

Introduction: Rasselas's Question

He would not admit *civilization* [to the fourth edition of his dictionary], but only *civility*. With great deference to him, I thought *civilization*, from *to civilize*, better in the sense opposed to *barbarity*, than *civility*.

James Boswell

All definitions of civilization ... belong to a conjugation which goes: 'I am civilized, you belong to a culture, he is a barbarian.'

Felipe Fernández-Armesto

When Kenneth Clark defined civilization in his television series of that name, he left viewers in no doubt that he meant the civilization of the West – and primarily the art and architecture of Western Europe from the Middle Ages until the nineteenth century. The first of the thirteen films he made for the BBC was politely but firmly dismissive of Byzantine Ravenna, the Celtic Hebrides, Viking Norway and even Charlemagne's Aachen. The Dark Ages between the fall of Rome and the twelfth-century Renaissance simply did not qualify as civilization in Clark's sense of the word. That only revived with the building of Chartres cathedral, dedicated though not completed in 1260, and was showing signs of fatigue with the Manhattan skyscrapers of his own time.

Clark's hugely successful series, which was first broadcast in Britain when I was five years old, defined civilization for a generation in the English-speaking world. Civilization was the chateaux of the

Loire. It was the palazzi of Florence. It was the Sistine Chapel. It was Versailles. From the sober interiors of the Dutch Republic to the ebullient façades of the baroque, Clark played to his strength as an historian of art. Music and literature made their appearances; politics and even economics occasionally peeked in. But the essence of Clark's civilization was clearly High Visual Culture. His heroes were Michelangelo, da Vinci, Dürer, Constable, Turner, Delacroix.¹

In fairness to Clark, his series was subtitled *A Personal View*. And he was not unaware of the implication – problematic already in 1969 – that ‘the pre-Christian era and the East’ were in some sense *uncivilized*. Nevertheless, with the passage of four decades, it has become steadily harder to live with Clark's view, personal or otherwise (to say nothing of his now slightly grating *de haut en bas* manner). In this book I take a broader, more comparative view, and I aim to be more down and dirty than high and mighty. My idea of civilization is as much about sewage pipes as flying buttresses, if not more so, because without efficient public plumbing cities are death-traps, turning rivers and wells into havens for the bacterium *Vibrio cholerae*. I am, unapologetically, as interested in the price of a work of art as in its cultural value. To my mind, a civilization is much more than just the contents of a few first-rate art galleries. It is a highly complex human organization. Its paintings, statues and buildings may well be its most eye-catching achievements, but they are unintelligible without some understanding of the economic, social and political institutions which devised them, paid for them, executed them – and preserved them for our gaze.

‘Civilisation’ is a French word, first used by the French economist Anne-Robert-Jacques Turgot in 1752, and first published by Victor Riqueti, marquis de Mirabeau, father of the great revolutionary, four years later.² Samuel Johnson, as the first epigraph to this Introduction makes clear, would not accept the neologism, preferring ‘civility’. If barbarism had an antonym for Johnson, it was the polite (though sometimes also downright rude) urban life he enjoyed so much in London. A civilization, as the etymology of the word suggests, revolves around its cities, and in many ways it is cities that are the heroes of this book.³ But a city's laws (civil or otherwise) are as important as its walls; its constitution and customs – its inhabitants' manners (civil or

otherwise) – as important as its palaces.⁴ Civilization is as much about scientists' laboratories as it is about artists' garrets. It is as much about forms of land tenure as it is about landscapes. The success of a civilization is measured not just in its aesthetic achievements but also, and surely more importantly, in the duration and quality of life of its citizens. And that quality of life has many dimensions, not all easily quantified. We may be able to estimate the per-capita income of people around the world in the fifteenth century, or their average life expectancy at birth. But what about their comfort? Cleanliness? Happiness? How many garments did they own? How many hours did they have to work? What food could they buy with their wages? Artworks by themselves can offer hints, but they cannot answer such questions.

Clearly, however, one city does not make a civilization. A civilization is the single largest unit of human organization, higher though more amorphous than even an empire. Civilizations are partly a practical response by human populations to their environments – the challenges of feeding, watering, sheltering and defending themselves – but they are also cultural in character; often, though not always, religious; often, though not always, communities of language.⁵ They are few, but not far between. Carroll Quigley counted two dozen in the last ten millennia.⁶ In the pre-modern world, Adda Bozeman saw just five: the West, India, China, Byzantium and Islam.⁷ Matthew Melko made the total twelve, seven of which have vanished (Mesopotamian, Egyptian, Cretan, Classical, Byzantine, Middle American, Andean) and five of which still remain (Chinese, Japanese, Indian, Islamic, Western).⁸ Shmuel Eisenstadt counted six by adding Jewish civilization to the club.⁹ The interaction of these few civilizations with one another, as much as with their own environments, has been among the most important drivers of historical change.¹⁰ The striking thing about these interactions is that authentic civilizations seem to remain true unto themselves for very long periods, despite outside influences. As Fernand Braudel put it: 'Civilization is in fact the longest story of all . . . A civilization . . . can persist through a series of economies or societies.'¹¹

If, in the year 1411, you had been able to circumnavigate the globe, you would probably have been most impressed by the quality of life

in Oriental civilizations. The Forbidden City was under construction in Ming Beijing, while work had begun on reopening and improving the Grand Canal; in the Near East, the Ottomans were closing in on Constantinople, which they would finally capture in 1453. The Byzantine Empire was breathing its last. The death of the warlord Timur (Tamerlane) in 1405 had removed the recurrent threat of murderous invading hordes from Central Asia – the antithesis of civilization. For the Yongle Emperor in China and the Ottoman Sultan Murad II, the future was bright.

By contrast, Western Europe in 1411 would have struck you as a miserable backwater, recuperating from the ravages of the Black Death – which had reduced population by as much as half as it swept eastwards between 1347 and 1351 – and still plagued by bad sanitation and seemingly incessant war. In England the leper king Henry IV was on the throne, having successfully overthrown and murdered the ill-starred Richard II. France was in the grip of internecine warfare between the followers of the Duke of Burgundy and those of the assassinated Duke of Orléans. The Anglo-French Hundred Years' War was just about to resume. The other quarrelsome kingdoms of Western Europe – Aragon, Castile, Navarre, Portugal and Scotland – would have seemed little better. A Muslim still ruled in Granada. The Scottish King, James I, was a prisoner in England, having been captured by English pirates. The most prosperous parts of Europe were in fact the North Italian city-states: Florence, Genoa, Pisa, Siena and Venice. As for fifteenth-century North America, it was an anarchic wilderness compared with the realms of the Aztecs, Mayas and Incas in Central and South America, with their towering temples and skyscraping roads. By the end of your world tour, the notion that the West might come to dominate the Rest for most of the next half-millennium would have come to seem wildly fanciful.

And yet it happened.

For some reason, beginning in the late fifteenth century, the little states of Western Europe, with their bastardized linguistic borrowings from Latin (and a little Greek), their religion derived from the teachings of a Jew from Nazareth and their intellectual debts to Oriental mathematics, astronomy and technology, produced a civilization capable not only of conquering the great Oriental empires and subjugating

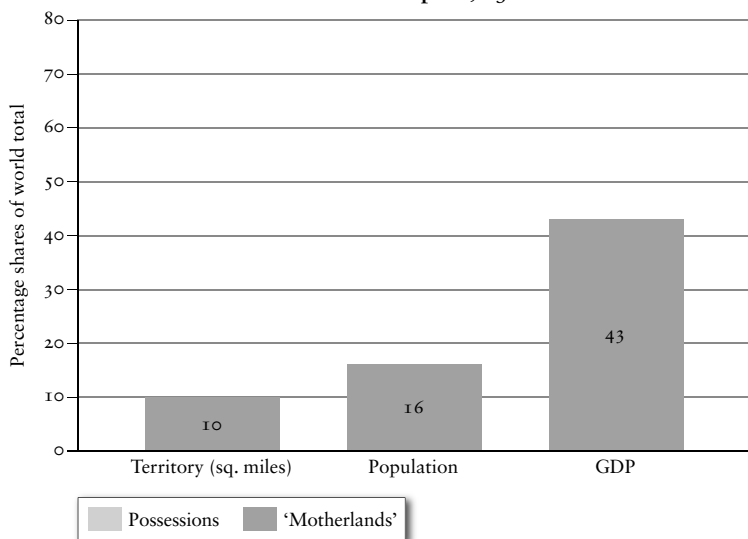
Africa, the Americas and Australasia, but also of converting peoples all over the world to the Western way of life – a conversion achieved ultimately more by the word than by the sword.

There are those who dispute that, claiming that all civilizations are in some sense equal, and that the West cannot claim superiority over, say, the East of Eurasia.¹² But such relativism is demonstrably absurd. No previous civilization had ever achieved such dominance as the West achieved over the Rest.¹³ In 1500 the future imperial powers of Europe accounted for about 10 per cent of the world's land surface and at most 16 per cent of its population. By 1913, eleven Western empires* controlled nearly three-fifths of all territory and population and more than three-quarters (a staggering 79 per cent) of global economic output.¹⁴ Average life expectancy in England was nearly twice what it was in India. Higher living standards in the West were also reflected in a better diet, even for agricultural labourers, and taller stature, even for ordinary soldiers and convicts.¹⁵ Civilization, as we have seen, is about cities. By this measure, too, the West had come out on top. In 1500, as far as we can work out, the biggest city in the world was Beijing, with a population of between 600,000 and 700,000. Of the ten largest cities in the world by that time only one – Paris – was European, and its population numbered fewer than 200,000. London had perhaps 50,000 inhabitants. Urbanization rates were also higher in North Africa and South America than in Europe. Yet by 1900 there had been an astonishing reversal. Only one of the world's ten largest cities at that time was Asian and that was Tokyo. With a population of around 6.5 million, London was the global megalopolis.¹⁶ Nor did Western dominance end with the decline and fall of the European empires. The rise of the United States saw the gap between West and East widen still further. By 1990 the average American was seventy-three times richer than the average Chinese.¹⁷

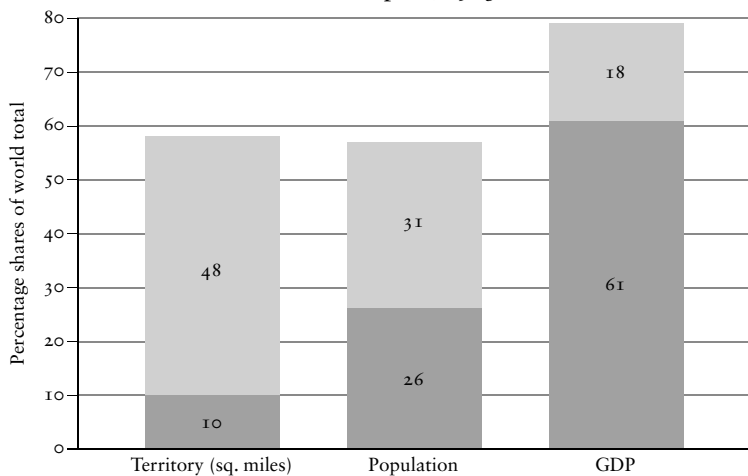
Moreover, it became clear in the second half of the twentieth century that the only way to close that yawning gap in income was for Eastern societies to follow Japan's example in adopting some (though

* The eleven were Austria, Belgium, France, Germany, Italy, Netherlands, Portugal, Spain, Russia, the United Kingdom and the United States. Of these only France, Portugal and Spain existed in 1500 in anything resembling their early twentieth-century form. For Russia's claim to be considered a part of the West, see below.

