trip voyages to Lisbon in eleven months. By contrast, it seems unlikely the *navis* engaged in the Lisbon run in 1465/6 could have managed that. For example, three *naves*, the *Christopher Damme* of Bristol, under master John Power, the *Mary Herbert* under master John Brisley and the *Trinity* of Bristol, under Thomas Lony, left Bristol for Lisbon between 2 and 5 October 1465. The *Mary Herbert* is recorded as returning on 15 March 1466 and the *Christopher Damme* and the *Trinity* two days later. Since the customs accounts record the day a ship's consignment was entered into the books, rather than the date that a ship physically entered or left the port, it seems likely that these three great ships had sailed together to ensure their collective safety. Their voyage took five and a half months. During the later sixteenth century ships typically took three weeks to sail between Bristol and south-eastern Iberia.³⁵ If the sailing times of fifteenth-century ships were similar, less than a third of the total voyage would have been spent at sea.³⁶ The rest of the trip would have been spent in Lisbon, while the cargo was discharged and the merchants sold their goods, purchased wares for the return journey and, finally, loaded the homebound merchandise. Similarly, on their return to Bristol, it was normal for the port's vessels to remain home for several weeks, while the vessel was refitted and the owners prepared their next enterprise. For instance, following the return of the three ships mentioned above, seven weeks passed before the *Trinity* and the *Christopher Damme* left Bristol, sailing once more to Lisbon.³⁷ Given that seven months passed between the ships' two departures from Bristol in October 1465 and May 1466, it seems unlikely they would have been able to complete two voyages that year. In some cases, moreover, it seems that the owners of Bristol's greatest ships did not even try to do this. For example, the pattern of deployment of a c.380-ton *navis*, the *Anthony* of

Bristol, during the 1480s shows that, on at least one occasion, it completed only one voyage to Lisbon in a year, departing Bristol on 2 October 1486 and only returning on 1 May 1487. After that, it did not set sail again till 8 September, four months later.³⁸ The extended stopover may have been because the owner wanted to ensure the ship was in Lisbon by the early autumn, ready to bring the new wine and olive oil home.

Conclusion

This chapter has explored the operation of a late medieval shipping market and the nature of the industry that served it in ways that have rarely been attempted for the pre-modern period. In doing so, it has developed a methodology and made suggestions about Bristol's shipping market that have broader relevance. That said, this chapter was written in the hope that it might show how the Newport Medieval Ship would have been used during its commercial life. It will thus finish by summing up some of the implications of the research for how the ship might be understood, as well as whether the foregoing research throws light on the suggestions made by Ralph Griffiths and Bob Trett in this volume about the identity of the vessel.

The Newport Medieval Ship was a great commercial merchantman. When locally owned, its main function would have been to serve the trade between Bristol and Portugal. In a typical year the vessel would have set sail for southern Iberia in the early autumn, carrying fine woollen broadcloth belonging to merchants from Bristol and the wider region. But for the owners of the ship, this was very much the loss-making part of the trip, for the vessel would have been largely empty and few freight dues or none would have been collected on the cargo.

After a voyage of about three weeks, the ship would have reached Lisbon and the cloth discharged. This would have then been sold, with the proceeds used to buy wine, olive oil, fruit and salt. The process of acquiring a cargo typically took two or three months, which meant that the ship would usually not return to Bristol until the spring. The length of this stopover is important to bear in mind when considering the 'small-find' evidence from the Newport Medieval Ship, especially the material that has been interpreted as 'crew waste', such as the broken bits of Portuguese pottery, the southern Iberian foodstuffs and the foreign coins.³⁹ Some see this as evidence that the ship had a foreign crew or was actually an Iberian-owned vessel.⁴⁰ That may be wrong. When thinking about the life of English mariners sailing to Portugal at this time, the key point to recall is that most of their time on board ship was not spent in England, or even on the voyage to or from Portugal. Rather, the bulk of their time was spent in Lisbon, using the ship as a base during the long months before they returned home. So even if the ship was an English vessel, with an English crew, most of its 'occupational' waste would have been generated in Lisbon. This would have included the coins, since English sailors typically received half their pay, in foreign coin, while abroad.⁴¹ Given that they had no need for English money on their voyage out and would not get the

remainder of their pay until they had returned home, it should be *expected* that lost coins found on an English merchantman would be predominantly foreign. Similarly, broken pottery of the types found on the Newport Medieval Ship is likely to have been associated with port time; sailors rarely used pottery vessels or cooking pots when at sea, since they were too easily broken.

Bearing in mind the pattern of deployment of Bristol ships at this time and comparing it to a study of Bristol's mid-sixteenth century shipping, one difference may be noted. During the 1540s, Bristol's continental traders, which were typically smaller than those of the fifteenth century, nearly always achieved two voyages per year and they often managed three: one perhaps to Andalusia and two to Biscay.⁴² By contrast, the largest Bristol ships of the fifteenth century seem to have managed rather less. That great ships undertook fewer voyages is not surprising, not just because it would have taken longer to load and unload their cargoes, but because it would have taken more time to sell sufficient freight space to make a voyage worthwhile. If larger ships tended to make fewer voyages each year, this may help to explain Ian Friel's observation that England's total shipping capacity appears to have declined between the mid-fifteenth century and the mid-sixteenth century.⁴³ He notes that fewer great ships were built by the later fifteenth century, a point that is certainly borne out by the data from the Bristol customs accounts. Indeed, while eight *naves* are recorded in the 1465/6 customs accounts, only two appear in the 1485/6 account and none in the account for 1503/4.⁴⁴ On the other hand, a decline in the total capacity of the English fleet does not necessarily mean that less merchandise was shipped. If smaller ships could undertake more voyages each year, a fleet with a smaller combined tonnage could have carried the same quantity of merchandise.

A twice-yearly voyage between Bristol and Lisbon is likely to have been typical for the Newport Medieval Ship when it was English owned. It would not have been a constant, since the pattern of activity would have been interspersed with other forms of employment. In some years the ship might have undertaken a voyage to Iceland over the summer, or it might have been engaged in the Biscay trade, operating under a safe-conduct to ensure its safety in France or Spain. In other years the ship might have been employed in more unusual activities, such as a voyage into the Mediterranean. Given that its life spanned both the end of the Hundred Years War and the start of the Wars of the Roses, it is also likely that the ship spent some of its life in naval service or as a privateer, for which it would certainly have been considered suitable.

Ralph Griffiths and Bob Trett have suggested that the Newport Ship may have been owned by Lord Herbert (d. July 1469), who was the chief magnate of Wales and the lord of Newport.⁴⁵ Following his execution by the earl of Warwick, any ships Herbert possessed would have gone to Warwick. Herbert is known to have had at least two ships, one of which was a *navis* called the *Mary*. Warwick meanwhile had a fleet of ships during the 1450s and 1460s, which amounted to a private navy but were also used by the 'Kingmaker' for commercial purposes.⁴⁶ The Bristol customs account of

1465/6 include at least two ships that appear to be the property of these magnates. The *navis* described in the accounts as the '*Mary Herberd*' was almost certainly William Herbert's *Mary*. At this time, it was common practice for Bristol's customs officer to append an owner's surname to a ship's name if they wished to avoid any confusion about the vessel's identity. So, for example, the *Christopher Damme* and the *Julian Bagotte*, listed in Table 8.1, seem to be the respective properties of the Bristol merchants William Damme and John Bagot.⁴⁷ In a similar manner, the *navicula* the *George of Warwick*, recorded in the 1465/6 account, was almost certainly one of the earl of Warwick's ships, given that the Midlands town lacked a port or navigable river.⁴⁸ Since the *George of Warwick* was described twice in the accounts as a *navicula*, it would presumably have been of less than 150 tons burden and thus too small to be the Newport Ship.⁴⁹ On the other hand, the *George* might be the vessel mentioned in a financial memorandum issued by the earl in November 1469, which concerns a ship he was having refitted at Newport.

Following the Battle of Edgcote in July 1469, the earl of Warwick took control of the lordship of Newport. It would not, therefore, be surprising if he had decided to get one of his ships serviced there, given that he was certainly engaged in Bristol's trade and Newport was capable of carrying out maintenance work on great ships – as the discovery of the Newport Medieval Ship itself demonstrates. On the other hand, it is impossible to tell whether the memorandum relates to one of the earl of Warwick's existing fleet, or whether it concerns a vessel that had formerly been owned by Herbert. If the *George* is unlikely to have been the Newport Ship, a stronger case can be made for the *Mary Herbert*. Since Bristol's customs officers described it as a *navis*, it was of the right size to be the Newport Ship. It was also involved in the Lisbon trade, which fits with the archaeological evidence for the ship.

Above all else, the 'particular' customs accounts illustrate the extent to which the region's larger vessels existed primarily to service Bristol's long-distance trade. This included those ships that belonged to the country's great magnates. For example, most of the goods listed on both the *Mary Herbert* and the *George of Warwick* belonged to Bristol merchants, with the *Mary Herbert* sailing to and from Lisbon in 1465/6 in the company of two other Bristol ships. What is perhaps different about the *Mary Herbert* is that only 59 tons of wine and other goods were declared at Bristol on its return journey. Since the ship was described as a *navis*, this could not have been a full lading. The most plausible explanation for the shortfall is that a significant part of the cargo was owned directly by Lord Herbert and been landed in Wales. This would have been legal if the merchandise was for his own use, or if it was intended for sale in Wales.⁵⁰

At present, it is unclear who owned the Newport Medieval Ship, even at the end of its life. It could have been the property of powerful aristocrats, Bristol merchants, or men from Newport. This said, the latter part of its existence would have been shaped in great part by the commercial world of the Severn Sea and by the nature and pattern of demand for long-distance shipping in the region. In this period, the great ships of the Severn Sea

were used for many purposes: including war, privateering and the earliest exploration voyages launched from England. Yet their core function remained the transport of Bristol's long-distance trade with France, Spain, Iceland and, above all, Lisbon.



Appendix

Table 8.2: Tonnages and Value of Trade in £ by destination, 1465–6

	Imports	Exports		Imports	Exports
England	42	2	England	£91	£7
France	317	68	France	£1,182	£1,665
Iceland	0	69	Iceland	£0	£106
Ireland	719	11	Ireland	£1,368	£120
Portugal	1233	123	Portugal	£3,803	£2,973
Spain	151	11	Spain	£533	£256
Seville	0	16	Seville	£0	£391
Foreign parts	0	108	Foreign parts	£0	£431
Wales	3	0	Wales	£7	£0
Total	2574	300	Total	£6,984	£5,948

Table 8.3: Tonnages and Value of Trade in £ by destination, 1485–6

	Imports	Exports		Imports	Exports
France	812	42	France	£3,512	£968
Iceland	105	0	Iceland	£238	£0
Ireland	614	251	Ireland	£1,795	£1,017
Pisa	241	0	Pisa	£2,374	£0
Levant	98	0	Levant	£534	£0
Madeira	14	0	Madeira	£456	£0
Portugal	830	117	Portugal	£2,041	£2,004
Andalusia	100	28	Andalusia	£282	£657
Spain	282	134	Spain	£1,179	£3,250
Huelva	271	12	Huelva	£894	£292
Seville	60	0	Seville	£236	£0
Wales	16	11	Wales	£66	£10
Total	3444	596	Total	£13,607	£8,197

Table 8.4: Tonnages and Value of Trade in £ by destination, 1503–4

	Imports	Exports		Imports	Exports
England	4	8	England	£19	£165
France	1484	261	France	£6,190	£2,203
Guernsey	24	0	Guernsey	£30	£0
Ireland	1560	495	Ireland	£3,369	£1,880
Low Countries	165	0	Low Countries	£214	£0
Portugal	420	117	Portugal	£1,797	£1,887
Andalusia	685	37	Andalusia	£2,733	£810
Spain	230	82	Spain	£583	£1,576
Galicia	28	0	Galicia	£44	£0
Wales	397	2	Wales	£1,130	£34
Total	4997	1002	Total	£16,109	£8,555

Notes

- 1 See Toby Jones and Nigel Nayling's chapter in this volume.
- 2 E. M. Carus-Wilson, *The Overseas Trade of Bristol in the Later Middle Ages*, Bristol Record Society, Vol. VII (Bristol, 1937), pp. 64–5; James A. Williamson, *The Cabot Voyages and Bristol Discovery under Henry VII*, Hakluyt Society, 2nd series, Vol. CXX (Cambridge, 1962), 247; Jean Vanes, ed., *Documents Illustrating the Overseas Trade of Bristol in the Sixteenth Century*, Bristol Record Society, Vol. XXXI (Bristol, 1979), pp. 99–100.
- 3 In her unpublished paper for the 'World of the Newport Ship' conference, Margaret Condon observed that some countries, including Castile, sought to restrict the sale of ships to foreigners. On the other hand, sales did certainly occur under licence and possibly also via covert transactions. Illicit sales might, for instance, have been coloured (falsely represented) as a long-term bareboat charter, or a seizure made abroad to reclaim a debt, or even as an act of piracy. For examples of international ship transfers by sale or seizure, see also the chapters in this volume by Ralph Griffiths, Wendy Childs and Susan Rose.
- 4 See Toby Jones and Nigel Nayling's chapter in this volume.
- 5 See Toby Jones and Nigel Nayling's chapter in this volume.
- 6 The best general studies of Bristol's overseas trade during the fifteenth century remain E. M. Carus-Wilson, 'The overseas trade of Bristol' and 'The Iceland trade', in E. Power and M. M. Postan (eds.), *Studies in English Trade in the Fifteenth Century* (London, 1933), pp. 155–246.
- 7 Bristol's overseas trade in 1465/6 was worth £12,932, of which £6,776 (52 per cent) was with Portugal. All of this was with Lisbon, apart from the *Sancta Martha* of Lisbon entering from the Algarve on 19 November 1465 with merchandise valued at £158 and the *Sancta Michael* of Viana do Castelo, entering from that port on 17 April 1466 with goods worth £213.

- 8 DFS Worldwide London UK, 'Shipping to China', <http://www.dfsworldwide.com/Shipping-to-China.html> [accessed 12 July 2014].
- 9 Duncan Taylor, 'The maritime trade of the smaller Bristol Channel ports in the sixteenth century' (unpublished PhD thesis, University of Bristol, 2009), p. 5.
- 10 One of the differences between the 'particular' customs accounts and the 'port books' that replaced them from 1565 is that the latter were meant to specify the capacity of the vessel in tons burden: TNA: PRO, E190.
- 11 When goods had a specific gravity that was roughly equal to/greater than wine (e.g. beer, iron, oil, coal, lead or salt) the tonnage is usually figured by weight in the accounts. If a consignment had a specific gravity that was significantly lower than wine (e.g. wool), the tonnage could be calculated by volume, with forty cubic foot typically being considered to be one 'freight ton': Frederic C. Lane, 'Tonnages, Medieval and Modern', *Economic History Review*, 17 (1964), pp. 219–20.
- 12 Evan T. Jones, 'Tonnage estimates of goods recorded in the Bristol 'particular' customs accounts: 1465/6, 1485/6, 1503/4' (unpublished working paper, University of Bristol, PURE, Oct 2017) <http://hdl.handle.net/1983/400b49af-7e71-4f3f-ac2b-3867e9e2b1e6>.
- 13 See Table 8.3 in the Appendix to this chapter.
- 14 There are no surviving Bristol customs accounts from the 1450s. Two other accounts survive from the 1460s: TNA: PRO, E122/19/126 (26 March–29 September 1461) and E122/19/6 (16 August–14 November 1469).
- 15 'Ireland-Bristol trade in the sixteenth century' (RES-000-23-1461), 2006–8. The transcription of the fifteenth-century accounts was undertaken as part of the University of Bristol's 'Cabot Project' (2009–), funded by Gretchen Bauta, a private Canadian benefactor.
- 16 The raw figures on which this and the other graphs in this chapter are based can be found in the appendix to this chapter, Tables 8.2–8.4.
- 17 In some cases it is possible to infer the existence of a more complex voyage from the 'particular' accounts. For example, on 15 February 1466 the *navicula* the *St Mary Grace* of Lisbon, master Giles Gonzales, arrived from Ireland carrying Irish products such as fish, linen and sheep skins. When it departed on 28 February, it was carrying salt and cloth, which suggests it was sailing back to Ireland, at least initially, rather than Portugal: Margaret M. Condon and Evan T. Jones (eds), 'Bristol 'particular' Customs Account, 1465/6' (To be published online); TNA: PRO, E122 19/4. The existence of more complex voyages involving multiple ports are also sometimes referred to in court cases: Carus-Wilson, *Overseas Trade of Bristol*, pp. 106–8.
- 18 To be published online.
- 19 This exemption survived until the 1560s: W. R. B. Robinson, 'The Establishment of Royal Customs in Glamorgan and Monmouthshire under Elizabeth I', *Bulletin of the Board of Celtic Studies*, 23/4 (1970), pp. 356–7.
- 20 Tim Bowly, Margaret M. Condon and Evan T. Jones (eds), 'Bristol 'particular' Customs Account, 1485/6' (To be published online); TNA: PRO, E122/20/5.
- 21 The *Olyver* of Galway is recorded as arriving from Pisa on 16 November 1485 carrying alum, malmsey, currants and sugar; it belonged to a number of alien and indigenous merchants, none of whom appear to be from Bristol. The *Marie* of Bilboa entered from the Levant (the contemporary term for the Eastern Mediterranean) on 18 June 1486 with an exotic cargo, including dates, pepper, silk, cinnamon, sugar, mercury and wine – the last

of which is likely to have been 'rumney' and/or 'malmsey', the sweet and precious wines of Greece and Crete. Much of the merchandise belonged to prominent Bristol merchants, such as John Esterfeld, John Pynke and John Hemmyng. The *Mare Petat* (port unknown) arrived from Madeira on 19 September 1486 with sugar belonging to foreign merchants: Bowly, Condon and Jones, 'Bristol 'particular' Customs Account, 1485/6'; TNA: PRO, E122/20/5.

- 22 See Susan Rose's chapter in this volume.
- 23 For the regular pattern of Italian trade, see Francesco Guidi-Bruscoli's chapter in this volume; for the Iberian trade, see the chapter by Hilario Casado Alonso and Flávio Miranda.
- 24 The 'nominal' value of exports this year was £8,197, of which £7,948 consisted of cloth. The value of the beans and malt, as determined by the customs officers, was £108.
- 25 'An Act against bringing into this Realme Wyne in forrayne bottomes', *Statutes of the Realm*, Vol. 2, pp. 534–5.
- 26 An additional advantage of unlading goods in a Welsh port is that, in certain circumstances, it enabled merchants to avoid paying the duty of 'prisage' on wine: Evan T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol* (Farnham, 2012), pp 186–91.
- 27 The chief imports in 1503/4 were: wine (1,876 tons), Irish fish (1,061 tons), salt (458 tons), iron (268 tons), woad (234 tons), grain (189 tons), fruit (184 tons) and olive oil (116 tons). Together these accounted for 93 per cent of the goods imported (4,735 tons). The chief exports were woollen cloth paying custom (299 tons), other forms of woollen cloth (34 tons), beans, malt and wheat (324 tons) and coal (99 tons). Together these commodities accounted for 83 per cent of exports (1,039 tons). That Bristol was both importing and exporting basic foodstuffs may seem surprising, but can probably be explained by the timing. The export of foodstuffs took place almost entirely during the winter and early spring, while the grain was all imported in July 1504, primarily from the Low Countries.
- 28 The chief imports in 1465/6 were: wine (881 tons), Irish fish (555 tons), salt (354 tons), olive oil (126 tons), iron (125 tons) and fruit (75 tons). Together these accounted for 91 per cent of the goods imported (2,318 tons). The chief export was woollen cloth paying custom (250 tons), along with other forms of woollen cloth (27 tons), salt being sent to Ireland (92 tons) and beans, malt and wheat (16 tons). Together these commodities accounted for 86 per cent of exports (447 tons).
- 29 It is certainly the case that Bristol's shipping market in the 1540s was very similar, with the surviving business records from the mid-sixteenth century confirming that the freight receipts of Bristol's shipowners depended on imports: Evan T. Jones, 'The Bristol shipping industry in the sixteenth century' (unpublished PhD thesis, University of Edinburgh, 1998), pp. 59–64. For the later development of Bristol's trade, see Richard Stone, 'The Overseas Trade of Bristol before the Civil War', *International Journal of Maritime History*, 23/2 (2011), pp. 211–39.
- 30 Carus-Wilson, *Overseas Trade*, pp. 135–7
- 31 Vanes, *Documents Illustrating*, pp. 85–6; Jones, *Inside the Illicit Economy*, p. 77.
- 32 Later Port Book evidence indicates that some of the vessels used for freighting goods between Bristol and Ireland were very small. For instance, the *Sunday* of Wexford, which left Bristol for Wexford on 5 April 1576, was just 3 tons burden, while the *James* of Dungarvan, which

- sailed to Dungarvan on 13 August 1576, was 4 tons burden: Susan Flavin and Evan T. Jones (eds), 'Bristol Port Book, Overseas Outwards, 1575/6' (University of Bristol, ROSE, 2009) <http://hdl.handle.net/1983/1306>.
- 33 While in this account the largest recorded lading is 106 tons, accounts for other years suggest that a *navicula* could be somewhat larger. For example, the *navicula Michael* of Bristol, discussed earlier in this chapter, made two voyages in 1485/6, returning in one instance with 138 tons of merchandise and in the other with 144 tons.
- 34 In the 1503/4 'particular' customs account, the *Matthew* of Bristol appears five times, servicing the trade to Ireland, Bordeaux and northern Spain: Evan T. Jones, 'The *Matthew* of Bristol and the Financiers of John Cabot's 1497 Voyage to North America', *English Historical Review*, 121 (2006).
- 35 The sailing times of a number of voyages in the 1540s suggest the run between Biscay and Bristol could be completed in eleven or twelve days, while the depiction of a 'model' voyage of the 1580s suggests that the voyage from Bristol to Sanlúcar de Barrameda in Andalusia might be accomplished in three weeks: Jones, 'Bristol Shipping Industry', p. 16; John Brown, *The Marchants Avizo* (London 1589). Based on known fifteenth-century voyage times between England and Biscay, it appears that sailing times were similar (see Wendy Childs's chapter in this volume).
- 36 Known sailing times for late medieval ships appear to be similar to those from the sixteenth century. See the chapters by Francesco Guidi-Bruscoli and Wendy Childs in this volume.
- 37 The *Trinity* was recorded as leaving on 3 May, the *Christopher Damme* on 6 May. It seems unlikely that the *Mary Herbert* joined them on this occasion, given that the ship is not included in the account, which ran on till 14 May.
- 38 On 2 October 1486 the *Anthony* of Bristol sailed to Lisbon, returning on 1 May 1487. It then seems to have remained in port till 8 September, when it departed again for Lisbon. This time it managed to complete its voyage in five months, albeit it was wrecked on 25 February 1488 as it came into Kingroad: TNA: PRO, E122/20/7, mm. 2d., 14d-15d, 23d; Margaret M. Condon and Evan T. Jones (eds), 'William Weston v Thomas Smith: Chancery Petition, 1490' (University of Bristol, PURE, 2012), <http://hdl.handle.net/1983/2539979c-d80a-4238-9798-244735e73e20>.
- 39 See Toby Jones and Nigel Nayling's chapter in this volume.
- 40 See, for example, Bob Trett's chapter in this volume.
- 41 T. F. Reddaway and A. A. Ruddock (eds), 'The Accounts of John Balsall, Purser of the *Trinity* of Bristol, 1480-1' *Camden Miscellany* XXIII (1969), pp. 15-19; A. Hanham, *The Celys and their World: An English Merchant Family of the Fifteenth Century* (Cambridge, 1985), pp. 370, 379, 382, 392.
- 42 Jones, 'Bristol Shipping Industry', p. 96.
- 43 See Ian Friel's chapter in this volume.
- 44 The three ships were the *Anthony* of Bristol, sailing to Lisbon 16 November 1485, the *Oliver* of Galway, arriving from Pisa 19 November 1485 and the *Trinity* of London, returning from Iceland 18 September 1486.
- 45 See the chapters by Ralph Griffiths and Bob Trett in this volume.
- 46 Michael Hicks, *Warwick the Kingmaker* (Oxford, 1998), pp. 250-1; Susan Rose, *England's Medieval Navy, 1066-1509* (Seaforth, 2013), pp. 156-8.

- 47 William Damme is recorded as trading on a ship 'of Bristol' called the *Christopher* during the 1440s, while a licence of 1461 notes that the *Christopher Damme* of Bristol was then in royal service. The Bristol merchant John Bagot was granted a licence in 1461 to trade in the *Julian* of Bristol: Carus-Wilson, *Overseas Trade of Bristol*, p. 126.
- 48 A very similar naming pattern is evident in the '*Marie Welschote*' (i.e. *Mary Wiltshire*) of Bristol. In 1458 James Butler, earl of Wiltshire and treasurer of England, was granted a licence to trade to Aquitaine or Brittany with his ship: Carus-Wilson, *Overseas Trade of Bristol*, pp. 119–20; TNA: PRO, C76/140 m. 22.
- 49 It may be the 140-ton *George* that Warwick provided for naval expeditions undertaken from 1462–4: Hicks, *Warwick*, p. 250.
- 50 A third possibility is that William Herbert persuaded the customs officer of Bristol to overlook his goods. This would have been even easier once his brother, Thomas Herbert, was appointed customer of Bristol in May 1466: D. H. Thomas, *The Herberts of Raglan and the Battle of Edgcote, 1469* (Enfield, 1994), pp. 90–1.

nine

THE TRADING CONTEXT OF THE NEWPORT SHIP

The Overseas Trade of Bristol and its
Region in the Mid-Fifteenth Century

Wendy R. Childs



BY THE FIFTEENTH CENTURY, England had long been integrated into Europe's commercial networks. English merchants and ships not only sailed on short passages across the North Sea and the English Channel, but also regularly undertook much longer passages into the Baltic Sea and along Atlantic coasts from Iceland to the Straits of Gibraltar. On these routes they sailed alongside vessels from all over northern Europe – Hansard, Dutch, Flemish, Breton, Gascon, Basque and Portuguese – as an intrinsic part of the medieval maritime scene. A few English ships even ventured into the Mediterranean, but Italians and Catalans largely dominated the sea route between the Mediterranean and the north. London outstripped all other English ports by the fifteenth century, but among the provincial ports Bristol stood out as a major centre, along with Hull and Southampton. All three had large hinterlands and each had its own individual characteristics, strongly influenced by its geographical position. Hull was naturally active to the north and east, although its ships also regularly sailed to Bordeaux and occasionally to Iberia. Southampton, with its deep harbour and on the Channel route to Flanders, was the main landfall in England for the large Italian vessels coming from the Mediterranean to the north. Bristol, although it had some direct contact with the Baltic and Flanders, naturally looked westwards for most of its trade, and from the mid-fifteenth century occasionally sailed into the Mediterranean (where Robert Sturmy's expedition of 1457–8 is the best-known Bristol venture).¹ At this time England's largest export markets were still towards the east, but only just. Flanders was no longer as dominant as it had been when England's main export was raw wool, and south-western trade with Gascony, Portugal and Spain was flourishing. These Atlantic areas were especially important for Bristol and its region, from which cloth rather than wool was the main export.²

Bristol's regular Atlantic markets stretched from Iceland to Andalusia and activity varied in each from time to time according to commercial and political circumstances. In the north, Iceland was Bristol's newest market, providing fish (both salt cod caught by fishing fleets and wind-dried stockfish brought home by trading vessels). Direct trade between England and Iceland had started only at the beginning of the fifteenth century and Bristol had been one of the earliest English ports to take part. Its interest continued throughout the fifteenth century, but faded towards the end of the century,

no doubt partly due to improving commercial opportunities in Iberia.³ Ireland, on the other hand, was Bristol's oldest trading partner and its quays were always busy with ships plying on this route. These ships came not only from Bristol and southern Irish ports, but also from ports and havens on both sides of the Bristol Channel and the Severn. In the mid-fifteenth century, Irish trade usually accounted for well over 50 per cent of ship movements at Bristol, but many of the cargoes were small and the volume of Irish trade was less important than these movements suggest.⁴ By the end of the century Ireland took less than 10 per cent of Bristol's cloth exports, but at this level it was still significant and inward cargoes of fish were important to Bristol and its hinterland. Of these two markets, Iceland had little relevance for the Newport Ship, but Ireland was probably very familiar to its crew, since many vessels sailed between Bristol Channel ports and Iberia via southern Ireland.

