“Write what you know,” said Robert Graves, who rarely observed the maxim. It has become a shibboleth for writing teachers but seems contemptible: facile, challengeless, narrow-minded, anxious for success. The unknown is magnetic: an invitation to endlessly unwinding problems, a lure to the receding horizon that seduced Magellan, or a way into the improbable stories he composed for himself in his head and tried to act out in his life. In sticky, smelly classrooms, amid Gradgrind-mark schemes and marginal ticks, history is “about facts.” But, for me, facts are there only to feed problems: insoluble problems—for preference—that flirt and flit as you grasp at them.

I think I know as much about Magellan as you can know in your head. I can unpick the contradictions of the evidence. I can reproach predecessors with errors and straighten tangles in the chronology. I can get patternless details into focus: I know, for instance, as previous inquirers have known, how many arrows (21,600) and compass needles (thirty-five) appear in Magellan’s ships’ manifests, how many hourglasses (eighteen), how many barrels of anchovies and tons of biscuit (below, p. 110).1

I also think I know—or sense convincingly—a lot about his heart: the tragically flawed social ambition, the heroic self-delusion, the vexing self-righteousness, the cruelly streaked sense of humor. They all appear in the pages that follow. I can trace the way his journey through life changed him, and reconstruct the strange mood of religious exaltation...
in which he died. But there’s gut knowledge too, which eludes me. Magellan was one of at least 150 men who died on the voyage he led. If you leave out those who survived by deserting or in captivity, the death rate was about 90 percent. Even by the standards of the day, when failure was routine on alarmingly overoptimistic journeys, Magellan’s project beggared belief. Objectively considered, the chances of survival, let alone success, were always minimal. As we shall see, the cost in lives bought no quantifiable return. Despite previous historians’ assertions, the balance sheet of crude profit and loss ended in the red. The voyage Magellan captained failed in every declared objective.

What made such an egregious adventure attractive, not just to the men who risked it, but also the backers who put money into it? I am not sure I know or can know that. Life was cheap, for reasons, partly intelligible, to which we shall come in a moment. “To set sail,” said Luis de Camões, the well-traveled poet who turned Portuguese maritime history into verse in 1572, “is essential. To survive? That’s supererogatory.” What made such a shocking inversion of common sense seem reasonable? Why were seamen’s lives so dispensable—so much cheaper than everyone else’s? What made Magellan and some of his men persist as their prospects worsened? What induced the king of Spain and hard-headed merchants in Seville and Burgos to believe in Magellan? Why would they put up money for a proposal from a man who came to them with a reputation for treachery, a dearth of relevant experience, and a scientific sidekick, Rui Faleiro, who, to the psychiatry of the day, was literally, certifiably insane?

To approach the problems we have to start by trying to understand the constraints and opportunities of the world around Magellan.

That world was riven with paradox. Every textbook will tell you that the centuries in which Magellan lived were an “age of expansion,” when stunning new departures happened. In Europe the retrieval of classical tradition intensified in the Renaissance, which equipped minds for new art and thought and endeavor and which spread to much of the rest of the world, including parts of the Americas and sub-Saharan Africa: the first genuinely global intellectual event. The so-called Scientific Revolution was exhibiting early signs when Magellan took to sea, enabling the formerly backward West to catch up with and (in some respects, over the next hundred years or so) to overtake Chinese science and technology. Meanwhile, a global ecological exchange swapped life-forms across a formerly divergent world, spreading creatures, plants, and pathogens, for good and ill,
across the globe. A persistent historical tradition even claims that Magellan’s lifetime roughly coincided with “the origins of modernity”: the distribution and divisions of world religions were taking on something like their present configurations; some of the world’s most widely and creatively deployed languages and literatures were taking shape in forms intelligible to today’s readers. The world’s major civilizations—Christendom, Islam, and the Buddhist world—literally expanded, engrossing territory and people, stretching out to each other across chasms of culture, spreading contacts, conflicts, commerce, and contagion.