Western Future Empires, 1500



Western Empires, 1913



not all) of the West's institutions and modes of operation. As a result, Western civilization became a kind of template for the way the rest of the world aspired to organize itself. Prior to 1945, of course, there was a variety of developmental models – or operating systems, to draw a metaphor from computing – that could be adopted by non-Western societies. But the most attractive were all of European origin: liberal capitalism, national socialism, Soviet communism. The Second World War killed the second in Europe, though it lived on under assumed names in many developing countries. The collapse of the Soviet empire between 1989 and 1991 killed the third.

To be sure, there has been much talk in the wake of the global financial crisis about alternative Asian economic models. But not even the most ardent cultural relativist is recommending a return to the institutions of the Ming dynasty or the Mughals. The current debate between the proponents of free markets and those of state intervention is, at root, a debate between identifiably Western schools of thought: the followers of Adam Smith and those of John Maynard Keynes, with a few die-hard devotees of Karl Marx still plugging away. The birthplaces of all three speak for themselves: Kirkcaldy, Cambridge, Trier. In practice, most of the world is now integrated into a Western economic system in which, as Smith recommended, the market sets most of the prices and determines the flow of trade and division of labour, but government plays a role closer to the one envisaged by Keynes, intervening to try to smooth the business cycle and reduce income inequality.

As for non-economic institutions, there is no debate worth having. All over the world, universities are converging on Western norms. The same is true of the way medical science is organized, from rarefied research all the way through to front-line healthcare. Most people now accept the great scientific truths revealed by Newton, Darwin and Einstein and, even if they do not, they still reach eagerly for the products of Western pharmacology at the first symptom of influenza or bronchitis. Only a few societies continue to resist the encroachment of Western patterns of marketing and consumption, as well as the Western lifestyle itself. More and more human beings eat a Western diet, wear Western clothes and live in Western housing. Even the peculiarly Western way of work – five or six days a week from 9 until 5,

with two or three weeks of holiday – is becoming a kind of universal standard. Meanwhile, the religion that Western missionaries sought to export to the rest of the world is followed by a third of mankind – as well as making remarkable gains in the world's most populous country. Even the atheism pioneered in the West is making impressive headway.

With every passing year, more and more human beings shop like us, study like us, stay healthy (or unhealthy) like us and pray (or don't pray) like us. Burgers, Bunsen burners, Band-Aids, baseball caps and Bibles: you cannot easily get away from them, wherever you may go. Only in the realm of political institutions does there remain significant global diversity, with a wide range of governments around the world resisting the idea of the rule of law, with its protection of individual rights, as the foundation for meaningful representative government. It is as much as a political ideology as a religion that a militant Islam seeks to resist the advance of the late twentieth-century Western norms of gender equality and sexual freedom.¹⁸

So it is not 'Eurocentrism' or (anti-) 'Orientalism' to say that the rise of Western civilization is the single most important historical phenomenon of the second half of the second millennium after Christ. It is a statement of the obvious. The challenge is to explain how it happened. What was it about the civilization of Western Europe after the fifteenth century that allowed it to trump the outwardly superior empires of the Orient? Clearly, it was something more than the beauty of the Sistine Chapel.

The facile, if not tautological, answer to the question is that the West dominated the Rest because of imperialism.¹⁹ There are still many people today who can work themselves up into a state of high moral indignation over the misdeeds of the European empires. Misdeeds there certainly were, and they are not absent from these pages. It is also clear that different forms of colonization – settlement versus extraction – had very different long-term impacts.²⁰ But empire is not a historically sufficient explanation of Western predominance. There were empires long before the imperialism denounced by the Marxist-Leninists. Indeed, the sixteenth century saw a number of Asian empires increase significantly in their power and extent. Meanwhile, after the failure of Charles V's project of a grand Habsburg empire

stretching from Spain through the Low Countries to Germany, Europe grew more fragmented than ever. The Reformation unleashed more than a century of European wars of religion.

A sixteenth-century traveller could hardly have failed to notice the contrast. In addition to covering Anatolia, Egypt, Arabia, Mesopotamia and Yemen, the Ottoman Empire under Suleiman the Magnificent (1520–66) extended into the Balkans and Hungary, menacing the gates of Vienna in 1529. Further east, the Safavid Empire under Abbas I (1587–1629) stretched all the way from Isfahan and Tabriz to Kandahar, while Northern India from Delhi to Bengal was ruled by the mighty Mughal Emperor Akbar (1556–1605). Ming China, too, seemed serene and secure behind the Great Wall. Few European visitors to the court of the Wanli Emperor (1572–1620) can have anticipated the fall of his dynasty less than three decades after his death. Writing from Istanbul in the late 1550s, the Flemish diplomat Ogier Ghiselin de Busbecq – the man who transplanted tulips from Turkey to the Netherlands – nervously compared Europe's fractured state with the 'vast wealth' of the Ottoman Empire.

True, the sixteenth century was a time of hectic European activity overseas. But to the great Oriental empires the Portuguese and Dutch seafarers seemed the very opposite of bearers of civilization; they were merely the latest barbarians to menace the Middle Kingdom, if anything more loathsome – and certainly more malodorous – than the pirates of Japan. And what else attracted Europeans to Asia but the superior quality of Indian textiles and Chinese porcelain?

As late as 1683, an Ottoman army could march to the gates of Vienna – the capital of the Habsburg Empire – and demand that the city's population surrender and convert to Islam. It was only after the raising of the siege that Christendom could begin slowly rolling back Ottoman power in Central and Eastern Europe through the Balkans towards the Bosphorus, and it took many years before any European empire could match the achievements of Oriental imperialism. The 'great divergence' between the West and the Rest was even slower to materialize elsewhere. The material gap between North and South America was not firmly established until well into the nineteenth century, and most of Africa was not subjugated by Europeans beyond a few coastal strips until the early twentieth.

If Western ascendancy cannot therefore be explained in the tired old terms of imperialism, was it simply – as some scholars maintain – a matter of good luck? Was it the geography or the climate of the western end of Eurasia that made the great divergence happen? Were the Europeans just fortunate to stumble across the islands of the Caribbean, so ideally suited to the cultivation of calorie-rich sugar? Did the New World provide Europe with ‘ghost acres’ that China lacked? And was it just sod’s law that made China’s coal deposits harder to mine and transport than Europe’s?²¹ Or was China in some sense a victim of its own success – stuck in a ‘high-level equilibrium trap’ by the ability of its cultivators to provide a vast number of people with just enough calories to live?²² Can it really be that England became the first industrial nation mainly because bad sanitation and disease kept life exceptionally short for the majority of people, giving the rich and enterprising minority a better chance to pass on their genes?²³

The immortal English lexicographer Samuel Johnson rejected all such contingent explanations for Western ascendancy. In his *History of Rasselas: Prince of Abissinia*, published in 1759, he has Rasselas ask:

By what means . . . are the Europeans thus powerful? or why, since they can so easily visit Asia and Africa for trade or conquest, cannot the Asiaticks and Africans invade their coasts, plant colonies in their ports, and give laws to their natural princes? The same wind that carries them back would bring us thither.*

To which the philosopher Imlac replies:

They are more powerful, Sir, than we, because they are wiser; knowledge will always predominate over ignorance, as man governs the other animals. But why their knowledge is more than ours, I know not what reason can be given, but the unsearchable will of the Supreme Being.²⁴

Knowledge is indeed power if it provides superior ways of sailing ships, digging up minerals, firing guns and curing sickness. But is it in

* This question was indeed being posed in non-Western empires in the eighteenth century. In 1731 the Ottoman writer İbrahim Müteferrika asked: ‘Why do Christian nations, which were so weak in the past compared with Muslim nations, begin to dominate so many lands in modern times and even defeat the once victorious Ottoman armies?’

fact the case that Europeans were more knowledgeable than other people? Perhaps by 1759 they were; scientific innovation for around two and a half centuries after 1650 was almost exclusively Western in origin.²⁵ But in 1500? As we shall see, Chinese technology, Indian mathematics and Arab astronomy had been far ahead for centuries.

Was it therefore a more nebulous cultural difference that equipped Europeans to leap ahead of their Oriental counterparts? That was the argument made by the German sociologist Max Weber. It comes in many variants – medieval English individualism, humanism and the Protestant ethic – and it has been sought everywhere from the wills of English farmers to the account books of Mediterranean merchants and the rules of etiquette of royal courts. In *The Wealth and Poverty of Nations*, David Landes made the cultural case by arguing that Western Europe led the world in developing autonomous intellectual inquiry, the scientific method of verification and the rationalization of research and its diffusion. Yet even he allowed that something more was required for that mode of operation to flourish: financial intermediaries and good government.²⁶ The key, it becomes ever more apparent, lies with institutions.

Institutions are, of course, in some sense the products of culture. But, because they formalize a set of norms, institutions are often the things that keep a culture honest, determining how far it is conducive to good behaviour rather than bad. To illustrate the point, the twentieth century ran a series of experiments, imposing quite different institutions on two sets of Germans (in West and East), two sets of Koreans (in North and South) and two sets of Chinese (inside and outside the People's Republic). The results were very striking and the lesson crystal clear. If you take the same people, with more or less the same culture, and impose communist institutions on one group and capitalist institutions on another, almost immediately there will be a divergence in the way they behave.