England's long-established trade towards the south-west provides the more immediate context for the ship. Many English ports from Chester to Newcastle sent ships to Gascony for its wines and most English ports from the south-west round to London were familiar with Iberian trade. For Bristol's prosperity, Gascony, Spain and Portugal were particularly important. Many of Bristol's richest merchants and almost all the officials at the heart of the town were deeply involved in these three markets and their bulky wine and oil cargoes encouraged the building of some of Bristol's largest ships. Bristol's vessels came to dominate its trade on the longer routes, especially to Lisbon and Andalusia, but in the Atlantic generally Bristol's ships were simply part of the busy maritime community drawn from many areas. The Newport Medieval Ship, with its Basque timbers, French votive coin and its Portuguese coins, pottery and dunnage fits into this commercial context perfectly.

South-Western Trade: Commodities, Access and Politics

Three factors made markets attractive to merchants: saleable goods, straightforward access and reasonable market stability. The south-western markets fulfilled the first two of these perfectly but the third more patchily.

Commodities

In its barrels, boxes, bales and baskets the Newport Medieval Ship would have carried a wide range of goods from luxury wines and foodstuffs to essential industrial raw materials. In return it would have loaded bales upon bales of England's woollen cloth and the cheaper Welsh friezes.

Gascony produced honey, rosin, a little iron and some woad, but the main cargo was always wine (both red and white) exported through Bordeaux.⁵ In verses written in 1224 Gascon wine was described as strong enough to burst eyeballs and split heads. In a fourteenth-century verse debate on the virtues of wine and water, however, the

spokesman for Gascon wine claimed that, although strong, it was 'good-tempered', leaving neither wind nor bad breath, and that it was Burgundy's wine that made men fighting drunk. In return, the spokesman for Burgundy wine denounced Bordeaux wine as gross, bitter and with nothing to commend it but its colour, which made it useful as a mixer.⁶ Whatever the qualities, the English (who held Gascony from 1154 to 1453) developed a taste for Gascon wine, and for much of the late Middle Ages the vast majority of England's wine imports came from Bordeaux.

Northern Spain provided more varied commodities. The Basque Provinces exported wool (which did not interest England) and iron (which interested England very much) and also some leathers, rosin, honey, saffron, liquorice, a little wine and yew for bow staves. Basque iron was low in phosphorus and relatively easy to work with medieval techniques. A French treatise written shortly after 1453 recorded that Basque iron was especially good for shipbuilding and that it was easy for the French to buy from its Spanish ally, while the English could get it only with difficulty and under safe-conducts.⁷ Despite the difficulties, Basque iron dominated England's iron imports even before the Anglo-Castilian treaty of 1466. It could always be bought through the Low Countries, to which the Basques sent regular trading fleets, and iron from eastern Europe was never a substitute. Imports of osmund and eastern iron rarely passed 100 tons a year, while annual imports of Basque iron often reached 2,000–3,000 tons.⁸

Further west along the Spanish coast Galicia exported white wines and also attracted a good deal of passenger traffic, as pilgrims sailed to A Coruña en route to the great shrine at Santiago de Compostela. In jubilee years, when the feast of St James (25 July) fell on a Sunday and greater indulgences could be earned, thousands of English pilgrims crossed the Bay of Biscay. In 1434 licences were issued for sixty-four English ships to carry over 3,000 pilgrims to A Coruña; in 1445 thirty-two ships were licensed for over 2,400 pilgrims;⁹ and William Wey also counted thirty-two English ships there when he made his pilgrimage to Santiago in 1456 (another jubilee year).¹⁰ Nearly 60 per cent of these passenger ships were from Cornwall and Devon, but a few went directly from Bristol and at least one was a Newport vessel.¹¹

The range of commodities from Portugal and Andalusia was different. Their warmer climates produced dried and fresh fruits (figs and raisins, oranges, lemons and pomegranates), olive oil, salt, cork, scarlet kermes dye for the cloth industry, and some of their wines were sweet. Although most Portuguese wine recorded in the customs accounts paid non-sweet wine duties, there was clearly a growing English perception that sweet wines (long brought from the Mediterranean) were becoming a regular Portuguese product. The author of the 'Noumbre of Weyghtes', a book of instruction for young merchants written about 1463, noted that the 'chief marchandy' of Portugal was sweet wine, and by the end of the fifteenth century the word 'osey', which had been the generic name for all Portuguese wine, became specifically associated with sweet wines.¹² The 'Noumbre of Weyghtes' also recognised the excellent quality of Portuguese goods. Its olive oil was 'the wholesomest' for food and medicine and its kermes

scarlet dye was 'the best' for dyeing cloth (a statement which English customs accounts confirm as they valued Portuguese kermes higher than that from Seville).¹³ Andalusia added mercury and manufactured luxury goods such as fine leathers, soap and carpets to the list of goods, and in the later fifteenth century both areas also became sugar producers.¹⁴ Sugar is a reminder of the constant changes that took place in trade, in both routes and commodities, and foreshadows the major changes about to take place as Atlantic exploration expanded.

In return Bristol exported mainly cargoes of cloth. Although Gascony, Portugal and Spain produced cloth, none had major industries and so English cloth was an attractive commodity. The range offered was good: England made light and narrow cloths, good-quality solid broadcloths, and even some top-of-the-range scarlets. Welsh cloths were also popular in Portugal. The cloth was exported fully finished and in a wide range of colours (undyed and unfinished cloth was directed primarily at the Low Country markets towards the end of the fifteenth century). The quality of the best was good enough for royal households. The Navarrese royal household bought a sophisticated range of shades including violets, pinks and turquoises, but shades of red and green were their most favoured colours. Red and green bed hangings were also sent to the Portuguese king in 1428 and the Castilian monarchs favoured the same colours at the end of the fifteenth century.¹⁵ Cloth would have occupied the hold of the outward-bound Newport Ship, whether from Bristol or its neighbouring ports on both sides of the Bristol Channel.

Access

Access to the south-west was straightforward. For three centuries, since Gascony had become attached to the English Crown, English ships had become familiar with the Bay of Biscay. Many simply crossed to Brittany and sailed down to Bordeaux, but it was not much further to reach the Basque Provinces. For the longer voyages to Galicia, Portugal and Andalusia, the direct crossing of the Bay of Biscay was well established by the mid-fifteenth century. When this route became normal is unclear, but it may have been quite early in the fourteenth century. Portuguese merchants, who had traded in Gascony in the thirteenth century, disappeared from its records in the early fourteenth century; their main interest moved to England and Flanders and they probably increasingly used the faster direct passage then. Similarly, the Italians, sailing north from the Mediterranean to Southampton and Bruges, had little interest in coastal trading or Gascony; by the early fourteenth century, when they had mapped the coasts, they also probably headed directly from Galicia to Brittany. Licences permitting ships to transport pilgrims from Bristol to A Coruña in 1368 and 1369 also indicate direct crossings from Bristol by that time.¹⁶ Fifteenth-century descriptions of the passage show that it could be done in five days, even in uncertain weather. Margery Kempe crossed from Bristol in 1417, taking seven days out and five days back, probably in

July. William Wey sailed from Plymouth in 1456 and took five days each way in May and June. Roger Machado, part of Henry VII's diplomatic embassy to Castile and Portugal in 1489, crossed from Falmouth to Laredo in five days in February despite a great storm and adverse winds; in June, returning from Lisbon, his ship had a very slow journey to Finisterre, beating against north winds, but then covered seventy leagues in a single day, taking it half way across the Bay of Biscay. Worsening weather meant another four days before it reached Cornwall, but even so the total passage across the Bay took only five days.¹⁷

The first surviving English sailing directions, compiled before 1461, possibly from earlier manuscripts, describe a variety of crossings.¹⁸ Two things are striking about these. The first is the number of routes between Ireland and Iberia. The most frequently mentioned navigational point is Cape Clear, from which ships could pick up courses for Bayonne, Santoña, Cape Ortegal or Finisterre; ships heading to Finisterre and on down to Lisbon could also find directions from Mizen Head, west of Cape Clear. Bristol ships often used routes between Ireland and Iberia. They are recorded in lawsuits, in customs accounts (which sometimes record ships as sailing out to Ireland and back from Lisbon and vice versa), and in the purser's account for the *Trinity* of Bristol, which sailed to Andalusia in 1480–1 via Minehead, Milford, Haverford and Kinsale before crossing to Iberia.¹⁹ The second striking aspect of the sailing directions is that they assume the sailors already knew the waters well. This is abundantly clear in the instructions for those heading north from Finisterre across the Bay of Biscay. If they were aiming for the Severn the shipmasters (or long-distance pilots if they were carried) were expected to be able to judge when they were 'two parts' over the Bay to change direction; those heading for the English Channel had to hang on until they were 'three parts' over to do so. The instructions for the Severn approaches are:

At Finisterre go your course north-north-east. When you guess you are two parts over the sea, if bound for the Severn, you must go north by east till you come into soundings. If you have 90 to 100 fathoms turn north until you sound again in 72 fathoms with fair grey sand; and that is the shoal that lies between Clear and Scilly. Continue north until your soundings are of ooze, then go east-north-east or else east by north and you will not fall far short of Steep Holm. It rises all round, like a 'copped' hill.²⁰

At this point the instructions end and it was doubtless at this island (as from Lundy in more recent centuries) that the shipmaster would take on local pilots for Bristol. Only if he were a local man who knew the Bristol Channel very well would a master undertake the final navigation through the mud banks to King Road or Hung Road to wait for the tide to Bristol.

Crossing Biscay was dangerous, but experience, skill and care brought success. Even in the 1300s relatively clumsy one-masted ships of up to 300 tuns burden

safely made repeated journeys from England to Bordeaux, and the crossing became safer still in the fifteenth century with the development of larger, robust two- and three-masted ships. Bristol's customs accounts show ships sailed across the Bay throughout the year. The spread of crossings to and from Iberia can be seen in the accounts for three complete years in the later fifteenth century (1485–6, 1486–7 and 1492–3). Each year is different, but the pattern is clear. Autumn crossings were frequent, averaging six crossings a month in both October and November. Crossings remained regular at four a month all winter from December to February, rose to five a month in March, and peaked in April to June with averages of eight, six and seven crossings a month respectively. In high summer in July and August sailings dropped to about two journeys a month before beginning to rise again for the autumn to four a month in September.²¹ Ships sailing to Portugal and Andalusia were typically away for three to four months, a period that would include a month or more in the main destination and possibly a planned stopover at another port en route.²² With its traces of Portuguese artefacts, it is clear that the Newport Medieval Ship sailed this route at some time in its life.

Market Stability

Commodities and access might be attractive, but safety and stability posed more problems in the west. When the ship was built in c.1449 the Hundred Years War between England and France was entering its last phase and war at sea was an immediate problem. By 1453 England had lost all its French possessions except Calais. Both Normandy (newly regained by Henry V) and Gascony (which England had held for three hundred years) became enemy territory. Increased trade with Spain would later partly compensate for the disruption of Gascon trade, but this could not take place immediately because Castile was still an ally of France. So it was a blessing that Portugal was an English ally.

Lisbon offered an important and stable market for Bristol at this time. England's trade with Portugal went back to the early thirteenth century. At that date it was mostly in Portuguese hands, but English activity increased in the fourteenth century. English merchants received trading privileges in Lisbon in 1367 and 1389 and formal political treaties strengthened Anglo-Portuguese ties in 1373 and 1386.²³ By the mid-fifteenth century English merchants, especially from Bristol and London, together with some from Ireland, formed a resident 'colony' in Lisbon. They kept resident junior partners and factors in the city, married and brought up families there; some were so well entrenched that they were granted the right to carry arms and exemptions from taxes.²⁴ The swift remedies offered by Afonso V in 1454 and 1458 to their complaints against customs house officials indicates that, even if not universally loved, they retained royal favour.²⁵ Acts of violence at sea between the two nationalities were rare but not unknown. The war at sea in the last stages of the

Hundred Years War led to wrongful seizures by the English of two Portuguese ships in 1451 and six more in 1455–6,²⁶ but apart from these instances trade was usually peaceful and Portugal remained the most consistently safe market for English merchants. Portugal, as a market, met increasing competition from Castile after the Anglo-Castilian treaty of 1466, but Bristol's trade with Lisbon remained strong to the end of the century, and it is not at all surprising that a 1460s ship found in the Bristol Channel shows traces of contacts with Portugal.

England's relationships with Gascony and Castile were much more volatile and both changed dramatically during the Newport Ship's life. English Gascony became French and thus enemy territory in 1453 and Castile moved from its French alliance to become an English ally by the treaty of 1466. For thirteen years between 1453 and 1466, however, both areas were enemy territory. Trade was rarely totally disrupted for long as merchants adjusted to circumstances, but the Newport Medieval Ship certainly worked for much of its life in particularly difficult times for Bristol's trade.

Gascony was an important element in Bristol's trade. The duchy had been an English dominion for three hundred years, since 1154. Trade between the two countries was tight and English shipping dominated Bordeaux's trade. In the 1440s English ports alone provided 74 per cent of vessels loading wine there and another 18 per cent came from other territories of the English kings.²⁷ Together these vessels loaded 95 per cent of Bordeaux's wine exports. Bristol usually sent six to ten ships a year and also received a little more wine from Welsh ships after they had broken bulk in Wales.²⁸ The French conquest of Gascony was devastating to English prestige and a blow to English merchants and wine drinkers alike. It totally disrupted the trade and English merchants were banned from Bordeaux for a period in 1455. Total annual imports of wine into England dropped immediately from an average of around 11,000 tons a year in the 1440s to an average of around 5,000 tons for the next thirty years.²⁹ Bordeaux, however, needed the trade as much as England did and English merchants were soon allowed back, but they lost their favourable position and traded under restrictions for a generation. Imports recovered to around 10,000 tons at the end of the century, but English ships never regained their former hold.³⁰ Bristol's trade mirrored this general picture. Wine imports dropped from an annual average of over 2,000 tons to just over 800 tons in the 1460s.³¹ At the same time cloth exports to Gascony collapsed. Gascony had been Bristol's major export market, taking 47 per cent of its cloth in the late fourteenth century. In the 1460s this sank to less than 28 per cent, and in the late 1480s and 1490s to under 10 per cent.³² The wine trade at Bordeaux was of limited interest to the Basques. Only a handful of Gipuzkoan ships from San Sebastián and Fuenterrabía were there in the 1440s and, although opportunities increased when Gascony became French, even in 1482–3 (the first surviving account for wine exports after the French conquest) only ten Basque ships appeared there. Basque shipping, however, began to increase in Bordeaux in the 1490s, as carriers for Toulouse woad for Burgos merchants.³³

Badly hit by the loss of Gascony, Bristol merchants looked for other markets. Iberia was an obvious choice, but could not provide immediate compensation. Portugal (while friendly) was small and Castile, which had great potential given its size, remained a French ally until 1466. The Franco-Castilian alliance was long-standing, forged nearly a century earlier because it was in the interest of the king of Castile to have an ally against the English. When Enrique Trastámara usurped the Castilian throne in 1369 with French support, the English naturally supported his opponents, the legitimate heirs of Pedro I, who had been an English ally. The Franco-Castilian alliance was steadily renewed for the rest of the Hundred Years War, but once the new dynasty was firmly established, Castile's commitment to France gradually weakened. In the early fifteenth century Anglo-Castilian trade began to revive during truces and under a system of safe-conducts. Some Basque merchants and shipowners built up regular businesses with England under this regime,³⁴ but the full potential of the trade could only be realised once firm peace returned. When this happened in 1466, shortly before the Newport Medieval Ship foundered, the whole of Iberia's Atlantic coast was once more freely open to Bristol's trade.³⁵

The new Anglo-Castilian alliance was not without problems. Twice, under French pressure (in 1470 and 1478), Castile repudiated it, but there was little open conflict and Edward IV, always eager to protect trade, insisted on recognising the validity of the treaty's commercial clause despite uncertainties over the political ones.³⁶ With this encouragement Anglo-Spanish trade surged in the 1480s and 1490s. Bristol's trade patterns, however, were beginning to change within the lifetime of the Newport Ship. In the 1460s Iberian wine imports (mainly from Portugal and Andalusia) sometimes reached over 600 tons a year, before rising to well over 1,000 tons before the end of the century (around 50 per cent of Bristol's imports).³⁷ Similarly, as Gascony's cloth trade collapsed, Iberia's share rose. At the end of the fourteenth century Iberia had taken only 23 per cent of Bristol's cloth exports; in the 1460s this had already risen to around 45 per cent and would soar to 85 per cent by the end of the century.³⁸ By then Basque ships increasingly sailed into Bristol and Bristol ships to Huelva and Seville, where English merchants settled as they had done in the traditional market of Lisbon. Soon, despite the long tradition of Lisbon trade, Spain was overhauling Portugal in importance to Bristol's trade.³⁹

When the Newport Medieval Ship was lost, these dramatic changes were only just beginning. For most of its working life the ship operated in more difficult circumstances; for thirteen years, between 1453 and 1466, both Gascony and Spain were enemy territories for England. Shipowners and masters operating on routes between these areas and England needed to keep a sharp eye on political events. They needed to know the exact dates and terms of truces; if they were prudent they also spent time and money buying safe-conducts and licences to trade, and if they were wise they also checked the wording of these documents carefully to avoid any remaining risks of seizure and delay by over-zealous officials.

Safe-conducts

Safe-conducts were an age-old device, widely used in times of conflict and uncertainty to maintain trade that was essential to everyone. Even when Castile was still a strong ally of France in the early fifteenth century, Anglo-Castilian trade was protected by an agreed regime of up to sixty safe-conducts a year from both sides.⁴⁰ This practice was specifically accepted in Franco-Castilian treaties. Numbers were negotiable and changed from time to time; in 1454 France agreed that Castile could freely grant twenty safe-conducts to English vessels but required French approval for any above that number, while all French safe-conducts for the English required Castilian consent. A little later, in 1456, it was agreed that France and Castile could freely grant eighty safe-conducts a year to enemy ships, provided they were unarmed; and in 1459 the French agreed that ten might be armed for defence.⁴¹ Royal safe-conducts were the strongest guarantees of safety for ships and men. To violate them was always an offence against the Crown and in addition, in England in 1414 and in 1450, violation was explicitly declared treason. Inevitably violations occurred from time to time, but, when they did, courts normally offered swift justice, even if judgments might be difficult to enforce.

The registration of safe-conducts and similar commercial 'paper-work' leaves ample traces in the records to illustrate the working conditions for many ships and merchants. Safe-conducts were always conditional. They demanded the holders' good behaviour, their payment of all customs duties and the presentation of the safe-conducts before entrance to any fortified places. Sometimes additional conditions required that merchants unload all their goods or a sufficient amount to produce a stated level of customs duties. Obtaining the safe-conducts cost time and money. The expense was high. The Bristol owners of the *Julian* of Fowey offered a flat fee of 40 marks (£26 13s. 4d) to two Bristol merchants in Bordeaux who arranged their French safe-conduct in 1459–60 and William Isgar of Bristol charged Pedro Sans de Venesse of Fuenterrabía £12 per voyage in 1460 for delivering an English safe-conduct for Pedro's *Mary* of Gipuzkoa. These two cases also illustrate the problem of validity. The *Julian*'s safe-conduct ran out of time when the ship was impressed for service in Ireland, and Pedro's safe-conduct became invalid when Henry VI lost the throne to Edward IV.⁴² Even when valid, a safe-conduct did not always prevent hassle. In England in 1436 it was decreed that every safe-conduct should record the names of the grantee, of the ship, its homeport, its master, the number of its mariners and its tonnage. France had similar regulations. Enrolments, however, show that sometimes the terms were left more open-ended, allowing the holders to use one or two ships up to a certain tonnage with up to five names registered for the possible master(s).⁴³ This was convenient, perhaps even essential at times, as merchants might not know which ships or masters would be available for hire a year or two later; but 'open' safe-conducts were liable to challenge by picky officials. In 1454 Robert Chattock of London had to pay £100 for the release

of his ship at Bayonne because officials there deemed the safe-conduct 'insufficient',⁴⁴ and in 1459 both the *Anthony* of Hull and the *Margaret* of Orwell fell foul of officials in the Gironde.⁴⁵ Both appear to have been using safe-conducts without the name of the ship, but it was a discrepancy in tonnage that the officials picked up, not the absence of a name. The *Anthony*'s safe-conduct covered a ship of 400 tons, but officials at Blaye alleged the *Anthony* was a ship of 450 tons.⁴⁶ The master's defence was that by common usage the tonnage declared in a safe-conduct covered only the cargo and that allowance should be made for all else, such as the ship's gear, victuals and crew. For the *Margaret*, also with a safe-conduct for 400 tons, the discrepancy alleged was 200 tons. Here the master claimed that it was the ship's first voyage so the portage was uncertain, and that when he arrived at Bordeaux he had obtained a further safe-conduct locally to cover the excess. This second safe-conduct unfortunately led to further disputes between French officials over whether Bordeaux was an 'arm of the sea' or a sweet-water port, which determined who had the jurisdiction to issue the second safe-conduct. Although both masters won their cases, they suffered long delays. The *Margaret*'s master complained that he had lost seven months of work and that his crew had sold the shirts off their backs and begged for bread while they waited for the verdict. The Newport Medieval Ship would have needed such safe-conducts for most of its destinations for most of its life, whether it was in Basque or English hands.⁴⁷

Registration of safe-conducts was a sensible precaution for buyers as proof of purchase and was also encouraged by the English government in an attempt to stop forgeries. There seem to be no surviving lists of registered safe-conducts in Spanish, Portuguese or French archives. A considerable number, however, can be traced in England, and they reveal the overwhelming importance of Basque (especially Gipuzkoan) vessels among Spanish shipping coming to England.

Between 1440 and 1467 some 282 safe-conducts for Spanish (Castilian and Basque) ships can be traced in English records.⁴⁸ The pattern of purchases indicates the trust that was generally put in truces. Only sixteen safe-conducts were registered in the five years of the Anglo-French truce of 1444–9 (in which Castile was included), but ninety-five were registered in the five years of war immediately after England's loss of Gascony. Another surge in registration came in 1461–2, when many safe-conducts were re-validated at the accession of Edward IV. Registration tailed off after the Anglo-Castilian treaty of 1466.⁴⁹ Of the 282 safe-conducts, 137 (49 per cent) were issued for Gipuzkoan vessels. Vessels from San Sebastián were the most active, accounting for thirty-three of the safe-conducts; then came Deva with twenty-one, and after that Fuenterrabía with six, Mutriku and Erreterria with five each, and Pasaia and Getaria with two and one respectively. Forty-five (16 per cent) were for Biscayan ships. A further eighty-five (30 per cent) were 'open', recorded simply as for ships of 'Spain', with several alternative names recorded for possible masters. In all these cases, however, most of names were clearly Basque, so we can be confident that overall some 267 of the 282 recorded safe-conducts were for vessels from the Basque Provinces.

Even in the unlikely event that all the ships of 'Spain' with Basque masters were from Biscay, Gipuzkoan ports still provided the majority of Spanish ships active in the English trade. Of the other safe-conducts a mere seven were for vessels of Cantabria and Galicia, six for Navarre, and two for Andalusia. The predominance of the Gipuzkoans at this time fits other evidence. Not only did they enjoy major grants from Edward IV in compensation for losses at sea in 1474 and a specific ten-year commercial truce in 1482,⁵⁰ but at Bristol itself two-thirds of the safe-conducts registered in the *Great Red Book* for 1453–66 were for Gipuzkoan vessels. Bristol's customs accounts show that Gipuzkoans dominated Spanish shipping there, accounting for about 80 per cent of the movements of Spanish vessels.⁵¹ This Gipuzkoan importance is significant for the Newport Ship, given that the timber analysis places its origins closer to Gipuzkoan than Biscayan ports.

If the Newport Medieval Ship was in Basque ownership in the 1450s and early 1460s, it is quite likely that its name occurs amongst the ships registered for safe-conducts; but if it had moved to English ownership (as its English repairs might suggest), then it would need a safe-conduct not from the English Crown but from the kings of France (after 1453) and Castile (up to 1466), for which we have no records; it would also need a licence to trade in enemy territory from the English king. In this case its name might be among the records of English vessels granted licences to trade in Aquitaine or Spain, but we have no means of identifying it on either list, nor certainty that the ship would have retained the same name throughout its working life.

Whether, when and how the Newport Medieval Ship might have changed hands are interesting questions. Shipbuilding might be commissioned abroad, although it is less likely that this happened between England and the Basque Provinces before 1466, while they were still formally enemies. Ownership was often complex and could cross national boundaries (normally, of course, between allies). For example, the ownership of the *St John* of Bayonne was internationally shared between Sancio Dyturbyde of Bayonne and Martim Gunsalvus of Portugal until 1441–2 when Gunsalvus's share was sold to an Englishman.⁵² Ships not only changed hands through sales (as in the case of the *St John* above),⁵³ but also by bequest or capture (illustrated in the case of the *Mary* of Mutriku below). Capture was not always an act of war or piracy; seizures could be semi-legitimised by way of reprisal or letter of marque. I would like, therefore, to finish with a case that shows how a Gipuzkoan ship with many characteristics of the Newport Medieval Ship reached Bristol hands. The case illustrates the nuances of seizure, reveals the attempts made to regulate violence through legitimate letters of marque, lawsuits and negotiation, and further illustrates the conditions in which the ship would have worked.

The *Mary* of Mutriku came into the hands of William Skirmot of Bristol in the winter of 1448–9. In June 1448 the *Peter* of Bristol of 200 tons, part-owned by William Skirmot and carrying his cloth to Bayonne, was captured by two Spanish ships manned by men of Mutriku. Skirmot sued in Castile for its return and claimed

he was unsuccessful. When the *Mary* was seized by Irish and Welsh seamen and taken to Bristol, he claimed it in recompense for the *Peter*. He was successful and the *Mary* was granted to him on 22 February 1449, on the usual condition that no other legitimate claim was made to it and its cargo within one year and one day. Almost immediately, in March 1449, ten Genoese merchants successfully claimed over 180 tons of its cargo, including Seville oil, Seville cumin and soap. Then in November 1449 Gunzales Ibanez (Ibames) of Messeta, near Mutriku, claimed the *Mary* itself, stating that the ship was 'new' when it was seized, together with the remaining 14 tons of goods (also mostly southern goods: 'bastard' and 'romney' wines, oil, pomegranates and oranges). Skirmot and Ibanez accepted arbitration and four months later, on 11 March 1450, they agreed to exchange the ships, which were similar in size (200 tons) and value (500 marks for *Peter*; 550 marks for *Mary*). This was how reprisal and marque were expected to work: the seizure of a ship of similar size forced exchange and restored the status quo.

In the event, however, the ships were not exchanged.⁵⁴ By November 1450 Skirmot was dead and Patrick Davy, another Bristol merchant, entered the scene. He claimed that he was part owner with Skirmot of the *Peter* and that therefore he also had an interest in the *Mary*. He further revealed that before his death Skirmot had given the *Mary* to the bishop of St David's without Davy's consent (and without telling the bishop of Davy's interest). Why Skirmot made the gift is not entirely clear. If it was a deathbed bequest it was verbal, as Skirmot died intestate,⁵⁵ but Davy claimed that it was a plot by Skirmot to cheat him of his share. The bishop of St David's accepted Davy's claim to be part owner and on 12 April 1451 Davy regained the whole of the *Mary*, paying the bishop 200 marks. This was around half the declared value of the ship and thus the value of Skirmot's half-share (which he could quite legitimately have given to the bishop). Throughout the dispute the *Mary* was kept working by its *de facto* owner and Davy was to take delivery of it on its return from its current voyage to Bordeaux. Here we have a tantalising picture: a ship built around 1448; Gipuzkoan; around 200 tons burden; already working on the southern route past Portugal; and passing into Bristol hands. Sadly, despite these similarities, the *Mary* was built a little too early to be the Newport Ship, and we cannot know whether that ship came into English hands in a similar way. Nonetheless, the parallels are interesting, and the Newport Ship could have been very like the *Mary* of Mutriku.

