1

Europe Comes of Age

The Flowering of the Renaissance

It seems strange to label a historical period after a cultural movement. The spread of ideas is not something that can be neatly pigeon-holed and dated. The Renaissance was first and foremost a revival of classical learning, a rebirth of interest in knowledge in all its forms. This led to the cultural phenomena that most people associate with the period—the paintings of Raphael, the statues of Michelangelo, and the buildings of Brunelleschi. However, the Renaissance was so much more. It led to significant political and economic changes within Europe, while the thirst for knowledge was harnessed to the desire for profit to produce the voyages of exploration and discovery that revealed a world beyond Europe's shores.

It is also virtually impossible to date. Once again, historians seem to come up with dates and events that help pin a historical era together but that don't really embrace the whole picture. Europe was just too large and diverse for that. If you date the Renaissance by the spread of ideas, then you could claim it all began with the growth of universities in the second half of the fifteenth century. Followers

of the world of literature would tend to agree, as the first printed book—the Gutenberg Bible—was produced in 1455. Art historians cite the works of Donatello and Masaccio in the 1420s, or else jump forward to the paintings of Botticelli or Leonardo da Vinci from the late 1470s onward. For their part, historians use the fall of Constantinople (1453), the Spanish conquest of Moorish Granada (1492), or the French invasion of Italy (1494) as their benchmarks. However, few can argue with maritime historians when they claim that the world changed forever in 1492, when Columbus discovered the New World.

We have the same problem when we try to work out when the Renaissance ended. The turn of the seventeenth century is often cited, as it marked the end of several political eras, including the end of Elizabethan England, Huguenot France, and the Spain of Philip II. The death of artists such as Tintoretto and Veronese marked the end of the high Renaissance of Italian art, while the Reformation had already divided Europe along religious lines, which meant a new political order in Europe, where allegiances were decided by religion rather than dynastic rivalry. Others argue that the Renaissance continued well into the new century, particularly in northern Europe, where religion gave a fresh impetus to cultural and artistic endeavor. This was the age of Rembrandt and the Dutch masters, of scientists such as Galileo and Bacon, writers such as Shakespeare, and architects such as Inigo Jones.

On the wider stage the sixteenth century had seen the establishment of Spanish colonies in the Americas, while the Portuguese carved out their own overseas trading empire in India and the East Indies. For much of the period these overseas empires remained firmly in Iberian control, but the Spanish monopoly fell apart in the wake of a series of attacks by English sea dogs and French corsairs. By the end of the sixteenth century the maritime powers of northern Europe—the English, the French, and the Dutch—had all gained their own colonial foothold in North America and were set to challenge the southern Europeans for control of the riches of the Americas. This shift in power became even more marked during the early seventeenth century, when the Dutch and English East India companies began to oust the Portuguese from India, and the American colonies became permanent fixtures on the newly drawn map of the

world. Smaller European nations—the Swedes, the Danes, and even the Scots—tried to establish their own overseas colonies, but by that stage the others were too well entrenched to allow the interlopers any chance of success.

Whichever way you define it, the Renaissance also was marked by a series of wars that may not have embraced the whole Continent but that seemed never-ending. In northwestern Europe the Hundred Years' War (1337-1453) between England and France caused widespread devastation but also led to the rise of national governments. Similarly, the Scandinavian countries fought a series of wars for independence that ended only with the emergence of Sweden as a power in the Baltic. Then came the Hapsburg-Valois wars between the French king and the Holy Roman emperor, a conflict that used Italy as a battleground. In the Mediterranean the longest-running conflict was between Christians and Muslims. Although the Moors were driven from Spain in 1492, the Ottoman Turks were victorious in the eastern Mediterranean, and throughout the sixteenth century the two religions remained at loggerheads. This meant that the great cultural, artistic, religious, and economic developments of the period were set against a backdrop of nearly constant warfare.