How did all that happen in what was also, worldwide, an age of plague and cold?^4

On the face of it, we should not expect large-scale migrations, long-range conquests, or spells of invention in a period of severe environmental dislocation or harsh conditions.^5 Climate and disease set the context for everything else that happens; and climate is supreme, because diseases depend on it. Magellan’s lifetime came roughly in the middle of one of the most severe interruptions in global warming since the end of the Younger Dryas, nearly twelve thousand years ago. The “Little Ice Age,” from the mid-fourteenth to the early eighteenth century, inflicted conspicuous and measurable harm on the societies it affected, spreading starvation, worsening wars, provoking rebellions, incubating plagues. The coldest spell was toward the end, generating stories of freak freezings, from the king of France’s beard to entire salt seas.^6

During Magellan’s career no conditions or events remotely so extreme occurred, and in the first half of the sixteenth century temperatures seem to have been milder than immediately before or after. Nevertheless, in parts of the world from which quantifiable data are available, spring and winter temperatures were typically between one and two degrees lower, on average, than what we now consider normal (represented by the average in the first half of the twentieth century).^7 As we shall see, Magellan’s men complained of the cold they experienced and threatened to mutiny because of it.

Lethal, recurrent bouts of disease accompanied the cold.^8 At the time, people called them plagues: maladies associated with a complex ecology, involving rodent hosts and fleas as vectors.^9 The afflictions in question were persistent and impressive. From the mid-fourteenth century to the early eighteenth—the period exactly matching the cold era—no living subject was portrayed more often in Europe than the Grim Reaper, reveling in his deadly duties, selecting dancing partners without regard to age, sex, or appearance.^10 In 1493, a little before Magellan
became a page boy in the Portuguese court, the *Nuremberg Chronicle* included a remarkable text under an image of dancing dead, in various stages of putrescence—gleefully displaying rotting flesh, jangling their bones, with worms wriggling and entrails dangling.

They are irrepressibly jolly. It is tempting to say that the dead exhibit joie de vivre. The words of the song to which the cadavers rise from their graves appear in the text. “There is nothing better than Death.” He is just, because all deserve him. He is equitable, because he treats poor and rich alike. He is benign, because he frees the old from sorrow. Visiting prisoners and the sick, he is kind in obedience to commands of Christ. Mercifully, he liberates victims from suffering. He is wise, despising worldly pleasure and deploring the vanity of power and wealth. When the Age of Plague receded, Death became less familiar and therefore, perhaps, more feared. Nowadays, people treat him with evasion. They speak of him in euphemisms, in which “the loved one” is said to “pass away.” Magellan and his contemporaries had an uneasy familiarity with Death that it is hard for us to retrieve.

Local recurrences of plague defied, to some extent, expectations that visitations would leave survivors protected by immunity. The pace of microbial mutations, perhaps, explains the persistence. While the bubonic-plague bacillus, *Yersinia pestis*, was responsible for many, if not most or all, of the outbreaks, evidence that survives in victims’ DNA includes variations, small and significant, over time.11 One feature of the environment was constant: the reasons for the way then-prevalent strains of the bacillus responded to fluctuations in temperature have attracted a great deal of inconclusive research; the link with cold, however, is conspicuous. The Black Death of 1348–50 followed a fall in Northern Hemisphere temperatures. The retreat of “plague” coincided with the resumption of global warming.12

During Magellan’s adulthood, though population was edging upwards in Europe, plague hardly abated. England experienced three outbreaks of “great plague” or “great pestilence” in the first two decades of the sixteenth century. From the frequency with which the city council issued measures of quarantine and of what we should now call “lockdown,” Edinburgh seems never to have been free of plague from 1498 to 1514.13 In Leipzig in 1521 quacks hawked Germany’s “first brand-name medicines” as remedies for plague.14 In 1520 what can fairly be called an international medical conference met in Basel to propose universal measures of prevention.
In the Iberian peninsula, in the harshest winter of Magellan’s lifetime, in 1505–6, plague struck Évora, Lisbon, Porto, and Seville. Plagues appeared in Barcelona in 1501, 1507, 1510, and 1515. Those of 1507 and 1510 reached across Spain’s eastern seaboard and beyond, into western Andalusia. The years 1507–9 were by some measures the most deadly since the Black Death. The outbreak in 1507 killed a tenth of the prebendaries of Cadiz Cathedral, while the Andalusian priest and sedulous chronicler Andrés de Bernáldez claimed to witness thirty thousand deaths in a single month in May. The previous year, claims that Jews were responsible for spreading plagues helped to provoke a massacre in Lisbon.15 While Magellan’s expedition was at sea, plague broke out in Valladolid and spread to Valencia, Córdoba, and Seville, where his fleet was launched. An earthquake in Játiva in 1519, an exceptionally rainy year, was taken as presaging the plague that followed in Lisbon, Valencia, Zaragoza, and Barcelona, where it persisted until 1521.16 The plague and cold did not exclude other routine sources of suffering, such as drought in 1513 in the Gudiana valley and more generally in 1515 and 1516. Drought and famine menaced much of Portugal in 1521–22.17

