CONTENTS

ix

	List of Figures and Tables xi		
	Acknowledgments xvii		
	Introduction: The Great Escape	1	
PART I. THE EUROPEAN ANOMALY			
1	Patterns of Empire	31	
PART II. WHY ROME?			
2	Core	51	
3	Periphery	89	
4	Counterfactuals	110	
PART III. WHY ONLY ROME?			
5	From Justinian to Frederick	127	
6	From Genghis Khan to Napoleon	174	
PART IV. THE FIRST GREAT DIVERGENCE			
7	From Convergence to Divergence	219	

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x CONTENTS			
8	Nature	259	
9	Culture	307	
PAF	RT V. FROM THE FIRST TO THE SECOND GREAT DIVERGENCE		
10	Institutions	337	
11	New Worlds	420	
12	Understanding	472	
	Epilogue: What Have the Romans Ever Done for Us?	503	

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Introduction

The Great Escape

WHAT?

WHAT WAS the Great Escape? It made it possible for me to write this book, and for you to read it—which we could not do if we were busy farming the land, or were illiterate, or had died in childhood. It transformed the human condition by making so many of us so much richer, healthier, and better educated than our ancestors used to be.¹

This escape from sickness, ignorance, oppression, and want, which remains very much a work in progress in large parts of the world, was not made up of slow, gradual, and linear improvements. For the most part, it represented a radical break from the practices and life experiences of the past, a break that changed the world in the course of just a few generations.

Before the nineteenth century, a certain amount of intensive—per capita—growth in economic output had taken place over the long run, but on a scale so modest that this cumulative increase becomes almost invisible when it is set against the breakthroughs of the past two centuries. Much the same is true of growth in the stock of knowledge and our ability to fight disease. This discontinuity accounts for the fact that any graph that tracks economic performance, or human welfare in general, in those parts of the world where modern economic development took off first—in Britain and then in other parts of Europe and their various

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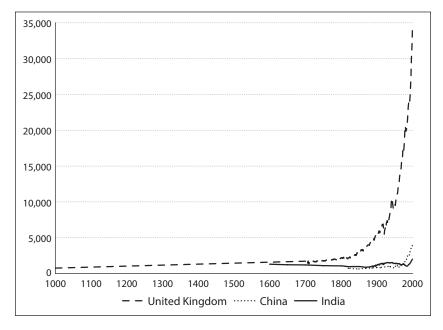


FIGURE 1.1 Per capita GDP in the United Kingdom, China, and India, 1000–2000 CE (in 2011 US\$). Source: Maddison Project Database 2018.

global spinoffs—is shaped like a hockey stick. This upward turn opened up a growing gap with most of the rest of the world that has only recently begun to close (figure I.1).²

Thanks to this divergence, population number ceased to be the principal determinant of aggregate regional output. Global production and consumption shifted from what had long been the most populous parts of the world—East and South Asia—and came to be heavily concentrated where this novel type of transformative development occurred: in Europe and North America, and later also in Japan (figures I.2–I.3).³

Even though many Asian countries in particular have been catching up, narrowing the extreme imbalance that existed a couple of generations ago, the impact of the original divergence has been very slow to fade. Thus, most of the world's recipients of elevated incomes continue to be found in those regions that were the first to develop, with the United States and Western Europe maintaining a forbidding lead. While inequality also contributes to this pattern by boosting the standing of

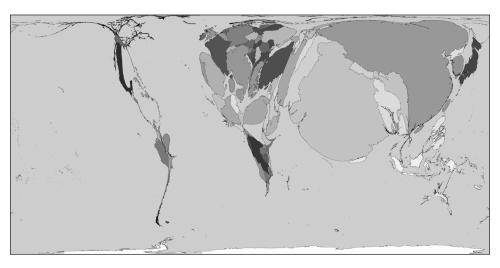


FIGURE 1.2 Distribution of global GDP adjusted for purchasing power parity in 1 CE. *Sources*: http://archive.worldmapper.org/display.php?selected=159 and http://archive.worldmapper.org/display.php?selected=162 (© Copyright Worldmapper.org / Sasi Group [University of Sheffield] and Mark Newman [University of Michigan]).

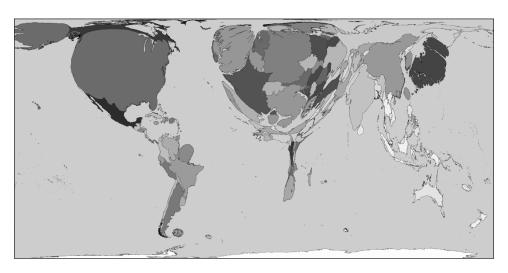


FIGURE 1.3 Distribution of global GDP adjusted for purchasing power parity in 1960. *Sources*: http://archive.worldmapper.org/display.php?selected=159 and http://archive.worldmapper.org/display.php?selected=162 (© Copyright Worldmapper.org / Sasi Group [University of Sheffield] and Mark Newman [University of Michigan]).