Conclusion

Even if we cannot identify the Newport Medieval Ship, we can see quite clearly how it would fit into England's and Bristol's trade. Surviving documents and archaeology dovetail well. We can see what commodities it might carry, what routes it might sail and what conditions it would have worked in. The surviving customs accounts, however imperfect, provide a quantitative framework for the pattern of trade during

its life and the changes that were beginning to occur. They reveal the overwhelming importance of south-western trade at Bristol, the strong shift within it from Gascony towards Iberia and the growth of Basque (especially Gipuzkoan) activity at Bristol. Bristol's commercial shift towards Iberia meant that by the end of the century Portugal and Spain supplied up to 50 per cent of its wine imports and took 85 per cent of its cloth exports. By that time Bristol's horizons were widening further, to include direct commercial contacts with Madeira and the Mediterranean and voyages of exploration in the Atlantic, but both the great surge in Spanish trade and the importance of these wider connections came after the Newport Ship foundered. The ship itself worked in what was essentially a centuries-old trading pattern between Bristol and Gascony, Portugal and Castile. During its life, war and diplomacy dramatically changed the balance between Gascony and Castile, but when it sank the pattern of trade in which it operated was still essentially the traditional one. Its conditions of work, the routes it sailed, the risks it faced and what precautions its owners needed to take were familiar to shipowners, masters, sailors and merchants in Bristol and its region and in the Basque Provinces for centuries.



Notes

- 1 S. Jenks, *Robert Sturmy's Commercial Expedition to the Mediterranean (1457/8)*, Bristol Record Society, Vol. 58 (Bristol, 2006).
- 2 E. M. Carus-Wilson and O. Coleman, *England's Export Trade 1275–1547* (Oxford, 1963), pp. 132–3, 142–3. For detailed analysis of Bristol's customs accounts, see Richard Stone's chapter in this volume and for Bristol's region and hinterland see the chapters by Ralph Griffiths and Peter Fleming.
- 3 A surprising number of Icelandic servants, however, lived in Bristol in 1483: TNA: PRO E179/270/54. For the Icelandic trade, see E. M. Carus-Wilson, 'The Iceland trade', in E. Power and M. M. Postan (eds.), *Studies in English Trade in the Fifteenth Century* (London, 1933), pp. 155–82, reprinted in E. M. Carus-Wilson, *Medieval Merchant Venturers*, 2nd edn (London, 1967), pp. 98–142; for a comparison of Bristol and Hull in Iceland, see W. R. Childs, 'England's Icelandic Trade in the Fifteenth Century: the Role of the Port of Hull', *Northern Seas Yearbook*, 1995, Poul Holm, Olaf Janzen, Jón Thór (eds), Fiskerimuseets studieserie, nr 5 (Esbjerg, 1995), pp. 11–31.
- 4 TNA: PRO E122 (King's Remembrancer's customs accounts) for Bristol, *passim*; W. R. Childs, 'Ireland's Trade with England in the Later Middle Ages', *Irish Economic and Social Studies*, 9 (1982), p. 16. There are few detailed accounts for mid century, but the visible trends are consistent.
- 5 Woad became an important transit commodity in the 1480s, passing through Gascony from Toulouse in the hands of Castilian merchants from Burgos: G. Caster, *Le Commerce*

- du pastel et de l'épicerie à Toulouse de 1450 environ à 1561* (Toulouse, 1962), pp. 87–91, 99–121, 138–40.
- 6 Henri d'Andeli, 'La bataille des vins', in Alain Corbellari (ed.), *Les dits d'Henri d'Andeli* (Paris, 2003), lines 125, 128; Geoffroi des Nés, 'La Desputoison du vin et de l'iaue', lines 116–25, 168–220, in A. Jubinal (ed.), *Nouveau recueil de contes, dits, fabliaux, et autres pièces inédites des XIIIe, XIVe, et XVe siècles*, 2 vols (Paris, 1839–42), I, pp. 293–311.
 - 7 L. Pannier et P. Mayer (eds), *Le Débat des herauts d'armes de France et d'Angleterre*, Société des anciens textes français, 8 (Paris, 1877), p. 28.
 - 8 W. R. Childs, 'England's Iron Trade in the Fifteenth Century', *Economic History Review*, 2nd series, 34 (1981), pp. 25–47 at 28–9, 33–9.
 - 9 Licences are recorded in *Calendars of Patent Rolls* and *Treaty Rolls* (TNA: PRO C76). A list is provided in E. Ferreiro Priegue, *Galicia en el comercio marítimo medieval* (Santiago, 1988), pp. 587–608. For analysis see W. R. Childs, 'The perils, or otherwise, of maritime pilgrimage to Santiago de Compostela in the fifteenth century', in J. Stopford (ed.), *Pilgrimage Explored* (Woodbridge, 1999), pp. 123–43 at 129–32.
 - 10 *The Itineraries of William Wey, fellow of Eton College, to Jerusalem AD 1458 and AD 1462 and to St James of Compostella AD 1456*, Roxburghe Club 76 (London, 1857), p. 154.
 - 11 Fifteen licences (6 per cent of the total registration) are recorded for Bristol ships. The *Trinity* of Newport of 400 tons, owned by Morgan ap Jenkyn ap Philip and licensed in 1462 for 300 pilgrims, is too big for our ship: TNA: PRO C76/146 m. 15.
 - 12 For the origin of 'osey' from the place name Azoia, see M. Freeman, '“Pots of osey”: Portuguese wine in late medieval England and its place of origin', in S. Gregory and D. A. Trotter (eds), *De Mot en Mot: Aspects of Medieval Linguistics. Essays in Honour of William Rothwell* (Cardiff, 1997), pp. 17–36.
 - 13 'Noumbre of Weyghtes', BL Cotton Ms Vespasian E ix; S. Jenks (ed.), 'Werkzeug des spätmittelalterlichen Kaufmanns: Hansen und Engländer im Wandel von *memoria* zur Akte (mit einer Edition von *The Noumbre of Weyghtys*)', *Jahrbuch für fränkische Landesforschung*, 52 (1992), p. 307.
 - 14 Bristol received imports directly from Madeira in the 1480s: TNA: PRO E122/20/5.
 - 15 J. Castro y F. Idoate (eds), *Archivo General de Navarra. Catálogo de la Sección de Comptos: documentos*, 49 vols (Pamplona, 1952–69), vols. 20–33 *passim*; CCR (1422–9), p. 368; A. de la Torre, 'Telas extranjeras en la corte de los Reyes Católicos', *VI Congreso de Historia de la Corona de Aragon 1957* (Madrid, 1959), pp. 831–9.
 - 16 CPR (1367–70), pp. 122, 140, 212, 226, 228.
 - 17 *The Book of Margery Kempe*, W. Butler-Bowdon (ed.), (London, 1936), books 44–5; *Itineraries of William Wey*, pp. 153–5; 'Journals of Roger Machado', in J. Gairdner (ed.), *Memoirs of King Henry the Seventh*, Rolls Series 10 (1858), pp. 331–3, 366–7.
 - 18 For the text and an analysis of its navigational accuracy, see Robin Ward, 'The Earliest Known Sailing Directions in English', *Deutsches Schifffahrtsarchiv*, 27 (2004), 49–92. The text is also available in Geoffrey A. Lester, 'The earliest English sailing directions', in Lister M. Matheson (ed.), *Popular and Practical. Science of Medieval England* (East Lansing, 1994), pp. 331–67.
 - 19 T. F. Reddaway and A. A. Ruddock (eds), 'The accounts of John Balsall, purser of the *Trinity of Bristol*, 1480–1', in *Camden Miscellany XXIII*, Camden Society Publications, 4th series, 7 (1969).

- 20 Ward, 'Sailing Directions', 83; Lester, 'Sailing Directions', p. 354. The Stepilhord of the manuscript is without doubt Steep Holm in the Bristol Channel, just opposite Weston-super-Mare, and not Steephill on the Isle of Wight as suggested by Lester (p. 366).
- 21 TNA: PRO E122/20/5, 7, 9. Accounts for 1477–8 and 1479–80, although one is damaged and the other incomplete, show similar patterns of regular winter sailings: E122/19/13, 161/31, 174/3, 19/14.
- 22 For further discussion of the length and nature of voyages, see Evan Jones's chapter in this volume.
- 23 H. V. Livermore, 'The "Privileges of an Englishman in the Kingdoms and Dominions of Portugal"', *Atlante*, 2 (1954), pp. 65–7.
- 24 Pedro de Azevedo, 'Comercio anglo-português no meado do sec. XV', *Academia das Ciências de Lisboa*, Boletim da Secunda Classe, 8 (1913–14), pp. 53–66 at 61, 65–6; TNA: PRO PRO31/8/153, ff. 632–5, 640–640v (cited in V. M. Shillington and A. B. W. Chapman, *The Commercial Relations of England and Portugal* (London, 1907) p. 67.
- 25 Shillington and Chapman, *Commercial Relations*, pp. 68–9, 111–25; Livermore, "Privileges", pp. 67–73.
- 26 *CPR* (1446–52), pp. 476, 536; *CPR* (1452–61), pp. 61, 165, 225, 254, 281, 300–1, 306; for Portuguese safe-conducts in response to the violence, see TNA: PRO PRO31/8/153.
- 27 TNA: PRO E101/194/3, 195/19; BL Add. Ms. 15543 (for 1443–4, 1444–5, and 1448–9). Wales, Ireland and the Channel Islands provided 7 per cent; Gascony (especially Bayonne), Calais and English Normandy provided 11 per cent.
- 28 The Welsh ports with the busiest connections with Bordeaux were Tenby, Milford and Chepstow.
- 29 M. K. James, *Studies in the Medieval Wine Trade* (Oxford, 1971), pp. 58–9.
- 30 In 1482–3 only 55 of the 310 ships loading wine at Bordeaux were from English territories (16 per cent instead of the previous 93 per cent) and only three were from Bristol: 'Registre de la Comptablie de Bordeaux, 1482–3', trans. G. Ducaunnès-Duval, *Archives historiques du département de la Gironde*, 50 (1915), 1–166. The lack of ships in the spring of that year, however, might be due to the arrest of English vessels for Edward IV's planned expedition to France.
- 31 James, *Wine Trade*, pp. 111–13.
- 32 TNA: PRO E122/15/8; 16/2, 4–5, 9, 11, 13, 15, 17, 19–23, 26, 28, 30, 34; 19/1, 3–4, 6–14; 161/31; 20/5, 7, 9.
- 33 'Registre de la Comptablie de Bordeaux', 1–166; J. Bernard, *Navires et Gens de Mer à Bordeaux (vers 1400 – vers 1550)*, 3 vols (Paris, 1968), III, Appendix 'Mouvement de la navigation à Bordeaux de 1445 à 1520 d'après les archives notariales', and see n. 5 above.
- 34 For example, Martin Ochoa de Yrive of Deva and his son Pedro traded in and out of Southampton, Sandwich and London between 1431 and 1464 under successive safe-conducts for several ships: TNA: PRO C76/118 m.17; 122 m. 15; 123 m. 20; 124 m. 22; 126, m. 4; 128 m.5; 131 m. 10; 138 m. 30; 139 mm. 24, 23, 12; 141 m. 16; 142 mm. 18, 15; 145 m. 35; 147 mm. 20, 12; 157 m. 14; 158 m. 7.
- 35 *Foedera*, V. ii. pp. 140, 146, 148.
- 36 The treaty allowed English and Castilian subjects to trade in each other's country as if natives, which lowered customs duties and encouraged trade. For Edward's policies

- towards Castile, see W. R. Childs, *Anglo-Castilian Trade in the Later Middle Ages* (Manchester, 1978), pp. 53–7. Edward also combatted piracy and under him recorded instances of losses per decade were one quarter of those under Henry VI: Charles Ross, *Edward IV* (London, 1974), pp. 366–7. For piracy and interpretations of it, see Susan Rose's chapter in this volume.
- 37 TNA: PRO E122/19/3–4, 13–14; 161/31; 20/5, 7, 9.
- 38 For sources, see above, n. 32.
- 39 In the early sixteenth century John Smythe of Bristol made his greatest profits in Andalusia and ignored Portugal: J. Vanes (ed.) *The Ledger of John Smythe 1538–1550*, Bristol Record Society Vol. XXVIII (Bristol, 1974), pp. 105–6, 132–3, 144–5, 176–8, 210–11.
- 40 *POPC*, II, pp. 118–19.
- 41 L. Suarez-Fernandez, *Navegación y comercio en el Golfo de Vizcaya: un estudio sobre la política marinera de la casa de Trastámara* (Madrid, 1959), pp. 115, 117–18; G. Daumet, *Etude sur l'alliance de la France et de la Castille au XIV^e et au XV^e siècles*, Bibliothèque de l'Ecole des Hautes Etudes 118 (Paris, 1898), pp. 89–90, 95, 97, 99, 101, 248–51. For the context, see also Childs, *Anglo-Castilian Trade*, pp. 45–8.
- 42 TNA: PRO C1/27/383 (printed in E. M. Carus-Wilson, *The Overseas Trade of Bristol in the later Middle Ages*, Bristol Record Society, Vol. VII (Bristol, 1937); C1/29/390. In both cases those who arranged the original safe-conducts demanded payment for them although they had not been used.
- 43 'Open' safe-conducts were sometimes granted with a specific clause that this was 'despite the statute': TNA: PRO C76/130 m. 3.
- 44 TNA: PRO E28/85, 23 July.
- 45 'Registres des Grands Jours de Bordeaux', H. A. Barckhausen (ed.), *Archives historiques du département de la Gironde* 9 (1867), pp. 422–32, 443–61; some details are printed in D. Burwash, *English Merchant Shipping 1460–1540* (Toronto, 1947), pp. 89–90.
- 46 Blaye was the major calling point for vessels sailing down the Gironde to Bordeaux: Bernard, *Navires et Gens de Mer*, I, pp. 110–12 and map 2.
- 47 Outside truces Basque ships would have needed safe-conducts to trade in England, Portugal and (before 1453) Gascony; English ships would have needed safe-conducts to trade in France, Castile and (after 1453) Gascony.
- 48 TNA: PRO C76/122–51 *passim*; Childs, *Anglo-Castilian Trade*, pp. 48–50. At least 33 of these ships (and three more not registered in the Treaty Rolls) presented their safe-conducts at Bristol between 1453 and 1466. Of these, 24 were Gipuzkoan (66.6 per cent), 2 Biscayan, 9 'of Spain' and 1 from Seville: E. W. W. Veale (ed.), *Great Red Book of Bristol, Text I*, Bristol Record Society, Vol. IV (Bristol, 1933) p. 191; *Text II*, Bristol Record Society, Vol. VIII (Bristol, 1938) pp. 24–9, 36–45, 72–3, 76–7, 80–3, 92–9, 102–5, 108–9, 114–17, 120–3.
- 49 A small number of safe-conducts was also issued in the early 1470s when the treaty was temporarily repudiated: TNA: PRO C76/155–6; *Great Red Book Text II*, pp. 132–3, 136–7, 144–7. There were many more potential voyages than the raw numbers of safe-conducts suggest: ships might make two or even three passages a year, and some safe-conducts were granted for two, three, or even four years.
- 50 *CPR* (1467–77), pp. 480, 599; TNA: PRO C76/165 m. 15; BL Cotton Ms Vespasian C xii, ff. 209–10; *Foedera*, V. iii. pp. 117–18.

- 51 *Great Red Book of Bristol*, above n. 48; TNA: PRO E122 *passim*.
- 52 The lawful English purchaser is uncertain; both Thomas Burton of Bristol and Robert Shirborn of London claimed to have bought it: TNA: PRO C1/15/147; E28/70/35–6.
- 53 Edward IV and Richard III also bought Iberian ships: Colin Richmond, 'English Naval Power in the Fifteenth Century', *History*, 52 (1967), pp. 1–15 at 12–15.
- 54 It is not clear why arrangements fell through. Perhaps Ibanez could not raise the extra money for the cargo. Although the ships were of similar valuation, the cargoes were not. Skirmot claimed 1,149 marks, while Ibanez claimed only 130 marks.
- 55 TNA: PROB11/1 fo. 94 (93)v. I am grateful to Margaret Condon for this information.

ten

BRISTOL'S OVERSEAS
TRADE IN THE LATER
FIFTEENTH CENTURY

The Evidence of the 'Particular'
Customs Accounts¹

Richard Stone



THE EXCAVATION OF THE Newport Medieval Ship has revealed a great deal about the maritime world of the fifteenth century. It is not, however, only in the mud of the river Usk where scholars can dig for new evidence about the ships that plied the Severn Sea five hundred years ago. Much of the information from the Newport Medieval Ship has been gained through the use of modern computer technology, whether that be through searching vast dendrochronological databases to date its timbers and work out where they grew, or by using laser scanners to map the vessel's fabric down to the last adze mark to determine its construction. Computer processing has revealed a wide range of evidence that would not have been attainable for previous generations of investigators. This chapter seeks to take a similar 'digital humanities' approach to another source relating to the world of the Newport Ship: the fifteenth-century customs records. The 'particular' accounts for the port of Bristol will be subjected to a statistical investigation much more detailed than has hitherto been possible, providing quantitative evidence for the nature and development of the overseas trade in which the Newport Medieval Ship participated.²

This chapter begins with a discussion of the fifteenth-century English customs system, and the records it produced. The analysis of Bristol's trade will start with an evaluation of its overall health in the later fifteenth century. This shows that, while overseas commerce was dealt a severe blow by the loss of Gascony in 1453, by the 1470s the port's trade had recovered, and was even beginning to surpass the heights of the 1440s. Next, the 'particular' accounts will be mined to assess the nature of that trade, considering the markets involved as well as its seasonal patterns. This analysis reveals that Iberian trade drove Bristol's recovery: the peninsula accounted for two thirds to three quarters of the port's commerce by the 1490s. Each of Bristol's main branches of trade will then be considered in greater depth, examining their development, the commodities involved and the places with which they traded. While the make-up of imports varied from one region to another, previous studies have over-emphasised the variety of exports. From one year to the next, and no matter where they were sailing, around 98 per cent of exports consisted of woollen cloth. Finally, Bristol's attempts to break into new markets are considered. These were not of great

economic significance, rarely persisted and never accounted for more than a few per cent of Bristol's trade. They are, however, a marker of the city's renewed prosperity and the ambition of its merchants. While the overall trends are clear, working with the 'particular' accounts highlights the significant year-to-year variations in both the value and the nature of commerce. No year in the life of vessels such as the Newport Medieval Ship was truly 'typical', something which historians need to bear in mind when working with this type of record.

The 'Particular' Customs Accounts of the English Exchequer

From 1415, all goods exported or imported into the country paid customs duties to the Crown, with the customs officers recording the 'particulars' of the shipments in detailed accounts that were submitted to the Exchequer for audit purposes.³ These 'particular' accounts are now held in the E122 series at the National Archives. The records of the port of Bristol are especially detailed, making them a valuable resource for the study of fifteenth-century overseas trade. For each shipment, the officers recorded the name of the vessel; its home-port and master; the port of origin or destination of the voyage; the date of entry into the books; the name of the owner of the goods and his/her nationality (denizen, alien, or Hanse); the type of goods, their value and the custom paid.⁴

To understand the fifteenth-century customs system, a note is needed on what constituted a 'port'. For the customs service, a 'port' did not mean an individual town or harbour, but rather a broader administrative area.⁵ Each of these 'ports' would have a 'head port', where the local customs service was based. Some also had 'member ports' (although Bristol did not), where separate accounts were kept by officers who acted as deputies to the chief officers at the head port. In addition, all ports had 'creeks', where goods could be legally loaded and unloaded following 'entry' into the books at a head or member port. The exact number of 'ports' and their boundaries fluctuated over time.⁶ In the late fifteenth and early sixteenth century, the area controlled by the Bristol customs officers consisted of the river Avon, and the river Severn as far as Worcester.⁷ The Welsh ports did not formally become part of the Exchequer's customs system until the 1560s (although Chepstow was sometimes considered to be part of the port of Bristol), being subject instead to the Marcher lords who charged their own (lower) duties.⁸ While the ports of Gloucestershire and south Wales had bustling trades of their own, these were principally local in nature.⁹ If locally owned, a large merchantman such as the Newport Medieval Ship is likely to have spent most of its time servicing the trade of Bristol, which was England's second most important port and by far the largest town in the region. Given this, Bristol's customs records can reveal much about the world of the Newport Ship.¹⁰

Some comment is also necessary on the reliability of the 'particular' accounts. When using customs records, one of the greatest areas of concern is smuggling, since contraband was not recorded by the customs officers. Fortunately, merchants

only smuggled when there was reason to do so, typically in response to high duties or burdensome regulations. Such incentives were quite weak in the fifteenth century, with duties on most goods rarely amounting to more than 5 per cent of their value.¹¹ As Evan Jones discusses in his chapter, there were circumstances in which certain minor duties or irksome regulations could be avoided by trading via Wales, particularly for those engaged in the wine trade in small or foreign ships.¹² This resulted in some goods being landed in Wales prior to being dispatched across the Severn to Bristol. This, however, never amounted to more than £700 in any given year, little more than 3 per cent of Bristol's annual trade. Moreover, since such goods *were* recorded and did pay customs duty, activity of this kind did not constitute smuggling.¹³ Rather, it was a regulatory or tax 'avoidance' strategy, which exploited Wales's anomalous fiscal position.

Concerns have also been raised over the fact that the surviving 'particular' accounts of the later fifteenth century are fragmentary.¹⁴ Many only cover one or two months and since there was a seasonal pattern to trade, it cannot be assumed that an account covering October–November, for example, would be representative of trade in the year as a whole. Even when surviving accounts cover an entire twelve-month period, it may be an exceptional year and so not reflect trade in the period more generally. As the analysis below reveals, trade was highly seasonal and there were year-to-year variations in the nature and direction of Bristol's overseas commerce. On the other hand, many of the core features of the port's trade were enduring. It would thus be foolish to disregard what is one of the richest sources for overseas trade merely because it is not perfect. This chapter will seek to identify and make allowance for these potential problems, in part by using less detailed but longer running fiscal records, such as the enrolled accounts, which summarise the duty paid in each port, each year. These can help set the surviving 'particular' accounts in context.

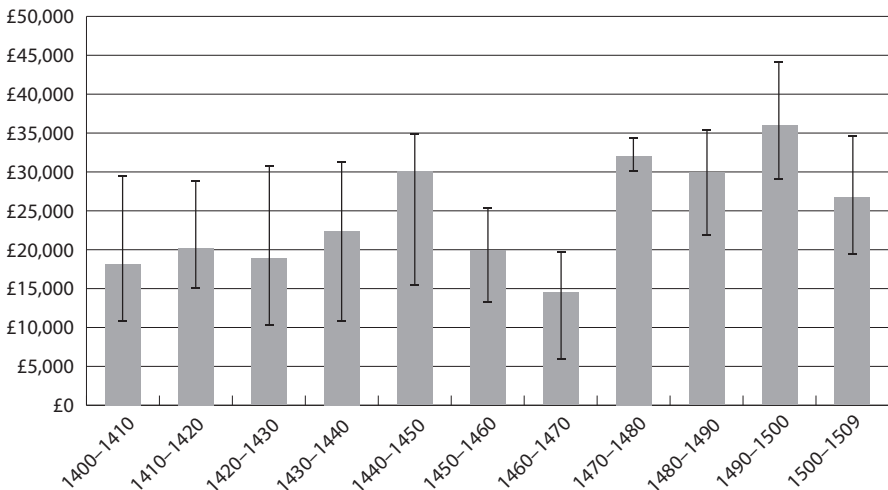
The Health of Trade

The obvious place to start an investigation of Bristol's fifteenth-century trade is with its overall health: what was the value of goods passing through the port in a given year and how did this change over time? Unfortunately, in this regard the utility of the 'particular' accounts is limited. Those accounts which survive from the middle of the century only cover parts of years and are thus not directly comparable, since the seasonality of many of the key goods in which Bristol dealt (such as wine) meant that the extent of its trade varied considerably from month to month. From the last two decades of the century, however, there are surviving accounts for three complete years. These show imports of around £13,500 in both 1485/6 and 1486/7, with a considerably higher figure of *c.*£21,100 in 1492/3. The value of the export trade was a little lower and was also subject to variation, with just £8,200 worth of exported goods recorded in 1485/6 compared to £12,300 the following year and £12,800 in 1492/3.

Fortunately, a more continuous series for annual trade values is provided by the 'enrolled' accounts, with figures for Bristol surviving for virtually every year of the fifteenth century. The enrolled accounts were compiled by the clerks of the Exchequer from the 'particular' accounts submitted by the customs officers of each port.¹⁵ For each accounting year from Michaelmas (29 September) to the following Michaelmas the clerks enumerated the number of sacks of wool and woollfells exported, the number of woollen cloths paying the Ancient Custom exported, the number of tons of wine imported and the total value of all other goods paying 'poundage', an *ad valorem* duty. These figures have been combined and nominal values for cloth and wine applied to give a total value for Bristol's trade in each year for which figures survive. The advantage of a more continuous dataset, rather than relying on individual years, is clearly illustrated by the error bars on Figure 10.1. These show that recorded trade in an individual year could deviate by £7,000 or more from the mean for its decade.

The figures from the enrolled accounts illustrate Bristol's changing commercial fortunes over the course of the fifteenth century. Having averaged around £20,000 p.a. in the first four decades of the century, the 1440s were a prosperous time for Bristol's

Figure 10.1: Decade Averages for the Value of Bristol's Overseas Trade as Recorded in the Enrolled Accounts, with Error Bars indicating Highest and Lowest Years in the Decade (in pounds sterling).



Sources: E. Power and M.M. Postan (eds.), *Studies in English Trade in the Fifteenth Century* (London, 1933), pp. 333-335; J. Vanes, 'The Overseas Trade of Bristol in the Sixteenth Century', (unpublished Ph.D. Thesis, University of London, Birkbeck College, 1975), pp. 394, 397, 400. The following years have been omitted as only partial data survives: 1409/10, 1466/7, 1467-9, 1469, 1469/70, 1470/1, 1472.

merchants, with the yearly average recorded trade up to £30,000. The loss of Gascony in 1453, however, and more importantly the loss of exclusive trading privileges for English merchants there, proved a major blow. Annual trade fell during the 1450s and dropped further in the 1460s, with 1460/1 being the worst year of the century, with a mere £6,300 worth of goods passing through the port. The Newport Medieval Ship would thus have operated in a challenging commercial environment during its lifetime (c.1449–c.1468), with wider geopolitical factors having thrown Bristol's trade into crisis.

The last three decades of the fifteenth century saw a marked recovery in Bristol's trade. During the 1470s trade averaged £32,000 and in the 1480s the average was £29,900, with no individual year falling below £21,900. The century then ended on a highpoint, with an average of almost £36,000. Such prosperity may explain why Bristol's merchants felt able to invest in Atlantic exploration, including John Cabot's search for a route to Asia, which resulted in Europe's rediscovery of North America in 1497.

The General Pattern of Bristol's Trade

The broad pattern of Bristol's trade in the later Middle Ages has long been known. Eschewing the markets in the Low Countries and the Baltic, which made up much of the trade of other English ports, Bristol exploited its westerly position to ply Europe's Atlantic coast. Although there were occasional voyages to far-flung destinations, such as Iceland and the Levant, three main areas accounted for the bulk of Bristol's trade: France, Ireland and the Iberian peninsula. Two commodities predominated; the vast majority of Bristol's export trade consisted of high quality English broadcloth, while a large portion of its imports were of wine.¹⁶

It is when looking at the makeup of overseas trade, rather than its gross value, that the 'particular' accounts are most useful. While the 'enrolled' accounts separate out cloths exported and wine imported, all other goods are lumped together as goods paying the *ad valorem* duty of 'poundage'. Moreover, the 'enrolled' accounts do not indicate where goods were coming from. The 'particular' accounts, by contrast, provide data on the make-up and direction of Bristol's commerce and how this developed over time. Previous studies, such as those of Carus-Wilson and Childs, have made use of the customs records to examine the markets and merchandise that made up Bristol's trade in the second half of the fifteenth century. On the whole, however, they have treated the 'particular' accounts as a qualitative source, using them to obtain a general impression of the types of ports and goods involved. The detailed quantitative analysis presented here will add both detail and precision to our understanding of Bristol's late fifteenth-century trade. The principal focus will fall on two accounts from consecutive years in the mid-1480s (1485/6 and 1486/7) and a further account from 1492/3. These accounts have been chosen because they are the earliest surviving accounts to

cover complete twelvemonth periods. This analysis will be supplemented by a brief examination of the surviving accounts from the 1460s, which only cover short periods of time. This will show how Bristol's trade had developed since the time of the Newport Medieval Ship.