In one respect, Magellan’s career coincided with an unprecedentedly aggressive development in the global disease environment: the transmission of Old World pathogens to other continents, along with the other biota of global ecological exchange, which Columbus inaugurated when he swapped products of the Old World and the New on his first two transatlantic voyages.18 The arrival of Spanish settlers in Hispaniola in 1493, or perhaps of successors in subsequent voyages, introduced unfamiliar diseases with which native immune systems could not cope. In a terrible acceleration of mortality in 1519, the friars to whom the Spanish monarchy had confided control of the colony abandoned hope of keeping the natives alive.19 Near extinction followed. By the time of Magellan’s voyage, Spanish intrusions had generalized the effect around the Caribbean and projected it onto the Central American mainland. Mortality rates of up to 90 percent became normal wherever “the breath of a Spaniard” broadcast disease.20 The cheapness of life was not the result of glut anywhere in the world of the time. Magellan’s era differed from ours not so much, perhaps, because of the low value people put on life as because of the high value they put on death. Death in those days was the real lord of the dance.

...
Meanwhile, despite the unpropitious circumstances, in widely separated parts of the world, economic activity and territorial conquests speeded up like springs uncoiling. An “age of expansion” really did begin, but the phenomenon was of an expanding world, not simply, as some historians say, of European expansion. The world did not wait passively for European outreach to transform it, as if touched by a magic wand. Other societies were already working magic of their own, turning states into empires and cultures into civilizations. Beyond the reach of the recurring plagues that stopped demographic growth in much of Eurasia, polities dwarfed those of Latin Christendom. Some of the most dynamic and rapidly expanding societies of the fifteenth century were in the Americas and sub-Saharan Africa. Indeed, in terms of territorial expansion and military effectiveness against opponents, native African and American empires outclassed any state in western Europe until the establishment of the global Spanish monarchy in the sixteenth century.

Even Spain and Portugal, in the three decades or so preceding Magellan’s project, seemed feeble by comparison with the rates of expansion of other empires. Aztecs and Incas outperformed Spaniards as conquerors until the newcomers improbably gobbled their empires almost at a gulp in a couple of hectic decades from 1520. The Aztec paramount who greeted Cortés was the most spectacular conqueror in his people’s history, shunting armies back and forth between the mouth of the Pánuco River and Soconusco Bay, acquiring tribute—in maize and beans, cacao and gold and jade and the feathers of exotic birds—from forty-four new subject communities. Huayna Capac, who died shortly before Spanish explorers arrived in Peru, made the Inca polity one of the world’s fastest-expanding states in Magellan’s day, extending the frontier in every direction, conquering the Caranqui in what is now Ecuador and reputedly drowning twenty thousand of their defeated warriors in Lake Yawar-Cocha.

Russia, meanwhile, extended empire to the Eurasian Far North, sending expeditions beyond the Arctic Circle and across the Rivers Perm and Ob in the 1490s. In the decade of Magellan’s departure, the tsar conquered Smolensk and extended rule to the Dnieper. While Magellan was readying his fleet, Sigmund von Herberstein visited Moscow as the ambassador of the Holy Roman Empire and heard prophecies from an unconvincing shamaness known as the Old Woman of the Ob, who foretold Russia’s future in an icy El Dorado, amid “men of monstrous shape and fishes having the appearance of men.”

Just before Magellan’s departure on his great voyage the Ottomans conquered Egypt and began to stretch control or influence along the
Magellan was born in a small state—Portugal—and died ostensibly trying to build a great empire for Spain. In his lifetime, the two monarchies he served became the foci of allegiance of the world’s newest and most dynamic empires, unprecedented for their reach across the globe and the diversity of the environments and cultures they encompassed. His career took him to more of the world than had been accessible to anyone in any previous generation. In early adulthood he spent eight years, from 1505 to 1513, in and around the Indian Ocean, campaigning up and down the coasts of Africa and India to help found the Portuguese Empire, taking part in the conquest of Malacca in 1511, and learning about the islands beyond the ocean that would become the foci of his later career. At intervals from 1513 to 1517 he fought for Portugal in Morocco. His voyage from Spain in 1519 took him further into the South Atlantic than any previous European expedition, and across the Pacific—an ocean never previously traversed, as far as we know, in a single voyage—to archipelagoes at its rim, in what became the Marianas and the Philippines. We shall take a tour d’horizon of the places beyond Iberia that mattered in his career before returning to trace the beginnings of his life and education in the next chapter.