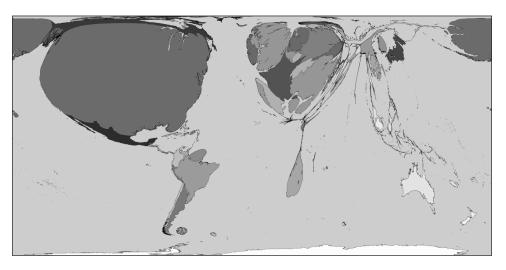


FIGURE 1.4 Distribution of people worldwide living on more than \$200 per day in 2002 (adjusted for purchasing power parity, by country). *Source*: http://archive.worldmapper.org/display.php?selected=158 (© Copyright Worldmapper.org / Sasi Group [University of Sheffield] and Mark Newman [University of Michigan]).

the United States, South Africa, and South America, the timing of modernization remains the principal determinant of these imbalances (figure I.4).⁴

Ian Morris's social development index is perhaps the most ambitious attempt to quantify this massive transformation. It seeks to (very roughly) quantify and compare overall levels of material development by tracking four key components—energy capture, social organization, war-making capacity, and information technology—over the very long term in the most developed parts of western and eastern Eurasia. For the former, this exercise produces the same hockey stick as before (figure I.5).⁵

For a long time, variation between East and West was mere oscillation, reflecting in the first instance the moderately beneficial effect of empire on social development. Large imperial formations were associated with somewhat higher development scores, and their collapse (or plagues) with lower ones: the Roman empire helped Europe, the Tang and Song empires China. In the late Middle Ages, China was hit by the Mongols and Europe by the Black Death (figure I.6).

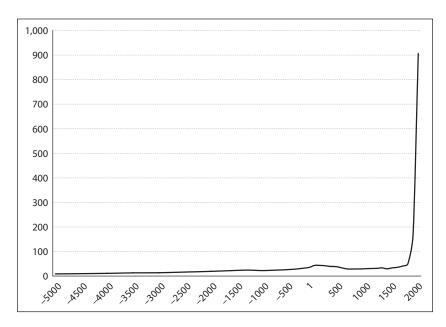


FIGURE 1.5 Social development scores in the most developed parts of western Eurasia, 5000 BCE-2000 CE. Source: Derived from Morris 2013b: 240-41, table 7.1.

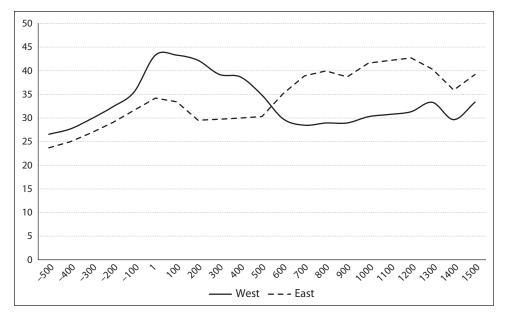


FIGURE 1.6 Social development scores in western and eastern Eurasia, 500 BCE–1500 CE. Sources: Morris 2013b: 240–43, tables 7.1–7.2.

6 INTRODUCTION

Very different mechanisms were required to generate more dramatic and self-sustaining progress. In the nineteenth century, development swiftly reached an unprecedented order of magnitude that made earlier fluctuations appear insignificant and defined the inflection point for the mature hockey stick.

The resultant divergence—from the past, and between different parts of the Old World—was so great that we no longer have to worry about the problem of (gu)es(s) timating historical GDP or other poorly documented metrics: it far exceeded any plausible margin of error. This was when the world truly did change: in David Landes's memorable turn of phrase, "The Englishman of 1750 was closer in material things to Caesar's legionnaires than to his own great-grandchildren."

Energy capture per person accounts for most of Morris's social development scores, from 100 percent back in 14,000 BCE—when there would have been no meaningful differences in social organization or military capacity, let alone information technology, across the globe—to around 80 percent in 1800 and between 60 and 70 percent in 1900. Thus, changes in energy capture drove the divergence shown in figure I.7. In Morris's account, estimated per capita energy consumption rose from 38,000 kilocalories per day in 1800 to 92,000 in 1900 in northwestern Europe and on to 230,000 (in the United States) today.⁷

An alternative reconstruction envisions an even more rapid increase during the nineteenth century, from 33,000 to 99,000 daily kilocalories in England, all of which was sustained by coal. The transition from organic to fossil fuel economies was crucial. The former faced an iron constraint in their dependence on plant photosynthesis that converted a steady flow of solar energy into food, feed, and firewood that sustained human and animal labor and the processing of raw materials. The latter, by contrast, could draw on much larger accumulated stocks of fuel that had been built up over geological time, first coal and later oil and gas.⁸

Only in the twentieth century did war-making capacity and information technology, each of which grew by two orders of magnitude by Morris's reckoning (thanks to nuclear weapons and computers), take over as the most important drivers of development. Both are the fruits

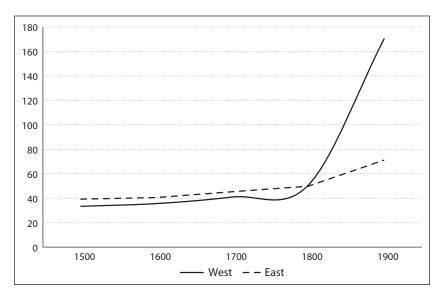


FIGURE 1.7 Social development scores in western and eastern Eurasia, 1500–1900 CE. Sources: Morris 2013b: 241, table 7.1; 243, table 7.2.

of ever more sophisticated science and engineering that have kept deepening our break from the past.