Figure 10.2 and Table 10.1 reveal the general pattern of Bristol's trade in the 1480s and 1490s, which was dominated by trade with France, Ireland and the Iberian peninsula. Of these three markets, that with the Iberian peninsula (Spain and Portugal) was by far the most important. The combined trade with the peninsula accounted for more than 75 per cent of Bristol's exports in each of the three accounts and was almost 82 per cent of the total in 1486/7. Although less dominant, the peninsula also accounted for the bulk of Bristol's imports (72 per cent in 1486/7 and 65 per cent in 1492/3). The figure for 1485/6 is considerably lower (34 per cent), but that was the result of the unusual appearance of three ships carrying goods from Italy, the Levant and Madeira. Ireland was a small but steady presence throughout these three years, usually making up between 10 and 13 per cent of both imports and exports. Finally, French trade, which had been the backbone of Bristol's commerce before 1453, was still significant.¹⁷ Around a quarter of Bristol's imports in both 1485/6 and 1492/3 came from France. On the export side, France was much less prominent: less than 6 per cent of Bristol's exports were sent to France in 1492/3.

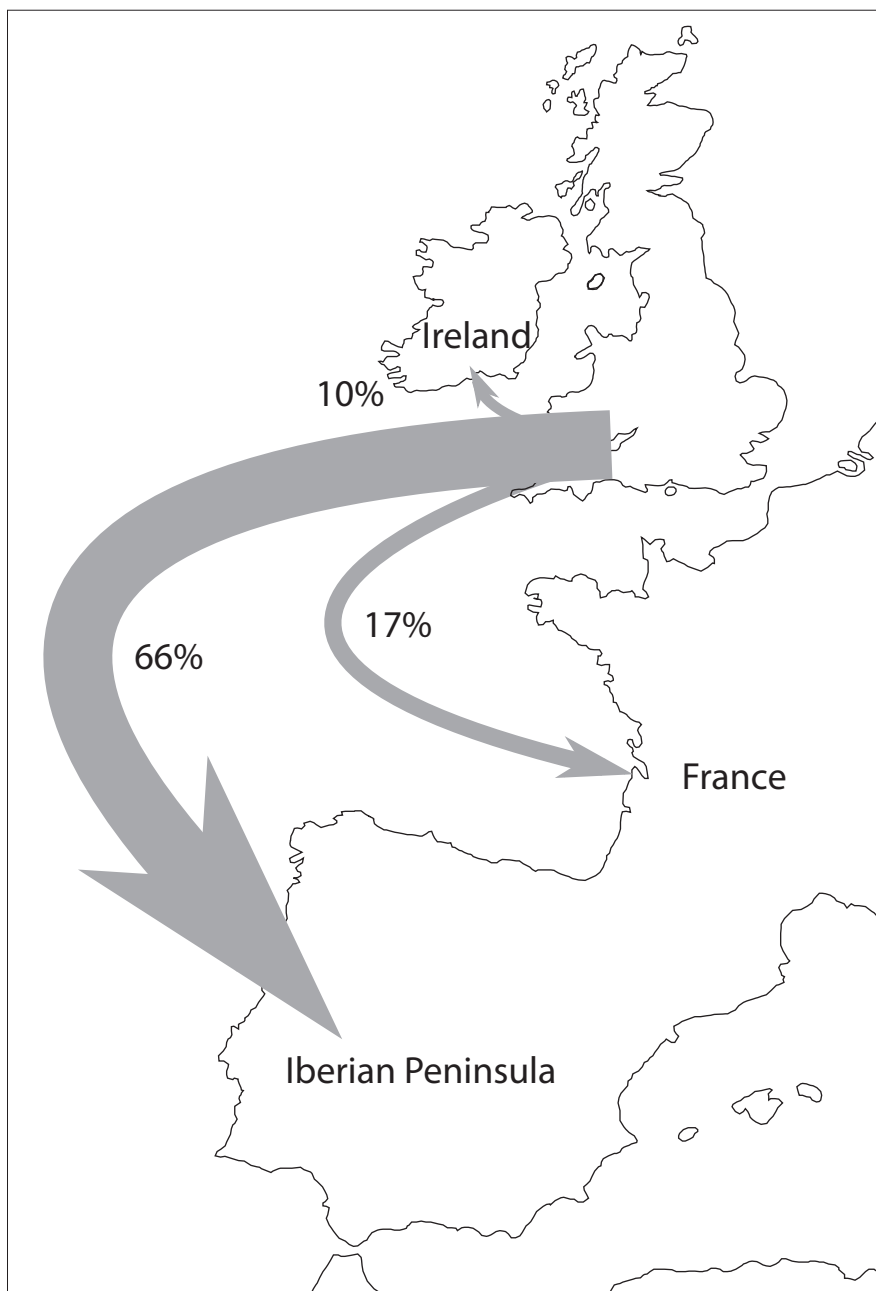
Having three sets of surviving accounts from an eight-year period highlights the extent to which Bristol's trade varied from year to year. Subject to variations in the climate (both meteorological and political), as well as in the personal fortunes of individual merchants, no year was truly typical. Imports from Spain over this period, for example, range from £2,600 in 1485/6 to £9,400 in 1492/3. Nonetheless, viewing the accounts together, a clear pattern emerges. The Iberian peninsula was Bristol's most important market, accounting for between two-thirds and three-quarters of all recorded trade; France was a distant second, accounting for around a fifth of total trade; and Ireland, at around 10 per cent, comes third.

Table 10.1: Bristol's Trade by Country of Origin/Destination 1485/6, 1486/7 and 1492/3 (in pounds sterling)

	1485/6		1486/7		1492/3	
	In	Out	In	Out	In	Out
France	£3,512	£968	£2,199	£933	£5,245	£756
Ireland	£1,795	£1,017	£1,434	£1,280	£1,499	£1,341
Portugal	£2,041	£2,005	£2,432	£2,261	£4,146	£3,528
Spain	£2,592	£4,198	£7,219	£7,816	£9,429	£6,793
Other	£3,667	£10	£163	£42	£782	£371

Sources: TNA: PRO E122/20/5, E122/20/7, E122/20/8.

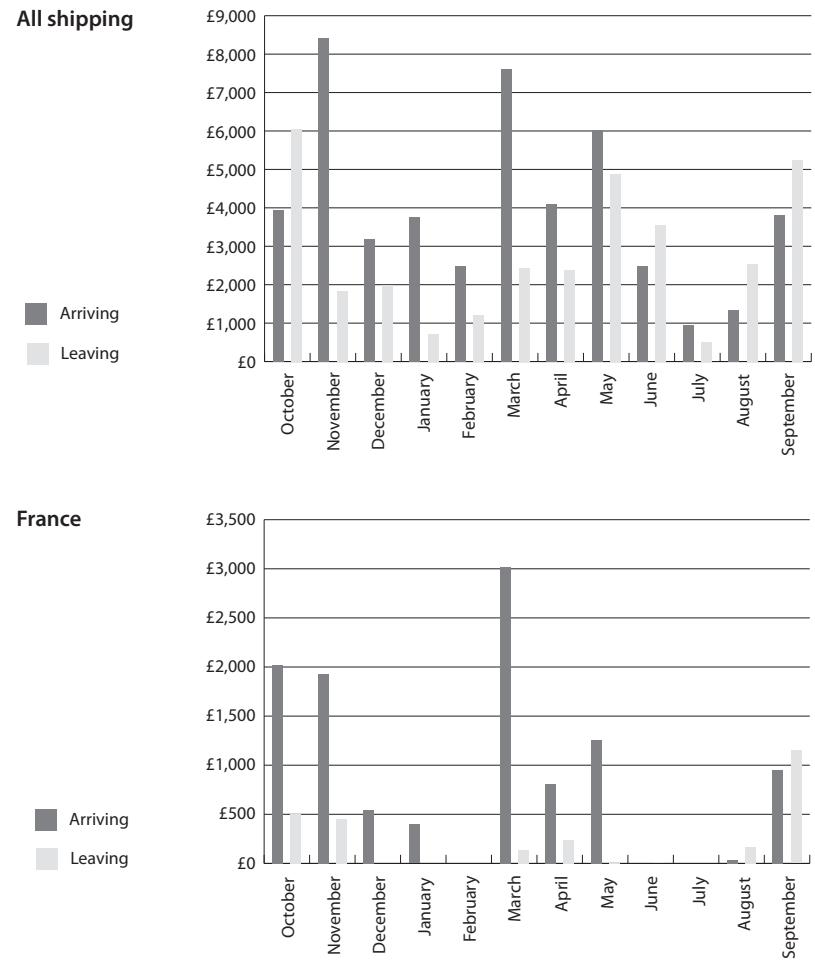
Figure 10.2: Bristol's Trade by Country of Origin/Destination 1485/6, 1486/7 and 1492/3 (in pounds sterling)

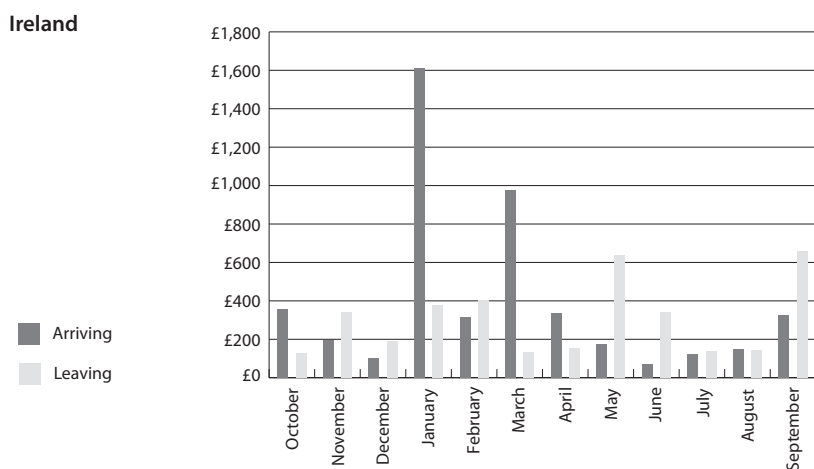
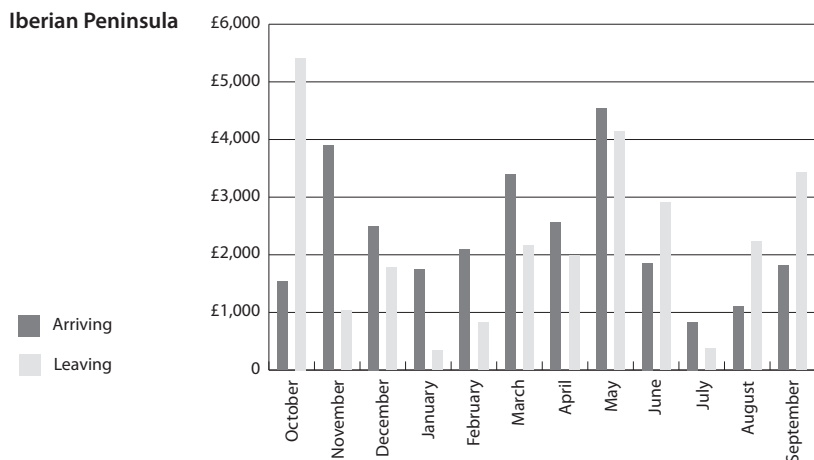


Seasonal Pattern of Bristol's Trade

The dating of shipments in the 'particular' accounts allows us to examine the seasonal patterns of Bristol's trade (see Figure 10.3). This is a useful exercise both in its own right, and because it aids the interpretation of the accounts of the 1460s–70s, where records survive for only parts of individual years. The seasonal pattern was subject to a significant degree of year-to-year variation. While merchants were always keen to get their goods to market as quickly as possible in order to obtain the best prices, adverse weather conditions, a late harvest, or political events could all delay the sailing of a particular vessel, or even the whole fleet.

Figure 10.3: Bristol's Trade by Month, 1485/6, 1486/7, and 1492/3 (in pounds sterling)





Sources: TNA: PRO E122/20/5, E122/20/7, E122/20/8. Values are the aggregate for the three years.

The quietest time in Bristol's commercial calendar was the high summer. In all three sets of accounts, the value of trade recorded in July and August was significantly lower than in the peak months. With the onset of autumn Bristol's docks bustled once more. Exports peaked in September and October, with up to £3,000 worth of goods dispatched each month to France and the Iberian peninsula. Once sold, the proceeds were used to buy wine from the new vintage, along with other seasonal products such as olive oil. The ships' return during the winter and spring was more piecemeal and also more prone to variation. Some vessels returned as early as October and November, allowing them to fit a second voyage into the year. But many returned later, with some not coming home till the spring. Overall, the peak months for imports were March to

May. Dependent as it was on wine production, the trade with Portugal and France was the most seasonal of Bristol's trades, voyages tending to cluster around these autumn and spring sailings. Trade with Spain was less seasonal than that with France and Portugal, with some activity being recorded in all months of the year. The early summer saw a second peak of exports to northern Spain, with £3,400 worth of goods dispatched in May to June 1493. Production of the return imports of iron and woad from this region, unlike wine, was not seasonal, so trade continued throughout the summer.

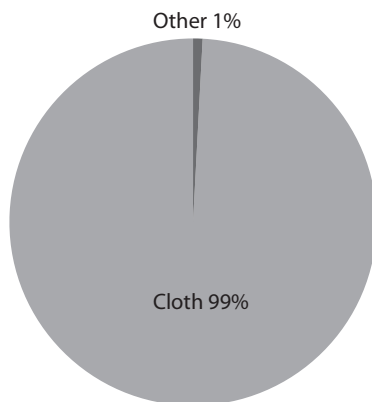
Bristol's trade with Ireland exhibited a very different pattern, with activity continuing throughout the year. Both imports and exports were recorded in every month, although the period from January to March was generally the peak season. For example, almost £1,100 worth of Irish goods were imported in January 1486, more than half of all Irish imports that customs year. During the sixteenth century, such a pattern was associated with a concentration of activity associated with Bristol's winter fairs.¹⁸

A large vessel such as the Newport Medieval Ship was best suited to the wine trade, and the archaeological evidence indicates that it was involved in trade with southern Iberia, carrying back casks that had almost certainly been filled with wine or olive oil. In a normal year, the ship would have left the Severn between September and October, spending the winter in Lisbon, where Bristol's Iberian trade was concentrated during the 1460s. In some years, the ship might have returned before the end of winter, allowing it to fit in a spring-summer voyage to Iceland or northern Castile. But if it did not get back till the spring, this might not have been possible. At most, the ship would have been able to make two trips a year.

Iberian Trade

The branch of Bristol's trade that saw both the most significant expansion and the greatest change over the course of the second half of the fifteenth century was that with the Iberian peninsula. Bristol's export trade with the peninsula was typical of its continental trades, being dominated by one commodity: woollen broadcloth. Cloth made up more than 98 per cent of Bristol's Iberian exports in all three of the 'particular' accounts of the 1480s and 1490s. While other commodities, such as alabaster tablets, wheat, beans and tin were exported, these were in such small quantities as to be statistically insignificant. Figure 10.4 highlights the advantage of using detailed statistical analysis to examine trade. While previous accounts of Bristol's fifteenth century exports have recognised the great importance of woollen cloth, a tendency to list cloth alongside the other commodities, without giving any indication of their relative value, has obscured the dominance of the cloth trade.¹⁹ Bristol's fifteenth century continental exports were truly a cloth monoculture, whatever the year and whatever the region.

Bristol's Iberian imports were more diverse in character than the exports and showed greater variation, depending on the part of the peninsula from which they came (see Figure 10.5). The general pattern was that the further south ships came

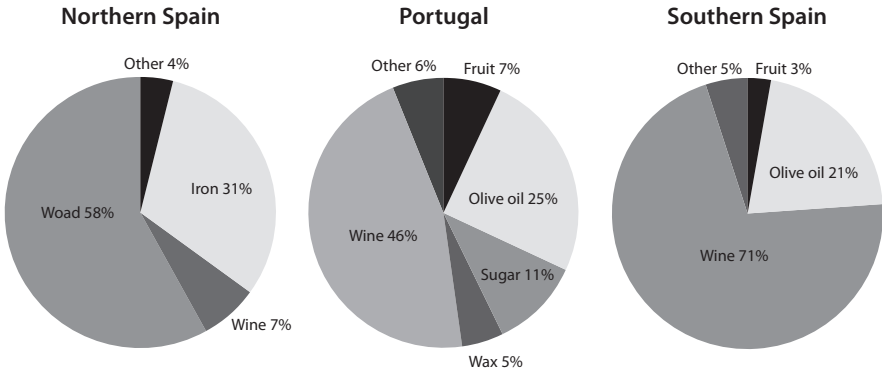
Figure 10.4: Bristol's Exports to Iberia by Commodity (in pounds sterling).

Sources: TNA: PRO E122/20/5, E122/20/7, E122/20/8.

from, the more important wine became. Many of the entries are declared as coming from 'Hispania'. This term seems to have been used only for the ports of northern Castile, the trade to southern Castile being recorded as 'Andalusia', or by specified ports, such as Seville. Amongst the goods coming from 'Hispania', which made up about around a third of the value of Bristol's Iberian imports,²⁰ wine was a relatively minor commodity, making up between 5 and 8 per cent of imports. The most important commodities were the dyestuff woad (around half the total) and iron (about a third of imports from northern Spain).²¹ Moving further south, wine became progressively more important, accounting for about half of Bristol's Portuguese imports. The remainder of this trade was a mixture of raw materials and minor luxuries. Chief amongst these were substantial quantities of olive oil (used to clean wool) and smaller quantities of dried fruit, salt and wax. Noteworthy, although not yet economically significant, are several early shipments of sugar, at this time an expensive luxury and probably produced in Portugal's new colonies in the Atlantic islands. Bristol's imports from southern Spain show a similar mix of commodities, although wine (at between 62 and 85 per cent) was more dominant and olive oil slightly less important.

The fact that only part-year accounts survive from the 1460s to the 1470s makes it difficult to establish the development of Bristol's Iberian trades before the 1480s. The closest to a complete year that survive from the time of the Newport Ship are two accounts which, when combined, cover the period from 29 September 1465 to 14 May 1466.²² While this is just seven-and-a-half months, it includes the most important period of Bristol's commercial year. Of the four-and-a-half months which are missing, three occur in the usually quiet period of June, July and August. Furthermore, comparison with the 'enrolled' accounts suggests that the trade recorded (just under £13,000) represented two-thirds of the total (£19,500) that passed through Bristol

Figure 10.5: Bristol's Iberian Imports by Commodity, in the 1480s and 1490s (in pounds sterling)



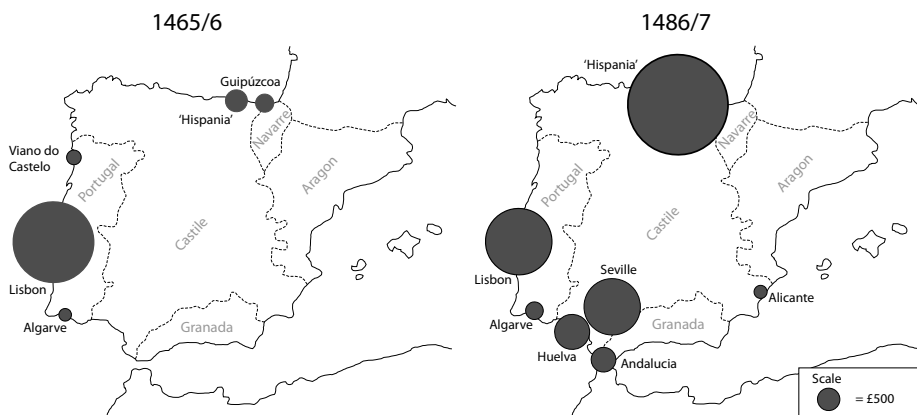
Sources: TNA: PRO E122/20/5, E122/20/7, E122/20/8.

between Michaelmas 1465 and Michaelmas 1466.²³ Treated with caution, therefore, the 1465/6 'particular' accounts, along with other later fragments, can give a reasonable insight into Bristol's trade in the 1460s.

As discussed earlier, Iberian trade became increasingly important to Bristol in the latter half of the fifteenth century, accounting for three quarters of the port's overseas commerce by the 1480s. As noted by previous historians, this was associated with the growing importance of Castile.²⁴ The growth of Anglo-Castilian trade is clearly reflected in the data from the 'particular' accounts (see Figure 10.6). As the 1465/6 accounts show, Bristol's Iberian trade was dominated by Lisbon in Portugal. Lisbon alone accounted for around 80 per cent of Iberian trade recorded in this seven-and-a-half month period, with Castile playing a relatively minor role. Little over £500 worth of goods were recorded as being from northern Castile, and on the export side goods worth just £250 were sent to this region, along with goods worth nearly £400 bound for Seville in the south.

By the 1480s the balance of Bristol's Iberian trade had changed, with Castilian trade outstripping that of Portugal. As Figure 10.6 shows, in 1486/7 Bristol's Castilian imports were almost twice those from Lisbon. While Lisbon's trade fell from £3,400 in 1465/6 to £2,300 in 1485/6, Castilian imports grew from £500 to £4,000 in the same period. A significant trade also developed with southern Castilian ports, with £1,200 of imports from Huelva and £1,500 from Seville in 1486/7. Similar trends are observable in the export trade; in 1485/6 and 1492/3 Bristol's Castilian trade was two or three times greater than that with Portugal. There are a number of reasons for these developments. Following the loss of Gascony in 1453, Bristol's merchants initially turned to Portugal as a market for English cloth and an alternative source of wine.²⁵ Then, as relations between England and Castile improved during the 1460s, cemented by a treaty in 1466, commerce with Castile expanded. As Childs has noted, the treaty

Figure 10.6: Bristol's Iberian Imports by Port of Origin (in pounds sterling)



Sources: TNA: PRO, E122/19/4, E122/20/7.

A depiction such as this needs to be treated with an element of caution, as destinations were not necessarily exclusive. It was relatively common for a ship to visit more than one port in the course of a voyage, but usually only the immediate port of origin/destination would be declared to the customs officers.

offered both greater security for the merchants, and the right of English merchants to trade as if they were Castilians, with resultant lower duties.²⁶ The attraction of more favourable customs rates on their trade would certainly explain the apparent shift of some of Bristol's Iberian trade from Lisbon to Castile. This trend is apparent in the Bristol customs accounts by the early 1470s. Accounts covering the period from late Easter to Michaelmas survive from five successive years, from 1471 to 1475. They show that, just a few years after the Anglo-Castilian treaty, Bristol's trade with the region had already grown substantially, trade volumes often equalling those of the same months in the 1480s and 1490s. For example, imports worth £4,700 from Castile in July and August 1473 were ten times higher than the figure for 1461. The shift towards Castile was thus rapid once the underlying conditions for commerce had improved.

French Trade

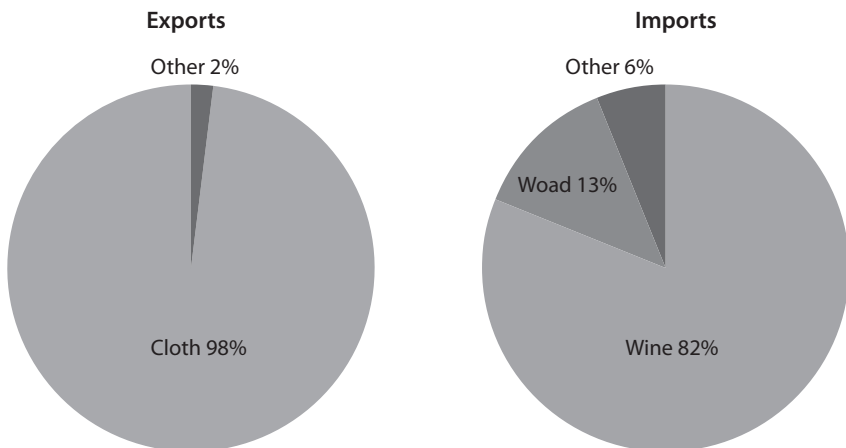
While Bristol's Iberian trade boomed in the second half of the fifteenth century, the city's French trade shrank following England's loss of Gascony in 1453. Until that time Bristol's trade had focused heavily on Bordeaux, rooted in trading privileges and long-established commercial ties.²⁷ The lack of surviving 'particular' accounts from the first half of the fifteenth century is frustrating, since it prevents a direct comparison of the situation before and after 1453. The surviving accounts from the 1460s do, however, allow us to trace the faltering recovery of the Bordeaux trade. Such was the strength of commercial ties between England and Gascony that some trade continued despite the

political disruption. In September 1461, more than £400 of exports to Bordeaux were declared, suggesting that, eight years into French rule, a significant trade still existed. Covering the period from 29 September to 14 May, the pair of surviving accounts from 1465/6 are better placed for examining trade with France. These accounts confirm that, while Gascon trade had not ceased entirely, it now formed a small part of Bristol's overseas commerce, with imports from France accounting for less than a fifth of the total.

By the 1480s and 90s French trade had seen a revival, credit for which may be given to the Treaty of Picquigny (1475), which lifted many of the restrictions on commerce.²⁸ Although still clearly prone to fluctuation in the unstable political climate, in 1486/7 French imports (£2,200) were almost double those in 1465/6. The figures from 1485/6 and 1492/3 were higher again, at £3,500 and £5,200 respectively. This partial recovery is also reflected in the volume of wine imported to Bristol from France. While just 247 tons were imported in 1465/6, by 1485/6 this had risen to 643 tons and by 1492/3 it amounted to 1,180 tons. But this was still a long way behind the 2,000 or more tons per year imported at the height of Bristol's Gascon trade during the early fifteenth century, as recorded in the 'enrolled' accounts.²⁹

Bristol's export trade with France was virtually identical to that with the Iberian peninsula (see Figure 10.7). Woollen cloth accounted for 97 per cent of exports, occasionally supplemented by other commodities such as fish and coal. In terms of imports, the foundation of this trade had always been Gascon wine, and this remained the case in the 1480s and 1490s. Wine accounted for more than 73 per cent of the value of recorded French imports in each of the three accounts examined here. The only other significant commodity was woad, making up about 20 per cent of French imports in 1485/6.

Figure 10.7: Bristol's Trade with France by Commodity, in the 1480s and 1490s (in pounds sterling)



Sources: TNA: PRO E122/20/5, E122/20/7, E122/20/8.

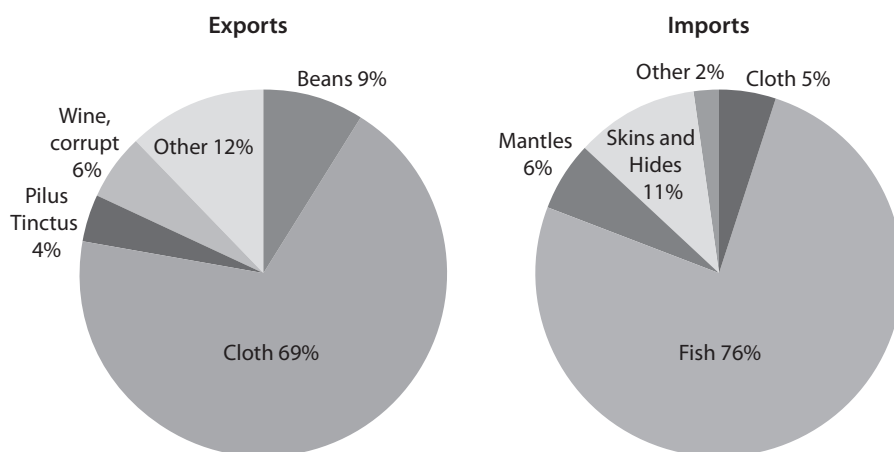
Whereas Bristol's Iberian trade had seen increasing geographical diversification in the second half of the fifteenth century, the city's French trade remained remarkably consistent in its focus on Gascony. This may seem surprising, since Gascony was no longer an English possession after 1453. Carus-Wilson suggested that Bristol developed new contacts in Brittany and Normandy following the disruption of Gascon trade. Yet in the long run these seem to have been of minimal economic significance, with trade to Brittany and other French ports accounting for just a few per cent of French trade in the 1480s and 1490s. England's love of claret wine ensured that Bordeaux remained the principal draw for Bristol's merchants.