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In North Africa, the empire most likely to succeed at the time—the Ottomans’—was unable to expand beyond the deserts that fringed its dependencies. Westward from Egypt, along Africa’s Mediterranean coast, numerous small states, founded on the profits of trade or piracy, flourished where Mediterranean and Saharan trade routes met. The first of the straits that channeled Magellan’s life was at the western end of North Africa, separating the continent from the Iberian peninsula. Morocco, where he would spend the best part of three years’ campaigning, had southern shore of the Mediterranean. In West Africa, meanwhile, Muhammad Touré consolidated the preponderance of the empire of Songhay over the vast Niger valley. In East Africa, where Magellan took part in a campaign in 1510 to secure Portuguese coastal toeholds and gain access to trade in gold, salt, and ivory, the empire of Mwene Mutapa grew to occupy the land from the Limpopo to the Zambezi. A Portuguese ambassador to Abyssinia in 1520 thought he had found the fabled realm of Prester John, so impressed was he with the thousands of red tents that housed the Negus’s army on the march. The imperial habit was spreading, and new empires were forming in environments that had never experienced imperialism before.
emerged as a kingdom on the edge of the Islamic world, holding Christendom at bay. The rulers’ hereditary viziers, the Banu Marin, seized control in a coup in 1465 but had to fight off pretenders sprung from desert sects and, allegedly, from the stock of the prophet Muhammad. The followers of al-Jazuli, a murdered Sufi, spread rebellion by touring the realm with his embalmed corpse. They weakened the state in the face of invasions from Spain and Portugal. For Iberian rulers, North Africa was an overseas extension of the peninsula, and a legitimate war zone, conquerable on the alleged grounds that it had formed part of the same political unit as Hispania in antiquity and that it was sometime Christian land, recoverable from Muslim usurpers. Portuguese efforts focused on dominating harbors west of the Strait of Gibraltar, where, as we shall see, Magellan served, defending Portuguese acquisitions against revanche by new heirs of al-Jazuli’s mantle: a family from the Draa valley, deep in what is now Western Sahara, claimed descent from the Prophet and, from 1509, launched a jihad and organized a tribal confederacy that first manipulated and ultimately displaced the Banu Marin.

Magellan’s adventure beyond the Strait of Gibraltar was only a brief episode in an overseas career spent hovering between remoter straits: they bound coastal routes of maritime Asia on the shores of the Indian Ocean, from Ormuz in the west to Malacca (as traditionally known, or Melaka in currently fashionable orthography) in the east. Here the monsoon dominates the environment. Above the equator, northeasterlies prevail in winter. When winter ends, the direction of the winds is reversed. For most of the rest of the year they blow steadily from the south and west, sucked in toward the Asian landmass as air warms and rises over the continent.

The regularity of the wind system made this ocean the most ancient and richest zone of long-range commerce in the world—envied in the relatively poor and confined economies of Christendom. By timing voyages to take advantage of the predictable changes in the direction of the wind, navigators could set sail, confident of a fair wind out and a fair wind home. In the Indian Ocean, moreover, compared with other navigable seas, the reliability of the monsoon season offered the advantage of a speedy passage in both directions. To judge from such ancient and medieval records as survive, a trans-Mediterranean journey from east to west, against the wind, would take fifty to seventy days. With the monsoon, a ship could cross the entire Indian Ocean, from Palembang in Sumatra to the Persian Gulf, in less time. Three to four weeks in either direction sufficed to get between India and a Persian Gulf port.
The monsoon made travel speedy, but the ocean was stormy, unsafe, and hard to get into and out of. Access from the east was barely possible in summer, when typhoons tore into the shores. Fierce storms guarded the southern approaches. No one who knew the reputation of these waters cared to venture between about ten and thirty degrees south and sixty or ninety degrees east during the hurricane season. Arab legends claimed the region was impassable. For most of history, therefore, it was the preserve of peoples whose homes bordered it or who traveled overland—like some European and Armenian traders—to become part of its world. Moreover, all the trade was internal. Indian Ocean merchants took no interest in venturing far beyond the monsoon system to reach other markets or supplies.