What has all this economic growth and social development done for us? Most fundamentally, we live much longer. Life span is positively associated with economic performance, and as global average per capita output has risen about fifteenfold between the late eighteenth century and today, global mean life expectancy at birth has more than doubled from around thirty to seventy years. And we do not just live longer but also better. Poverty is down worldwide: the share of people subsisting on the real equivalent of about two dollars a day has declined from well over nine-tenths two hundred years ago to about one-tenth now. Its closest corollary, malnourishment, haunted half of the world's population in 1945 but affects only about one in ten people today.⁹

In the Western world, the original trailblazer, mature male stature rose by five inches between the late eighteenth and the late twentieth centuries. Overall, Westerners "are taller, heavier, healthier, and longer lived than our ancestors; our bodies are sturdier, less susceptible to

8 INTRODUCTION

disease in early life and slower to wear out." And once again, this trend has gone global. 10

The world's literacy rate is up from one in eight adults 200 years ago to six out of every seven today. Freedom reigns: the proportion of human-kind that lives in countries that count as more democratic than autocratic has exploded from maybe 1 percent in 1800 to two-thirds today—and had China's civil war in the late 1940s ended differently, the total could now easily be closer to five-sixths. On a scale from —10 (all autocratic) to +10 (all democratic), the average global score for major polities has risen from —7 in 1800 to +4 today. All this has made us measurably happier: GDP is linked to happiness and life evaluation more generally. Overall, even as economic inequality has been sustained within societies, and divergent development opened up a wide gap between rich and poor nations that is now only slowly narrowing, modern development has improved our life experience on many fronts, and has increasingly done so on a global scale. 11

It goes without saying that we are hardly in a position to claim that the Great Escape has fully succeeded. Yet the painful truth that this same development has the potential to cause serious harm to us and our planet—through climate change, environmental degradation, weaponized pathogens, or nuclear war—merely reflects the sheer scale of this transformation: nothing like this had previously been within our reach. In both good and bad, we have far outpaced the past.¹²

WHY?

Why has the world changed so much? All this development was rooted in initial breakthroughs that took place in northwestern Europe: hence the inflection points in figures I.1 and I.7. But what made it possible for that corner of the globe to launch a process that unleashed previously unimaginable productivity and human welfare by harnessing an everbroadening range of natural resources from coal and the vaccinia virus to silicon and uranium?

By now, answers to this question not only fill shelf-loads of learned books and binders—or rather electronic folders—of academic papers, entire books have been written to take stock of all those books and papers that propose answers. Scholarly opinion is divided. Some take a long-term view, searching for causes and trends that go back many centuries. Others stress the role of more recent contingencies that enabled some pioneering—or, depending on whom you ask, particularly rapacious or just plain lucky—societies to pull ahead. Some accounts privilege politics and institutions; others overseas trade and colonization; others still culture, education, and values.¹³

I argue that a single condition was essential in making the initial breakthroughs possible: competitive fragmentation of power. The nursery of modernity was riven by numerous fractures, not only by those between the warring states of medieval and early modern Europe but also by others within society: between state and church, rulers and lords, cities and magnates, knights and merchants, and, most recently, Catholics and Protestants. This often violent history of conflict and compromise was long but had a clear beginning: the fall of the Roman empire that had lorded it over most of Europe, much as successive Chinese dynasties lorded it over most of East Asia. Yet in contrast to China, nothing like the Roman empire ever returned to Europe.

The enduring absence of hegemonic empire on a subcontinental scale represented a dramatic break not only with ancient history. It also set Europe on a trajectory away from the default pattern of serial imperial state formation—from the boom and bust of hegemonic powers—we can observe elsewhere. By laying the foundations for persistent polycentrism and the transformative developmental dynamics it generated over the long run, this rupture was the single most important precondition for modern economic growth, industrialization, and global Western dominance much later on.

I develop my argument in several stages. In the opening chapter, I establish the fact that as far as imperial state formation is concerned, Europe differed profoundly from other parts of the world that supported major complex civilizations. After the demise of the unified

Roman empire in the fifth century CE, the greatest powers in Europe never laid claim to more than about one-fifth of its total population, a far cry from the four-fifths or more that had submitted to Roman rule. Likewise, the greatest powers that subsequently existed in the geographical space once held by the Romans never controlled more than a similarly modest proportion of its later population.¹⁴

This pattern is striking for two reasons: it reveals a sharp discontinuity between the ancient and post-ancient history of Europe, and it differs dramatically from outcomes in other parts of the world that used to be home to large traditional empires, such as East Asia, the Indian subcontinent, and the Middle East and North Africa region. The historically unique phenomenon of "one-off empire" in Europe is remarkable because regions that supported very large polities early on can reasonably be expected to have done the same later, and did in fact consistently do so elsewhere. In this respect, imperial state formation in South Asia and the Middle East—as well as in Southeast Asia, Central America, and the Andes region—had more in common with East Asia, the classic example of imperial persistence over time, than with Europe, which represents a genuine outlier. 15

This raises four closely interrelated questions, which I address in Parts II through V of the book. How did the Roman empire come into existence—did its rise and success depend on rare or unique conditions that were never replicated later on? Why was nothing approximating the Roman empire in terms of scale ever rebuilt in the same part of the world? Can comparison with other parts of the world help us understand the absence of very large empire from post-Roman Europe? And finally, and most importantly, did the latter open a path to (much) later developments that eventually reshaped the entire world?

In Part II, I explain the creation of a very large empire that came to encompass the entire Mediterranean basin with reference to two principal factors. First, the Roman Republic managed to combine a culture of military mass mobilization of an intensity unknown among ancient state-level polities outside the Greek city-state culture and Warring States China with integrative capacities that enabled it to scale up military mass mobilization to levels unparalleled and arguably unattainable

elsewhere in western Eurasia at the time (chapter 2). Second, in its formative phase, Rome benefited from its position at the margins of a larger civilizational zone that had expanded outward from the Fertile Crescent region for several thousand years but had been exceptionally slow in drawing the central and western Mediterranean into the growing network of sustained political and military interaction at that zone's core (chapter 3). In addition, prolonged domestic political stability and a fortuitous concatenation of circumstances that allowed Rome to establish effective naval hegemony across the Mediterranean at a relatively early stage of its expansion further contributed to its success.