However, this book isn't about art, literature, architecture, or science. Our focus is on the maritime world, particularly the revolution in the design and fighting ability of sailings ships of war. Although the great age of discovery plays a part in this story, it is a secondary one, as are the cultural and religious changes that characterized the Renaissance as a period of rebirth. Even the nearly endless succession of wars is secondary, except where they involved naval warfare, or encouraged the development of artillery that could be used at sea. What remains are the political and economic changes that helped shape the naval policies of Europe's rulers, that saw the creation of national fleets, and that witnessed the rise of European powers whose strength was drawn from sea power and maritime trade rather than from terrestrial affairs. Among these powers the quest to build bigger and better warships became an obsession, as did the desire to arm fleets with the latest weaponry. Therefore our view of the Renaissance is influenced by the key events in this naval revolution and by the way the rulers of Europe embraced sea power to ensure their own power and prestige.

The Princes of the West

During the last half of the fifteenth century major changes transformed the Continental map and established the political landscape of modern Europe. If Italy was the epicenter of the Renaissance, it is somewhat disappointing that none of this political upheaval had any lasting effect on the region. It had long been divided into small city-states and petty states, and while the fifteenth century might have witnessed a cultural upheaval of global importance, in political terms it remained business as usual in Italy, where intercity warfare was endemic. The arrival of the French in 1494 did little to change all this, while it also turned northern Italy into a battleground as allegiances formed and re-formed, and battles achieved little lasting political unity. The conflict reached a peak when the Spanish intervened, and the last decade of the Italian wars saw the conflict become a struggle between the Holy Roman emperor and the French crown.

While the Battle of Pavia in 1525 might have decided the struggle for Italy in favor of the emperor, the Hapsburg-Valois wars would continue for another two decades, by which time France was embroiled in its own internal war while the emperor faced religious unrest within his own realm. The only two maritime powers of any real note in Italy were the city-states of Genoa and Venice. However, by the end of the fifteenth century both cities were in decline, and Genoa became little more than a mercenary supplier of fleets to the French. Venice was on the front line in the bar against the Turks, and much of its efforts were devoted to preserving the Venetian trading empire in the central and eastern Mediterranean. A string of naval campaigns would be fought between Christian and Muslim as the sixteenth century unfolded, but the rest of the time war galleys and corsairs alike raided the coastline of their religious rivals, and piracy became a way of life.

It was a similar story in the western Mediterranean. Although the Spanish had succeeded in driving the Moors from Spain in 1492, these Muslims retained control of the North Africa seaboard, an area known as the Barbary Coast. The Spanish, the Knights of Malta, the French, the Genoese, and the smaller Italian powers all devoted considerable energy to trying to quash these Muslim corsairs, but little was achieved. The region would remain a pirate hot spot

until well into the seventeenth century, and resources that could be spent elsewhere were devoted to the protection of Mediterranean trade. It also meant that the rulers of Spain and France had more to worry about than the creation of fleets of sailing ships of war, as they had to maintain powerful galley fleets in the Mediterranean. The galley itself would remain largely a Mediterranean phenomenon. Although war galleys were used in the waters of the English Channel and the Baltic, they never challenged the supremacy of the sailing warship. Therefore, as this story is concerned more with sailing ships than with oared warships, the Mediterranean plays a relatively minor part in this book.

The Spanish were something of a maritime enigma. After the success of the Reconquista, which united Spain under the Christian rulers Ferdinand and Isabella, they continued their campaign against the Moors of Africa, but they also looked west, across the Atlantic Ocean. Although the exploration phase continued for a few decades, by the mid-1520s regular shipments of gold and silver were being transported from the New World to Spain, and this naturally attracted the interest of others. After French corsairs began intercepting these shipments, the Spanish instituted a flota or convoy system, which would remain in operation for more than two centuries. The Spanish came to rely on this regular American windfall, and they devoted a lot of time and effort to ensure that the flotas arrived home safely. This meant that while the Spanish still prosecuted their war against the Barbary pirates in the Mediterranean, their efforts in the Atlantic were concentrated on the New World rather than on the establishment of a fleet designed to operate in northern European waters.

During the reign of King Philip II (1556–1598) this would change dramatically as the Spanish became embroiled in a costly war with the Dutch rebels of the Netherlands and a cold war with Elizabethan England. Spanish frustration would lead to a massive reallocation of resources as Philip created a powerful armada or fleet designed to carry an army of invasion to England. Although this expedition proved a costly failure, it demonstrated that Spain was still a maritime power of considerable importance that still could alter the strategic naval balance in northern Europe if its ruler wished. While the failure of the Spanish Armada has long been lauded as a triumph

of English ship design and gunnery, the truth is that however good a few of the English ships were, they were unable to break up the armada's defensive formation as it advanced up the English Channel, and the only Spanish ships to fall victims to the English lagged behind the rest of the fleet.