Many historians today would agree that there were few really profound differences between the eastern and western ends of Eurasia in the 1500s. Both regions were early adopters of agriculture, market-based exchange and urban-centred state structures.²⁷ But there was one crucial institutional difference. In China a monolithic empire had been consolidated, while Europe remained politically fragmented. In *Guns*,

Germes and Steel, Jared Diamond explained why Eurasia had advanced ahead of the rest of the world.²⁸ But not until his essay ‘How to Get Rich’ (1999) did he offer an answer to the question of why one end of Eurasia forged so far ahead of the other. The answer was that, in the plains of Eastern Eurasia, monolithic Oriental empires stifled innovation, while in mountainous, river-divided Western Eurasia, multiple monarchies and city-states engaged in creative competition and communication.²⁹

It is an appealing answer. And yet it cannot be a sufficient one. Look only at the two series of engravings entitled *Miseries of War*, published by the Lorraine artist Jacques Callot in the 1630s as if to warn the rest of the world of the dangers of religious conflict. The competition between and within Europe’s petty states in the first half of the seventeenth century was disastrous, depopulating large tracts of Central Europe as well as plunging the British Isles into more than a century of recurrent, debilitating strife. Political fragmentation often has that effect. If you doubt it, ask the inhabitants of the former Yugoslavia. Competition is certainly a part of the story of Western ascendancy, as we shall see in Chapter 1 – but only a part.

In this book I want to show that what distinguished the West from the Rest – the mainsprings of global power – were six identifiably novel complexes of institutions and associated ideas and behaviours. For the sake of simplicity, I summarize them under six headings:

1. Competition
2. Science
3. Property rights
4. Medicine
5. The consumer society
6. The work ethic

To use the language of today’s computerized, synchronized world, these were the six killer applications – the killer apps – that allowed a minority of mankind originating on the western edge of Eurasia to dominate the world for the better part of 500 years.

Now, before you indignantly write to me objecting that I have missed out some crucial aspect of Western ascendancy, such as capitalism

or freedom or democracy (or for that matter guns, germs and steel), please read the following brief definitions:

1. Competition – a decentralization of both political and economic life, which created the launch-pad for both nation-states and capitalism
2. Science – a way of studying, understanding and ultimately changing the natural world, which gave the West (among other things) a major military advantage over the Rest
3. Property rights – the rule of law as a means of protecting private owners and peacefully resolving disputes between them, which formed the basis for the most stable form of representative government
4. Medicine – a branch of science that allowed a major improvement in health and life expectancy, beginning in Western societies, but also in their colonies
5. The consumer society – a mode of material living in which the production and purchase of clothing and other consumer goods play a central economic role, and without which the Industrial Revolution would have been unsustainable
6. The work ethic – a moral framework and mode of activity derivable from (among other sources) Protestant Christianity, which provides the glue for the dynamic and potentially unstable society created by apps 1 to 5

Make no mistake: this is not another self-satisfied version of ‘The Triumph of the West’.³⁰ I want to show that it was not just Western superiority that led to the conquest and colonization of so much of the rest of the world; it was also the fortuitous weakness of the West’s rivals. In the 1640s, for example, a combination of fiscal and monetary crisis, climate change and epidemic disease unleashed rebellion and the final crisis of the Ming dynasty. This had nothing to do with the West. Likewise, the political and military decline of the Ottoman Empire was internally driven more than it was externally imposed. North American political institutions flourished as South America’s festered; but Simón Bolívar’s failure to create a United States of Latin America was not the gringo’s fault.

The critical point is that the differential between the West and the

Rest was institutional. Western Europe overtook China partly because in the West there was more competition in both the political and the economic spheres. Austria, Prussia and latterly even Russia became more effective administratively and militarily because the network that produced the Scientific Revolution arose in the Christian but not in the Muslim world. The reason North America's ex-colonies did so much better than South America's was because British settlers established a completely different system of property rights and political representation in the North from those built by Spaniards and Portuguese in the South. (The North was an 'open access order', rather than a closed one run in the interests of rent-seeking, exclusive elites.)³¹ European empires were able to penetrate Africa not just because they had the Maxim gun; they also devised vaccines against tropical diseases to which Africans were just as vulnerable.

In the same way, the earlier industrialization of the West reflected institutional advantages: the possibility of a mass consumer society existed in the British Isles well before the advent and spread of steam power or the factory system. Even after industrial technology was almost universally available, the differential between the West and the Rest persisted; indeed, it grew wider. With wholly standardized cotton-spinning and weaving machinery, the European or North American worker was still able to work more productively, and his capitalist employer to accumulate wealth more rapidly, than their Oriental counterparts.³² Investment in public health and public education paid big dividends; where there was none, people stayed poor.³³ This book is about all these differences – why they existed and why they mattered so much.

Thus far I have used words like 'West' and 'Western' more or less casually. But what exactly – or where – do I mean by 'Western civilization'? Post-war White Anglo-Saxon Protestant males used more or less instinctively to locate the West (also known as 'the free world') in a relatively narrow corridor extending (certainly) from London to Lexington, Massachusetts, and (possibly) from Strasbourg to San Francisco. In 1945, fresh from the battlefields, the West's first language was English, followed by halting French. With the success of European integration in the 1950s and 1960s, the Western club grew larger. Few would now dispute that the Low Countries, France, Germany, Italy,

Portugal, Scandinavia and Spain all belong to the West, while Greece is an *ex officio* member, despite its later allegiance to Orthodox Christianity, thanks to our enduring debt to ancient Hellenic philosophy and the Greeks' more recent debts to the European Union.

But what about the rest of the Southern and Eastern Mediterranean, encompassing not just the Balkans north of the Peloponnese, but also North Africa and Anatolia? What about Egypt and Mesopotamia, the seedbeds of the very first civilizations? Is South America – colonized by Europeans as surely as was North America, and geographically in the same hemisphere – part of the West? And what of Russia? Is European Russia truly Occidental, but Russia beyond the Urals in some sense part of the Orient? Throughout the Cold War, the Soviet Union and its satellites were referred to as 'the Eastern bloc'. But there is surely a case for saying that the Soviet Union was as much a product of Western civilization as the United States. Its core ideology had much the same Victorian provenance as nationalism, anti-slavery and women's suffrage – it was born and bred in the old circular Reading Room of the British Library. And its geographical extent was no less the product of European expansion and colonization than the settlement of the Americas. In Central Asia, as in South America, Europeans ruled over non-Europeans. In that sense, what happened in 1991 was simply the death of the last European empire. Yet the most influential recent definition of Western civilization, by Samuel Huntington, excludes not just Russia but all countries with a religious tradition of Orthodoxy. Huntington's West consists only of Western and Central Europe (excluding the Orthodox East), North America (excluding Mexico) and Australasia. Greece, Israel, Romania and Ukraine do not make the cut; nor do the Caribbean islands, despite the fact that many are as Western as Florida.³⁴

'The West', then, is much more than just a geographical expression. It is a set of norms, behaviours and institutions with borders that are blurred in the extreme. The implications of that are worth pondering. Might it in fact be possible for an Asian society to become Western if it embraces Western norms of dressing and doing business, as Japan did from the Meiji era, and as much of the rest of Asia now seems to be doing? It was once fashionable to insist that the capitalist 'world-system' imposed a permanent division of labour between the

Western core and the Rest's periphery.³⁵ But what if the whole world eventually ends up being Westernized, in appearance and lifestyle at least? Or could it be that the other civilizations are, as Huntington famously argued, more resilient – particularly 'Sinic' civilization, meaning Greater China,* and Islam, with its 'bloody borders and innards'?³⁶ How far is their adoption of Western modes of operation merely a superficial modernization without any cultural depth? These are questions that will be addressed below.

Another puzzle about Western civilization is that disunity appears to be one of its defining characteristics. In the early 2000s many American commentators complained about the 'widening Atlantic' – the breakdown of those common values that bound the United States together with its West European allies during the Cold War.³⁷ If it has become slightly clearer than it was when Henry Kissinger was secretary of state whom an American statesman should call when he wants to speak to Europe, it has become harder to say who picks up the phone on behalf of Western civilization. Yet the current division between America and 'Old Europe' is mild and amicable compared with the great schisms of the past, over religion, over ideology – and even over the meaning of civilization itself. During the First World War, the Germans claimed to be fighting the war for a higher *Kultur* and against tawdry, materialistic Anglo-French *civilisation* (the distinction was drawn by Thomas Mann and Sigmund Freud, among others). But this distinction was hard to reconcile with the burning of the Leuven University library and the summary executions of Belgian civilians in the first phase of the war. British propagandists retorted by defining the Germans as 'Huns' – barbarians beyond the Pale of civilization – and named the war itself 'The Great War for Civilization' on their Victory medal.³⁸ Is it any more meaningful to talk today about 'the West' as a unitary civilization than it was in 1918?

Finally, it is worth remembering that Western civilization has declined and fallen once before. The Roman ruins scattered all over Europe, North Africa and the Near East serve as potent reminders of

* It is an idiosyncratic notion that one of the world's most venerable civilizations should have a name that no one but a political theorist has ever heard of. In his original 1993 essay, Huntington used 'Confucian'.

that. The first version of the West – Western Civilization 1.0 – arose in the so-called Fertile Crescent stretching from the Nile Valley to the confluence of the Euphrates and the Tigris, and reached its twin peaks with Athenian democracy and the Roman Empire.³⁹ Key elements of our civilization today – not only democracy but also athletics, arithmetic, civil law, geometry, the classical style of architecture and a substantial proportion of the words in modern English – had their origins in the ancient West. In its heyday, the Roman Empire was a startlingly sophisticated system. Grain, manufactures and coins circulated in an economy that stretched from the north of England to the upper reaches of the Nile, scholarship flourished, there was law, medicine and even shopping malls like Trajan's Forum in Rome. But that version of Western civilization declined and then fell with dramatic speed in the fifth century AD, undone by barbarian invasions and internal divisions. In the space of a generation, the vast imperial metropolis of Rome fell into disrepair, the aqueducts broken, the splendid market places deserted. The knowledge of the classical West would have been lost altogether, but for the librarians of Byzantium,⁴⁰ the monks of Ireland⁴¹ and the popes and priests of the Roman Catholic Church – not forgetting the Abbasid caliphs.⁴² Without their stewardship, the civilization of the West could not have been reborn as it was in the Italy of the Renaissance.

Is decline and fall the looming fate of Western Civilization 2.0? In demographic terms, the population of Western societies has long represented a minority of the world's inhabitants, but today it is clearly a dwindling one. Once so dominant, the economies of the United States and Europe are now facing the real prospect of being overtaken by China within twenty or even ten years, with Brazil and India not so very far behind. Western 'hard power' seems to be struggling in the Greater Middle East, from Iraq to Afghanistan, just as the 'Washington Consensus' on free-market economic policy disintegrates. The financial crisis that began in 2007 also seems to indicate a fundamental flaw at the heart of the consumer society, with its emphasis on debt-propelled retail therapy. The Protestant ethic of thrift that once seemed so central to the Western project has all but vanished. Meanwhile, Western elites are beset by almost millenarian fears of a coming environmental apocalypse.