None of the preconditions were—or in the case of the second principal factor even could be—repeated in later historical periods. Rome's rule had greatly extended the boundaries of the original Middle Eastern political-military system all the way to the North Sea. Large-scale military mass mobilization did not return to Europe until the French Revolution. Never again—or at least not until Trafalgar or World War II—was any one power or alliance able to claim naval supremacy across the entire Mediterranean basin.

After identifying the key factors that underpinned Rome's unique success, I assess the degree of contingency inherent in this process by considering counterfactuals (chapter 4). I ask at which junctures Roman expansion could have been derailed by plausible, "minimal rewrites" of actual history. This exercise suggests that the window for substantially alternative outcomes was fairly narrow, concentrated in the time of Alexander the Great near the end of the fourth century BCE. From the third century BCE onward, Roman capabilities—relative to those of its macro-regional competitors—made failure increasingly unlikely. Roman state formation thus turns out to have been both highly contingent (in terms of its foundational preconditions) and highly robust (once these preconditions were in place).

In Part III, I make short work of the extremely popular question of why the Roman empire fell: after all, most imperial entities in history that did not eventually morph into nation-states disintegrated at some point. Instead, I focus on a much more salient problem that has received much less attention: Why did it—or rather something like it—never return?

Chapters 2 and 3 already highlighted the peculiarities and sometimes irreproducible context of the Roman experience. I now expand my analysis to trajectories of state formation in post-Roman Europe. I identify and discuss eight junctures between the sixth and the early nineteenth centuries at which similarly dominant imperial states might conceivably have been created: the East Roman attempt in the sixth century to regain large parts of what used to be the western half of the Roman empire; Arab expansion in the seventh and eighth centuries; the growth of Frankish power around 800; the development of the German empire from the tenth to the thirteenth century; the Mongol advance in Eastern and Central Europe in the mid-thirteenth century; Habsburg policies in the sixteenth century; Ottoman power in the sixteenth and seventeenth centuries; and French policies from Louis XIV to Napoleon, with World War II added as a brief coda.

I argue that on all these occasions, a wide range of well-documented factors decisively militated against the reemergence of anything truly resembling hegemonic empire in Europe. No plausible minimal rewrite of history was likely to lead to that particular outcome. I conclude that post-Roman polycentrism in Europe was a perennially robust phenomenon.

In Part IV, I address a question that arises directly from this last observation: Why did large-scale empire building in post-Roman Europe *consistently* fail even as it continued *serially* elsewhere in the world? I approach this problem by comparing trends in state formation in different parts of the Old World, with particular emphasis on Europe and East Asia. I focus on this pairing because the Chinese imperial tradition was unusually resilient by world historical standards and therefore constitutes an ideal-typical counterpoint to the abiding polycentrism of post-Roman Europe.

This comparative perspective allows me to identify several factors that favored serial imperiogenesis in East Asia and obstructed it in Europe. At the proximate level of causation, fiscal arrangements and the characteristics of the post-Roman and post-Han conquest regimes played a major role (chapter 7). At the ultimate level, geographical and ecological conditions influenced macro-sociopolitical development

(chapter 8). Among these environmental features, the degree of exposure to large steppe zones appears to have been a crucial determinant of the likelihood of imperial state formation, not merely in Europe and East Asia but also in other parts of Afroeurasia. In addition, though not necessarily fully autonomously, the nature of religious and secular belief systems as well as more general cultural properties reinforced divergent trends at the opposite end of the Eurasian land mass (chapter 9).

In all these respects, conditions in post-Han China differed profoundly from those in post-Roman Europe and help account for persistent long-term differences in the scaling-up and centralization of political and other forms of social power. I call this post-ancient divergence in macro-social evolution—centered on the sixth century CE—the "First Great Divergence." ¹⁶

I conclude by proposing a taxonomy of features that were conducive or antithetical to empire-building on a large scale, which suggests that Europe—and Western or Latin Europe in particular—was a priori less likely to be brought under the control of such entities than were other regions. While East Asia experienced conditions that were favorable to iterative universal empire, South Asia and the Middle East and North Africa region occupied an intermediate position. This comparative analysis reinforces my findings in chapters 2 and 3 that the rise of the Roman empire depended on highly unusual circumstances. From this perspective, Rome's success was a greater anomaly than were later failures of imperial projects in Europe.

In Part V, I argue that what is now commonly referred to as the "Great Divergence," broadly understood as a uniquely (Northwest-)European and eventually "Western" breakthrough in economic and cognate capacities, was intimately connected with and indeed deeply rooted in the political "First Great Divergence" between Roman and post-Roman Europe (Parts II and III) and between Europe on the one hand and East Asia and intermediate regions on the other (Part IV)—a divergence between the enduring disappearance and the cyclical re-creation of hegemonic empire.

This is the case regardless of which of the competing explanations of the modern "Great Divergence" and the Industrial Revolution(s) we

accept. Leading contenders include institutional developments from feudalism, church power, and religious schism to the creation of communes, corporate bodies, and parliamentarianism; social responses to perennial warfare, and more generally the overall configuration of the main sources of social power; the contribution of New World resources and global trade, and of mercantilist colonialism and protectionism; the emergence of a culture of sustained scientific and technological innovation; and a shift of values in favor of a commercially acquisitive bourgeoisie.