As a fictional Spanish mother advised, “Stick to the rich and something may rub off” (Arrimarse a los buenos por ser uno de ellos). Europeans would have wanted to find ways of tapping the wealth of the region, even without the lure of products available nowhere else in the world. In the fifteenth century, however, a conspicuous change in the region was the growing global demand for, and therefore supply of, spices and aromatics—especially pepper. These products, sold to rich buyers in China and Southwest Asia, and, to a lesser extent, in Europe, were the most profitable in the world, in terms of price per unit of weight. No one has ever satisfactorily explained the reasons for the increase in demand. China dominated the market and accounted for well over half the global consumption, but Europe, Persia, and the Ottoman world absorbed ever greater amounts. Population growth contributed—but the increase in demand for spices seems greatly to have exceeded it. The commonplace explanation—that cooks used spices to mask the flavor of bad meat—is nonsense. Produce was far fresher in the medieval world, on average, than in modern urbanized and industrialized societies, and reliable preserving methods were available for what was not consumed fresh. Changing taste has been alleged, but there is no evidence of that: it was the abiding taste for powerful flavors—a taste being revived today as Mexican, Indian, and Sichuanese cuisines go global—that made spices desirable; the same circumstances affected demand for sugar, which boomed at the same time, not because it supplied a new taste, but because it made a long-standing preference attainable in a widening market. The spice boom was part of an ill-understood upturn in economic conditions across Eurasia. In China, especially, increased prosperity made expensive condiments more widely accessible, as the turbulence that brought the Ming to power
subsided and the empire settled down to a long period of relative peace and internal stability.

In partial consequence, spice production expanded into new areas. Pepper, traditionally produced on India’s Malabar coast, and cinnamon, once largely confined to what is now Sri Lanka, spread around Southeast Asia. Pepper became a major product of Malaya and Sumatra in the fifteenth century. Camphor, sappanwood, and sandalwood, aromatic benzoin and cloves, credited with medical and culinary magic, all overspilled their traditional places of supply. Nonetheless, enough local specialization remained within the region to ensure huge profits for traders and shippers. Commercial opportunities in their home ocean kept seafaring Arabs, Swahili merchant communities, Persians, Indians, and Javanese and other island peoples of the region fully occupied. Indeed, their problem was, if anything, shortage of shipping in relation to the scale of demand for interregional trade. That was why, in the long run, they generally welcomed interlopers from Europe in the sixteenth century, who were truculent, demanding, seemingly barbaric, and often violent, but who added to the shipping stock of the ocean and, therefore, contributed to the general increase of wealth. Paradoxically, Europeans’ poverty favored their prospects as competitors and stimulated their exceptionally broad outreach by the standards of the time, compelling them to look overseas because of the dearth of economic opportunities at home, and making their services as shippers relatively cheap.

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From Europe access to the Indian Ocean was well worth seeking. Today, Europe is a magnet for migrants from poorer economies. In Magellan’s day, the normal relationship was the other way round: Europe was a relatively poor backwater, despised as barbaric in the richer societies that lined the shores of maritime Asia. European merchants craved a share of the richest trades and most prosperous markets in the world. The widespread assumption that Vasco da Gama was the first to penetrate deep inside the Indian Ocean when he rounded the Cape of Good Hope in 1498 is a vulgar error. Italian merchants often plied their trade there during the late Middle Ages. But the journey was too long, laborious, and hazardous to generate much profit. From the Mediterranean, merchants typically had to travel up the Nile from Alexandria and overland by camel caravan from the first or second cataract to the Red Sea coast, where they awaited the turn of the monsoon before shipping for
Aden or Socotra. It was inadvisable to attempt to join the Red Sea further north because of the formidable hazards to navigation. By an alternative route, Europeans could attempt a dangerous passage through the Ottoman Empire to the Persian Gulf in the rare interstices of war and religious hostility. In either case, they obviously could not take ships with them. This was a potentially fatal limitation because Europeans had little to offer to people in the Indian Ocean basin except shipping services.