Irish Trade

The most stable of Bristol's trades in the latter half of the fifteenth century was that with Ireland. Remote from the disruptive effects of international wars, Irish trade was not affected by the violent swings experienced by the other branches of Bristol's commerce. A steady flow of goods to and from Ireland is recorded in the 'particular' accounts surviving from the latter half of the sixteenth century, with little difference being observable in either the scale or the make-up of the trade.

As Figure 10.8 shows, the commodity make-up of Bristol's trade with Ireland was very different from the continental trades. On the export side, woollen cloth was still by far the most important commodity, making up 60 to 80 per cent of exports in the 1480s and 1490s. Other commodities, however, played a much more important part than in the continental trade. Particularly notable are exports of salt and corrupt wine,

Figure 10.8: Bristol's Trade with Ireland by Commodity, in the 1480s and 1490s (in pounds sterling)



Sources: TNA: PRO E122/20/5, E122/20/7, E122/20/8.

used as preservatives in Ireland's considerable fishing industry. These make up 7 to 8 per cent of exports across the three accounts. Foodstuffs were also a regular export, with considerable quantities of beans accounting for 7 to 10 per cent of exports, along with lesser amounts of malt and wheat. A diverse range of wares made up the rest of Bristol's exports to Ireland, with forty-two different commodities appearing across the three years' accounts besides cloth. Particularly notable are the mordant alum (exports of which were worth £100 in 1486/7) and *pilus tinctus* (probably dyed wool)³⁰ to supply the developing Irish cloth industry. Other goods included re-exported luxuries such as silk, saffron and even small quantities of spices such as ginger and cinnamon. Some in Ireland clearly had wealth to spare for the conspicuous consumption of foreign luxuries.

Among Bristol's imports from Ireland, fish was by far the most important commodity; in each of the three accounts more than £1,000 worth of fish was imported, making up between 68 and 80 per cent of total Irish imports (see Figure 10.8). Most were saltwater fish such as herring and hake, although there were also considerable quantities of freshwater salmon (amounting to almost £600 in 1485/6). Cow hides only feature significantly in the 1485/6 account, when more than £100 worth were imported, but other skins were a regular feature. Sheep and lamb skins (specified as being 'without wool'), made up around 11 per cent of Irish imports in 1492/3. Skins of wild animals such as deer, fox and marten were also imported, but total values never amounted to more than a few pounds a year. In addition, there were small but steady imports of woollen 'check', linen and mantles (a type of cloak). Such cloth and clothing amounted to £200 (14 per cent) of Bristol's Irish imports in 1492/3. Although never in particularly great quantities, there are also examples of Iberian goods such as cork, fruit, olive oil, sugar and wine arriving from Ireland, mixed in with more typical Irish products. This suggests that Ireland's direct trade with the Iberian peninsula sometimes reached a sufficient scale for it to be worth re-exporting surpluses to England.

Unfortunately, the 'particular' accounts do not permit analysis of the geography of Bristol's Irish trades, since the customs officers did not specify where in 'Hibernia' vessels were going to or coming from. On the other hand, the fact that most of the Irish vessels involved in the trade were from the Anglo-Irish ports of the south coast, such as Waterford, Wexford, Dungarvan and Cork, suggests that Bristol had only limited contact with other parts of Ireland, including Dublin.³¹

Other Trades

Novelty always attracts attention and much has been written on Bristol's dealings with more distant parts during the fifteenth century.³² Their economic significance, however, was both short term and relatively minor. In spite of all of the upheaval which characterised this period, Bristol's focus remained on its three traditional markets in France, Ireland and the Iberian peninsula.

Most regular amongst the other trades was that with Iceland, a trade that commenced in the early fifteenth century. Iceland voyages appear in the accounts for 1461, 1470, 1471, 1472, 1473, 1475, 1485/6 and 1492/3.³³ On the export leg, vessels carried a mix of commodities, including the usual woollen cloth as well as foodstuffs, salt and iron. In return, the vast majority of their cargo was made up of stockfish (wind-dried cod) that had been bought from the Icelanders, along with much smaller quantities of other goods, such as cloth and hides. Trade with Iceland occurred in the summer months, when the weather was better and the much longer days made navigation easier. One of the advantages of the Iceland trade was that it fitted well with the seasonal pattern of Bristol's long-distance commerce. Ships could be sent out on a voyage to Iceland during the slack spring-summer months and then be back in Bristol in time to be sent out again in the autumn, ready for the next wine vintage. Yet with a plentiful supply of fish on its doorstep in Ireland, Bristol had little need to venture out into the deep Atlantic and the Iceland trade declined in the later fifteenth century. Although almost £500 worth of imports were recorded in 1461, in the later accounts Icelandic trade never amounted to much more than a couple of hundred pounds and made up less than 2 per cent of total trade.³⁴

The customs account which records the most varied trade is that from 1485/6, where almost 25 per cent of imports were made up of trade brought on three ships coming from Pisa in Italy, the Levant and Portugal's Atlantic island colony, Madeira. This was not the first time Bristol had shown an interest in the Mediterranean, but it had never become a regular feature of the city's trade.³⁵ Of these three vessels coming into Bristol in this year, two appear to be entirely non-Bristol ventures. The ship from Madeira, carrying a cargo worth £560 which consisted almost entirely of sugar, was Portuguese and the merchants who freighted goods on her were mostly aliens.³⁶ The vessel from Pisa is a little more difficult to place, but would also appear not to be a Bristol venture.³⁷ On arrival the ship was described as the *Olyver* of Galway (Ireland). This may, however, be no more than a clerical error, in that the master Gaspar Eanes was an alien and on her departure the ship's homeport is listed as Lisbon. The main constituent of her cargo was £2,000 worth of alum, shipped jointly by Edmund Deme and Dominic Lynche. These two men are recorded as denizens but only appear in the 1485/6 account, which would suggest that they are not local. The remainder of the cargo consisted principally of £120 worth of wine and malmsey wine and £150 worth of sugar, along with smaller quantities of a range of other goods. In all sixteen men declared goods from the vessel, of whom eleven were aliens.

Perhaps most interesting of the three vessels declaring from unusual destinations in 1485/6 is the *Marie* of Bilbao, which arrived in Bristol on 6 June 1486 from the 'Leauvant', which to contemporaries meant the eastern Mediterranean.³⁸ Her cargo, worth £530 in all, consisted principally of £380 worth of wine and £120 worth of pepper (an unusual commodity to be bringing into Bristol in such a large quantity at this time). Along with some cloth and dried fruit, there were also small amounts of

such exotic goods as cinnamon, mercury, nutmeg and silk. It is the merchants involved in this voyage who make it most interesting. Of the twelve men who declared goods from the *Marie*, none were alien and only four (including the master) were noted as 'de Hispania' (the Customs officers' shorthand for Castilian). Their goods accounted for about 20 per cent of the cargo. Most of the other merchants were Bristol men who feature regularly in the customs records and were involved in multiple branches of the port's trade. Thomas Appowell and Janicot Barrero were middle-ranking merchants involved in the Iberian and French trades, while the two largest investors, John Esterfeld (£180) and John Hemyng (£120), were among Bristol's most prosperous merchants and leading civic figures.³⁹ Although the voyage is unusual, it provides insight into the ambitions and prosperity of Bristol's merchants at this time. Thirty years earlier the Bristol merchant Robert Sturmy had tried and failed to break the Italian monopoly of the Levant trade, with an ill-fated voyage to Chios. Although Sturmy's three ships fell foul of Genoese-backed pirates, the 1486 voyage of the *Marie* shows that Bristol's merchants were not entirely deterred by that disaster. Now operating in collaboration with Castilians from the Basque Country, they met with greater success. This voyage is also interesting as it helps to set the context for the Cabot voyages of the latter 1490s. The quest for eastern luxuries was clearly in the mind of Bristol's merchant community more than a decade before Cabot attempted to reach China by sailing west across the Atlantic. On the other hand, the fact that such Mediterranean voyages did not recur in either 1486/7 or 1492/3 suggests that this had been an experimental venture that had perhaps not been profitable enough to be considered worth repeating. Such voyages were pursued at the margins of Bristol's trade and this would continue to be true for another 150 years. Only in the mid-seventeenth century would Bristol's merchants finally shifted their focus away from the Atlantic seaboard of Europe and across the Atlantic to the Americas.⁴⁰

Conclusion

Quantitative analysis of the customs records gives us a much clearer picture of the nature and development of Bristol's overseas trade in the second half of the fifteenth century, augmenting our understanding of the context in which the Newport Medieval Ship operated. Three principal conclusions can be drawn about this trade. The first is that the goods carried were very predictable. Woollen cloth accounted for up to 99 per cent of Bristol's export trade, while wine would have accounted for much of its import cargo from continental ports. The second conclusion is that Bristol-based ships traded with a limited number of ports. Nearly all trade was conducted along Europe's Atlantic coast with ports in western France, southern Ireland and the Iberian peninsula. Further flung voyages were very unusual. The third conclusion is that the volume of trade, the peak months of activity and the exact destinations of ships could vary significantly from year to year. External factors, such as the weather or the timing

of the grape harvest, could impact on the departure and arrival of ships during a given year. In the longer term, however, it was political, not economic, factors which had the biggest impact on overseas trade. England's loss of Gascony in 1453 and the treaties of 1467 and 1475 stand out as crucial turning points, forcing or permitting major realignments in Bristol's commerce.

The 1450s and 1460s, when the Newport Medieval Ship sailed the seas, were two of the most tumultuous decades of the fifteenth century. They witnessed the loss of England's dominions in France, the forging of a new alliance with Castile and the outbreak of the Wars of the Roses at home. It is thus unsurprising that the 'enrolled' accounts show this to have been a very difficult period for Bristol's trade. Full recovery only occurred during the 1470s, in response to the restoration of peace with France and, more importantly, the growth of trade with Spain that followed the Anglo-Castilian treaty of 1467. Overseas trade could be prosperous in the late Middle Ages but it depended on a favourable political environment. Such conditions did not exist during the 1450s and 60s. So, whoever owned the Newport Medieval Ship and wherever it sailed, its life would have been shaped by war and the uncertain commercial and political conditions of its time.



Notes

- 1 I am indebted to the Cabot Project for creating the digital versions of the 'particular' accounts on which this chapter is based. In particular, I want to thank Margaret Condon and Tim Bowly for their transcriptions and Glenys Phillips for her digitisation of previously published accounts. I hope to publish the data behind the graphs in this chapter in an online appendix.
- 2 Unlike the remains of the Newport Ship, the customs records are not a newly discovered resource. Numerous scholars have worked on fifteenth-century overseas trade, and specifically that of Bristol. Their analysis, however, has tended to be qualitative rather than statistical and often focused on just one branch of trade. Significant previous studies of Bristol's fifteenth-century trade include: E. M. Carus-Wilson, 'The overseas trade of Bristol in the fifteenth century', in her *Medieval Merchant Venturers* (London, 1954), pp. 1–97; E. M. Carus-Wilson (ed.), *The Overseas Trade of Bristol in the Later Middle Ages*, Bristol Record Society, Vol. VII, (Bristol, 1937); W. R. Childs, *Anglo-Castilian Trade in the Later Middle Ages* (Manchester, 1982); W. R. Childs, 'Anglo-Portuguese Trade in the Fifteenth Century', *Transactions of the Royal Historical Society*, 2 (1992), pp. 195–219; W. R. Childs, 'Irish Merchants and Seamen in Late Medieval England', *Irish Historical Studies*, 32/125 (2000), pp. 22–43; T. Bowly, "'Herring of Sligo and salmon of Bann": Bristol's maritime trade with Ireland in the fifteenth century', in R. Gorski (ed.), *Roles of the Sea in Medieval England* (Woodbridge, 2012), pp. 147–66; see also Wendy Childs's chapter in this volume.

- 3 N. S. B. Gras, *The Early English Customs System* (Cambridge, 1918), p. 84; S. Flavin and E. T. Jones, *Bristol's Trade with Ireland and the Continent, 1503–1601: The Evidence of the Exchequer Customs Accounts*, Bristol Record Society, Vol. 61, (Bristol, 2009), p. xx. Customs duties at this time fell into two principal categories: specific duties, determined by the weight or volume of the goods, and *ad valorem* duties, determined by their value. The analysis in this chapter uses the value of the goods, as this facilitates comparisons between different branches of trade and commodities. It creates a problem, however, as two of the key commodities for Bristol's fifteenth-century trade, wine and broadcloth, paid 'specific' volume-based duties. For these goods, therefore, a nominal value has to be inserted in order to allow comparative analysis. Throughout this chapter, wine is thus valued at £4 per tun, broadcloth at £2 per cloth of assize, and leather at £1 per dicker. These values (adopted from the ESRC funded project Ireland-Bristol Trade in the Sixteenth Century; the datasets at <http://www.bris.ac.uk/Depts/History/Ireland/datasets.htm> [accessed 21 July 2015]) are roughly in line with the valuations of goods paying poundage.
- 4 Carus-Wilson, *Overseas Trade of Bristol*, p.7; <http://www.nationalarchives.gov.uk/help-with-your-research/research-guides/medieval-customs-accounts/> [accessed 21 July 2015].
- 5 Gras, *Early English Customs System*, pp. 105–6.
- 6 Gras, *Early English Customs System*, p. 105.
- 7 Jones and Flavin, *Bristol's Trade*, p. xix.
- 8 E. T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol* (Farnham, 2012), p. 68.
- 9 D. Taylor, 'The maritime trade of the smaller Bristol Channel ports in the sixteenth century', (unpublished PhD thesis, University of Bristol, 2009).
- 10 See Peter Fleming's chapter in this volume.
- 11 E. T. Jones, *Inside the Illicit Economy*, ch. 9.
- 12 See Evan Jones's chapter in this volume.
- 13 This figure is from the 1492/3 Bristol Particular Customs Account: TNA: PRO E122/20/8.
- 14 Carus-Wilson, *Overseas Trade of Bristol*, p. 7.
- 15 Carus-Wilson, *Overseas Trade of Bristol*, pp. 9–11.
- 16 Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', p. 13; see also Wendy Childs's chapter in this volume.
- 17 J. W. Sherborne, *The Port of Bristol in the Middle Ages* (Bristol, 1965), pp. 7–12.
- 18 S. Flavin, 'Consumption and material culture in sixteenth-century Ireland', (unpublished PhD thesis, University of Bristol, 2011), p. 64.
- 19 See for example: Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', pp. 38, 52.
- 20 25 per cent in 1485/6, 42 per cent in 1486/7, and 37 per cent in 1492/3.
- 21 The woad would in fact have been grown in the south of France rather than Spain (indeed, in later accounts it is often referred to as 'Toulouse woad'. The wine on these vessels is also likely to have been French in origin, either picked up en route or shipped coastwise to northern Spain. S. Flavin and E. T. Jones (eds), 'A glossary of commodities, weights and measures found in the sixteenth-century Bristol customs account', (2009), p. 107 at <http://research-information.bristol.ac.uk/files/3015669/glossarycommodities.pdf>.
- 22 TNA: PRO E122/19/3 and E122/19/4.

- 23 E. Power and M. M. Postan (eds), *Studies in English Trade, in the Fifteenth Century* (London, 1933), p. 335.
- 24 Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', pp. 55–8; Childs, *Anglo-Castilian Trade*; see also Wendy Childs's chapter in this volume.
- 25 TNA: PRO E122/19/3, E122/19/4 and E122/20/7.
- 26 See Wendy Childs's chapter in this volume.
- 27 Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', pp. 28–9.
- 28 Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', pp. 47–9; see also Wendy Childs's chapter in this volume.
- 29 See Wendy Childs's chapter in this volume.
- 30 Flavin and Jones, *Bristol's Trade*, p. 956.
- 31 Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', pp. 14–19.
- 32 See, for example: Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', pp. 64–73; Carus-Wilson, 'The Iceland venture', in her *Medieval Merchant Venturers*, pp. 98–142; P. V. McGrath, 'Bristol and America, 1480–1631', in K.R. Andrews et al. (eds), *The Westward Enterprise: English Activities in Ireland, the Atlantic and America 1480–1650* (Liverpool, 1978).
- 33 TNA: PRO E122/19/1, E122/19/7, E122/19/8, E122/176/27, E122/19/10, E122/18/39, E122/19/11, E122/20/5, E122/20/8.
- 34 Bristol's recorded trade with Iceland was: £477 imports 1461; £106 exports 1466; £155 imports 1470; £63 exports and £40 imports 1471; £30 exports 1472; £37 exports and £59 imports 1473; £83 exports and £183 imports 1475; £273 imports 1485/6; £53 exports 1492/3.
- 35 Carus-Wilson, 'Overseas trade of Bristol in the fifteenth century', pp. 64–73; and S. Jenks (ed.), *Robert Sturmy's Commercial Expedition to the Mediterranean*, Bristol Record Society, Vol. 58, (Bristol, 2006).
- 36 TNA: PRO E122/20/5 ff. 31r/v.
- 37 TNA: PRO E122/20/5 ff. 3r/v, 12v.
- 38 TNA: PRO E122/20/5 ff. 25r/v.
- 39 TNA: PRO E122/20/5, E122/20/7, E122/20/8.
- 40 R. Stone, 'Overseas trade of Bristol in the seventeenth century', (unpublished PhD thesis, University of Bristol, 2012), ch. 3.

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THE IBERIAN ECONOMY
AND COMMERCIAL
EXCHANGE WITH
NORTH-WESTERN EUROPE
IN THE LATER
MIDDLE AGES

Hilario Casado Alonso and Flávio Miranda



THE ARCHAEOLOGICAL EVIDENCE suggests the Newport Medieval Ship was built in the Spanish Basque Country but was engaged, during at least part of its life, in the trade between southern Iberia and the Bristol Channel. Neither should be a surprise, given that Bristol's customs accounts indicate that commerce between Iberia and the Severn Sea represented a major and growing component of overseas trade at this time. As Wendy Childs discusses in this volume, political developments explain part of this growth. On the other hand, the expansion in overseas trade and shipping between Iberia and north-west Europe was, more fundamentally, a consequence of the Iberian peninsula's economic success during the late medieval period. Understanding the nature and causes of Iberia's growth is thus key to understanding both the Newport Ship's origin and how it was used.

During the 1450s and 1460s, when the Newport Medieval Ship sailed the seas, the Iberian peninsula was one of Europe's busiest commercial regions. Every year, thousands of vessels passed between the Atlantic and the Mediterranean, connecting almost every major port town located between Constantinople and Bruges. Midway between the Levant and the Baltic Sea, places like Valencia, Seville and Lisbon emerged as essential ports of call for merchants and adventurers, both because of their geostrategic position and their commercial potential. The fact that Iberia recovered relatively quickly from both the Black Death (1347–9) and the political conflicts of the fourteenth century enabled the peninsula to develop faster than the core regions of Europe. Iberia's rise in the European economy was further accelerated by the adoption of innovative commercial techniques by Castilian merchants, the Portuguese expansion to western Africa and the Atlantic islands and the discovery of America by Christopher Columbus, in the service of the Catholic monarchs of Spain. These developments did not just change Iberia's commercial ranking within Europe; they served to 'pull the medieval economy out of stagnation'.¹

A number of factors contributed to the economic development of Iberia in the later Middle Ages: rising population, urban growth, commercial expansion, financial innovation and oceanic exploration. In this chapter we will examine those elements that contributed to, or impacted on, the commercial connections Spain and Portugal

established with north-west Europe during the fourteenth and fifteenth centuries. This chapter is divided into three parts. The first will present an overview of the Spanish and Portuguese economies in the Middle Ages, covering population, urban growth, production, institutions and commercial techniques. The second part will examine the expansion of Iberian overseas trade with north-west Europe, in the process considering the importance of political events, trading routes and commodities in the formation of commercial networks. The final part will focus on Anglo-Iberian trade in the later Middle Ages, discussing the economic relations between England, Castile and Portugal, before presenting brief case studies on the role of Bristol in Anglo-Iberian trade and the Bilbao-London trading route.

An Overview of the Spanish and Portuguese Economies

With an area of approximately 225,000 square miles and roughly 6.5 million inhabitants by the end of the fifteenth century, Iberia was made up of several kingdoms, each with distinct languages, culture and religions. These differences influenced the development of the peninsula, the formation of urban networks within it and the nature of commercial expansion between both Iberia's kingdoms and the rest of Europe.

Population and Urban Growth

Castile was the largest of Iberia's kingdoms and the one that experienced the most rapid population growth during the late medieval to early modern period: 3.4 million inhabitants in 1400, 4 million in 1480, 4.5 million in 1530 and 6.5 million by 1580. By contrast, Portugal had 1.5 million people in 1500 and the other Iberian kingdoms just 1 million. Castile thus accounted for 80 per cent of Spain's population by the late fifteenth century.² By comparison, England, with just 2 million inhabitants in 1500, had just half the population of Castile.³

Iberia's expansion commenced in the tenth to twelfth centuries with the rebirth of urban life and the rise of influential socioeconomic groups – in particular, the merchants. Economic growth was a consequence of the political stability of northern Iberia, which had already finished the Christian Reconquista, and of the creation of fairs and markets backed by royal charters, which encouraged commercial exchange. Although the Black Death interrupted Iberia's economic expansion for several decades, recent research suggests that its consequences were less significant than in other parts of Europe.⁴ Indeed, Iberia experienced a substantial demographic growth in both its cities and the countryside in the late fourteenth century and the fifteenth century. In Castile, this growth was accompanied by the emergence of medium-sized towns (i.e. less than 20,000 inhabitants), which formed important nodes in the urban network.

Table 11.1: Urban Population in Iberia in the Late Fifteenth Century

City or town	Population	City or town	Population
Lisbon	50,000	Burgos	11,000
Valencia	42,000	Medina del Campo	11,000
Seville	40,000	Porto	10,000
Granada	40,000	Évora	10,000
Barcelona	35,000	Santarém	9,000
Toledo	30,000	Tavira	7,000
Valladolid	20,000	Bilbao	5,000
Zaragoza	20,000		

Sources: Ladero Quesada (2007), Dias (1998), Duarte (2006).

There was a big difference in the size of larger, medium and smaller towns in medieval Iberia (Table 11.1), with the functioning of the commercial network depending heavily on the way they related to each other and their regions. Each town had its own hinterland, production centre, market and consumers, with the large ones also acting as centres for the smaller regional economies. In certain parts of Iberia – especially in Andalusia, Extremadura, Toledo, the Duero Valley, but also in Beira Interior and Trás-os-Montes – a dense urban network developed, very similar to those of Italy and the Low Countries.

An unusual aspect of Castilian merchant networks was the extent to which some of the inland towns engaged in overseas trade, creating a type of *inverted hinterland*. For instance, Burgos, despite being small in size and located more than a hundred kilometres from the coast, developed a significant overseas trade.⁵ The same happened with Valladolid and Medina del Campo, the latter being famous for its international fair.⁶ In addition, Galicia, Asturias, Cantabria, Biscay and Gipuzkoa were able to become major players in the growing Atlantic economy despite the absence of any large coastal towns. Instead, they relied on a string of about fifty small ports along a coastline (known as the *Marisma Costera de España*) that stretched over 1,300 kilometres in length.⁷ These small ports established major fishing industries, while some also became important suppliers of ships, provisions and freight services to Europe's merchants.

The situation in Portugal was slightly different; its cities and towns were smaller and its economy was less developed than Castile's, at least until the fifteenth century. Although Porto and other towns in the Algarve had their own hinterland, Lisbon dominated Portugal's commercial scene. It attracted more people, commodities and merchants than other parts of the kingdom, in part because Lisbon's initial size made it an attractive centre for those engaged in long-distance commerce and in part

because the Portuguese Crown implemented commercial policies from the second half of the fourteenth century that favoured the capital.⁸ Investigations of Portugal's population conducted in 1527–32 suggest that 91 per cent of the people lived inland.⁹ This implies that less than 120,000 Portuguese lived in cities and towns along the mainland coast.¹⁰ On the other hand, to this 'coastal population' may be added the rapidly rising population of the Atlantic islands, following their discovery and colonisation in the fifteenth century.¹¹ Madeira's population, for instance, grew from 4,560 residents in 1455 to 18,000 in 1500.¹² Notwithstanding the small size of Portuguese port towns, Lisbon, Porto, Viana and Tavira were very active in the trade with north-west Europe and the Mediterranean. Moreover, Portugal's inland urban centres had extensive commercial contacts with Castile, which assisted the growth of trade within Iberia.¹³

Production

The demographic rise experienced in most of the Iberian peninsula in the Middle Ages was paralleled by the growth in agricultural production. This was the result of a number of factors: the extension of cultivated lands (cereal, wine); the introduction of new types of agricultural products (especially madder and flax); and the proliferation of husbandry, to both plough the fields and provide meat. From the thirteenth century the Castilian economy also depended heavily on sheep and wool production. By 1500, Castile had approximately 10.5 million sheep, especially in La Mesta, with a third of the wool produced being exported.¹⁴ By comparison, England in the 1350s was producing 40,000 sacks of wool per year from its 8 million sheep.¹⁵ The bulk of Spanish wool went to supply the *nieuwe draperie* (new draperies) of Flanders, established from the late fourteenth century in the smaller towns of the Low Countries.¹⁶

The economic expansion of Iberia's rural world contributed to the proto-industrialisation of the countryside, with the proliferation of workshops producing hides, iron and textiles. From the mid-fifteenth century these appeared in places like Segovia, Ávila, Palencia, Cuenca, Bilbao, Córdoba, Ciudad Real, Toledo and Cameros. The textile industry was to the fore in adopting the '*verlagssystem*', also known as the 'putting-out system'. This involved large-scale manufacturers contracting-out stages in the production process to specialised producers operating from their own homes and workshops. From the mid-fifteenth century, cloth merchants invested heavily in this type of production, their lead being followed by other Spanish industries during the early modern period.¹⁷ Similar developments occurred in Portugal and other parts of Europe, increasing aggregate production, facilitating the expansion of local economies and allowing country folk to purchase a much wider variety of manufactured goods.¹⁸

Travelling through the Iberian peninsula during the 1460s, Leo von Rozmital observed that Portugal seemed well cultivated, fertile and full of fruits and wine.¹⁹

The same could have been said of much of Castile, which had a similar economy, being renowned for its wine, olive oil, fruits, honey, salt and fish. The economy was also open to innovation. In 1404, a Genoese immigrant established the first sugar cane farms in the Algarve, paving the way for the much larger-scale plantations that would be established on Madeira during the second half of the fifteenth century.²⁰ Meanwhile, Portugal produced the dyestuffs woad (*isatis tinctoria*) and 'grain' (*kermes vermilio*), to supply the textile dyers of Italy, England and Flanders. Although it is difficult to provide precise figures for Portuguese production or exports, a significant part of the wine and fruit produced in Portugal went to foreign markets.

Portugal's most productive regions were the north, the Tagus valley and the Algarve, which accounted for most of the commodities exported to north-west Europe. In the fifteenth century, the discovery of the islands of Madeira and Azores, together with the establishment of permanent *feitorias* (trading factories) in western Africa, widened the array of commodities Portugal had to offer to include sugar, pepper, ivory and slaves. While manufacture was less developed in Portugal than in Flanders and Italy, there were some important industries. A good example of this is the 'Casa dos Sirgos' of Bragança (the Silkworms House), which produced good quality silk for both domestic consumption and export. The Italian merchants established in Portugal had a particularly keen interest on Portuguese silk and woad, taking direct control over their production in Lamego, Sintra and Olivença.²¹

The dendrochronological evidence from the Newport Medieval Ship suggests that it was built in Spain, using wood from the Basque Country.²² Iberia's shipbuilding industry was highly developed by the late fifteenth century, as a consequence of both the strong commercial links with the rest of Europe and oceanic expansion. Along the Andalusian, Portuguese and Biscayan coast (especially Cantabria and the Basque Country) there were many shipyards building pinnaces, caravels and other types of vessels. Shipbuilding also encouraged the development of other businesses related to the timber industry, fostered skilled craftsmanship, transformed the harbour front of many port cities and reduced the cost of sea transport. The industry was also a major employer; in 1551, there were 227 shipwrights and 114 caulkers working in Lisbon's shipyard.²³ At the same time, Iberia's shipmasters and pilots became celebrated for their skills in Atlantic navigation, with their ships frequently being chartered by English, Flemish, German and Italian merchants to freight goods between northern and southern Europe.