Drawing on these different types of explanations in turn (chapters 10 through 12), I show that all of them critically depend on the absence of Roman-scale empire from much of Europe throughout its post-ancient history. Recurrent empire on European soil would have interfered with the creation and flourishing of a stable state system that sustained productive competition and diversity in design and outcome. This made the fall and lasting disappearance of hegemonic empire an indispensable precondition for later European exceptionalism and thus, ultimately, for the making of the modern world we now inhabit.¹⁷

The transition to modernity was therefore a product of trends that played out over the long term: even if it only "took off" in the nineteenth century, it had very deep roots indeed, far beyond earlier signs of modernizing development that had appeared in the previous two centuries (and which I discuss in chapter 10). When it comes to the underlying dynamics, the long road to prosperity reached back to late antiquity. Europe's breakthrough was not a highly contingent process that might just as readily have taken place elsewhere: a protracted buildup was necessary—or at least sufficient—to make it possible, though by no means inevitable. ¹⁸

From this developmental perspective, the death of the Roman empire had a much greater impact than its prior existence and the legacy it bequeathed to later European civilization. This may seem a bold claim, and I devote an epilogue to Monty Python's famous question, "What have the Romans ever done for us?" The afterlife of Roman cultural traditions, from language and (Christian) religion to law and elite

culture, undeniably mediated the long-term consequences of the collapse of Roman imperial power. Specific elements of this legacy may indeed have provided a vital counterweight to the traumatic fractures of intensifying international and domestic competition, allowing productive exchange of people, goods, and ideas across a thicket of political and ideological boundaries.

This raises a final question: Was the actual historical scenario in which a monopolistic empire first created a degree of shared culture but subsequently went away for good more conducive to an eventual European breakthrough than a counterfactual scenario in which no such empire had ever appeared in the first place? Engagement with this problem pushes us well beyond the confines of defensible counterfactual reasoning and toward runaway conjecture but is nevertheless worth considering: Are there reasons to believe that the complete lack of Roman foundations would have derailed our tortuous journey toward the modern world?

• • •

My book stands in a long tradition of scholarship that has invoked fragmentation and competition as an important precondition or source of European development. It differs from existing work in that for the first time, it develops a much more comprehensive line of reasoning to establish once and for all a fundamental axiom: without polycentrism, no modernity.¹⁹

Empire was an effective and successful way of organizing large numbers of people in agrarian societies. Large, composite, and diverse, comprising multiple peripheries loosely held together by an often distant center whose dependence on local elites belied grandiose claims to universal rule, traditional empires were kept afloat by their ability to concentrate resources as needed without intruding too much upon their far-flung subject populations. Empire's adaptiveness is made strikingly clear in the fact that for more than 2,000 years, with primitive technology and under enormous logistical constraints, a very large share of our species has been controlled by just a handful of imperial powers (figure I.8).²⁰

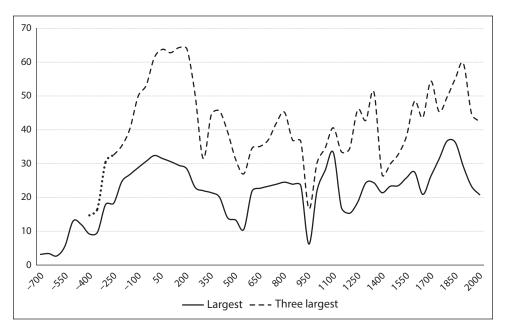


FIGURE 1.8 The population of the single largest empire and the three largest empires in the world as a proportion of world population, 700 BCE–2000 CE (in percent). *Source*: Scheidel in press-a.

Yet from a developmental perspective, traditional empire failed in three ways, all of which mattered greatly for the making of the modern world:

- in the specific sense that the Roman empire released its grip on Europe and gave way to a very long period of polycentrism of powers both international and domestic;
- in the broader sense that near-monopolistic empire failed to be reestablished in Europe; and
- in the most general sense that empire, as a way of organizing people and resources, consistently failed to create conditions that enabled transformative development.

My focus is not on empire per se, a phenomenon increasingly studied from a global comparative perspective, most recently in the seventy-odd chapters of the *Oxford World History of Empire* that I have had the pleasure to edit jointly with Peter Bang and the late Chris Bayly. Even as

I repeatedly refer to specific characteristics of traditional empires—most notably in China—in the following chapters, I use them primarily as a foil to conditions in the post-Roman European state system to help cast the latter into sharper relief. For me, it is the escape that matters: not only what it was from, but how it came about.²¹

The productive dynamics of a stable state system were key: fragmentation generated diversity, competition, and innovation, and stability preserved gains from what worked best, rewarding winners and punishing losers. Empire contributes to this story insofar as it prevented both: monopolistic rule stifled competition, and the waxing and waning of imperial power rendered polycentrism intermittent and curtailed its cumulative benefits. Thus, traditional empires did not need to maintain hegemonic status all or even most of the time in order to derail modernizing development: sporadic "imperiogenesis" on a large scale was enough. Only the persistent absence of empire allowed polycentrism and its corollaries to flourish.

I do not track our entire journey from fracture to fracking. This is resolutely an analysis of origins. My emphasis is on foundational features, from the Middle Ages up to what is known as the First Industrial Revolution in England around 1800. I do not progress beyond that point because the First Industrial Revolution cannot be judged on its own, but only in terms of what it led to, far beyond cotton-spinning, ironmaking, and the stationary steam engine. It was the Second Industrial Revolution, a great acceleration in macro-inventions and their widespread application from the last third of the nineteenth century onward that was driven by systematic scientific study and engineering, and concurrent progress in medicine and public health, the fertility transition, and political and institutional reform that accounted for most of the Great Escape: but once the door had been opened, a path of promise had been set. To quote Landes one more time, "The Industrial Revolution has been like in effect to Eve's tasting of the fruit of the tree of knowledge: the world has never been the same."22

Instead of taking the narrative forward in time, my book extends in the opposite direction, in order to gauge the true depth of the underpinnings of these much later developments. I do so not only because of

my own professional interest in deep roots but also and indeed primarily because I am concerned with the robustness of historical outcomes. How likely was it that Europe would shift far enough toward a viable escape route? If post-Roman polycentrism was the norm, the very existence of the Roman empire was anomalous; otherwise it would have been the other way around.²³

In the end, outcomes appear to have been overdetermined: just as the "First Great Divergence" can be traced to multiple factors, so scholars have linked the "(Second) Great Divergence" to a variety of features that have only one thing in common, namely, that they are predicated upon productive competitive polycentrism—or, in other words, the fact that in Europe, Roman power had remained unique.