What is more, Western civilization appears to have lost confidence

in itself. Beginning with Stanford in 1963, a succession of major universities have ceased to offer the classic 'Western Civ.' history course to their undergraduates. In schools, too, the grand narrative of Western ascent has fallen out of fashion. Thanks to an educationalists' fad that elevated 'historical skills' above knowledge in the name of 'New History' – combined with the unintended consequences of the curriculum-reform process – too many British schoolchildren leave secondary school knowing only unconnected fragments of Western history: Henry VIII and Hitler, with a small dose of Martin Luther King, Jr. A survey of first-year History undergraduates at one leading British university revealed that only 34 per cent knew who was the English monarch at the time of the Armada, 31 per cent knew the location of the Boer War, 16 per cent knew who commanded the British forces at Waterloo (more than twice that proportion thought it was Nelson rather than Wellington) and 11 per cent could name a single nineteenth-century British prime minister.⁴³ In a similar poll of English children aged between eleven and eighteen, 17 per cent thought Oliver Cromwell fought at the Battle of Hastings and 25 per cent put the First World War in the wrong century.⁴⁴ Throughout the English-speaking world, moreover, the argument has gained ground that it is other cultures we should study, not our own. The musical sampler sent into outer space with the *Voyager* spacecraft in 1977 featured twenty-seven tracks, only ten of them from Western composers, including not only Bach, Mozart and Beethoven but also Louis Armstrong, Chuck Berry and Blind Willie Johnson. A history of the world 'in 100 objects', published by the Director of the British Museum in 2010, included no more than thirty products of Western civilization.⁴⁵

Yet any history of the world's civilizations that underplays the degree of their gradual subordination to the West after 1500 is missing the essential point – the thing most in need of explanation. The rise of the West is, quite simply, the pre-eminent historical phenomenon of the second half of the second millennium after Christ. It is the story at the very heart of modern history. It is perhaps the most challenging riddle historians have to solve. And we should solve it not merely to satisfy our curiosity. For it is only by identifying the true causes of Western ascendancy that we can hope to estimate with any degree of accuracy the imminence of our decline and fall.

I

Competition

China seems to have been long stationary, and had probably long ago acquired that full complement of riches which is consistent with the nature of its laws and institutions. But this complement may be much inferior to what, with other laws and institutions, the nature of its soil, climate, and situation might admit of. A country which neglects or despises foreign commerce, and which admits the vessels of foreign nations into one or two of its ports only, cannot transact the same quantity of business which it might do with different laws and institutions . . . A more extensive foreign trade . . . could scarce fail to increase very much the manufactures of China, and to improve very much the productive powers of its manufacturing industry. By a more extensive navigation, the Chinese would naturally learn the art of using and constructing themselves all the different machines made use of in other countries, as well as the other improvements of art and industry which are practised in all the different parts of the world.

Adam Smith

Why are they small and yet strong? Why are we large and yet weak? . . . What we have to learn from the barbarians is only . . . solid ships and effective guns.

Feng Guifen

TWO RIVERS

The Forbidden City (Gugong) was built in the heart of Beijing by more than a million workers, using materials from all over the Chinese Empire. With nearly a thousand buildings arranged, constructed and decorated to symbolize the might of the Ming dynasty, the Forbidden City is not only a relic of what was once the greatest civilization in the world; it is also a reminder that no civilization lasts for ever. As late as 1776 Adam Smith could still refer to China as 'one of the richest, that is, one of the most fertile, best cultivated, most industrious, and most populous countries in the world . . . a much richer country than any part of Europe'. Yet Smith also identified China as 'long stationary' or 'standing still'.¹ In this he was surely right. Within less than a century of the Forbidden City's construction between 1406 and 1420, the relative decline of the East may be said to have begun. The impoverished, strife-torn petty states of Western Europe embarked on half a millennium of almost unstoppable expansion. The great empires of the Orient meanwhile stagnated and latterly succumbed to Western dominance.

Why did China founder while Europe forged ahead? Smith's main answer was that the Chinese had failed to 'encourage foreign commerce', and had therefore missed out on the benefits of comparative advantage and the international division of labour. But other explanations were possible. Writing in the 1740s, Charles de Secondat, baron de Montesquieu, blamed the 'settled plan of tyranny', which he traced back to China's exceptionally large population, which in turn was due to the East Asian weather:

I reason thus: Asia has properly no temperate zone, as the places situated in a very cold climate immediately touch upon those which are exceedingly hot, that is, Turkey, Persia, India, China, Korea, and Japan. In Europe, on the contrary, the temperate zone is very extensive . . . it thence follows that each [country] resembles the country joining it; that there is no very extraordinary difference between them . . . Hence it comes that in Asia, the strong nations are opposed to the weak; the warlike, brave, and active people touch immediately upon those who are indolent, effeminate, and timorous; the one must, therefore, conquer,

and the other be conquered. In Europe, on the contrary, strong nations are opposed to the strong; and those who join each other have nearly the same courage. This is the grand reason of the weakness of Asia, and of the strength of Europe; of the liberty of Europe, and of the slavery of Asia: a cause that I do not recollect ever to have seen remarked.²

Later European writers believed that it was Western technology that trumped the East – in particular, the technology that went on to produce the Industrial Revolution. That was certainly how it appeared to the Earl Macartney after his distinctly disappointing mission to the Chinese imperial court in 1793 (see below). Another argument, popular in the twentieth century, was that Confucian philosophy inhibited innovation. Yet these contemporary explanations for Oriental underachievement were mistaken. The first of the six distinct killer applications that the West had but the East lacked was not commercial, nor climatic, nor technological, nor philosophical. It was, as Smith discerned, above all institutional.

If, in the year 1420, you had taken two trips along two rivers – the Thames and the Yangzi – you would have been struck by the contrast.

The Yangzi was part of a vast waterway complex that linked Nanjing to Beijing, more than 500 miles to the north, and Hangzhou to the south. At the core of this system was the Grand Canal, which at its maximum extent stretched for more than a thousand miles. Dating back as far as the seventh century BC, with pound locks introduced as early as the tenth century AD and exquisite bridges like the multi-arched Precious Belt, the Canal was substantially restored and improved in the reign of the Ming Emperor Yongle (1402–24). By the time his chief engineer Bai Ying had finished damming and diverting the flow of the Yellow River, it was possible for nearly 12,000 grain barges to sail up and down the Canal every year.³ Nearly 50,000 men were employed in maintaining it. In the West, of course, the grandest of grand canals will always be Venice's. But when the intrepid Venetian traveller Marco Polo had visited China in the 1270s, even he had been impressed by the volume of traffic on the Yangzi:

The multitude of vessels that invest this great river is so great that no one who should read or hear would believe it. The quantity of merchandise

carried up and down is past all belief. In fact it is so big, that it seems to be a sea rather than a river.

China's Grand Canal not only served as the principal artery of internal trade. It also enabled the imperial government to smooth the price of grain through the five state granaries, which bought when grain was cheap and sold when it was dear.⁴

Nanjing was probably the largest city in the world in 1420, with a population of between half a million and a million. For centuries it had been a thriving centre of the silk and cotton industries. Under the Yongle Emperor it also became a centre of learning. The name Yongle means 'perpetual happiness'; perpetual motion would perhaps have been a better description. The greatest of the Ming emperors did nothing by halves. The compendium of Chinese learning he commissioned took the labour of more than 2,000 scholars to complete and filled more than 11,000 volumes. It was surpassed as the world's largest encyclopaedia only in 2007, after a reign of almost exactly 600 years, by Wikipedia.

But Yongle was not content with Nanjing. Shortly after his accession, he had resolved to build a new and more spectacular capital to the north: Beijing. By 1420, when the Forbidden City was completed, Ming China had an incontrovertible claim to be the most advanced civilization in the world.

By comparison with the Yangzi, the Thames in the early fifteenth century was a veritable backwater. True, London was a busy port, the main hub for England's trade with the continent. The city's most famous Lord Mayor, Richard Whittington, was a leading cloth merchant who had made his fortune from England's growing exports of wool. And the English capital's shipbuilding industry was boosted by the need to transport men and supplies for England's recurrent campaigns against the French. In Shadwell and Ratcliffe, the ships could be hauled up on to mud berths to be refitted. And there was, of course, the Tower of London, more forbidding than forbidden.

But a visitor from China would scarcely have been impressed by all this. The Tower itself was a crude construction compared with the multiple halls of the Forbidden City. London Bridge was an ungainly

bazaar on stilts compared with the Precious Belt Bridge. And primitive navigation techniques confined English sailors to narrow stretches of water – the Thames and the Channel – where they could remain within sight of familiar banks and coastlines. Nothing could have been more unimaginable, to Englishmen and Chinese alike, than the idea of ships from London sailing up the Yangzi.

By comparison with Nanjing, the London to which Henry V returned in 1421 after his triumphs over the French – the most famous of them at Agincourt – was barely a town. Its old, patched-up city walls extended about 3 miles – again, a fraction the size of Nanjing's. It had taken the founder of the Ming dynasty more than twenty years to build the wall around his capital and it extended for as many miles, with gates so large that a single one could house 3,000 soldiers. And it was built to last. Much of it still stands today, whereas scarcely anything remains of London's medieval wall.

By fifteenth-century standards, Ming China was a relatively pleasant place to live. The rigidly feudal order established at the start of the Ming era was being loosened by burgeoning internal trade.⁵ The visitor to Suzhou today can still see the architectural fruits of that prosperity in the shady canals and elegant walkways of the old town centre. Urban life in England was very different. The Black Death – the bubonic plague caused by the flea-borne bacterium *Yersinia pestis*, which reached England in 1349 – had reduced London's population to around 40,000, less than a tenth the size of Nanjing's. Besides the plague, typhus, dysentery and smallpox were also rife. And, even in the absence of epidemics, poor sanitation made London a death-trap. Without any kind of sewage system, the streets stank to high heaven, whereas human excrement was systematically collected in Chinese cities and used as fertilizer in outlying paddy fields. In the days when Dick Whittington was lord mayor – four times between 1397 and his death in 1423 – the streets of London were paved with something altogether less appealing than gold.