Institutions and Commercial Techniques

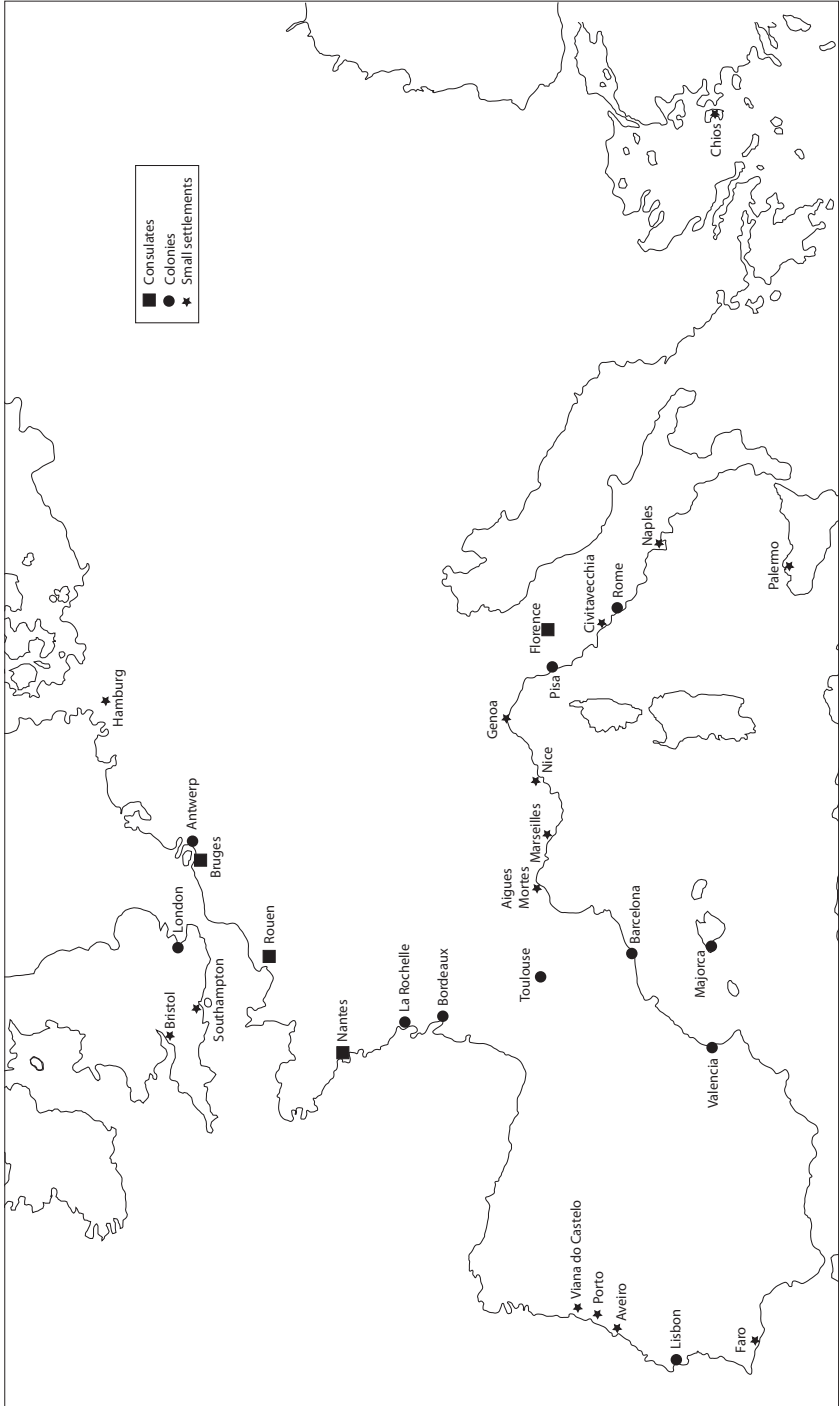
Iberia's economic expansion in the late Middle Ages owes much to the development of institutions and commercial techniques. The Universidad de mercaderes de Burgos, for example, founded in the early fifteenth century, encouraged the development of commercial skills. The Consules of Castile appeared about the same period, with

judicial rights granted to it by Bruges, Nantes and Rouen. Its functions included the right to arbitrate disputes within the commercial community, claim debts, expel rogue merchants, coordinate convoys, regulate maritime insurance, house merchants, organise funerals and act as proctors, agents, or partners for Spanish companies. The Consulado de Burgos (1494) and the Consulado de Bilbao (1511) are good examples of such institutions, which engaged in most of these functions, while also fostering social and business networks more generally amongst the Spanish merchant community.²⁴

One of the reasons for the success of Spanish and Portuguese trade in the fifteenth and sixteenth centuries was the way their merchants adopted financial instruments, business techniques and organisational forms developed in Italy and the Low Countries. The Castilians did not merely copy these practices, however; they adapted and applied them in very efficient ways. Castilian traders were to the fore in spreading the use of 'letters of exchange', double-entry bookkeeping, maritime insurance and correspondence services. The merchants of Burgos, for instance, introduced 'letters of exchange' and maritime insurance to Rouen, Nantes, La Rochelle and Bordeaux, while Spain's role in spreading such techniques to England is perhaps best illustrated by the way Englishmen of this time referred to double-entry bookkeeping as the *Reconninges of Spayne*.

Portugal's contribution to the evolution of novel business techniques was less obvious, but the institutionalisation of trade began at a very early period, with the establishment of customs houses, bourses and 'nations' in foreign territories. Perhaps the most remarkable institution, in that it developed at a very early stage, is the *bolsa de comércio*, founded in 1293 by King Dinis (r. 1279–1325) at the request of his merchants.²⁵ At a time when maritime insurance was still at a very embryonic stage, this institution served to protect merchants from the risks of overseas trade.²⁶ In the fifteenth century, the most significant institutional transformations were linked to the expansion of Atlantic trade. This encouraged the formation of *feitorias* from Flanders to western Africa, as well as the creation of specialised offices in Lisbon to deal with the Africa trade – the Casa de Ceuta and the Casa da Mina. So important did these institutions become that they not only changed the economic administration of overseas trade, they also had a significant effect on Lisbon's landscape and urban life.²⁷ Such innovations had a major impact on Iberia's economy, since they enhanced fiscal control, led to better contract enforcement and speeded up the resolution of commercial disputes. This does not mean, however, that there were no formal or informal barriers to commerce in Iberia; fiscal privileges, legal monopolies, dysfunctional institutions and the use a variety of different systems of weights and measures continued to hinder the free flow of trade. In the mid-fifteenth century, for example, the Germans and the English complained to the king of Portugal that they were routinely defrauded by customs officials in Lisbon.²⁸ Nevertheless, the development of state bureaucracy in Spain and Portugal and the improved regulation of trade served to reduce transaction costs and raise tax revenues.²⁹ This was the moment when Iberia's 'fiscal state' was born.³⁰

Figure 11.1: Iberian Trading Communities



The Expansion of Iberian Overseas Trade towards Northwest Europe

The initial phases of the medieval commercial expansion of Castile and Portugal were very similar. In the late twelfth century, Castilian and Portuguese merchants travelled sporadically to Flanders, England and other parts of Europe, taking their wine, olive oil and dried fruits to exchange for cloth, tin and other commodities. Yet, until the fourteenth century, northern European merchants seemed to have paid little attention to Iberia. Although ships from the north occasionally visited Fuenterrabía, Bilbao, Porto and Lisbon, the supply of Iberian commodities to northern markets was mostly in the hands of Iberian merchants. It is likely, as Wendy Childs argues for the English case, that northern European merchants felt that they 'had little need to travel further than Flanders' to buy their Portuguese wares. Bruges, after all, was closer, probably safer, and was well established as the great northern entrepôt for international trade.³¹

During the thirteenth century, Iberia's merchants consolidated their position in north-western markets by requesting safe-conducts and establishing new forms of commercial partnerships. Spanish and Portuguese merchants conducted most of the trade during the first phase of commercial exchange. Yet, compared to the rich cities of northern Italy and Flanders, Iberia's commerce remained modest. Three factors were to change that. Firstly, the Moors lost control over the Straits of Gibraltar in the fourteenth century, allowing Italian merchants to sail directly to northern Europe, exchanging spices, alum, dyestuffs and silks for Flemish cloth, English wool and other northern commodities.³² Iberia's Mediterranean ports had long enjoyed the benefits of Italian trade, especially in Barcelona, Valencia and Granada; Atlantic Iberia now began to experience the same advantages.³³ Secondly, Iberian traders organised themselves better, establishing colonies in foreign territories to develop new trade routes and strengthen merchant networks. The Spaniards, for example, were one of the first to have a street named after their community in Bruges (1284), predating those associated with the English (1285), the Scots (1291), the Florentines and Gascons (1292), the Danes (1304), the Norwegians (1308), the Portuguese (1308), the Venetians (1335) and the Basques from Bilbao (1344).³⁴ Thirdly, Iberian monarchs encouraged the creation of merchant institutions and promoted shipbuilding and overseas commerce.³⁵ What is observable, during this first phase of Iberia's commercial expansion, is the merchants' response to a new market logic. Faced with rising opportunities, they created new types of commercial networks formed by individuals and companies, which facilitated the creation of enduring economic relationships between merchants and commercial partners across Europe.

Although both Castile and Portugal developed large-scale merchant networks in Europe, there were differences between them. While both kingdoms had their

commercial core in Bruges until the late fifteenth century, before switching to Antwerp in the late 1480s, the products they traded were somewhat different. The Castilians focused on the export of dyes, iron, wine, spices and wool. The Portuguese thrived in Bruges thanks to wine, olive oil and dried fruits, to which, during the fifteenth century, were added Madeiran sugar, Azores woad and African ivory and spices.³⁶ Beyond Bruges, the Castilians maintained a much more extensive commercial network, which included the regions of Atlantic France and the Mediterranean. They were also active in French manufacturing centres, such as Rouen, Nantes and Toulouse. The latter city, for example, hosted many Castilian agents engaged in the production of woad, which was used as a blue dye in the English and Flemish cloth industries.³⁷ The Castilians were also very active in Italy and Portugal. In Florence, they had their own merchant colony by the early sixteenth century, and it was common to find Basque, Andalusian and Ragusan ships sailing to Pisa, Talamone and Genoa, laden with Castilian wool, Portuguese sugar and spices or dyes from the Americas. The Portuguese ports of Lisbon, Aveiro, Porto and Viana also became integrated into this network, linking the Mediterranean Sea with Atlantic Africa, the North Sea and, from the sixteenth century, India and Brazil.

While Castile's trade was greater than Portugal's until at least the mid-fifteenth century, the Portuguese were notable for their willingness to sail to far-flung destinations. In the twelfth century there are references to Portuguese merchants trading to Bruges, Montpellier and Thessaloniki, while in the thirteenth century they reinforced their presence in England, Zeeland, Flanders, Normandy and Brittany, along with Biscay, Galicia and Castile. Once the Straits of Gibraltar opened to Christian shipping, Portugal began to trade to Valencia, Italy and the Maghreb, while the fifteenth century witnessed the commencement of trade to Madeira, the Azores and western Africa. The sixteenth century saw the culmination of this process, with the creation of a maritime empire that encompassed Brazil, India, the China Sea and Japan. Yet even during the mid-fifteenth century, when the Newport Medieval Ship sailed the seas, Lisbon was connected to more than fifty European and Mediterranean ports, including Reval, Danzig, Middelburg, Bruges, Bristol, London, Chepstow, Galway, Saint-Malo, Bordeaux, Bayonne, Fuenterrabía, Seville, Valencia, Tlemcen, Oran, Pisa, Venice and many others.³⁸ Flanders, Normandy and England were the principal foreign destinations for Portuguese traders, albeit their presence was somewhat irregular in the latter two places. Brittany, Valencia and the Italian city-states were also connected to Portugal, but this trade was largely in the hands of their own merchants. All this meant that, while Portugal's commercial network was less extensive than Castile's, it was still impressive. Even before the birth of Portugal's maritime empire, the country had shown itself to be commercially ambitious, with an agricultural sector capable of producing large amounts of wine and fruit for export. This was a remarkable achievement given its relatively small population and limited urban network.

Anglo-Iberian Trade in the Later Middle Ages

Although England was commercially important to Iberia in the later Middle Ages, the extent of the engagement varied; Aragon, Navarre and Granada had little involvement with England, whereas Castile and Portugal maintained very extensive commercial contacts with it. Overall, England was second only to Flanders as a destination for Iberian wares and as a venue for purchasing merchandise desired in Castile and Portugal. Indeed, at times, Bristol, Southampton and London might have trumped Bruges in terms of volume of trade from Iberia, particularly following the signing of commercial agreements, or when alliances and wars skewed the 'normal' pattern of trade. Wars and the commercial embargoes associated with conflicts certainly had a major effect on trade. For instance, when England and Portugal allied against Castile in the 1370s and 1380s, Castilian merchants became unwelcome in England, allowing Portugal to become the dominant player for the duration of hostilities.³⁹ While this was an exceptional circumstance, it was always the case that politics impacted on the nature and direction of commerce. This was true from the signing of the first treaty between Castile and England in 1176 to the ill-fated marriage of Katherine of Aragon to Henry VIII in 1509. Politics, however, does not explain the basic reasons why merchants traded. From an economic point of view, the commercial complementarities that existed between Iberia and England were the most important consideration; each country had goods the other wanted. From the fourteenth century, England exported huge quantities of its woollen broadcloth (the famous *panos* or *pañós de Londres*), as well as tin, manufactured metals and beans. These were exchanged for goods England could not produce, such as wine, olive oil (used for cleaning wool), citrus fruits (fresh and dried), marmalade, dyes and high-carbon iron, which was much more suitable for making wrought iron goods than the iron found in England and Wales.

The Castilian merchants that we find in medieval England came mostly from Burgos, Vitoria, Valmaseda, Castro Urdiales, Bermeo and San Sebastián and traded primarily through Southampton and London. The Portuguese seemed to prefer Bristol in the fourteenth century, but then abandoned their trade there almost entirely in the fifteenth century.⁴⁰ Two factors made Southampton and London attractive: location and business opportunities. In terms of location, Southampton and London were favourable as ports because they were close to Bruges, making it easy for Iberian merchants to visit England and Flanders on a single voyage. Business opportunities were relevant because, while Bristol merchants were very active in Iberian trade, the merchants of Southampton and London were not. Iberian merchants thus faced less competition from locals when selling their wares through these ports.

Although there were similarities in the patterns of Anglo-Iberian trade between the Castilians and the Portuguese, there were also significant differences. One relates to the size of the communities in England. Although a few Portuguese merchants

lived in England in the fourteenth and fifteenth centuries, there was not an established community of the type that existed in Flanders. As Wendy Childs has pointed out, most of the Portuguese recorded in English records were temporary visitors, typically staying no longer than one to three months.⁴¹ A typical example is Gonçalo Esteves, whose ship arrived on 23 January 1436, laden with fruit and olive oil, before departing on 2 May. Similarly, when six Portuguese ships arrived in London in 1490–1, none remained more than thirty-seven days. There is some evidence, however, that some merchants might have lived in England for longer periods, given that inventories of their personal effects include objects normally associated with an established residence.⁴²

The 'England's Immigrants, 1330–1550' database contains valuable information about the Portuguese and Castilians in England. Out of the 64,000 individuals known to have migrated to England during the period, only forty-four are from Portugal and sixty-seven from Spain, few of whom were identified as merchants.⁴³ While the numbers seem on the low side, it supports the notion that Iberian merchants preferred to live in Flanders. This is very different from the commercial practice of the English, who tended to dispatch factors or agents to live in Portuguese and Spanish port towns. In Lisbon, such men can be traced back to 1352.⁴⁴ Many of these factors became permanent residents and married local women. Some, indeed, became so naturalised that they, or their children, were forced to pay duties in England as alien merchants, suggesting that the Crown no longer recognised them as English subjects. Such men include the 'Portuguese' merchants João de Brystowe (John of Bristol) and João Englisshe. Other examples from the Portuguese chancery records include a John Baker, who rented a house in Lisbon's Rua Nova, a privileged location near the river,⁴⁵ or an Englishwoman named Catherine – perhaps born to an English merchant father – who bore a child following an affair with a married Portuguese man.⁴⁶

Castilian merchants' involvement in English trade was somewhat different from that of the Portuguese, especially in the final decades of the fifteenth century. Contact between the north coast of Spain and England was well established – even in the twelfth century, the geographer Muhammad al-Idrisi described the Bay of Biscay as the 'Sea of the English'.⁴⁷ In great part this was a function of the high volume of trade between England and its most important overseas territory: Gascony. The ease of transport between the west coast of France and the north coast of Spain meant that interregional commerce was long established. Basque merchants, for example, are known to have participated in the French woad trade during the early sixteenth century, together with the merchant-company of the Bernuy, San Esteban, López de Villanueva and Bondia of Castile.⁴⁸ Additionally, commercial records reveal that vessels of San Sebastián and Fuenterrabía and other parts of Atlantic Spain often freighted Biscayan goods belonging to both Spaniards and foreign merchants to north-west Europe, including Middelburg, Bruges, Yarmouth, Barnstaple and Bristol.

Burgos merchants were the most visible group in late medieval England. Their presence can be traced back to the thirteenth century, when a family of merchants (the Perez) resided and worked in England for almost fifty years (1278–1325). One of the members of this family, Andrés Perez, performed services for Edward II (1307–27), assisting him in raising a loan required by English diplomats in Castile.⁴⁹ Centuries later, another family of Burgos merchants, the Castros, demonstrated their connections to the English Crown by providing hospitality to Roger Machado, England's ambassador to Spain and Portugal.⁵⁰ Such commercial contacts reached their height in the 1490s, when the Castro, Bernuy, Salamanca, Maluenda, Arbieto, Astudillo, Lerma and Medina families of Burgos and others like them made fortunes in London. Part of their proceeds was used to build the exquisite chapels and tombs still to be seen in Burgos today. These provide testament to the money made from the exchange of Spanish iron, woad and wine for English cloth, alabaster and other wares.

Two Short Case-Studies: Bristol and Bilbao

Anglo-Iberian trade was not controlled exclusively by Portuguese or Spanish traders in England, nor was it limited to the ports of Southampton and London. The English, in particular the merchants of Bristol, were major players in Anglo-Iberian trade during the second half of the fifteenth century.

A number of Bristol's 'particular' customs accounts survive from 1461 to 1504. These provide detailed records of the ships sailing to or from Bristol, including their destinations, the merchants who traded on them and the goods carried. The discussion below is based on our analysis of 11,000 individual entries from a subset of these accounts, taken from an electronic database of these records.⁵¹ Anglo-Iberian exchanges account for 38 per cent of the individual entries, with Spain representing 20.4 per cent and Portugal 17.3 per cent – overtaken only by Ireland (39.3 per cent), but ahead of France (15.3 per cent), Wales (3.2 per cent) and other European countries. These figures, however, do not represent the actual value of trade and probably underestimate the importance of Anglo-Iberian commerce. For instance, between August and October 1469 Iberian imports accounted for 92.7 per cent of the trade by value; and in 1492/3 Anglo-Iberian trade accounted for 51 per cent of the *entries* but 71 per cent of the trade by value.⁵² The participation of foreign merchants is very low, representing 1.1 per cent of all entries. If we confine our analysis to Anglo-Portuguese and Anglo-Spanish trade, the figures are somewhat higher, at 3.8 per cent of the trade to Portugal and 2.2 per cent of the Spanish. Again, numbers change slightly if we consider the value of trade rather than the number of alien-owned consignments: in 1492/3, for instance, the value of trade goods carried by alien merchants was 8 per cent of Bristol's total trade by value. Notwithstanding this difference, the data confirms that Iberian merchants had limited involvement in Bristol trade during this period, preferring to sail to other ports in England and Europe.

Trade between Portugal and Bristol varied markedly from year to year: it was strong during the second half of the 1460s, erratic during the 1470s and 1480s and robust in 1503–4.⁵³ The years in which trade was highest were 1465 and 1469, at 50.1 per cent and 69.3 per cent respectively. The reduction of trading contacts in the 1470s might be explained by the privateering actions of Fauconbridge, who attacked several Portuguese ships in 1471 as part of his commission to take prizes issued by the earl of Warwick. This episode ‘interrupted the cordiality of Anglo-Portuguese relations’,⁵⁴ and forced the countries’ monarchs to negotiate a diplomatic agreement to avoid further conflict.⁵⁵ Notwithstanding such incidents, Anglo-Portuguese commercial exchange conducted by Bristol merchants remained at a very high level throughout the second half of the fifteenth century. In part this was a response to the loss of Gascony (1453), which made it difficult for English merchants to buy wine in Bordeaux. On the other hand, having switched much of their wine buying to Portugal, the merchants also started purchasing a much wider array of commodities. Bristol’s ‘particular’ customs accounts detail at least forty-three different products acquired in Portugal, including olive oil, wax, vinegar, fruit (fresh and dried), salt, honey, sugar, pepper, cork, hides, kermes and ginger.

Bristol’s Anglo-Castilian trade grew stronger and became more stable during the second half of the fifteenth century. While one might have expected an expansion in trade in the second half of the 1460s, following the Anglo-Spanish alliance of 1466, this is not evident.⁵⁶ There is a marked growth, however, in 1471, which might be related to the tensions between England and Portugal mentioned earlier. Switching from Portugal to Spain was relatively easy, because southern Portugal and south-west Spain exported a similar range of products, such as wine, olive oil, fruit and honey.

Table 11.2: Duties Charged on Iberian Commodities in Bristol, 1461–1504

Commodity	Spain	Portugal
Alum	£113.00	£14.00
Fruit	£249.78	£585.00
Honey	£220.42	£114.38
Iron	£6,410.75	£50.00
Olive oil	£4,626.00	£2,344.58
Salt	£36.60	£393.85
Sugar	£77.50	£204.91
Vinegar	£25.00	£270.25
Wax	£90.00	£1,236.80
Wine	£4,055.00	£3,415.00
Total	£15,904.05	£8,628.77

Source: TNA E122, Bristol Customs Accounts.

In addition, Spain also produced many other products, including woad, orchil, rosin, liquorice, almonds and, above all, iron.

As can be seen from Table 11.2, Spain's trade with Bristol was about twice the size of Portugal's. From an Iberian perspective, there are three striking features of this data. Firstly, Bristol seems to have received almost equal quantities of olive oil, wine and honey from Spain and Portugal. Secondly, the range and scale of the other commodities confirm what is known from other sources about the productive capacities of the two countries: Spain produced large amounts of iron, whereas Portugal was known for its salt, vinegar and wax. Thirdly, iron was clearly Spain's most important export to Bristol during this period. In the customs accounts iron is almost always listed as coming from 'Hispania', rather than from 'Andalusia' or 'Seville'. This term seems to have been used to refer only to the Biscayan coast of Spain, with most coming from the Basque Country.

Bristol's customs accounts indicate that the port's main export to Iberia was woolen broadcloth, the high-quality felted fabric that was the cornerstone of English trade. Most of this cloth is listed in the accounts as notional 'cloths of assize'. These are not *actual* cloths; rather, they represent the customs officer's estimate of how many cloths would be in a consignment if it was made up of entirely of 'standard' broadcloths, twenty-four yards long and two yards wide. In total, 19,287.5 cloths of assize are recorded in the Bristol customs accounts for the period. At least 7,707 pieces went to Spain (40 per cent), while Portugal received 5,483.5 pieces of cloths (28.4 per cent). The two Iberian kingdoms therefore took 68.4 per cent of Bristol's exports.

Table 11.3: Ports Connected to Lisbon by Bristolians

Port of origin	Ships to Lisbon
Bristol	998
Hondarribia	92
Barnstaple	85
San Sebastián	48
London	33
Pasajes	33
Tenby	15
Northam	11
Combe Martin/Ilfracombe	8
Castro Urdiales	7
Chepstow	4
Total	1,451

Source: TNA E122, Bristol Customs Accounts.

The customs accounts reveal a complex web of trade and shipping services. Table 11.3 reveals that vessels from a broad range of ports freighted goods from Bristol to Lisbon. These include English and Welsh ships from Barnstaple, London, Northam, Combe Martin, Ilfracombe and Chepstow, as well as Spanish Biscayan vessels from Fuenterrabía, San Sebastián, Pasajes and Castro Urdiales. The 1,451 vessels listed here come from accounts relating to sixteen individual years. However, since many of the surviving accounts only cover part of the year, there is data for only half that period (ninety-four months).⁵⁷ This implies an average of 181 shipments, to or from Lisbon, per year. This is a remarkable number, which leaves us wondering how many times the Newport Medieval Ship must have sailed to Lisbon, Bilbao and other ports of Iberia in the later Middle Ages.

While the above data might give the impression that Bristol dominated Anglo-Iberian trade, it needs to be remembered there were multiple routes connecting England with Castile and Portugal. Castilian and Portuguese merchants seem to have preferred Southampton and London to Bristol. From an English point of view, it is also useful to note the rising importance of Andalusian trade by the end of the Middle Ages, which the Bristol accounts reflect. By the end of the fifteenth century the English had established important merchant colonies in Sanlúcar de Barrameda and in El Puerto de Santa María.⁵⁸ On board the Newport Medieval Ship archaeologists found remains of dried fruits and southern Iberian pottery, which would almost certainly have come from Portugal or Andalusia, illustrating the importance of the trade to this region in the mid-fifteenth century.

Spanish and Portuguese commercial sources for this period are not as complete as Bristol's customs accounts, but Bilbao's *averías* provide insight into the port's commerce with London for the period 1482 to 1501.⁵⁹ This tax roll lists forty ships importing English commodities and thirty-eight ships sailing to London with Spanish goods. In all cases the ships and shipmasters were Spanish. The imports included copper, tin, lead, tallow, hides, rabbit skin, bells and fish. Among the exports can be found skins, hides, madder, saffron, salt, wine, orchil and sugar. In the *avería*, however, two commodities stand out and, between them, account for the great bulk of the trade: English cloths and Basque iron (Table 11.4).

The quantities are impressive: more than eight thousand English cloths were imported to Bilbao and more than 66,000 *quintales* of iron (c.3,000 tons) of iron were exported to London during those years. The export of iron to London appears to have been relatively consistent, albeit the quantities were substantially higher during the last decade of the fifteenth century. English cloth exports, however, seems to have declined in the mid-1490s, and were not replaced by any other English commodity. Many ships must therefore have left London nearly empty, perhaps travelling to other European destinations before returning to Bilbao, expanding Iberian commercial networks with Northwest Europe still further.

Table 11.4: Bilbao's Averías: Import and Export, with England (1489–1501)

Year	Import Cloths (in pieces)	Export Iron (in quintales)
1489	1,842.50	-
1490	3,191.25	19,381.50
1491	2,253.00	7,453.00
1492	-	-
1493	96.00	-
1494	769.00	-
1495	114.50	10,848.00
1496	-	1,053.00
1497	-	
1498	-	
1499	253.00	18,371.00
1500	-	
1501	-	9,405.00
Total	8,519.25	66,511.50

Source: Archivo de la Real Chancillería de Valladolid, Sala de Vizcaya, 1933–2/1936–1 and 4317–4.

Note: Each 'quintal' equals 46 kg.

Conclusion

The Iberian economy grew enormously during the later Middle Ages, reaching its zenith in the sixteenth century. While Spain and Portugal were relatively minor players in Europe's long-distance trade before the fourteenth century, this changed as a result of the peninsula's rapid recovery from the demographic crisis of the late Middle Ages, the opening of the Straits of Gibraltar to Christian navigation and the commencement of the Age of Discovery. The Spanish and the Portuguese played a major role in integrating the economies of northern Europe and the Mediterranean, before going on to expand Europe's trade networks around the world. In the process, Spain and Portugal brought new commodities to Europe, changed the perspective Europeans had on the world and instituted the era of Europe's global domination. Such were the unanticipated outcomes of the economic rise of Spain and Portugal during the later Middle Ages. Overseas trade played a key part in these developments, with merchants, seamen and their ships binding the north and the south of Europe together.