In this respect, the story of modernity is also a story about Rome: Johann Wolfgang von Goethe was right to exclaim in 1786 that "an diesen Ort knüpft sich die ganze Geschichte der Welt an"—"the whole history of the world attaches itself to this spot." It does indeed, if only thanks to what Edward Gibbon two years later famously called the "the decline and fall of the Roman empire; the greatest, perhaps, and most awful scene, in the history of mankind." Yet when viewed from a great distance, it was not that awful after all: quite the opposite, in fact, as it ushered in an age of open-ended experimentation. It is for that reason alone that it deserves to be thought of as "the greatest scene in the history of mankind."

The making of the modern world had a clearly demarcated beginning, forbiddingly remote as it may seem to us today. Europe had not always been fragmented and polycentric. It was not for nothing that its erstwhile rulers bequeathed to us the word "empire." They owned Britain, a belated afterthought of an acquisition, for about as many years as have now passed since Charles I lost his head. The last self-styled Roman emperor, the Habsburg Francis II, did not abdicate until August 6, 1806, twenty months after Napoleon Bonaparte had crowned himself emperor of the French and only about a year after the latter had shelved his plans to invade Britain, where the first steam locomotive had recently been displayed and steady improvements to the power loom kept the patent office busy.

But that would-be master of Europe, however revolutionary in appearance, was merely the last hurrah of ancient designs. The Roman empire remained unique, and the long shadow it had cast was just that. Europe had well and truly escaped, ensuring our collective release into an unexpected future.

In the heyday of Roman power, a certain Lauricius, otherwise unknown but probably a Roman soldier, carved a graffito on a rock in a desolate corner of what is now southern Jordan: "The Romans always win." This sentiment, which curtly echoed Virgil's famous and more eloquent vision that Jupiter had given the Romans "empire without end," held true for a very long time, well beyond actual Roman history. Empires in general did tend to win, at least for a while, before they fell apart only to be succeeded by others: in that sense, they were indeed without end. For untold generations, they imposed tributary rule and prevented stable state systems from forming and building a different world. Our lives today are different only because in the end, "the Romans"—the empire builders—did not, as it happened, *always* win, even if they came close.²⁵

Their failure to do so may well have been our biggest lucky break since an errant asteroid cleared away the dinosaurs 66 million years earlier: there was no way to "get to Denmark"—to build societies that enjoy freedom, prosperity, and general welfare—without "escaping from Rome" first.²⁶

HOW?

How can we substantiate this argument? The search for the causes of the (modern, economic) "Great Divergence" is of immense importance for our understanding of how the world came to be the way it is, yet it has largely been abandoned by professional historians. In an informal but hardly unrepresentative sample drawn from my own bibliography, only one in five of some forty-odd scholars who have made significant contributions to this grand debate have earned an advanced degree in history. Social scientists have been at the forefront of this line of

research: economists led the pack and sociologists come in second. By contrast, political scientists have hardly been involved at all.²⁷

It is true that quite a few of these economists effectively operate as historians, either by holding academic positions in economic history or, more commonly, in terms of their primary interests. Nevertheless, the limited commitment of—for want of a better term—"professional," that is, credentialed, historians is striking: judging from the age distribution in my sample, it cannot simply be waved off as a function of a turn away from economic or macro-history to cultural or micro-history, even if those trends may well play a role.

Then again, the glass is not only half empty but also half full: the relative lack of interest among historians has been more than offset by economists and sociologists' eagerness to tackle a big historical problem. Their engagement accounts for much of the continuing vigor of the debate, which cannot fail to benefit from genuine transdisciplinarity.

I approach this topic in the same spirit of openness. I am, by training and employment, a historian of the ancient Roman world whose interests have increasingly branched out into wider reaches of history, from the comparative study of ancient empires, slavery, and human welfare to the applicability of Darwinian theory to the past and the long-term evolution of economic inequality. I have long been following the literature about the origins of the British/European/"Western" takeoff, and especially the controversy between proponents of long- and short-term perspectives.

As a historian primarily of the more distant past, affinity for the long run might well seem a professional hazard. Not so: my initial intuition was that ancient legacies need not have mattered nearly as much as my immediate colleagues often like to assume, an issue that I take up at the very end of this book. Over time, however, it became clear to me that the many competing and complementary explanations of this takeoff did in fact have something in common that anchored them in developments that commenced a very long time ago—developments that were not limited to positive contributions that shaped later opportunities and constraints, but also included a massive absence. Yet even that absence—of hegemonic empire, from post-Roman Europe—needed

to be explored, given that it was not a constant but had been preceded by an equally massive earlier presence. These entanglements made me a "long-termist" almost against my will.