Schoolchildren used to be brought up to think of Henry V as one of the heroic figures of English history, the antithesis of his predecessor but one, the effete Richard II. Sad to relate, their kingdom was very far from the 'sceptr'd isle' of Shakespeare's *Richard II* – more of a septic isle. The playwright fondly called it 'this other Eden,

demi-paradise, / This fortress built by Nature for herself / Against infection . . .' But English life expectancy at birth was on average a miserable thirty-seven years between 1540 and 1800; the figure for London was in the twenties. Roughly one in five English children died in the first year of life; in London the figure was nearly one in three. Henry V himself became king at the age of twenty-six and was dead from dysentery at the age of thirty-five – a reminder that most history until relatively recently was made by quite young, short-lived people.

Violence was endemic. War with France was almost a permanent condition. When not fighting the French, the English fought the Welsh, the Scots and the Irish. When not fighting the Celts, they fought one another in a succession of wars for control of the crown. Henry V's father had come to the throne by violence; his son Henry VI lost it by similar means with the outbreak of the Wars of the Roses, which saw four kings lose their thrones and forty adult peers die in battle or on the scaffold. Between 1330 and 1479 a quarter of deaths in the English aristocracy were violent. And ordinary homicide was commonplace. Data from the fourteenth century suggest an annual homicide rate in Oxford of above a hundred per 100,000 inhabitants. London was somewhat safer with a rate of around fifty per 100,000. The worst murder rates in the world today are in South Africa (sixty-nine per 100,000), Colombia (fifty-three) and Jamaica (thirty-four). Even Detroit at its worst in the 1980s had a rate of just forty-five per 100,000.⁶

English life in this period truly was, as the political theorist Thomas Hobbes later observed (of what he called 'the state of nature'), 'solitary, poor, nasty, brutish and short'. Even for a prosperous Norfolk family like the Pastons, there could be little security. John Paston's wife Margaret was ejected bodily from her lodgings when she sought to uphold the family's rightful claim to the manor of Gresham, occupied by the previous owner's heir. Caister Castle had been left to the Pastons by Sir John Fastolf, but it was besieged by the Duke of Norfolk shortly after John Paston's death and held for seventeen long years.⁷ And England was among the more prosperous and less violent countries in Europe. Life was even nastier, more brutal and shorter in France – and it got steadily worse the further east you went in Europe. Even in the early eighteenth century the average Frenchman had a

daily caloric intake of 1,660, barely above the minimum required to sustain human life and about half the average in the West today. The average pre-revolutionary Frenchman stood just 5 feet 4¾ inches tall.⁸ And in all the continental countries for which we have data for the medieval period, homicide rates were higher than in England, with Italy – a land as famous for its assassins as for its artists – consistently the worst.

It is sometimes argued that Western Europe's very nastiness was a kind of hidden advantage. Because high mortality rates were especially common among the poor, perhaps they somehow helped the rich to get richer. Certainly, one consequence of the Black Death was to give European per-capita income a boost; those who survived could earn higher wages because labour was so scarce. It is also true that the children of the rich in England were a good deal more likely to survive into adulthood than those of the poor.⁹ Yet it seems unlikely that these quirks of European demography explain the great divergence of West and East. There are countries in the world today where life is almost as wretched as it was in medieval England, where pestilence, hunger, war and murder ensure average life expectancy stays pitifully low, where only the rich live long. Afghanistan, Haiti and Somalia show little sign of benefiting from these conditions. As we shall see, Europe leapt forward to prosperity and power despite death, not because of it.

Modern scholars and readers need to be reminded what death used to be like. *The Triumph of Death*, the visionary masterwork of the Flemish artist Pieter Bruegel the Elder (c. 1525–69), is not of course a work of realism, but Bruegel certainly did not have to rely entirely on his imagination to depict a scene of stomach-wrenching death and destruction. In a land ruled by an army of skeletons, a king lies dying, his treasure of no avail, while a dog gnaws on a nearby corpse. In the background we see two hanged men on gibbets, four men broken on wheels and another about to be beheaded. Armies clash, houses burn, ships sink. In the foreground, men and women, young and old, soldiers and civilians are all driven pell-mell into a narrow, square tunnel. No one is spared. Even the troubadour singing to his mistress is surely doomed. The artist himself died in his early forties, a younger man than this author.

A century later the Italian artist Salvator Rosa painted perhaps the most moving of all *memento mori*, entitled simply *L'umana fragilità* ('Human Frailty'). It was inspired by the plague that had swept his native Naples in 1655, claiming the life of his infant son, Rosalvo, as well as carrying off his brother, his sister, her husband and five of their children. Grinning hideously, the angel of death looms from the darkness behind Rosa's wife to claim their son, even as he makes his first attempt to write. The mood of the heartbroken artist is immortally summed up in just eight Latin words inscribed on the canvas:

Conceptio culpa
Nasci pena
Labor vita
Necesse mori

'Conception is sin, birth is pain, life is toil, death is inevitable.' What more succinct description could be devised of life in the Europe of that time?

THE EUNUCH AND THE UNICORN

How can we understand the pre-eminence of the East? For a start, Asian agriculture was considerably more productive than European. In East Asia an acre of land was enough to support a family, such was the efficiency of rice cultivation, whereas in England the average figure was closer to 20 acres. This helps explain why East Asia was already more populous than Western Europe. The more sophisticated Oriental system of rice cultivation could feed many more mouths. No doubt the Ming poet Zhou Shixiu saw the countryside through rose-tinted spectacles; still, the picture here is of a contented rural populace:

Humble doorways loom by the dark path, a crooked lane goes way down to the inlet. Here ten families . . . have been living side by side for generations. The smoke from their fires intermingles wherever you look; so too, in their routines, the people are cooperative. One man's son heads the house on the west, while another's daughter is the western neighbour's wife. A cold autumn wind blows at the soil god's

shrine; piglets and rice-beer are sacrificed to the Ancestor of the Fields, to whom the old shaman burns paper money, while boys pound on a bronze drum. Mist drapes the sugar cane garden in silence, and drizzling rain falls on the taro fields, as the people come home after the rites, spread mats, and chat, half drunk . . .¹⁰

But such scenes of bucolic equipoise tell only part of the story. Later generations of Westerners tended to think of imperial China as a static society, allergic to innovation. In *Confucianism and Taoism* (1915) the German sociologist Max Weber defined Confucian rationalism as meaning 'rational adjustment to the world', as opposed to the Western concept of 'rational mastery of the world'. This was a view largely endorsed by the Chinese philosopher Feng Youlan in his *History of Chinese Philosophy* (1934), as well as by the Cambridge scholar Joseph Needham's multi-volume history of *Science and Civilization in China*. Such cultural explanations – always attractive to those, like Feng and Needham, who sympathized with the Maoist regime after 1949 – are hard to square with the evidence that, long before the Ming era, Chinese civilization had consistently sought to master the world through technological innovation.

We do not know for certain who designed the first water clock. It may have been the Egyptians, the Babylonians or the Chinese. But in 1086 Su Song added a gear escapement to create the world's first mechanical clock, an intricate 40-foot-tall contraption that not only told the time but also charted the movements of the sun, moon and planets. Marco Polo saw a bell tower operated by such a clock when he visited Dadu in northern China, not long after the tower's construction in 1272. Nothing remotely as accurate existed in England until a century later, when the first astronomical clocks were built for cathedrals in Norwich, St Alban's and Salisbury.

The printing press with movable type is traditionally credited to fifteenth-century Germany. In reality it was invented in eleventh-century China. Paper too originated in China long before it was introduced in the West. So did paper money, wallpaper and toilet paper.¹¹

It is often asserted that the English agricultural pioneer Jethro Tull discovered the seed drill in 1701. In fact it was invented in China 2,000 years before his time. The Rotherham plough which, with its

curved iron mouldboard, was a key tool in the eighteenth-century English Agricultural Revolution, was another innovation anticipated by the Chinese.¹² Wang Zhen's 1313 *Treatise on Agriculture* was full of implements then unknown in the West.¹³ The Industrial Revolution was also prefigured in China. The first blast furnace for smelting iron ore was not built in Coalbrookdale in 1709 but in China before 200 BC. The oldest iron suspension bridge in the world is not British but Chinese; dating from as early as AD 65, remains of it can still be seen near Ching-tung in Yunnan province.¹⁴ Even as late as 1788 British iron-production levels were still lower than those achieved in China in 1078. It was the Chinese who first revolutionized textile production with innovations like the spinning wheel and the silk reeling frame, imported to Italy in the thirteenth century.¹⁵ And it is far from true that the Chinese used their most famous invention, gunpowder, solely for fireworks. Jiao Yu and Liu Ji's book *Huolongjing*, published in the late fourteenth century, describes land and sea mines, rockets and hollow cannonballs filled with explosives.

Other Chinese innovations include chemical insecticide, the fishing reel, matches, the magnetic compass, playing cards, the toothbrush and the wheelbarrow. Everyone knows that golf was invented in Scotland. Yet the Dongxuan Records from the Song dynasty (960–1279) describe a game called *chuiwan*. It was played with ten clubs, including a *cuanbang*, *pubang* and *shaobang*, which are roughly analogous to our driver, two-wood and three-wood. The clubs were inlaid with jade and gold, suggesting that golf, then as now, was a game for the well-off.

And that was not all. As a new century dawned in 1400, China was poised to achieve another technological breakthrough, one that had the potential to make the Yongle Emperor the master not just of the Middle Kingdom, but of the world itself – literally 'All under heaven'.

In Nanjing today you can see a full-size replica of the treasure ship of Admiral Zheng He, the most famous sailor in Chinese history. It is 400 feet long – nearly five times the size of the *Santa María*, in which Christopher Columbus crossed the Atlantic in 1492. And this was only part of a fleet of more than 300 huge ocean-going junks. With multiple masts and separate buoyancy chambers to prevent them from sinking in the event of a hole below the waterline, these ships

were far larger than anything being built in fifteenth-century Europe. With a combined crew of 28,000, Zheng He's navy was bigger than anything seen in the West until the First World War.