The port towns of England, Flanders, Normandy, Brittany, Gascony, Spain, Portugal and Italy acted as nodes in a complex European commercial network. While the Italians played a major role in these developments, as Wendy Childs has noted, 'English, Spanish, and Portuguese merchants, ships and seamen were fully and tightly

tied into this network.⁶⁰ The Newport Medieval Ship was a product of this world and probably spent most of its life servicing this commercial network. This chapter has sought to explain why this trade was so important, helping to set the economic context for the vessel. In the process, it hopefully also establishes another reason why the ship is so important. While the people of Newport may be justly proud of their vessel, we need to remember that this is not just a Newport ship: it is a unique artefact from a commercial age that remade the world.



Notes

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- 2 See the numbers discussed in Miguel Ángel Ladero Quesada, ‘Sociedade bajomedieval: crisis y recuperación económica’, in Vicente Ángel Álvarez Palenzuela (ed.), *Historia de España de la Edad Media* (Barcelona, 2007), pp. 815–41; M. Asenjo González, ‘Demografía: el factor humano en las ciudades castellanas y portuguesas a fines de la Edad Media’, in *Las sociedades urbanas en la España Medieval: XXIX Semana de Estudios Medievales* (Estella, 2003), pp. 97–150; João José Alves Dias, ‘“A População,” in Portugal. Do Renascimento à Crise Dinástica’, in João José Alves Dias (ed.), *Nova História de Portugal* (Lisboa, 1998), pp. 11–52; Luís Miguel Duarte, ‘Um país sem cidades? O mundo urbano em Portugal na Idade Média’, in Manuel González Jiménez (ed.), *El Mundo Urbano en la Castilla del siglo XIII* (Sevilla, 2006), pp. 243–57.
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- 7 Jesús Ángel Solórzano Telechea, 'Medieval Seaports of the Atlantic Coast of Spain', *International Journal of Maritime History*, 21/1 (2009), pp. 84–5.
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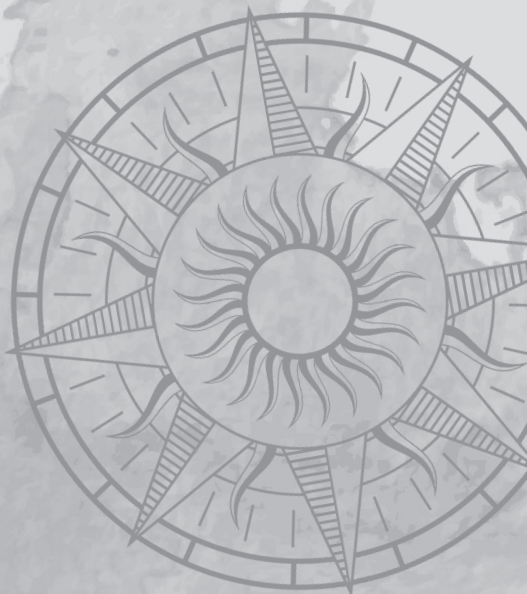
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twelve

TRADE AND
NAVIGATION BETWEEN
THE ATLANTIC AND
MEDITERRANEAN WORLDS
IN THE MID-FIFTEENTH
CENTURY

Francesco Guidi-Bruscoli



THE DENDROCHRONOLOGICAL evidence from the Newport Medieval Ship suggests it was a product of the Basque shipbuilding industry, while the pottery and pollen found in its remains imply that it spent at least part of its life servicing the trade between southern Iberia and northern Europe. This was an important trade route, in which merchants from Spain, Portugal and Bristol played a prominent part. Their ships, however, were not the only great trading vessels to sail the waters of Atlantic Europe; indeed, they were not even the greatest. The same waters were also plied by the Italians, carrying goods from the Mediterranean to the northern seas, with wares that ranged from Turkish alum and Italian silks to the spices of India and East Asia. This chapter deals with the Italians' trade, to provide a fuller understanding of the wider commercial environment in which the Newport Medieval Ship operated.

In 1277 a number of Genoese vessels arrived at the port of Bruges, having sailed from the northern Italian port, through the Straits of Gibraltar and up to the Low Countries. This was the first time that Mediterranean ships had accomplished such an expedition. Within a few years they would be followed by vessels from Majorca and Catalonia, with the Venetians arriving in the 1310s. The 1277 ships were not the first Italian vessels to sail into the Atlantic: there is evidence that at least one Genoese vessel passed through the Straits in 1232, doing business in La Rochelle and Spain.¹ But Flanders was a much more significant trading destination and it was the 1277 expedition that led to the opening of one of the most important commercial routes of late medieval Europe. The result was the establishment of a vast commercial space, entirely connected by sea routes, stretching from the Baltic to the Levant. This commercial zone encompassed most of the world known to Europeans, allowing more intense exchange, greater regional specialisation and heightened market integration across maritime Europe. Many ports on the route between the Italian peninsula and the North Sea benefited from the maritime connection, including those of Catalonia, Valencia, Andalusia, Portugal and western France. Yet direct involvement in the trade between the Mediterranean and the north was limited to a small number of centres, which acted as entrepôt for their wider inland and coastal hinterlands. Moreover, the long-distance trade itself was conducted almost entirely by the merchants of a few Mediterranean cities.

At the end of the first millennium Viking ships and others had entered the Mediterranean through the Pillars of Hercules, only to discover that the winds and currents made it easier to visit than to leave. These sporadic ventures had little economic impact, since they did not result in the establishment of a regular trade route. Fernand Braudel and many others after him have highlighted the importance of physical geography in determining the routes that people employed to cross the Mediterranean.² Landscapes, winds and currents certainly had a powerful influence on such matters. Yet, as David Abulafia argued in his book on the 'great sea', 'the human hand has been more important in moulding the history of the Mediterranean than Braudel was ever prepared to admit'.³

The two most economically advanced areas of medieval Europe were central-northern Italy and the Low Countries. While these two regions communicated and traded before the opening up of the sea route, their commerce required the costly crossing of the Alps, followed by river or road journeys down the Rhone, Saône and Seine valleys. With the opening of the maritime route, such overland traffic went into slow decline, hastened by the dislocations of the Hundred Years War and changes in the organisation of the Italian merchant companies. The chief advantage of the sea route was that it was much cheaper – roughly a quarter of the cost of land transport.⁴ Once established, maritime trade thus developed very rapidly, so that by the early fifteenth century the volume of goods transported by sea greatly exceeded that sent by land.

One consequence of the opening up of the sea route to Bruges was that commercial contact with England increased, with the ports of southern England being visited on the way to and from Sluis – Bruges's chief outpost. England became a regular stopover from the late fourteenth century as its cloth industry developed. The choice of ports to visit was normally left to the Italian merchants who chartered a ship for a given expedition. The Venetians, with their manoeuvrable galleys loaded with spices and precious cloth, favoured London, where they spent two to three months in the autumn/winter selling their products in England's richest market. London was the main market for the other Italians too, but the Genoese, who employed larger 'round ships', preferred Southampton. From there they sent goods to the capital by cart or by coastal vessels, thereby avoiding the difficult navigation around the Downs and into the Thames. For their part, Florentine galleys, which visited England less frequently, favoured Southampton and Sandwich. England's other ports, including those of the Bristol Channel and the North Sea, were almost never visited by the Italians.⁵

There are a number of reasons why direct seaborne traffic between Italy and northern Europe only commenced in the late thirteenth century. Firstly, there were political factors at work – in particular the weakening of Moorish control over southern Iberia at this time, which made it easier for Christian ships to sail freely through the straits. Secondly, there were technological innovations – including changes to ship design, which allowed Mediterranean vessels to manage the very different conditions of the Atlantic. Thirdly, economic factors played a major part. Roberto Sabatino Lopez, for example, has suggested that the 'delay' in opening up the sea route was

mainly due to ‘considerations of costs and markets’. He argued that the Italians would have found it difficult to trade profitably on the Atlantic leg of their journeys before the late thirteenth century because Iberia had possessed ‘comparatively underdeveloped seaports’. He suggested that the development of trade with Castile and Seville made longer-distance sea voyages more feasible, as did the growing range of goods that could be traded. In particular, once the Genoese had secured their monopoly over the Phocaea alum mines, in what is now Turkey, they had an incentive to export the mordant to the cloth workers of northern Europe. There alum, along with oriental spices, could be exchanged for English wool and Flemish woollen cloth.⁶

Within the Mediterranean, the most important advances in maritime technology were those that facilitated winter navigation, which increased the number of voyages a ship could make each year. Discussion of these matters goes beyond the scope of this chapter and much ink has been spilled on the many elements involved, such as the introduction of the compass and portolan charts. Nevertheless, since much of the work on the Newport Ship has inevitably focused on the vessel’s construction, it is worth outlining some of the major technological changes of the period.

Between the thirteenth and fourteenth centuries, Mediterranean round ships underwent major changes, particularly to their sail plan, with the introduction of a square sail on the mainmast (inspired by the northern-European cog, *coccha*), at times accompanied by triangular lateen sails on the mizzen masts. Such vessels were more stable and had greater thrust when sailing before the wind, while retaining much of the manoeuvrability of ships that relied exclusively on lateen sails. For their part, galleys also underwent significant changes with the appearance of triremes in place of biremes, while the large merchant galleys acquired a shape that increasingly resembled the round ships. Indeed, as these vessels became wider and deeper, they also acquired an arrangement of masts similar to round ships such as the carrack. This involved a mainmast in the centre for speed and two smaller masts at the front and back for manoeuvring.⁷ From a commercial point of view these developments were important because they affected the safety, speed and loading capacity of ships. On the other hand, it should be remembered that technical improvements were only widely adopted when they were cost effective; it was only when the economic and technical factors worked together that the new sea route became viable.

In and Out of the Mediterranean

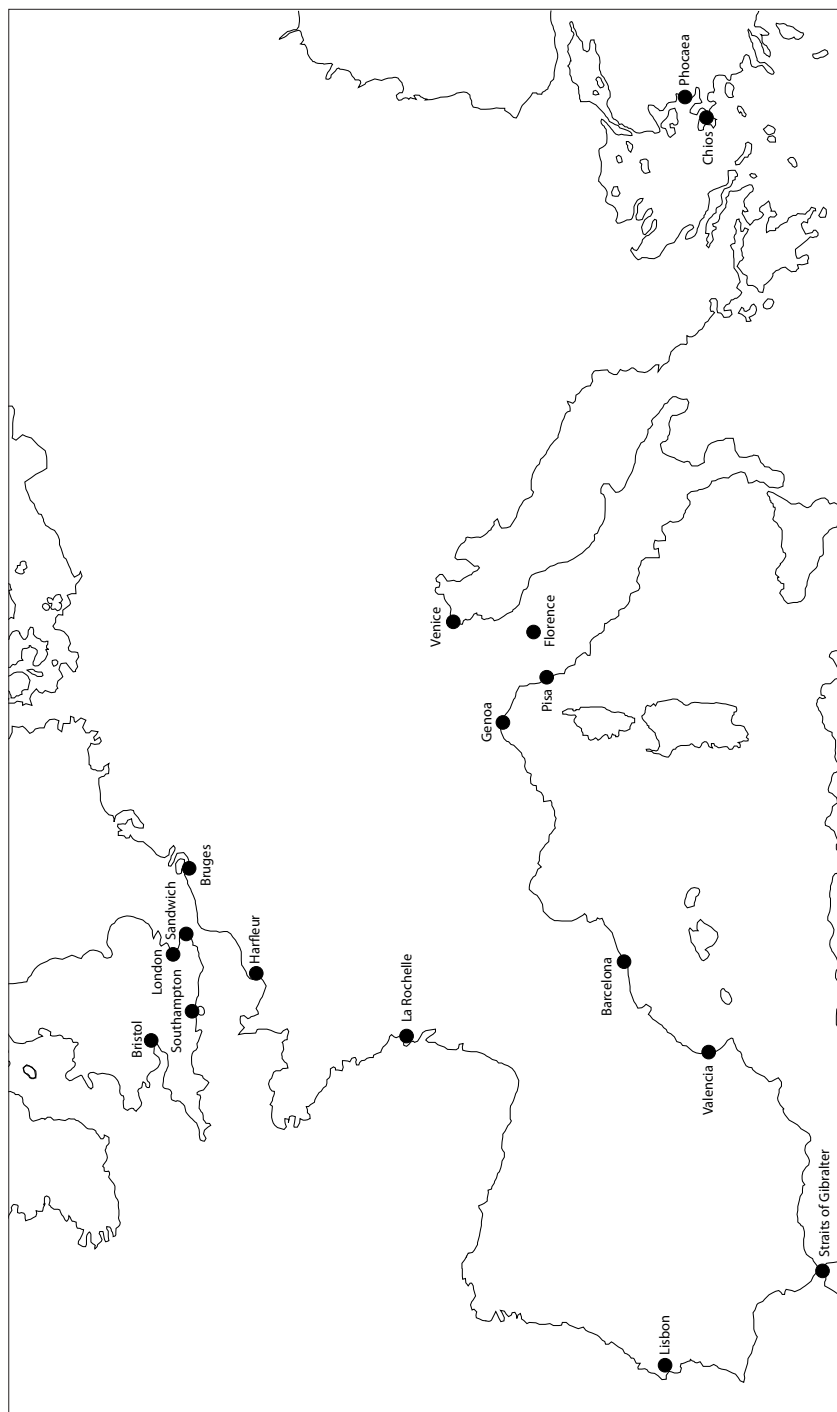
The chronological boundaries of this chapter have been set by the date of the Newport Medieval Ship, which was in operation from c.1449–67. Although the chapter will include information from the last decades of the fourteenth century, this is not a problem given that, as Alwyn Ruddock noted, ‘by 1395 trade between England and the Mediterranean had settled down to the plan it was to follow, with few variations, for sixty years and more’.⁸

This chapter will focus on the Italian merchants who dominated the sea trade between the Mediterranean (including the Levant) and the northern seas. Few northern Europeans attempted the passage into the Mediterranean during the later Middle Ages. Indeed, even the Baltic merchants of the Hanseatic League, who were great seafarers and had extensive dealings with the Italians at Bruges, never sailed south. That was despite their having an extensive overland trade with Italy and a commercial base in Venice at the *Fondaco dei Tedeschi*.⁹

The long-distance sea trade between the north and the Mediterranean was conducted primarily by the Genoese and the Venetians, along with a few others, such as the Catalans. This does not mean that Atlantic ships never visited the *mare nostrum* in the fifteenth century; many of the shorter voyages between the Atlantic coast of Iberia and the ports of the western Mediterranean were conducted by ships from Spain and Portugal. The ports of Barcelona and Valencia, for instance, were frequented by ships from Biscay with cargoes of salted fish.¹⁰ Indeed, by the time the Newport Medieval Ship was built in the Basque Country in c. 1449, Basque craft were carrying grain to Sicily and salt from Ibiza. Similarly, Castilian and Galician ships from northern Spain were freighting Spanish products into the Mediterranean, such as grain, leather, wool, fruit and tuna. Given the frequent voyages conducted between Biscay and the western Mediterranean, it is possible that the Newport Ship may have visited the Mediterranean at some point. This may have occurred while it was under the control of a Basque merchant, or following a charter to Genoese merchants.¹¹ For their part, Portuguese vessels also sailed into the Mediterranean, sometimes travelling as far as the western ports of the Italian peninsula, such as Genoa and Pisa.¹²

Although there were regular sailings between the Atlantic Ocean and the Mediterranean, it was rare for anyone, other than the Italians, to travel all the way from Italy to the North Sea. Exceptions include an English vessel that visited Ibiza in 1412 and, more impressively, a fleet of three Bristol ships that reached the Levant in 1457. They, however, were attacked and captured by Genoese-backed pirates while coming home, in an apparent attempt to discourage the English from attempting to break Genoa's control over the alum trade.¹³ In effect, the trade between the north and south of Europe in this period was monopolised by merchants and fleets from Genoa, Venice and Catalonia, with the latter also maintaining links with North Africa.¹⁴ These players limited involvement by others, despite the existence of agreements allowing reciprocal freedom of navigation. The agreements included a treaty of 1421 between England and Genoa, which stated that 'all subjects of the king may trade freely at Genoa and go and come as they please with their goods [. . .] and all Genoese subjects shall have the like privileges in England'.¹⁵ Yet, as Sturmy's fateful voyage demonstrated, the Genoese clearly did not feel that these rights permitted English entry into the Levant trade. The balance of power was clear; northern European engagement in Mediterranean trade remained limited until the late sixteenth century. Only then did the Dutch, English and French turn the tables on the Italians, to become the dominant players in both the Levant trade and in the trade linking northern Europe to the Mediterranean.

Figure 12.1: Italian Trading Connections



Navigating the Space

Since the physical geography of Europe has changed little since the Middle Ages, it is not difficult to imagine the seas the early sailors navigated. However, when it comes to analysing connections and trading relations, it is more useful to conceptualise spaces by calculating how long it took to cross them. The duration of a sea voyage varied enormously at this time, since it depended on both the weather conditions and the period spent in port. The latter was particularly important, because about 60 per cent of a voyage could be spent in port.¹⁶ In part that was because ships frequently put into harbours to refit, take on supplies, or shelter from the weather. But much time was also spent selling merchandise and acquiring fresh cargoes at the major centres with which the ships traded. Since sailing times were highly variable, it is more useful to calculate the ‘modal’ (i.e. most common) time it took to complete a voyage rather than the ‘mean’ (or average) time.

A number of studies have produced scattered data on the time needed for ships (or fleets) to reach a given destination. For current purposes, the most useful one is that of Federigo Melis, because it is based on the postal times of a substantial body of thousands of letters preserved in the Datini collection of the State Archive of Prato, Italy (c.1390–1410) (Table 12.1).¹⁷

This data includes not only sailing time but also time spent in ports for refitting, sheltering, loading or unloading cargoes. The same letters also offer detailed accounts of the names of the patrons and the size and nationality of ships (Table 12.2).

The source has some bias. For instance, the letters come mainly from Tuscan merchants, who had few dealings with the eastern Mediterranean, except through the main Venetian long-range routes. Adriatic and Ionian trade is thus largely absent. Venice is also under-represented in the table because the Venetian galleys included here were mostly ‘free’ ships, rather than the ‘state galleys’ that were so central to

Table 12.1: Postal Times, in Days, c.1390–1410 (mode)

To (Row)/ From (Column)	Constantinople	Alexandria of Egypt	Barcelona	Bruges	Italy (Central and Northern)	London	Tana (Azov Sea)
Barcelona	41	35	–	23	17–23	27	–
Bruges	–	–	23	–	22–8	6	72
Genoa	41	46	17	24	–	30	58
Lisbon	–	–	24	18	31–2	–	–
London	–	–	27	6	26–33	–	–
Venice	38	38	21	26	–	33	–

Source: F. Melis, ‘Intensità e regolarità nella diffusione dell’informazione economica generale nel Mediterraneo e in Occidente alla fine del Medioevo’, in Federigo Melis, *I trasporti e le comunicazioni nel Medioevo*, L. Frangioni (ed.), (Florence: Le Monnier, 1984), pp. 179–223.

Table 12.2: Ships mentioned in the Datini Letters (1383–1411), by Nationality of the Owner

	Total	In the North Sea
Catalan	875	49
Genoese	596	162
Tuscan	359	19
Other Ligurian	325	16
Venetian	154	36
Basque	119	52
Provençal	116	6
Others	376	67
Total	2,920	407

Source: F. Melis, 'Werner Sombart e i problemi della navigazione nel Medioevo', in Federico Melis, *I trasporti e le comunicazioni nel Medioevo*, p. 11.

Venetian commerce.¹⁸ Moreover, local coastal shipping (e.g. Ligurian, Provençal, but also Genoese) is largely absent from the sample, while non-Italian shipping is probably under-represented because the Datini Company preferred to employ their compatriots. On the other hand, these are not major drawbacks for current purposes, given that commerce between the Mediterranean and North Sea *is* well recorded and, as discussed, such activity was dominated by Italians. The ships included in this sample are both Mediterranean and Atlantic ones. Table 12.3 draws on a subset of the data, to include only those Mediterranean vessels present in the North Sea.¹⁹

Table 12.3: Mediterranean Ships Present in the North Sea according to the Datini Letters (1383–1411), by Nationality of the Owner

	In the North Sea	%
Genoese	162	54.9
Catalan	49	16.6
Venetian	36	12.2
Tuscan	19	6.4
Other Ligurian	16	5.4
Provençal	6	2.0
Andalusian	5	1.7
from Ancona	1	0.3
from Gaeta	1	0.3
Total	295	100

Source: Melis, 'Werner Sombart', p. 11.

While Venice is under-represented in Table 12.3, the preponderance of Genoese vessels is consistent with information derived from many other studies.²⁰ In considering the data, it should also be recalled that trade with north-west Europe accounted for a minor part of the trade of Mediterranean powers. Indeed, according to customs documents recorded in Genoa in 1376, only 16 per cent of the city's sea trade went to the northern seas. The rest went to the eastern Mediterranean, which accounted for a third of Genoa's trade, and the western Mediterranean, which was responsible for about half of it.²¹

Although it is useful to know the 'nationality' of a ship, this does not necessarily indicate the 'nationality' of the trade, since merchants could, and did, lade goods on alien ships. Florentine merchants not only loaded their merchandise on foreign vessels, they also chartered entire ships for extended voyages. Europe's shipping market was highly competitive and merchants were quite happy to buy freight space on foreign ships, or to charter a complete ship, if it allowed them to get their goods to their destination faster. Italian commercial correspondence often mentions that Venetian, Catalan and Genoese vessels had delayed their departure from a port because they wished to 'wait for the merchandises of the Florentines'. For example, in 1407 a ship belonging to the Genoese merchant Francesco Doria sailed from Bruges to Southampton 'with the hope of loading merchandise belonging to the Florentines'. His wish was clearly justified; in the event, of the 180,000 florins worth of cargo taken back to Italy (mostly wool, woollen cloth and tin), two-thirds belonged to Florentine merchants. This does not seem to have been unusual; just a few years earlier a Venetian ship sailing from Flanders to Italy stopped at Pisa (Florence's outpost) because one-third of the ship's cargo belonged to Florentine merchants.²²

In addition to the nationality of the ships, the Datini letters also offer information on the size of 436 of them (i.e. 15 per cent of the sample). Unfortunately, there is some uncertainty about the exact relationship between the unit of measurement normally provided in the letters (the *botte*) and the ton (*tonello*), which was the usual measure of shipping capacity in Atlantic Europe. Table 12.4 thus records the capacity of ships in *botti*, while the ensuing discussion assumes that one *botte* was equivalent to c.0.65 'tons burden'.²³ This should help to set the Newport Medieval Ship in context, given that it is estimated to have had a carrying capacity of 161 tons of wine.

About one third of these vessels (144) were present in the North Sea, 133 were in the Levant and 57 were recorded in both regions. For the 144 ships present in the North Sea, the most common size was 700–800 *botti*, for those present in the Levant 600–700. In other words such vessels would have been about 400–500 tons burden. This is significantly larger than the Newport Medieval Ship and would have placed the Italian vessels among the greatest ships visiting English ports. The largest vessels were the Genoese ones, while the smallest ones were typically the Catalan ships, which tended to be used primarily for the shorter voyages around the western Mediterranean. That trade was also serviced by the vessels of southern France.²⁴

Table 12.4: Ships Mentioned in the Datini Letters (1383–1411), by Size (in botti) and Nationality of the Owner

	< 400	401–600	601–800	801–1,000	> 1,000	Total
Catalan	70	38	10	8	3	129
Genoese	24	17	39	21	19	120
Venetian	11	23	18	4	–	56
Ligurian	16	6	1	4	–	27
Basque	24	3	–	–	–	27
Tuscan	19	6	–	1	–	26
Other	33	14	2	2	–	51
Total	197	107	70	40	22	436

Source: Melis, ‘Werner Sombart’, p. 14. NB Melis’s table recorded 437 ships, owing to a miscalculation.

This data reveals a clear relationship between the size of vessels and the length of voyages, a point that Evan Jones notes to have been also true of the Bristol fleet.²⁵ Catalan, Basque and Ligurian vessels were mainly employed in local coastal trade, while Genoa’s great ships could be used for voyages stretching from the eastern Mediterranean to the North Sea. Genoa’s vessels certainly impressed contemporaries; in 1406 a member of the Tornabuoni-Cambini company of Bruges commented ‘there are here six Genoese ships: they are like castles’.²⁶ Genoese ships, however, were not typically built in Genoa. Just as the Newport Medieval Ship was built in the Basque Country, several of Genoa’s greatest ships were built in Harfleur in Normandy.²⁷ The Genoese ships *par excellence* were the large ones, intended for trade with the eastern Mediterranean and Flanders. No other Mediterranean fleet had the same tonnage, not even the Atlantic vessels used by Galicia, Seville or Portugal. Venice and Dubrovnik, for their part, did not employ vessels of this size until the second half of the sixteenth century.²⁸

In general, it appears that there was an increase in the size of ships during the fifteenth century, which marries with the findings of Ian Friel in this volume.²⁹ On the other hand, care must be taken with contemporary descriptions of vessels, since different people, talking in different contexts, might have very different notions of what constituted a ‘large’ or ‘small’ ship. For instance, a 450/500-ton ship is described in one 1407 letter as ‘piccola’ (small).³⁰ Owning a great ship, however defined, was nevertheless a source of pride and evidence of commercial success. For example, when one Florentine merchant bought a 1,200-ton ship built in Harfleur, he wrote to a business associate that he would use it to ship oil and other products from Seville, boasting that its capacity was such that ‘it can load the whole of Spain’.³¹

The size of ships used was connected to both the type of merchandise transported and the way a given trade was organised. Genoa’s preference for truly great ships was

related to the fact that their vessels made fewer stopovers than those of the Venetians or the Florentines. Size also impacted on the ownership of vessels, in that the enormous cost of great ships meant that it was rare for one to be owned outright by a single merchant. Different types of vessel also had their particular advantages and disadvantages. Galleys, for example, which were very popular with the Venetians and the Florentines throughout the fifteenth century, were faster and more manoeuvrable than the larger Genoese round ships. As such, they were well suited to coastal navigation, being able to enter minor ports to shelter from bad weather or pirates, or to engage in trade, buy provisions and undertake repairs. The galleys' larger crew, moreover, meant they were better able to defend themselves when attacked, since the oarsmen could fight if needed. This, in turn meant galleys paid lower insurance premiums than carracks. On the other hand, the advantage of the great round ships was that they required a smaller crew relative to their cargo capacity, which lowered labour costs. As for the perils of navigation, there seems to have been little difference between the two types of ship, with the fifteenth-century *galere grosse* employed by the Venetians seeming to have had no problems coping with the Atlantic.³²

The size of Genoa's greatest vessels was such that they could only dock in a small number of ports and had to employ lighters for loading and unloading cargo. Moreover, even when they entered a port, operations were extremely slow because of the size of their cargoes. Given this, their owners sought to minimise the number of stopovers they made, even bypassing Genoa itself when carrying alum from the eastern Mediterranean to the North Sea. During this period, Genoa's great carracks were the ultimate form of mass and direct transport, with operations based around a small number of 'staple' ports, such as Chios, Majorca, Cádiz and Middleburg. These places were used for gathering / redistributing wares for a much broader region.³³

In the later Middle Ages, Venice managed to give its state galley fleets a more unified character than any other city. Its fleets had fixed and regular voyages, sailing to a calendar dictated partly by the weather but also by the city's economic needs, which required coordination between the different *mude* (fleets).³⁴ This system was established in the 1330s and became the standard means by which the city's long-distance trade was conducted, albeit 'free trade', conducted by private individuals and companies, was permitted for bulk products and regional traffic. Moreover, while the Venetian Senate always favoured the public galleys, offering exemptions or incentives to use them during commercial crises, more free trade was allowed in the second half of the fifteenth century.³⁵ From the merchants' point of view, a regular sailing pattern had the advantage of predictability, since it provided them with greater certainty about when their investments would generate returns.