Made in a rather different context, Garth Fowden's astute observation captures the scale of the challenge inherent in this project: "The ultimate goal of the Eurocentric historian ('modernity') is remote from, yet conceived of as standing in a relationship of dependence toward, the First Millennium. To depict such a relationship convincingly is a very difficult enterprise in itself." My own approach is therefore eclectic, by necessity (even) more than by inclination.²⁸

In trying to explain why the Roman empire rose to such preeminence, I have to wear my Roman historian's hat. In trying to explain why it never came back, I need to survey different periods in a brutally reductive way, shunting aside infinite nuance in the search for those factors that mattered most for particular outcomes. The resultant account is both parsimonious—perhaps to a fault, as fellow historians would say—and, despite its considerable length, tightly focused on my key theme.

In chapter 1, I look at the Old World as a whole to establish how different Europe really was, and in chapters 7 through 9, I need to do the same as I seek to identify the underlying causes of that difference. In chapters 10 through 12, I address a large body of scholarship, much of it produced by social scientists whose work has driven the debate, and with whom I engage on their own terms. And at the end, I return once more to antiquity, to see which if any of its legacies can be salvaged to play a role in an explanation of the transition to modern development.

Throughout my discussion, I employ two specific approaches to build my argument: a comparative perspective, and explicit recourse to counterfactuals—"what-ifs." Both of these are means to the same end: to improve our sense of causation, of why different societies turned out the way they did.

Historical comparison promises various benefits, only the most important of which merit mention here. Comparative description helps "clarify the specific profile of individual cases by contrasting them with others." I pursue this goal in the opening chapter by establishing contrasting patterns of state formation.²⁹

Comparison has an "alienating . . . effect": it defamiliarizes the deceptively familiar—deceptively familiar, that is, to the expert of a particular time and place: "The chief prize is a way out of parochialism." Thinking about the Roman empire without considering what happened later on in the same geographical space, or how other empires developed elsewhere, blurs our vision for what may have mattered most for the rise and fall of Rome: comparanda help explain the specific.

Comparison also helps us transcend peculiarities of evidence for a particular case or the dominant academic tradition thereon. "Analyses that are confined to single cases . . . cannot deal effectively with factors that are largely or completely held constant within the boundaries of the case (or are simply less visible in that structural or cultural context). This is the reason why going beyond the boundaries of a single case can put into question seemingly well-established causal accounts and generate new problems and insights." ³¹

A closely related benefit is the fact that "analytically comparison can help to refute pseudo-explanations and to check (or test) causal hypotheses." Parochial familiarity will favor factors that are prominent in the source tradition and/or the research tradition of a particular subfield. How can we tell how much weight to put on taxes, or religion, or geography, if we do not consider alternative cases? Such single-case explanations need not be pseudo, but they are at the very least local and thus run the risk of failing to capture significant relationships. The postancient "First Great Divergence" in particular is impossible to understand without comparing configurations of circumstances in different environments.³²

I am primarily interested in explaining one particular phenomenon, the path to modernity in parts of Europe, and not in offering a comprehensive survey of different societies and outcomes. This renders my comparative perspective, in Jürgen Kocka's term, "a-symmetric": "a form of comparison which is centrally interested in describing, explaining and interpreting one case . . . by contrasting it with others, while . . . the other cases are not brought in for their own sake, and . . . not fully researched but only sketched as a kind of background."³³

In the present case, I draw on the experience of China and—in less detail—other parts of Asia and North Africa in order to account for European development. This approach has a long pedigree, going back most famously to Max Weber's attempt to understand the emergence of capitalism and modern science in the West by probing Asian societies for contrast. I also apply this technique more superficially in contrasting the rise of Rome with the failure of later European states to follow suit. In Part V, I compare the effects of imperial persistence in China (and to a lesser degree in India and the Middle East) with those of Europe's post-Roman fragmentation.³⁴

Chapters 7 through 9 offer a more symmetric treatment: in trying to account for the "First Great Divergence," I give equal weight to postancient developments in Europe and China up to the end of the first millennium CE, which represent the most divergent outcomes within Afroeurasia in that period. This approach is known as "analytical comparison" between equivalent units. It helps us identify variables that can explain shared or contrasting outcomes—in this case, the characteristics of conquest regimes and fiscal arrangements, ideation, and ecological conditions.35

In the same context, specifically in chapter 8, I move farther toward a more ambitious goal, that of "variable-oriented" "parallel demonstration of theory": I argue that proximity to the steppe was such a persistent precondition for empire formation that it allows us to subordinate individual outcomes to a broader normative prediction. This makes it possible to identify cases that are outliers, most notably the rise of Rome, which in turn helps us assess the relative robustness of historical processes and outcomes over time, in this case the failure of hegemonic empire to return to post-Roman Europe.³⁶

My interest in robustness and contingency accounts for the relative prominence in this book of another tactic, overt consideration of counterfactuals. In a very basic sense, counterfactual reasoning is a necessary ingredient of any historical account that seeks to rise above the level of bare description: there is, after all, "absolutely no logical way to make causal inferences without simultaneously making assumptions about

how events would have unfolded if the causal factors we consider crucial had taken on different form." Thus "we are all counterfactual historians"—and that "we" covers pretty much every person, not just professional historians.³⁷

Even so, historians all too rarely highlight counterfactual reasoning in their research. This is a great loss. Explicit counterfactuals force us to confront the weaknesses of deterministic as well as revisionist assumptions, however implicit they might be: the notion that deviations from what happened might have proven short-lived and some approximation of actual outcomes would have happened anyway, or, conversely, that minor contingencies could have produced massive divergences from observed history. Merely to think about this makes us more careful about causal inferences. Just like comparative history—of which counterfactual history is a more exotic variant—"what-ifs" are a valuable means of assessing the relative weight of particular variables.³⁸

The key question must be this: How little change would have been enough for history to have taken an alternative path—in the nontrivial sense of altering outcomes enough to be visible and to make a difference in developmental terms? Procedurally, this question calls for adherence to what has been called the "minimal-rewrite rule": the least amount of tweaking of actual history and avoidance of arbitrary intervention.