During the last decade of his life Philip II also was distracted by war with the French. After the Spanish-led victory over the French at Pavia in 1525, the two sides maintained an uneasy peace, broken by short periods of open warfare. However, from 1562 to 1598, the French were distracted by an intermittent civil war known as the French Wars of Religion. The religious violence reached a peak in the St. Bartholomew's Day Massacre of 1572, a slaughter of Protestants that was applauded by both the pope and Philip II of Spain. Many Protestants—Huguenots—responded by waging their own war against Catholic Spain in the waters of the Americas. During the reign of King Henry IV (ruled 1589–1610), decrees of religious tolerance effectively ended the war, but following his death the monarchy resumed its persecution of the Protestant minority, and once more France became a resolutely Catholic country.



Francis I of France

The result of this century of conflict meant that from the midsixteenth century the French monarchs were more concerned with maintaining military control of their own country than with the creation of a national fleet. The exception was in the Mediterranean, where the French continued to maintain a powerful galley fleet throughout the sixteenth and early seventeenth centuries. Francis I (reigned 1515-1547) was therefore the last French king of the Renaissance to devote his energies toward the creation of a fleet of sailing warships. This fleet last saw action in 1545, and in the years that followed its ships rarely put to sea, and they were eventually decommissioned or allowed to rot at their moorings. It wasn't until the accession of King Louis XIV to the French throne in 1643 that a French royal fleet was again considered a strategic necessity. Still, the meager French fleet still boasted an occasional gem, such as the Saint Louis of 1625, built in Holland in response to the launch of the English warship Prince Royal. This powerful French warship carried fortyeight heavy guns mounted on two continuous gun decks. However, she remained the exception to the rule, and throughout this period the French punched well below their weight.

The situation was markedly different in the Netherlands, where in 1568 the Dutch rebelled against Spanish rule. The region was already heavily engaged in maritime trade, and consequently the Dutch rebels could draw on a pool of experienced sailors and sea captains. The Dutch relied on these men—the "Sea Beggars"—to defend the coastal cities of Holland and to harass the Spanish on the high seas. Throughout the first phase of this war the Dutch never created a powerful national navy like their Protestant allies in England. However, from 1597 the Dutch Republic began raising its own fleet of medium-size warships, and by the resumption of the war with Spain in 1621 these were used to launch attacks on Spanish and Portuguese colonies in the Americas and the East Indies. This culminated in the destruction of a Spanish treasure flota off the coast of Cuba in 1628, a victory that comprehensively demonstrated the decline of Spain's maritime effort and the rise of the Dutch as a maritime power.

Just as important to Dutch national interests were the armed merchantmen of the Vereenigde Oostindische Compagnie (VOC)—the Dutch East India Company. Formed in 1602 to develop trade

routes with the Indies, the "VOC" was the world's first true multinational corporation, and by the mid-seventeenth century it had broken the Portuguese monopoly on the spice trade. This success was based on a combination of aggressive mercantile dealing and the creation of a fleet of powerful East Indiamen capable of holding their own against just about any attacker they might encounter. These ships had to be built according to very rigid specifications—shallow enough to navigate the Dutch waterways and coastal waters of India or the East Indies, but commodious enough to carry a substantial cargo. They also had to be fast, as a speedy voyage meant a profitable one. The result was an effective warship that also was a well-designed merchant vessel, and in time of war the Dutch would eventually be able to double their naval strength by drawing on surplus East Indiamen.

Of all the future maritime powers of northern Europe, the English were among the first to embrace sea power. They were prepared to take full advantage of the shipbuilding and gunfounding revolutions of the late fifteenth and early sixteenth centuries, and in the process they laid the groundwork for a national fleet that would be the envy of the maritime world throughout the age of sail and beyond. Henry V—Shakespeare's warrior king—was one of the first English monarchs to realize the importance of controlling his territorial waters. He ordered the building of the first European "super ship," the *Grace Dieu*—a warship so big and powerful that it could single-handedly dominate the sea lanes of the English Channel. While the notions of a national navy and a naval leviathan might have been forgotten after Henry's death in 1422, they would return, and would remain an important theme in English foreign policy throughout the rest of the Renaissance.