In the fifteenth century there were regular voyages to both the eastern and the western Mediterranean, although not all of these voyages took place every year. The eastern fleets included the 'Muda de *Trafego*', which was inaugurated in the 1460s and sailed to Methoni in the Peloponnese and Beirut, departing on 1–15 March; the

Table 12.5: *Itineraries of a Galley's Voyages to Flanders and England in the 1460s*

THE VOYAGE OF 1463–4		THE VOYAGE OF 1467–8	
1463, Jul 13	VENICE	1467, Jul 19	VENICE
1463, Jul 23	Reggio Calabria	1467, Jul 20	Parenzo, Pola (Istria)
1463, Jul 28	Messina	1467, Jul 27	Brindisi
1463, Aug 6	Palermo	1467, Aug 7	Messina
1463, Aug 25–8	Maiorca	1467, Aug 19	Palermo
1463, Sep 5	Cádiz	1467, Sep 2–8	Maiorca
1463, Sep 13	Cascais	1467, Sep 18	Cádiz
1463, Oct 5	Muros (Galicia)	1467, Oct 6	Cabo S. Vicente (Algarve)
1463, Oct 13–14	Mugia (Galicia)	1467, Oct 21–28	Brittany (undefined)
1463, Oct 25	SOUTHAMPTON	1467, Nov 5–Dec 9	SANDWICH
1463, Nov 15–1464, Apr	BRUGES	1467, Dec 11	SLUIS
1464, Apr 13–May 26	LONDON	1467, Dec 15–1468, May 16	BRUGES
1464, Jul 10–19	SOUTHAMPTON	1468, May 20	SLUIS
1464, Jul 28	Muros (Galicia)	1468, May 29–Jul 23	LONDON
1464, Aug 6	Cádiz	1468, Jul 25–Aug 19	SOUTHAMPTON
1464, Aug 11–20	Málaga	1468, Sep 4	El Ferrol (Galicia)
1464, Aug 20	Almeria	1468, Sep 15	Cádiz
1464, Aug 28	Honain	1468, Sep 2–23	Málaga
1464, Sep 7–11	Oran	1468, Sep 30	Oran
1464, Sep 18	Bougie	1468, Oct 17	Tunis
1464, Oct 1–8	Tunis	1468, Oct 26–7	Siracusa
1464, Oct 15	Trapani	1468, Nov 1	Lesina (Dalmatia)
1464, Oct 21	Siracusa		
1464, Nov 2	Curzola (Dalmatia)		
1464, Nov 7	Zadar		
1464, Nov 9	Ulbo		
1464, Nov 12	Parenzo (Istria)	1468, Nov 14	Parenzo (Istria)
1464, Nov 15	VENICE	1464, Nov 18	VENICE

fleet directed to 'Romania' (i.e. Constantinople and Tana in the Sea of Azov) departed on 25 July; the Syria fleet departed in late July / early August and the Beirut fleet on 24 August; finally, a fleet to Alexandria sailed on 30 August. There were three *mude* towards the west: the 'Barberia' fleet, which from 1436 was directed towards the western Mediterranean and North Africa and departed on 22 April; the fleet to Aigues-Mortes (including Marseille and Barcelona) sailed on 8 May and the Flanders fleet in mid-July. The Flanders fleet, the only one to venture beyond the *mare nostrum*, is the most relevant to this chapter. Given this, Table 12.5 provides the itineraries of one galley during two voyages made to Flanders and England in the 1460s, when Newport's ship was still operating.³⁶

The voyage of 1463–4 lasted sixteen months, nine of which were spent in Southampton, Bruges or London. The voyage of 1467–8 also lasted sixteen months, eight-and-a-half of which were spent in Sandwich, Bruges, London or Southampton. As the itineraries illustrate, the voyages were tightly organised, tended to stop in the same places and ran, as far as practicable, to a fixed schedule. En route, the galleys would stop at predetermined ports to trade, while other halts were used mainly to obtain provisions or to fulfil other needs associated with the fleet. For example, Istria was visited to take on additional oarsmen, where they were easier to obtain than at Venice.

After the 1420s, the Florentines decided to build their own galley system, imitating the Venetian model. Yet its operation never reached the same scale, with the city rarely having more than ten galleys in service at any one time. Florence's galleys only carried a small portion of the city's maritime trade, with Catalan or Genoese ships frequently being chartered to transport goods from England. Despite this, in most years from 1425 to 1477 a Florentine fleet was dispatched north. Leaving Pisa (Porto Pisano) around mid-September, the fleet typically called at Port-Bou (Marseille), Barcelona, Cádiz, Lisbon, Sluis, Sandwich and Southampton, with occasional stops at other ports.³⁷

Merchandise and the Cost of Transport

The purpose of all this shipping activity was, of course, to carry goods from one part of Europe to another, where the merchandise could be sold for a profit. The following section considers the nature of this trade and the economics of the shipping industry.

Medieval England was a major source of high-quality wool, which 'fed' looms in both the Low Countries and the Italian peninsula. By the fifteenth century, England had also developed its own cloth industry, specialising in the production of high-quality broadcloth. This was exported in the Italian ships alongside the raw wool. The other product that England was famous for was tin, which was needed to make bronze and pewter. The Low Countries dispatched cloth to the Mediterranean alongside raw materials from the Baltic, such as timber, grain and tar. Such goods typically arrived in Bruges in ships belonging to the Hanseatic League.

The range of products exported from the Mediterranean to the north was much wider. It included agricultural products such as oil and wine and manufactured goods such as silks and cloth-of-gold, as well, most famously, as the oriental luxuries obtained in the Levant. From the fourteenth century Genoa tended to specialise in the trade of bulk low-value products, like wine and grain from the Black Sea and, more importantly, dyestuffs, such as alum from the Phocaea mines. The Genoese fleet was in fact the alum fleet *par excellence*, so much so that when the Medici of Florence acquired the monopoly for the export of the alum from the Tolfa mines, near Rome, to the North Sea, they employed Genoese vessels. As the historian Jacques Heers put it, 'c'est le fret qui a dicté le choix du bâtiment' ('it is the cargo that determined the choice of vessel').³⁸ The galleys, with their smaller cargo capacity, were best suited to carrying lightweight and high-value luxuries, such as the spices purchased in the eastern Mediterranean. As noted earlier, the galleys were smaller and more flexible vessels, which allowed the fleet to make frequent halts, often discharging part of their cargo en route, or loading the ships with local products. Indeed, Florentine galleys often left Tuscany with their hold only a quarter full, relying on wares acquired in Provence or Spain for their trade with the north. This was because England tended to restrict imports of Florence's main products (precious woollen and silk cloth), while the Venetians were already satisfying most of the northern demand for oriental products.³⁹ By contrast, as observed above, the Genoese vessels normally limited the number of their stopovers.

A major determinant of the feasibility of trade was the cost of transport. Freight rates declined over time, as the number of voyages increased, safety improved and shipping services became more efficient. According to Federigo Melis, a turning point in the development of seaborne trade was the development of differential freight rates during the fourteenth century. This allowed the entry of 'poor' or relatively 'poor' goods, which could not otherwise have borne the high transport costs, into long-distance trade. Salt had often been transported freight free, or at low cost, since it could be used as ballast. Yet other merchandise had to bear the full freight charges. During the fourteenth century, a closer connection was established between the value and weight of merchandise and the cost of the freight. This development was brought about by the merchants, who considered transport as an accessory to trade and thus sought to organise it according to their needs. When a merchant chartered a ship, or even just a part of its freight space, he could split the costs and 'assign' them to the different types of merchandise he loaded. The large profits made on luxury products could be 'used' to reduce the freight costs of low-value bulk goods, making their transport more economic. This practice became even more significant when merchants sold space to other merchants in order to complete the cargo, charging them according to the goods they were transporting.⁴⁰ One result of this letting and subletting of freight space was that, in the words of Braudel, ships became 'itinerant bazaars' ('bazaars ambulants'), containing goods of a large variety of types and values and belonging to

many merchants. Indeed, the customs registers show that up to a hundred different merchants might lade their goods on a given ship, albeit ultimate responsibility for the safety and security of the cargo continued to rest with a ‘patron’, who was often the original charterer of the vessel.

Table 12.6 is again drawn from the massive Datini dataset and shows the level of freight charges on the value of the main products transported between the Mediterranean and the North Sea.

Given that the data is similar to that found in the *Tabula nauorum* issued to Gaspare di Grimaldi in 1462, the Datini sample offers a fair representation of what was happening at the time of the Newport Medieval Ship. Even though this data refers solely to the Mediterranean–North Sea route, it has been noted that freight charges

Table 12.6: Freight Charges: Percentage of the Declared Value of Merchandises on the Mediterranean–North Sea route, 1385–1410, based on the Datini Archive

Direction	Product	%
South to North	Almonds	7.9
	Aniseed	10.0
	Dates	11.0
	Oil	16.3
	Raisins and figs	8.8
	Rice from Valencia	20.5
	Wine	21.7
	Cinnamon	3.6
	Ginger	2.3
	Pepper	3.5
	Saffron	1.8
	Sugar <i>candi</i>	4.6
	Alum	7.7
	Grain (dyestuff)	2.7
	Madder	6.6
	Woad	8.1
North to South	Tin	2.8
	Wool	4.3
	Wool, best	3.7
	Woollen cloth, medium	2.0
	Woollen cloth, poor	2.8

Source: Melis, ‘Werner Sombart’, pp. 54–9.

– in percentage terms – were very similar, whatever the route. In other words, as Heers concluded, ‘freight charges depend on the quality of the merchandise much more than on the distance’.⁴¹

In his celebrated early fourteenth-century merchant manual, Francesco Balducci Pegolotti recorded the freight charges on a wide range of goods, according to their value, weight and size. Interestingly, he noted that freight charges on armed ships were 33 per cent higher than on unarmed ones, reflecting the higher cost of manning but also an implicit insurance premium.⁴² Maritime insurance was in fact another issue affecting the cost of transport, of course, and the Italians developed insurance as a way of protecting investments from the perils of navigation and piracy. With improvements in shipbuilding and ship handling, winter navigation increased. Yet bad weather could still endanger vessels, while many wrecks simply resulted from manoeuvres in port that went wrong. Although pirates and privateers constituted a constant danger, some areas were more affected than others – as Susan Rose notes was the case around England.⁴³ For those travelling from Italy to the north, the most dangerous places were the Bay of Biscay and the waters around Corsica. This was reflected by the insurance premiums paid by ships, which rose dramatically if a ship had to pass through these areas.

Conclusion

By the time the Newport Medieval Ship sailed the seas, the ports and economies of Western Europe, North Africa and the Levant were closely and directly connected. Seafarers from many different countries played a part in this business, with the merchants of the Hanseatic League dominating the trade of the Baltic and North Sea, while the Spanish and Portuguese acted as mediators between Atlantic Iberia and the western Mediterranean. Yet, in this evolving maritime world, the Italian cities of Genoa, Venice and Florence stood out. For while much of their trade was regional, or restricted to the Mediterranean, these cities also dominated the truly long-distance trade and shipping markets of their day. It was this activity that made the Italians renowned seafarers throughout Europe and it was the demands of the long-distance trade that kept them at the forefront of many of the most significant commercial developments of the period, ranging from shipping technology and navigation to double-entry bookkeeping, maritime insurance and commercial banking. Their lead shaped Europe’s commercial world, fostering practices that others adopted. The activities of the Italians are thus not irrelevant to the merchants and shippers of the Severn Sea. Even though the Italians rarely visited the Bristol Channel, they were instrumental in shaping the mid-fifteenth century commercial environment of the Newport Medieval Ship.



Notes

- 1 M. G. Canale, *Storia civile, commerciale e letteraria dei Genovesi dalle origini all'anno 1797*, III (Genoa, 1844–6), pp. 84–6.
- 2 F. Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (London, 1972).
- 3 D. Abulafia, *The Great Sea: A Human History of the Mediterranean* (Oxford, 2011), p. xxx.
- 4 J. L. Bolton, *The Medieval English Economy, 1150–1500* (London, 1980), pp. 311–12.
- 5 A. Nicolini, 'Commercio marittimo genovese in Inghilterra nel Medioevo (1280–1495)', *Atti della Società Ligure di Storia Patria*, new series, XLVII (CXXI), n. I, (2007), pp. 223–4. Hull (and Boston) had enjoyed some success with the Italians in the thirteenth century, but were hardly ever used in the fourteenth, the only known exception being a galley of Andalo Di Negro, which visited Hull in 1307 and 1309: T. H. Lloyd, *The English Wool Trade in the Middle Ages* (Cambridge, 1977), pp. 140–1. Visits to Bristol were even rarer. Indeed, only two (in 1389 and the late 1470s) have been documented to date and both of those seem to have been unplanned: E. M. Carus-Wilson (ed.), *The Overseas Trade of Bristol in the Later Middle Ages*, Bristol Record Society Vol. VII, (Bristol, 1937), pp. 41–2, 148–50.
- 6 R.S. Lopez, 'Majorcans and Genoese on the North Sea Route in the Thirteenth Century', *Revue belge de philologie et d'histoire*, 29 (1951), pp. 1163–79 (citations at pp. 1164, 1165).
- 7 F. C. Lane, *Venice. A Maritime Republic* (Baltimore, 1973), pp. 119–24.
- 8 A. A. Ruddock, *Italian Merchants and Shipping in Southampton, 1270–1600* (Southampton, 1951), p. 55.
- 9 There is no evidence of the landing of Italian ships in German ports in this period. For an overview of the trade between Germany and the Italian peninsula, see P. Dollinger, *The German Hansa* (London, 1970), ch. 10.
- 10 Abulafia, *The Great Sea*, p. 396.
- 11 J. Heers, *Gênes au XVe siècle. Activité économique et problèmes sociaux* (Paris, 1961), p. 181.
- 12 See the chapter by Hilario Casado Alonso and Flávio Miranda in this volume; see also F. Themudo Barata, *Navegação, Comércio e Relações Políticas: Os Portugueses no Mediterrâneo Ocidental (1385–1466)* (Lisbon, 1998) and F. Guidi-Bruscoli, *Bartolomeo Marchionni, «homem de grossa fazenda» (ca. 1450–1530). Un mercante fiorentino a Lisbona e l'impero portoghese* (Florence, 2014), pp. 83–9.
- 13 Abulafia, *The Great Sea*, pp. 396–7. The promoter of this voyage, Robert Sturmy, had already sent a ship to the Levant ten years before. After unloading wool and tin at Pisa and then reaching Jaffa, the ship was wrecked near the Peloponnese; S. Jenks (ed.), *Robert Sturmy's Commercial Expedition to the Mediterranean (1457/8)*, Bristol Record Society Vol. LVIII (Bristol, 2006). See in particular pp. 10–15 for Jenks' reassessment on Sturmy's intentions; the Bristolian was trying to break into a direct alum trade from Chios to England, bypassing the Genoese intermediary, rather than into the spice trade, as previously thought.
- 14 Although the eastern Mediterranean was also the target of the celebrated French merchant Jacques Coeur in the mid-fifteenth century, the commercial link he established commenced in Mediterranean France, not from the Atlantic.

- 15 'Milan: 1421', in Allen B. Hinds (ed.), *Calendar of State Papers and Manuscripts in the Archives and Collections of Milan 1385–1618* (London, 1912), pp. 3–4 <http://www.british-history.ac.uk/cal-state-papers/milan/1385–1618/pp3–4> [accessed 30 July 2015].
- 16 U. Tucci, 'Gli itinerari marittimi nel tardo Medioevo', in S. Gensini (ed.), *Viaggiare nel Medioevo* (Pisa, 2000), pp. 45–6. Asking the mariners about the foreseen time of arrival was considered as a sign of bad luck, because they thought that 'asking that question would bear the consequence of a longer route due to the disappearance of the favourable winds' ('il farli tal petitione li sia uno slungar lo camino a causa di fare cesar li venti propitii'), Tucci, 'Gli itinerari marittimi', p. 43.
- 17 On Francesco Datini and his archive, see the classic work by I. Origo, *The Merchant of Prato: Francesco di Marco Datini, 1335–1410* (New York, 1957) and the recent G. Nigro (ed.), *Francesco di Marco Datini. The Man, the Merchant* (Florence, 2010).
- 18 F. Melis, 'Werner Sombart e i problemi della navigazione nel Medioevo', in F. Melis, *I trasporti e le comunicazioni nel Medioevo*, L. Frangioni (ed.), (Florence, 1984), pp. 10 n.28, 19–20.
- 19 For the purposes of this table, Andalusia is treated as Mediterranean, albeit part of its coast, between Gibraltar and Portugal, is obviously Atlantic.
- 20 See for example Heers, *Gênes au XV^e siècle*, pp. 453–4.
- 21 S.A. Epstein, *Genoa and the Genoese, 958–1528* (Chapel Hill, 1996), p. 231, who assembled the data provided by J. Day, *Les Douanes de Genes, 1376–1377*, I (Paris, 1963), pp. 214–339.
- 22 Melis, 'Werner Sombart', pp. 28–9 and n. 84. Original quotations: 'perché attendono il carico dei fiorentini' and 'chon speranza d'avere roba da' fiorentini'.
- 23 Contemporary estimates of the appropriate conversion range from 1 *botte* being equivalent to 0.57–0.75 tons.
- 24 Melis, 'Werner Sombart', pp. 15 n.34, 21–3.
- 25 See Evan Jones's chapter in this volume.
- 26 'Egli è ora di qua vj navi di ghenovesi, che son chastella' (Prato, Archivio di Stato, Datini, 855, n. 517789, Bruges-Barcelona, Francesco Tornabuoni e Piero Cambini e compagni, 08.01.1406).
- 27 Melis, 'Werner Sombart', pp. 24–5.
- 28 Heers, *Gênes au XV^e siècle*, p. 274.
- 29 See Ian Friel's chapter in this volume.
- 30 Prato, Archivio di Stato, Datini, 664, n. 10038, London-Florence, Gherardo Davizi, 29.03.1407.
- 31 'è di portata di 1.600 botti: porterà tutta Spagna' (F. Melis, 'La situazione della marina mercantile all'inizio dell'epoca arricchita: fattori tecnici ed economici di sviluppo', in Melis, *I trasporti e le comunicazioni*, p. 112).
- 32 M.E. Mallett, *The Florentine Galleys in the Fifteenth Century, with the Diary of Luca di Maso degli Albizzi, Captain of the Galleys 1429–1430* (Oxford, 1967), pp. 24–5.
- 33 Heers, *Gênes au XV^e siècle*, pp. 294–7.
- 34 Tucci, 'Gli itinerari marittimi', p. 40. On the Venetian galleys see, for example, B. Doumerc, 'Le galere da mercato', in A. Tenenti and U. Tucci (eds), *Storia di Venezia. Dalle origini alla caduta della Serenissima, vol. 12, Il mare* (Rome, 1991), pp. 357–95.

- 35 On the comparison between public and private navigation in Venice, see C. Judde de Larivière, *Naviguer, commercer, gouverner. Économie maritime et pouvoirs à Venise (XVe–XVIe siècles)* (Leiden, 2008), pp. 13–35.
- 36 The two ledger-books have recently been published: S. Montemezzo (ed.), *Giovanni Foscari. Viaggi di Fiandra, 1463–1464 e 1467–1467* (Venice, 2012).
- 37 Mallett, *The Florentine Galleys*, pp. 24–34, 108–11. After the mid-fifteenth century, however, the Levant galleys ‘were more popular than those going to the West’ (Mallett, *Florentine Galleys*, p. 43).
- 38 Heers, *Gènes au XVe siècle*, p. 278.
- 39 While the Florentine Levant galleys acquired oriental products, these were mainly shipped to Sicily or Catalonia; see Mallett, *Florentine Galleys*, p. 133.
- 40 Melis, ‘Werner Sombart’, pp. 36–68.
- 41 ‘Le prix du transport dépend davantage de la nature du produit transporté que de la distance’ (Heers, *Gènes au XVe siècle*, p. 315).
- 42 A. Evans (ed.), *F. Balducci Pegolotti, La pratica della mercatura* (Cambridge, Mass., 1936), p. 144.
- 43 See Susan Rose’s chapter in this volume.

GLOSSARY



THIS GLOSSARY is derived/adapted principally from the *Oxford English Dictionary*; the glossaries in S. Flavin and E. T. Jones (eds), *Bristol's Trade with Ireland and the Continent, 1503–1601*, Bristol Record Society Vol. 61 (Bristol, 2009); and a glossary of archaeological definitions prepared by Toby Jones and Nigel Nayling.

Additive manufacturing A process for building three-dimensional objects by adding layer after layer of material, usually plastics; often also described as 3D Printing.

Alien A foreigner. In fifteenth-century England this would mean someone who was not subject to the English Crown.

Ballast Heavy material, such as gravel or sand, placed in the hold of a ship to weigh it down in the water and prevent it from capsizing when under sail or in motion. Cargo can be substituted for ballast if suitably dense.

Balinger A small, light seagoing vessel without a forecastle. They sometimes had oars as well as sails.

Barge A small seagoing vessel with sails, one step up in size from the balinger.

Batella (Boat) A small seagoing vessel. In the fifteenth-century Bristol customs accounts this term seems to have been reserved for vessels of up to 37 tons burden.

Bilges The lowest internal part of a ship's hull.

Bow The fore-end of a ship or boat.

Bulkheads Upright partitions in a ship, used to divide the hold into compartments.

Cargo Capacity The weight of the cargo that the ship can safely load and store.

Carrack A type of vessel first developed in the late thirteenth and early fourteenth centuries, which fused the capacious hull-form, stern-rudder and square sail of the north European cog with the skeleton construction of the Mediterranean. The carrack had a distinctive form, with a deep, wide hull, tall superstructures and a fore-castle that was higher than the aftercastle. Carracks could be of a considerable size; indeed, in late medieval England the term was synonymous with 'large ship', making them useful both as bulk carriers and in warfare.

Carvel-Built (Skeleton Construction) A mode of ship construction whereby, rather than overlapping as in a clinker-built ship, the planks of the hull are fastened to an internal frame and lie flush to one another. This method of construction largely superseded clinker building during the later fifteenth century, particularly for large vessels.

Chaulders A dry measure of capacity. For lime and coal it varied from 32 to 64 imperial bushels.

Clinker-Built (Lapstrake-Built) A mode of ship construction where the planks of the hull overlap and are fastened together by nails.

Cloth of Assize This was the standard woollen broadcloth, 24 yards long x 2 yards wide. While few cloths would have been this precise size, it was the standard used when a consignment was assessed for customs purposes. In other words, the customs officer might inspect ten cloths of 27 yards in length and decide that this amounted to eleven 'cloths of assize'. In the customs accounts such cloths are commonly described as *pannus sine grano* (cloth without grain). This meant that the cloth had not been dyed using the expensive scarlet dyestuff 'grayne' (kermes). It did not mean that the cloth was undyed.

Cog A broadly built type of ship, with a roundish prow and stern, common in northern waters during the Middle Ages.

Coins (Quoins)

Wooden wedges placed under the quarters of barrels to hold them in place during a voyage.

Dendrochronology The science of establishing the felling date and provenance of timber by comparative study of the annual growth rings.

Displacement Total weight of water displaced by the fully laden ship. This is equal to the weight of the ship, ballast, cargo and crew.

Dunnage Light material, such as brushwood, mats and the like, stowed among and beneath the cargo of a vessel to prevent the goods from being damaged in transit, either by chaffing or by becoming wet.

Enrolled Customs Accounts Derived from the 'Particular' Accounts, these are less detailed customs records which summarise the value of the different duties collected during the accounting period. In the mid-fifteenth century wine paid a specific duty of 3s. per ton (tonnage) and cloths of assize paid a specific duty of 14d. per cloth (ancient custom). Most other goods paid an *ad valorem* duty based on the assessed value of the goods, equivalent in this period to 1s. per £ (i.e. 5 per cent). It is therefore possible to determine from the enrolled accounts the number of cloths of assize declared, the number of tons of wine declared and the total value of goods paying poundage.

Futtocks One of the middle timbers of the frame of a ship, between the floor and the top timbers.

Galley A low flat-built seagoing vessel, propelled by sails and oars. It was most commonly used in the Mediterranean but was also employed by some Italian merchants (notably the Venetians) for trading to England and the Netherlands.

Hull The body or frame of a ship, apart from the masts, sails, and rigging.

Keel The lowest longitudinal timber of a ship or boat, on which the framework of the whole is built up.

Keelson A line of timber placed inside a ship along the floor-timbers and parallel with the keel, to which it is bolted, so as to fasten the floor-timbers and the keel together.

Letters of Marque A licence granting legal authority to private individuals to fit out an armed vessel and use it in the capture of enemy merchant shipping and to commit acts that would otherwise have constituted piracy. See Privateering.

Lighter A vessel, usually a flat-bottomed barge, used to load or unload ships that cannot be loaded or unloaded conveniently at a wharf – most commonly because the ship drew too much water. More generally, the term was used for vessels used for transporting goods of any kind within a harbour.

Lightship Weight The weight of the empty hull and rigging (no ballast).

Marcher Lords/Lordships A series of lordships, originally created to guard England's borders. The Welsh Marcher lordships referred to in this volume were subject to the English Crown but not formally part of the English legal system. The rights and powers of the Marcher lords were somewhat different from those of lords in England.

Navicula A 'Little Ship'. In the fifteenth-century Bristol customs accounts this term seems to have been reserved for vessels of between *c.*35 and *c.*150 tons burden.

Navis A 'Great Ship'. In the fifteenth-century Bristol customs accounts this term seems to have been reserved for vessels that were greater than 150 tons burden.

'Particular' Customs Accounts Accounts in which the customs officers recorded the detailed 'particulars' of all goods shipped. These were submitted to the Exchequer each year for audit purposes, and are now held in the National Archives.

Port Book The successors to the Particular Customs Accounts, recording trade in a similar level of detail. In use after 1565.

Poundage An *ad valorem* customs duty of one shilling in the pound (5 per cent) charged on all goods either exported from or imported into England (except for wool, wine and broadcloth).

Privateer A ship that was privately owned and crewed, operating under a licence (see Letter of Marque) that allowed it to be used to attack and capture enemy goods and shipping.

Prize A ship or ship's cargo captured in war by a privateer or naval vessel. See Privateer.

Rig The configuration of masts, sails, and spars on a sailing vessel.

Rigging The ropes, chains, wires and associated fittings used to support and operate a vessel's masts, sails, derricks, booms, etc.

Safeconducts The privilege, granted by a monarch or other authority, of being protected from arrest or harm while making a journey or travelling within a certain region.

Slipway A sloping way leading down into the water. Used for moving ships in and out of the water.

Stanchion An upright bar, stay, prop or support.

Stockfish Wind-dried codfish or similar whitefish. This desiccated fish was the chief product of Iceland, having been 'dried in the frost' by the inhabitants without recourse to salt or smoking. This curing method can only be undertaken in cold climates.

Stringer An inside strake of planking or plating, secured to the ribs of a ship and supporting the ends of the beams.

Stem The timber at either extremity of a vessel, forming the curving bow of the ship, to which the ends of the side-planks were fastened.

Three-Masted Square Rig A fifteenth-century innovation in the sail plan of ships that made them more manoeuvrable.

Tonnage The tonnage of ships has been measured in different ways at different times. Modern forms of measuring tonnage (e.g. deadweight tonnage and displacement tonnage) do not correspond precisely to medieval and early modern conceptions. In medieval England, the size of merchant ships was typically measured in terms of their carrying capacity in 'tons burden' or 'tons burthen'. This related to the number of 'tuns' of wine by Bordeaux measure (252 gallons) a ship could store in its hold. This might also be described as the 'tonnage' or 'portage' of the vessel. A ship of 150 tons burden was one that could store 150 tons of Gascon wine in its hold. It should be noted that the reconstructed cask capacity figures used in the chapter by Jones and Nayling are modelled on the actual cask components found on the Newport Medieval Ship, which was used to create a computed average. This was 806 litres, which would make the casks somewhat smaller than the 'Bordeaux ton'.

Ton A freight ton is the weight of a ton of wine in its cask (c.2,240 lbs.) or forty cubic feet, whichever was the greater. Goods which were as dense or denser than wine (such as olive oil, soap, salt, and iron) paid freight charges according to their weight, while goods which were light (such as wool or cork) paid by volume.

Trow A large flat-bottomed sailing barge, widely used on the River Severn.

Tun A size of barrel. Bordeaux wine tuns were between 240 and 252 gallons in capacity in the fifteenth century. For the analysis of the Newport Medieval Ship, a tun has been taken to have a capacity of 806 litres, measuring 1,230mm in height and 1030mm in diameter. Half-tun casks are referred to as pipes or butts, and quarter-tun casks as hogsheads.

Tonnage (customs duty) A tax of 3s. per tun on wine imported into England.

Ullage Loss of liquid goods during a voyage due to leaking from the casks.

Useable Volume (cargo hold) Total volume between the underside of the lower deck and the ceiling planking.

Volumetric Capacity Total available volume within the ship for storing cargo, provisions and people.

Yard A spar on the mast from which the sails are set.



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