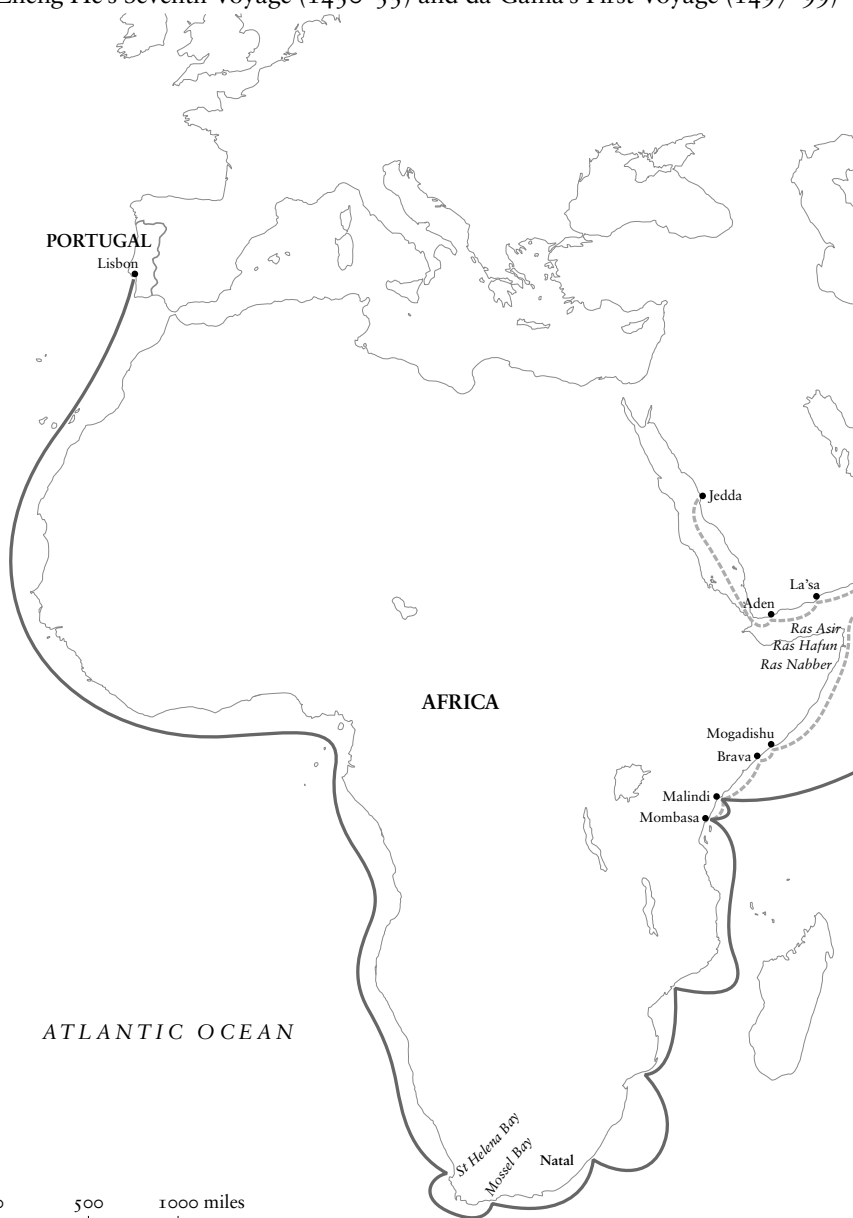
Their master and commander was an extraordinary man. At the age of eleven, he had been captured on the field of battle by the founder of the Ming dynasty, Zhu Yuanzhang. As was customary, the captive was castrated. He was then assigned as a servant to the Emperor's fourth son, Zhu Di, the man who would seize and ascend the imperial throne as Yongle. In return for Zheng He's loyal service, Yongle entrusted him with a task that entailed exploring the world's oceans.

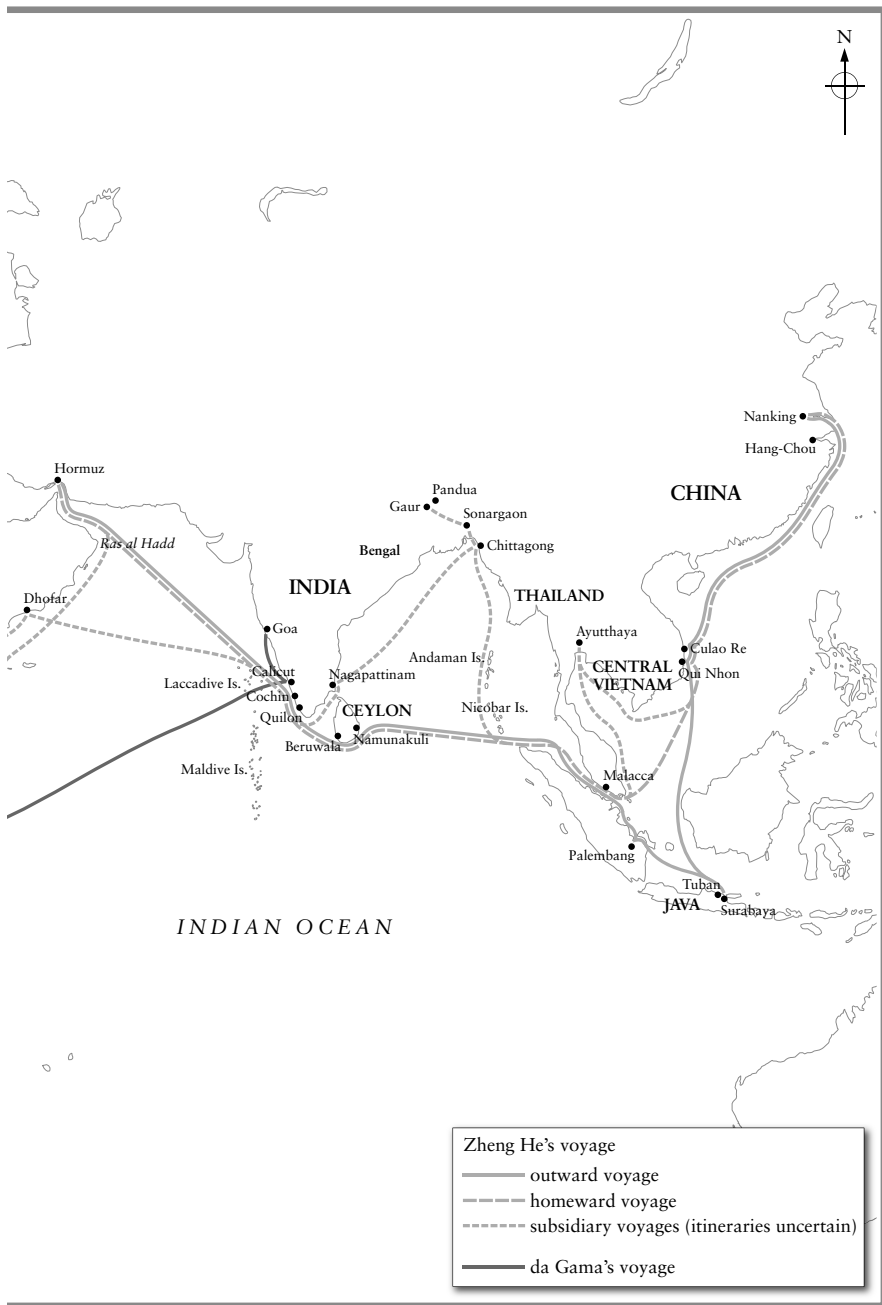
In a series of six epic voyages between 1405 and 1424, Zheng He's fleet ranged astoundingly far and wide.* The Admiral sailed to Thailand, Sumatra, Java and the once-great port of Calicut (today's Kozhikode in Kerala); to Temasek (later Singapore), Malacca and Ceylon; to Cuttack in Orissa; to Hormuz, Aden and up the Red Sea to Jeddah.¹⁶ Nominally, these voyages were a search for Yongle's predecessor, who had mysteriously disappeared, as well as for the imperial seal that had vanished with him. (Was Yongle trying to atone for killing his way to the throne, or to cover up for the fact that he had done so?) But to find the lost emperor was not their real motive.

Before his final voyage, Zheng He was ordered 'on imperial duty to Hormuz and other countries, with ships of different sizes numbering sixty-one . . . and [to carry] coloured silks . . . [and] buy hemp-silk'. His officers were also instructed to 'buy porcelain, iron cauldrons, gifts and ammunition, paper, oil, wax, etc.'¹⁷ This might seem to suggest a commercial rationale, and certainly the Chinese had goods coveted by Indian Ocean merchants (porcelain, silk and musk), as well as commodities they wished to bring back to China (peppers, pearls, precious stones, ivory and supposedly medicinal rhinoceros horns).¹⁸ In reality, however, the Emperor was not primarily concerned with trade as Adam Smith later understood it. In the words of

* There was a seventh voyage in 1430–33. It has been claimed by Gavin Menzies that Chinese ships rounded the Cape of Good Hope, sailed up the west coast of Africa to the Cape Verde Islands, crossed the Atlantic and then continued as far as Tierra del Fuego and the coast of Australia; and that one of Zheng He's admirals may have reached Greenland, returning to China along the north coast of Siberia and through the Bering Strait. The evidence for these claims is at best circumstantial and at worst non-existent.

Zheng He's Seventh Voyage (1430-33) and da Gama's First Voyage (1497-99)





a contemporary inscription, the fleet was 'to go to the [barbarians'] countries and confer presents on them so as to transform them by displaying our power . . .'. What Yongle wanted in return for these 'presents' was for foreign rulers to pay tribute to him the way China's immediate Asian neighbours did, and thereby to acknowledge his supremacy. And who could refuse to kowtow to an emperor possessed of so mighty a fleet?¹⁹

On three of the voyages, ships from Zheng He's fleet reached the east coast of Africa. They did not stay long. Envoys from some thirty African rulers were invited aboard to acknowledge the 'cosmic ascendancy' of the Ming Emperor. The Sultan of Malindi (in present-day Kenya) sent a delegation with exotic gifts, among them a giraffe. Yongle personally received the animal at the gateway of the imperial palace in Nanjing. The giraffe was hailed as the mythical *qilin* (unicorn) – 'a symbol of perfect virtue, perfect government and perfect harmony in the empire and the universe'.²⁰

But then, in 1424, this harmony was shattered. Yongle died – and China's overseas ambitions were buried with him. Zheng He's voyages were immediately suspended, and only briefly revived with a final Indian Ocean expedition in 1432–3. The *haijin* decree definitively banned oceanic voyages. From 1500, anyone in China found building a ship with more than two masts was liable to the death penalty; in 1551 it became a crime even to go to sea in such a ship.²¹ The records of Zheng He's journeys were destroyed. Zheng He himself died and was almost certainly buried at sea.

What lay behind this momentous decision? Was it the result of fiscal problems and political wrangles at the imperial court? Was it because the costs of war in Annam (modern-day Vietnam) were proving unexpectedly high?²² Or was it simply because of Confucian scholars' suspicion of the 'odd things' Zheng He had brought back with him, not least the giraffe? We may never be sure. But the consequences of China's turn inwards seem clear.

Like the Apollo moon missions, Zheng He's voyages had been a formidable demonstration of wealth and technological sophistication. Landing a Chinese eunuch on the East African coast in 1416 was in many ways an achievement comparable with landing an American astronaut on the moon in 1969. But by abruptly cancelling oceanic

exploration, Yongle's successors ensured that the economic benefits of this achievement were negligible.