The foundation of an English national navy is usually credited to Henry VII, who seized the English throne in 1485. While he inherited a small navy from his predecessor Richard III—Shakespeare's evil hunchback—his real achievement was to build two heavily armed warships, the foundation of the Tudor Navy Royal. The *Regent* and the *Sovereign* both carried a mixture of heavy and light pieces of ordnance, making them the first purpose-built gun-armed warships in northern Europe. Other warships would follow, and by the time Henry VIII succeeded his father in 1509, the fleet was

considered one of the cornerstones of Tudor power. The young king would build on this, creating powerful gun-armed modern warships such as the *Mary Rose*. The monarch was also responsible for commissioning England's next great "super ship," the *Henri Grace à Dieu*. The fleet he built survived his death and was passed on intact, first to his son Edward, and then to his daughters Mary and Elizabeth.

The Tudor Navy Royal really came into its own during the reign of Queen Elizabeth I (reigned 1558–1603). Under her elder sister Mary, English shipwrights had been introduced to aspects of Spanish ship design, and shortly after Elizabeth's succession the first of a new type of English warship appeared, a combination of the best of English and Spanish design. These vessels were far more maneuverable than earlier English ships, and better suited to making long Atlantic voyages. However, unlike Spanish galleons, their English counterparts were designed primarily to be mobile gun platforms possessing a level of firepower that put them into a class all of their own. These "race-built" galleons would later play a major part in England's defensive victory during the Spanish Armada campaign of 1588, and would serve as the flagships of Elizabethan sea dogs such as Francis Drake, John Hawkins, and Martin Frobisher.

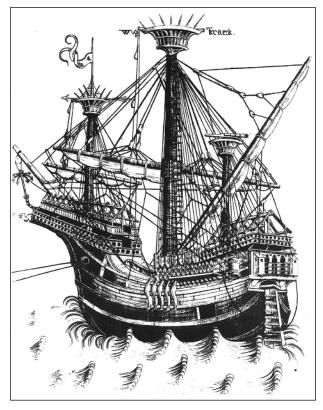
However, Elizabethan ship design continued to evolve, and the last years of the virgin queen's reign saw a move toward the creation of warships that carried a more homogeneous armament of heavy guns. Warships began to be built or converted to carry heavy guns in two or more full gun decks. One possible influence for these new ships was the commodious armed trading vessels built for the Honourable East India Company, England's answer to the VOC. By the second decade of the seventeenth century the English were producing an entirely new type of warship, typified by the *Prince Royal* of 1610, which carried fifty-six heavy guns mounted on three full gun decks. During her life she was rebuilt twice, and adapted to carry a further thirty-four pieces of heavy ordnance. She was designed by Phineas Pett, the man who would go on to build the *Sovereign of the Seas*.

A quick glance at a map will show why the English were so anxious to integrate a national fleet into their policy of national defense. The English Channel created a natural barrier to an invader, and the Spanish Armada campaign of 1588 demonstrated that a powerful

navy could prevent the landing of an enemy invasion fleet on the English coast. The Achilles heel of England was its land border with Scotland, so resources had to be devoted to the protection of northern England by fortified garrisons and a network of militias. This threat was made even more potent because the Scots were often openly hostile to the English, even when the two countries were ostensibly at peace. This animosity drew the Scots into an alliance with France, which raised the specter of a two-pronged attack—a Scottish invasion while England was embroiled in a land war with the French. Fortunately for the English this invasion threat rarely materialized, and when it did, the Scots proved singularly unsuccessful on the battlefield.

It was also fortunate for the English that their northern neighbors lacked the resources to build up a powerful navy. The one exception came during the reign of King James IV of Scotland (reigned 1488–1513). He created a small navy from scratch, and amazingly he built a flagship—the *Michael*—which for a few short years was the most powerful sailing warship in the world. It was an incredible achievement for such a small and impoverished country, and ultimately it turned out to be a monumental folly. After the king's death on the battlefield of Flodden in 1513, the *Michael* passed into obscurity, and all dreams of a Scottish navy were abandoned. Ironically, one legacy of the *Michael* was that her building spurred Henry VIII into creating his own even larger super warship—the *Henri Grace à Dieu*.