Most of the Western venturers who worked in the Indian Ocean before Vasco da Gama’s irruption are known only from stray references in the archives. Merchants rarely wrote up their experiences. Two circumstantial accounts, however, survive from the fifteenth century, the first by Niccolò Conti, who had been at least as far east as Java in the 1420s, the second by the Genoese Girolamo di Santo Stefano, who made an equally long trading voyage in the 1490s. Between them, they described the framework in which Portuguese successors, including Magellan, operated.

Conti chose to approach the Indian Ocean overland via Persia to the Gulf, where he took ship for Cambay in the Bay of Bengal. Santo Stefano used the other main route. In company with a business partner, Girolamo Adorno, he traveled up the Nile, joined a caravan bound for the Red Sea, and crossed the ocean from Massawah—a port generally under Ethiopian control at the time.

On his return, Conti sought papal absolution for having abjured Christianity in Cairo in order to save the lives of his wife and children, who traveled with him. He told his story to a Florentine humanist, who made a record of it as a morally edifying tale of changing fortunes. The convention Conti’s work established was of “the inconstancy of fortune.” When Santo Stefano wrote up his experiences of the Indian Ocean in 1499, he too focused on lamentations against the ill luck he endured “for my sins.” Had he eluded his sufferings, he might have retired on the riches that slipped through his hands and avoided the need to throw himself on the mercy of patrons—the obvious subtext of his work. “But who can contend with fortune?” he asked. He and Adorno got as far east as northern Sumatra, where they took ship for Pegu, in Burma, apparently with the idea of engaging in trade in gems. It was a painfully slow business. In Sumatra on the way back a local ruler confiscated their cargo, including the valuable rubies they brought from Burma. Adorno died in 1496, “after fifty-five days’ suffering” in Pegu, where “his body was buried in a certain ruined church, frequented by none.”
Naturally enough, as they were merchants, Conti and Santo Stefano inventoried trade goods wherever they went and took special interest in spices and aromatics. Santo Stefano described the drying of green peppercorns at Calicut, the profusion of cinnamon in Sri Lanka, the availability of pepper in Sumatra, the location of sandalwood in Coromandel. Conti’s description of aromatic oil production from cinnamon berries in Sri Lanka reflects personal observation, whereas he culled other purported observations from his reading. He reported camphor and durians (“The taste varies, like that of cheese”) in Sumatra. As specialists in gems, both travelers felt drawn to where rubies, garnets, jacinths, and crystal “grew.” Both had antennae for military intelligence. Santo Stefano was interested in elephant breeding for war and confirmed Conti’s claim that ten thousand war elephants were maintained in the stables of the ruler of Pegu.

These were hard-headed observations. But the writers seemed to go soft in the head when they succumbed to the lure of exotica. Around the Indian Ocean, they described a topsy-turvy world in which murder was moral, serpents flew, monsters trapped fish by lighting irresistibly magnetic fires on shore, and miners used vultures and eagles to gather diamonds. Some of the tales echo stories in the Sinbad corpus—evidence that the authors really did know the East at first hand. The taste for sensationalism was most apparent in their obsessions with sex. Santo Stefano described how Indian men “never marry a virgin” and hand prospective spouses over to strangers for deflowering “for fifteen or twenty days” before the nuptials. Conti was scrupulous in enumerating the harems of great rulers and commending the sang-froid of wives who committed suttee, flinging themselves on their dead husbands’ funeral pyres. In India he found brothels so numerous and so alluring with “sweet perfumes, ointments, blandishments, beauty and youth” that Indians “are much addicted to licentiousness,” whereas male homosexuality, “being superfluous, is unknown.” In Ava in Burma the women mocked Conti for having a small penis and recommended a local custom: inserting up to a dozen gold, silver, or brass pellets, of about the size of small hazelnuts, under the skin, “and with these insertions, and the swelling of the member, the women are affected with the most exquisite pleasure.” Conti refused the service because “he did not want his pain to be a source of others’ pleasure.”

On the whole, the merchants’ reports were of a world of abundance and civility. Beyond the Ganges, according to Conti, in a translation made in the reign of Elizabeth I, people “are equal to us in customs, life,
and policie; for they have sumptuous and neat houses, and all their ves-
sels and householde stuffe very cleane: they esteeme to live as noble
people, avoided of all villainie and crueltie, being courteous people &
riche Merchauntes.”