The same could not be said for the voyages that were about to be undertaken by a very different sailor from a diminutive European kingdom at the other end of the Eurasian landmass.

THE SPICE RACE

It was in the Castelo de São Jorge, high in the hills above the wind-swept harbour of Lisbon, that the newly crowned Portuguese King Manuel put Vasco da Gama in command of four small ships with a big mission. All four vessels could quite easily have fitted inside Zheng He's treasure ship. Their combined crews were just 170 men. But their mission – 'to make discoveries and go in search of spices' – had the potential to tilt the whole world westwards.

The spices in question were the cinnamon, cloves, mace and nutmeg which Europeans could not grow for themselves but which they craved to enhance the taste of their food. For centuries the spice route had run from the Indian Ocean up the Red Sea, or overland through Arabia and Anatolia. By the middle of the fifteenth century its lucrative final leg leading into Europe was tightly controlled by the Turks and the Venetians. The Portuguese realized that if they could find an alternative route, down the west coast of Africa and round the Cape of Good Hope to the Indian Ocean, then this business could be theirs. Another Portuguese mariner, Bartolomeu Dias, had rounded the Cape in 1488, but had been forced by his crew to turn back. Nine years later, it was up to da Gama to go all the way.

King Manuel's orders tell us something crucially important about the way Western civilization expanded overseas. As we shall see, the West had more than one advantage over the Rest. But the one that really started the ball rolling was surely the fierce competition that drove the Age of Exploration. For Europeans, sailing round Africa was not about exacting symbolic tribute for some high and mighty potentate back home. It was about getting ahead of their rivals, both economically and politically. If da Gama succeeded, then Lisbon

trumped Venice. Maritime exploration, in short, was fifteenth-century Europe's space race. Or, rather, its spice race.

Da Gama set sail on 8 July 1497. When he and his fellow Portuguese sailors rounded the Cape of Good Hope at the southernmost tip of Africa four months later, they did not ask themselves what exotic animals they should bring back for their King. They wanted to know if they had finally succeeded where others had failed – in finding a new spice route. They wanted trade, not tribute.

In April 1498, fully eighty-two years after Zheng He had landed there, da Gama arrived at Malindi. The Chinese had left little behind aside from some porcelain and DNA – that of twenty Chinese sailors who are said to have been shipwrecked near the island of Pate, to have swum ashore and stayed, marrying African wives and introducing the locals to Chinese styles of basket-weaving and silk production.²³ The Portuguese, by contrast, immediately saw Malindi's potential as a trading post. Da Gama was especially excited to encounter Indian merchants there and it was almost certainly with assistance from one of them that he was able to catch the monsoon winds to Calicut.

This eagerness to trade was far from being the only difference between the Portuguese and the Chinese. There was a streak of ruthlessness – indeed, of downright brutality – about the men from Lisbon that Zheng He only rarely evinced. When the King of Calicut looked askance at the goods the Portuguese had brought with them from Lisbon, da Gama seized sixteen fishermen as hostages. On his second voyage to India, at the head of fifteen ships, he bombarded Calicut and horribly mutilated the crews of captured vessels. On another occasion, he is said to have locked up the passengers aboard a ship bound for Mecca and set it ablaze.

The Portuguese engaged in exemplary violence because they knew that their opening of a new spice route round the Cape would meet resistance. They evidently believed in getting their retaliation in first. As Afonso de Albuquerque, the second Governor of Portuguese India, proudly reported to his royal master in 1513: 'At the rumour of our coming the [native] ships all vanished and even the birds ceased to skim over the water.' Against some foes, to be sure, cannons and cutlasses were ineffective. Half of the men on da Gama's first expedition did not survive the voyage, not least because their captain attempted

to sail back to Africa against the monsoon wind. Only two of the original four ships made it back to Lisbon. Da Gama himself died of malaria during a third trip to India in 1524; his remains were returned to Europe and are now housed in a fine tomb in the Jerónimos Monastery (now the church of Santa Maria de Belém in Lisbon). But other Portuguese explorers sailed on, past India, all the way to China. Once, the Chinese had been able to regard the distant barbarians of Europe with indifference, if not contempt. But now the spice race had brought the barbarians to the gates of the Middle Kingdom itself. And it must be remembered that, though the Portuguese had precious few goods the Chinese wanted, they did bring silver, for which Ming China had an immense demand as coins took the place of paper money and labour service as the principal means of payment.

In 1557 the Portuguese were ceded Macau, a peninsula on the Pearl River delta. Among the first things they did was to erect a gate – the *Porta do Cerco* – bearing the inscription: ‘Dread our greatness and respect our virtue.’ By 1586 Macau was an important enough trading outpost to be recognized as a city: *Cidade do Nome de Deus na China* (City of the Name of God in China). It was the first of many such European commercial enclaves in China. Luís da Camões, author of *The Lusiads*, the epic poem of Portuguese maritime expansion, lived in Macau for a time, after being exiled from Lisbon for assault. How was it, he marvelled, that a kingdom as small as Portugal – with a population less than 1 per cent of China’s – could aspire to dominate the trade of Asia’s vastly more populous empires? And yet on his countrymen sailed, establishing an amazing network of trading posts that stretched like a global necklace from Lisbon, round the coast of Africa, Arabia and India, through the Straits of Malacca, to the spice islands themselves and then on still further, beyond even Macau. ‘Were there more worlds still to discover,’ as da Camões wrote of his countrymen, ‘they would find them too!’²⁴

The benefits of overseas expansion were not lost on Portugal’s European rivals. Along with Portugal, Spain had been first off the mark, seizing the initiative in the New World (see Chapter 3) and also establishing an Asian outpost in the Philippines, whence the Spaniards were able to ship immense quantities of Mexican silver to China.²⁵ For decades after

the Treaty of Tordesillas (1494) had split the world between them, the two Iberian powers could regard their imperial achievements with sublime self-confidence. But the Spaniards' rebellious and commercially adept Dutch subjects came to appreciate the potential of the new spice route; indeed, by the mid-1600s they had overtaken the Portuguese in terms of both number of ships and tonnage sailing round the Cape. The French also entered the lists.

And what of the English, whose territorial ambitions had once extended no further than France and whose one novel economic idea in the Middle Ages had been selling wool to the Flemish? How could they possibly sit on the sidelines with news coming in that their arch-foes the Spaniards and French were making their fortunes overseas? Sure enough, it was not long before the English joined in the race for overseas commerce. In 1496 John Cabot made his first attempt to cross the Atlantic from Bristol. In 1553 Hugh Willoughby and Richard Chancellor set off from Deptford to seek a 'North-east Passage' to India. Willoughby froze to death in the attempt, but Chancellor managed to get to Archangel and then made his way overland to the court of Ivan the Terrible in Moscow. On his return to London, Chancellor lost no time in setting up the Muscovy Company to develop trade with Russia (its full name was 'The Mystery and Company of Merchant Adventurers for the Discovery of Regions, Dominions, Islands, and Places unknown'). Similar projects proliferated with enthusiastic royal support, not only across the Atlantic but also along the spice route. By the middle of the seventeenth century England's trade was flourishing from Belfast to Boston, from Bengal to the Bahamas.

The world was being carved up in a frenzy of cut-throat competition. But the question still remains: why did the Europeans seem to have so much more commercial fervour than the Chinese? Why was Vasco da Gama so clearly hungry for money – hungry enough to kill for it?

You can find the answer by looking at maps of medieval Europe, which show literally hundreds of competing states, ranging from the kingdoms of the western seaboard to the many city-states that lay between the Baltic and the Adriatic, from Lübeck to Venice. There were roughly a thousand polities in fourteenth-century Europe; and still around 500 more or less independent units 200 years later. Why was this? The simplest answer is geography. China had three great rivers,

the Yellow, the Yangzi and the Pearl, all flowing from west to east.²⁶ Europe had multiple rivers flowing in multiple directions, not to mention a host of mountain ranges like the Alps and the Pyrenees, to say nothing of the dense forests and marshes of Germany and Poland. It may just have been easier for marauding Mongols to access China; Europe was less readily penetrable by a horde on horseback – and therefore had less need of unity. We cannot be sure exactly why the Central Asian threat receded from Europe after Timur. Perhaps Russian defences just got better. Perhaps the Mongol horses preferred steppe grass.

True, as we have seen, conflict could be devastating in Europe – think only of the mayhem caused by the Thirty Years' War in mid-seventeenth-century Germany. Woe betide those who lived at the frontiers between the dozen or so bigger European states, which were at war on average more than two-thirds of the time between 1550 and 1650. In all the years from 1500 to 1799, Spain was at war with foreign enemies 81 per cent of the time, England 53 per cent and France 52 per cent. But this constant fighting had three unintended benefits. First, it encouraged innovation in military technology. On land, fortifications had to grow stronger as cannon grew more powerful and manoeuvrable. The fate of the ruined 'robber baron's' castle on the Tannenberg above Seeheim in southern Germany served as a warning: in 1399 it became the first European fortification to be destroyed using explosives.

At sea, meanwhile, ships stayed small for good reasons. Compared with the Mediterranean galley, the design of which had scarcely changed since Roman times, the late fifteenth-century Portuguese caravel, with its square-rig sails and two masts, struck an ideal balance between speed and firepower. It was much easier to turn and much harder to hit than one of Zheng He's giant junks. In 1501 the French device of putting rows of cannon in special bays along both sides of a ship turned European 'men of war' into floating fortresses.²⁷ If it could somehow have come to a naval encounter between Zheng He and Vasco da Gama, it is possible that the Portuguese would have sent the lumbering Chinese hulks to the bottom, just as they made short work of the smaller but nimbler Arab dhows in the Indian Ocean – though at Tamao in 1521 a Ming fleet did sink a Portuguese caravel.

The second benefit of Europe's almost unremitting warfare was

that the rival states grew progressively better at raising the revenue to pay for their campaigns. Measured in terms of grams of silver per head, the rulers of England and France were able to collect far more in taxation than their Chinese counterpart throughout the period from 1520 to 1630.²⁸ Beginning in thirteenth-century Italy, Europeans also began to experiment with unprecedented methods of government borrowing, planting the seeds of modern bond markets. Public debt was an institution wholly unknown in Ming China and only introduced under European influence in the late nineteenth century. Another fiscal innovation of world-changing significance was the Dutch idea of granting monopoly trading rights to joint-stock companies in return for a share of their profits and an understanding that the companies would act as naval subcontractors against rival powers. The Dutch East India Company, founded in 1602, and its eponymous English imitator were the first true capitalist corporations, with their equity capital divided into tradable shares paying cash dividends at the discretion of their directors. Nothing resembling these astoundingly dynamic institutions emerged in the Orient. And, though they increased royal revenue, they also diminished royal prerogatives by creating new and enduring stakeholders in the early-modern state: bankers, bond-holders and company directors.