For much of James IV's reign his closest European ally was King Hans (or John) of Denmark (1481–1513), who spent much of his life fighting to control the rest of Scandinavia, particularly Sweden, which he conquered in 1497. This war against Swedish rebels and their Hanseatic allies involved a struggle for naval control of the Baltic Sea, and Hans built up a small but effective fleet during the last decade of his reign. His son Christian II continued this struggle with the Swedes, which culminated in his temporary reconquest of these rebel territories in 1520 and the brutal massacre of his Swedish opponents in Stockholm. Like his father, he recognized that Danish power relied on control of the sea, and consequently he built up a powerful fleet. Unfortunately, Christian ended up a prisoner of his uncle Frederick of Holstein, who used this golden opportunity to seize the crown. Ultimately this drive for regional naval supremacy



The "WA" carrack

came to nothing, and ultimately it was Denmark's main rival that would control the cold waters of the Baltic.

The Swedes had managed to regroup after the "Stockholm Bloodbath" of 1520, and in 1523 the twenty-four-year-old nobleman Gustav Vasa was elected as the new Swedish king. The previous summer the Swedish Riksdag (Parliament) purchased several ships from their major ally, the German Baltic port of Lübeck, a member of the once-powerful Hanseatic League. These formed the basis of a new national navy. Gustav I and his successors realized that Swedish independence depended on the maintenance of a Baltic fleet, and shortly after the temporary cessation of hostilities with Denmark in 1524, the Swedes set about building an even larger fleet. The flagship of this new fleet was the *Elefant*, built in Stockholm in 1532.

She was reputedly a warship of about 750 tons, which made her bigger than anything the Danes could send against her.

This Swedish obsession with size would return almost a century later, after a succession of Baltic wars that saw the country's navy gradually gain the ascendancy in the Baltic. However, resources were limited, and the Swedes rarely did more than achieve temporary control of the region. Then in 1625 King Gustavus Adolphus (reigned 1611–1632) ordered the building of four new warships, the largest of which was called the *Vasa*. She was designed along the lines of the English *Prince Royal*, with two full gun decks augmented by a few more guns on her upper deck. This ornate and stately sixty-four-gun warship was launched in Stockholm, and began her maiden voyage in August 1628. She had barely sailed a mile before a sudden gust of wind forced her to heel over. Water poured into her open gunports and she sank in minutes, taking thirty of her crew with her. This disaster proved that while rulers such as Gustavus Adolphus now realized the potential of modern heavy guns to influence a naval battle, ship designers were still trying to figure out the best way to carry all this weaponry within the hull of a sailing man-of-war.

Within six years of this disaster King Charles I of England and Scotland visited the shipbuilder Phineas Pett in the royal shipyard in Woolwich, just outside London. Charles ordered the building of his own super warship, the largest vessel built in Europe since Henry V's *Grace Dieu*. Naval experts swore it couldn't be done and that this vessel—the *Sovereign of the Seas*—would be unmanageable under sail and would be too large to navigate the coastal waters of Britain. Charles I and Phineas Pett proved them wrong. When the *Sovereign of the Seas* was launched in 1637, she was the biggest and most powerful warship in Europe, a naval leviathan with more than a hundred heavy guns, and the most heavily decorated ship anyone had ever seen. Ultimately she would cost Charles I his kingdom and his head, but that is another story.

His designer, Phineas Pett, had finally achieved what European ship designers had been striving for since the early fifteenth century: he had built the ultimate Renaissance "battleship," a warship so well armed and so well designed that she could well have stood alongside the British fleet at the Battle of Trafalgar almost two

centuries later. If we decided to begin our own naval Renaissance as early as 1418, when Henry V's *Grace Dieu* became the first European super ship, the launch of the *Sovereign of the Seas* provides us with the perfect point at which to end the Renaissance. The two centuries between would be remembered for their contribution to culture, science, religion, and politics. They should also be recognized as the time when the great quest to find the ultimate gunarmed warship would run its course.