If there was one thing the civilizations of the East lacked, it was ship-
ning adequate to meet the huge demands of their highly productive
economies and active trades. Santo Stefano marveled at the cord-bound
ships that carried him along the Red Sea and across the Indian Ocean.
But while ships were well designed, well built, and ingeniously navi-
gated, there were never enough of them to carry all the available freight.

As a result, in the 1490s, the Indian Ocean was about to experience a new
future, in which European interlopers would cash in on their advantages.
For that future to happen, Europeans needed to enter the ocean with
ships. Because they lacked salable commodities, they had to find other
ways of doing business: shipping and freighting were their best resources.
Without ships of their own, visitors such as Conti and Santo Stefano were
little better than peddlers. The Indian Ocean region was so rich and pro-
ductive, so taut with demand and so abundant in supply, that it could
absorb hugely more shipping than was available at the time. Any Euro-
pean who could get ships into the zone stood to make a fortune.

There was only one way to do it: sail the ships in around the southern
tip of Africa. But was such a long and hazardous journey possible? Were
the ships of the time equal to its strains? Could they carry enough food
and water? In any case, it was not even certain that an approach to the
ocean lay along that route. The geographer the age most revered was
the second-century Alexandrian Claudius Ptolemy. His *Geography*
was the favorite book on the subject in the West as soon as the text became
widely available in the early fifteenth century. Readers generally, if inac-
curately, inferred that the Indian Ocean was landlocked and therefore
inaccessible by sea. Maps of the world made to illustrate Ptolemy’s ideas
showed the ocean as a vast lake, cut off to the south by a long tongue of
land, protruding from Southeast Africa and curling round to lick at the
edges of East Asia. The fabled wealth of India and the spice islands lay
enclosed within it, like jewels in a strongroom.

Although this was an erroneous view, it was understandable. Indian
Ocean merchants kept to the reliable routes, served by predictable mon-
soons that guaranteed them two-way passage between most of the
trading destinations of maritime Asia and East Africa. There was little
reason to venture to where the belt of tempests girds the sea, or to risk
the coasts south of Mozambique, where the storms tear into lee shores.
There were no potential trading partners beyond those limits, no oppor-
tunities worth braving those dangers for. From within the monsoonal
system, the way in and out of it did seem effectively unnavigable.

For anyone who tried to approach from the Atlantic no such inhibi-
tions applied. Other obstacles, however, were equally effective. In 1487
the Portuguese explorer Bartolomeu Dias managed to struggle round
the Cape of Storms at the southernmost point of Africa. The king of
Portugal is supposed to have renamed it the Cape of Good Hope in a
promotional exercise of brazen chutzpah. But the hope was weak, the
storms strong. Beyond the cape, Dias found an adverse current and
dangerous lee shores. The way to the Indian Ocean still seemed to be
barred. Nor had Dias really gone far enough to prove that the ocean
was not landlocked. All he had achieved was to demonstrate how labo-
rious was the journey to the southernmost tip of Africa. To avoid the
adverse current along the West African shore, his successors would have
to strike far into the South Atlantic—farther from home, longer at sea
than any voyagers had ever known—to find the westerly winds that
would carry them around the cape.

So, while Dias explored the way by sea, the Portuguese crown sent
agents overland to the Indian Ocean by traditional routes to gather
intelligence and, in particular, to settle the question of whether the
ocean was open to the south. Pero da Covilhão led the effort. He was
one of many indigent but talented noblemen to cross and recross the
permeable border between Portugal and Castile. He spent years in
Seville, where he served in the household of the Castilian nobleman the
Count (later Duke) of Medina Sidonia. This was probably a useful
apprenticeship. The count was an investor in the conquest of the Canary
Islands and a major figure in the Atlantic tuna fishery and sugar indus-
try. When war broke out between the two kingdoms in 1474, Covilhão
returned to his native Portugal to serve his king. Missions of an unknown
nature—perhaps espionage, perhaps diplomacy—took him to Maghribi
courts, where he learned Arabic.

At about the time Bartolomeu Dias left to explore the approach to the
Indian Ocean from the Atlantic, Covilhão, with a companion, Afonso
de Paiva, set off up the Nile and across the Ethiopian desert to Zeila on
the Red Sea. His inquiries took him east to Calicut and thence perhaps
as far as Sofala on the coast of Mozambique—the emporium from which
East African gold was traded across the Indian Ocean. By the end of