Above all, generations of internecine conflict ensured that no one European monarch ever grew strong enough to be able to prohibit overseas exploration. Even when the Turks advanced into Eastern Europe, as they did repeatedly in the sixteenth and seventeenth centuries, there was no pan-European emperor to order the Portuguese to suspend their maritime explorations and focus on the enemy to the east.²⁹ On the contrary, the European monarchs all encouraged commerce, conquest and colonization as part of their competition with one another.

Religious war was the bane of European life for more than a century after the Lutheran Reformation swept through Germany (see Chapter 2). But the bloody battles between Protestants and Roman Catholics, as well as the periodic and localized persecution of Jews, also had beneficial side-effects. In 1492 the Jews were expelled from Castile and Aragon as religious heretics. Initially, many of them sought refuge in the Ottoman Empire, but a Jewish community was established

in Venice after 1509. In 1566, with the revolt of the Dutch against Spanish rule and the establishment of the United Provinces as a Protestant republic, Amsterdam became another haven of tolerance. When the Protestant Huguenots were expelled from France in 1685, they were able to resettle in England, Holland and Switzerland.³⁰ And, of course, religious fervour provided another incentive to expand overseas. The Portuguese Prince Henrique the Navigator encouraged his sailors to explore the African coast partly in the hope that they might find the mythical kingdom of the lost Christian saint Prester John, and that he might then lend Europe a hand against the Turks. In addition to insisting on exemption from Indian customs duties, Vasco da Gama brazenly demanded that the King of Calicut expel all Muslims from his realm and waged a campaign of targeted piracy against Muslim shipping bound for Mecca.

In short, the political fragmentation that characterized Europe precluded the creation of anything remotely resembling the Chinese Empire. It also propelled Europeans to seek opportunities – economic, geopolitical and religious – in distant lands. You might say it was a case of divide and rule – except that, paradoxically, it was by being divided themselves that Europeans were able to rule the world. In Europe small was beautiful because it meant competition – and competition not just between states, but also within states.

Officially, Henry V was king of England, Wales and indeed France, to which he laid claim. But on the ground in rural England real power was in the hands of the great nobility, the descendants of the men who had imposed Magna Carta on King John, as well as thousands of gentry landowners and innumerable corporate bodies, clerical and lay. The Church was not under royal control until the reign of Henry VIII. Towns were often self-governing. And, crucially, the most important commercial centre in the country was almost completely autonomous. Europe was not only made up of states; it was also made up of estates: aristocrats, clergymen and townsfolk.

The City of London Corporation can trace its origin and structure back as far as the twelfth century. Remarkably, in other words, the Lord Mayor, the sheriffs, the aldermen, Common Council, liverymen and freemen have all been around for more than 800 years. The Corporation is one of the earliest examples of an autonomous

commercial institution – in some ways the forerunner of the corporations we know today, in other ways the forerunner of democracy itself.

As early as the 1130s, Henry I granted Londoners the right to choose as their own sheriff and justice ‘whom they will of themselves’, and to administer their judicial and financial affairs without interference from the Crown or other authorities.³¹ In 1191, while Richard I was crusading in the Holy Land, the right to elect a mayor was also granted, a right confirmed by King John in 1215.³² As a result, the City was never in awe of the Crown. With the support of the City’s freemen, Mayor Thomas fitz Thomas supported Simon de Montfort’s revolt against Henry III in 1263–5. In 1319 it was the turn of Edward II to confront the City as the mercers (cloth dealers) sought to reduce the privileges of foreign merchants. When the Crown resisted, the ‘London mob’ supported Roger Mortimer’s deposition of the King. In the reign of Edward III, the tide turned against the City; Italian and Hanseatic merchants established themselves in London, not least by providing the Crown with loans on generous terms, a practice which continued during Richard II’s minority.³³ But the Londoners continued to challenge royal authority, showing little enthusiasm for the Crown’s cause during either the Peasants’ Revolt (1381) or the challenge to Richard’s rule by the Lords Appellant. In 1392 the King revoked London’s privileges and liberties, but five years later a generous ‘gift’ of £10,000 – negotiated by Mayor Whittington – secured their restoration. Loans and gifts to the Crown became the key to urban autonomy. The wealthier the City became, the more such leverage it had. Whittington lent Henry IV at least £24,000 and his son Henry V around £7,500.³⁴

Not only did the City compete with the Crown for power. There was competition even within the City. The livery companies can all trace their origins back to the medieval period: the weavers to 1130, the bakers to 1155, the fishmongers to 1272, the goldsmiths, merchant taylors and skinnners to 1327, the drapers to 1364, the mercers to 1384 and the grocers to 1428. These guilds or ‘misteries’ exerted considerable power over their particular sectors of the economy, but they had political power too. Edward III acknowledged this when he declared himself to be ‘a brother’ of the Linen-Armourers’

(later Merchant Taylors') Guild. By 1607 the Merchant Taylors could count as past and present honorary members seven kings and a queen, seventeen princes and dukes, nine countesses, duchesses and baronesses, over 200 earls, lords and other gentlemen and an archbishop. The 'great twelve' companies – in order of precedence: mercers, grocers, drapers, fishmongers, goldsmiths, skinner, merchant taylors, haberdashers, salters, ironmongers, vintners and clothworkers – are a reminder of the power that London's craftsmen and merchants were once able to wield, even if their role today is largely ceremonial. In their competitive heyday they were as likely to fight as to dine with one another.³⁵

Among other things, this multi-level competition, between states and within states – even within cities – helps to explain the rapid spread and advancing technology of the mechanical clock in Europe. Already in the 1330s Richard of Wallingford had installed a remarkably sophisticated mechanical clock in the wall of the south transept of St Albans Abbey, which showed the motion of the moon, of the tides and of certain celestial bodies. With their distinctive hourly bells (hence the name: clock, *clokke*, *Glocke*, *cloche*), the mechanical clock and the spring-driven clock that supplanted it in the fifteenth century were not only more accurate than Chinese waterclocks. They were also intended to be disseminated, rather than monopolized by the Emperor's astronomers. Thus, if one town's cathedral installed a fine new dial in its tower, its nearest rival soon felt obliged to follow suit. If Protestant watchmakers were unwelcome in France after 1685, the Swiss gladly took them in. And, as with military technology, competition bred progress as craftsmen tinkered to make small but cumulative improvements to the accuracy and elegance of the product. By the time the Jesuit missionary Matteo Ricci brought European clocks to China in the late sixteenth century, they were so much superior to their Oriental counterparts that they were greeted with dismay.³⁶ In 1602, at the request of the Wanli Emperor, Ricci produced a beautiful rice-paper map of the world, which depicted China at the centre of the earth. He must have known, however, that in terms of technology China was now drifting to the global periphery.

Because of the greater precision it permitted in measurement and

in the co-ordination of action, the rise of the clock and later the portable watch went (it might be said) hand in hand with the rise of Europe and the spread of Western civilization. With every individual timepiece, a little bit more time ran out for the age of Oriental pre-eminence.

By comparison with the patchwork quilt of Europe, East Asia was – in political terms, at least – a vast monochrome blanket. The Middle Kingdom's principal competitors were the predatory Mongols to the north and the piratical Japanese to the east. Since the time of Qin Shihuangdi – often referred to as the 'First Emperor' of China (221–210 BC) – the threat from the north had been the bigger one – the one that necessitated the spectacular investment in imperial defence we know today as the Great Wall. Nothing remotely like it was constructed in Europe from the time of Hadrian to the time of Erich Honecker. Comparable in scale was the network of canals and ditches that irrigated China's arable land, which the Marxist Sinologist Karl Wittfogel saw as the most important products of a 'hydraulic-bureaucratic' Oriental despotism.

The Forbidden City in Beijing is another monument to monolithic Chinese power. To get a sense of its immense size and distinctive ethos, the visitor should walk through the Gate of Supreme Harmony to the Hall of Supreme Harmony, which contains the Dragon Throne itself, then to the Hall of Central Harmony, the emperor's private room, and then to the Hall of Preserving Harmony, the site of the final stage of the imperial civil service examination (see below). Harmony (和), it seems clear, was inextricably bound up with the idea of undivided imperial authority.³⁷

Like the Great Wall, the Forbidden City simply had no counterpart in the fifteenth-century West, least of all in London, where power was subdivided between the Crown, the Lords Temporal and Spiritual and the Commons, as well as the Corporation of the City of London and the livery companies. Each had their palaces and halls, but they were all very small by Oriental standards. In the same way, while medieval European kingdoms were run by a combination of hereditary land-owners and clergymen, selected (and often ruthlessly discarded) on the basis of royal favour, China was ruled from the top down by a

Confucian bureaucracy, recruited on the basis of perhaps the most demanding examination system in all history. Those who aspired to a career in the imperial service had to submit to three stages of gruelling tests conducted in specially built exam centres, like the one that can still be seen in Nanjing today – a huge walled compound containing thousands of tiny cells little larger than the lavatory on a train:

These tiny brick compartments [a European traveller wrote] were about 1.1 metres deep, 1 metre wide and 1.7 metres high. They possessed two stone ledges, one servicing as a table, the other as a seat. During the two days an examination lasted the candidates were observed by soldiers stationed in the lookout tower . . . The only movement allowed was the passage of servants replenishing food and water supplies, or removing human waste. When a candidate became tired, he could lay out his bedding and take a cramped rest. But a bright light in the neighbouring cell would probably compel him to take up his brush again . . . some candidates went completely insane under the pressure.³⁸

No doubt after three days and two nights in a shoebox, it was the most able – and certainly the most driven – candidates who passed the examination. But with its strong emphasis on the Four Books and Five Classics of Confucianism, with their bewildering 431,286 characters to be memorized, and the rigidly stylized eight-legged essay introduced in 1487, it was an exam that rewarded conformity and caution.³⁹ It was fiercely competitive, no doubt, but it was not the kind of competition that promotes innovation, much less the appetite for change. The written language at the heart of Chinese civilization was designed for the production of a conservative elite and the exclusion of the masses from their activities. The contrast could scarcely be greater with the competing vernaculars of Europe – Italian, French and Castilian as well as Portuguese and English – usable for elite literature but readily accessible to a wider public with relatively simple and easily scalable education.⁴⁰

As Confucius himself said: 'A common man marvels at uncommon things. A wise man marvels at the commonplace.' But there was too much that was commonplace in the way Ming China worked, and too little that was new.