Ideally, the direction of a counterfactual change should preserve "consistency with well-established historical facts and regularities, consistency with well-established generalizations that transcend what is true at a particular time and place, and consistency with well-established laws of cause and effect." This does not rule out recourse merely to space aliens and asteroid impacts but also to historical actors that display anachronistic or contextually implausible behavior. The closer the change hews to what could well have happened at the time—the more informed the counterfactual scenario is by what actually did happen—the more reasonable it is.³⁹

In devising counterfactuals, it is essential to be clear about putative connections—to specify antecedents and consequents—and to ensure that connecting lines are logically consistent. One problem in particular is difficult to avoid in practice: counterfactuals inevitably generate

second-order effects that complicate the prediction. The more they add to the complexity of counterfactual scenarios, the lower the overall probability these scenarios will be compared to that of any given link within them: the whole exercise becomes more tenuous and frail. Although the problem of complexity can be a function of design—if, for instance, we introduce multiple changes at once—more commonly it is simply a function of time: the farther we project ahead of actual history, the less we are able to control the thought experiment. Counterfactuals work best in the short term. ⁴⁰

I follow best practice in identifying critical junctures at which things either might well have gone differently or would have needed to have gone differently in order to generate significantly different long-term outcomes (that is, before a particular trend had become firmly locked in). Unlike much of the existing literature, however, I do not start with some ostensibly plausible change to explore its likely ramifications. Instead, I ask, as I must, how much would have had to go differently at a certain point to bring about change on a large scale—in this case, either the abortion of Roman expansion (chapter 4) or the restoration of Roman-style empire in post-Roman Europe (chapters 5 and 6).⁴¹

That these are very substantial divergences from actual history makes it easier to judge their plausibility because they often tend to be incompatible with the dictates of the minimal-rewrite rule: if it is not feasible to obtain dramatically different outcomes without straying far from what might plausibly have happened at the time when the counterfactual change is made, historically observed developments are revealed as having been fairly robust. This robustness helps contain the ever-present risk that we design counterfactuals that support our own preconceived notions of what was likely to have happened.⁴²

The odds of Rome's failing to build a mighty empire steadily declined as time went by: whereas early changes could have derailed it from this trajectory, at later junctures it becomes more challenging to devise plausible pathways to a significantly alternative reality. The same is true for post-Roman Europe and the ascent of modern development in terms of economic growth and scientific and technological progress: trends that up to 1500 might quite readily have been aborted became more

difficult to change during the following two centuries. In the eighteenth century, this exercise would require even more dramatic rewrites, and it becomes well-nigh impossible in the nineteenth. The real question is just how much this trend owed to compound and reinforcing effects, and how far these effects reached back in time: my own answer, of course, is that their roots were very deep indeed.⁴³

Comparison is essential for establishing the European anomaly (chapter 1) and for explaining it (chapters 7 through 9) and its developmental consequences (chapters 10 through 12). Counterfactuals are essential in testing the robustness of what happened (chapter 4) and what did not happen (chapters 5 and 6) in Roman and post-Roman Europe, respectively. The epilogue takes the counterfactual approach even further, sharpening our appreciation concerning what exactly it is the modern world owes to the ancient past.

• • •

The final result is a book that is quite varied in content and perspective, moving as it does back and forth between ancient history, modern history, comparative historical sociology, and history that did not even happen. For this and other reasons it is bound to irritate: classicists and humanists of all stripes for giving short shrift to the (positive) legacy of the classical world; culturally and microscopically inclined historians by focusing on the big picture of state formation and economic development; even more historians by foregrounding the influence of ecology and geography; and most historians by being irremediably "reductive." I might even be taken to task for eschewing conventional indictments of the "West," or indeed of the very concept—a label for which I have little use. For balance, I also expect to annoy social scientists by dredging up proverbial ancient history and by relying on a great deal of qualitative reasoning.⁴⁴

This is exactly as it should be. While it may be rare for such diverse elements to be brought together between two covers, that is the whole point of the exercise—to forgo business as usual and to experiment. Those challenging my argument will have to do so by drawing on a similarly broad canvas—or better still on an even broader one, or by

showing why the canvas is too broad, or the wrong one. Any such critique will inevitably have to wrestle with a familiar conundrum: how to go about addressing the Very Big Question of why the world has turned out the way it has (so far). The more productive disagreement my book arouses, the better it will have done its job.

Yet needless to say, disagreement is not what I am after. I wrote this book to establish, as firmly and comprehensively as I could, two simple points: that interlocking forms of productive fragmentation were of paramount importance and indeed indispensable in creating the specific set of conditions that gave birth to modernity, and that the divergences that precipitated this outcome in only one part of the world but not in others were highly robust. In the end, only Western Europe and its offshoots fit the bill: had our "Great Escape" not begun there, it would most likely not have happened at all.

INDEX

Note: Page numbers in *italics* refer to figures and tables.

Abbasid caliphate, 38, 43, 144-45, 150, 151, 256, 301, 432, 541n3 Abernathy, David, 450, 453, 591n71 Académie royal des sciences (Paris), 475 Acemoglu, Daron, 496, 525, 602n45 Achaemenid empire: Athenian empire fighting against, 55, 553n6; in counterfactual to Roman empire, 112, 112-13, 119, 121; duration and scope of, 221, 300, 522; horsemanship of, 299; imperial consolidation under, 38; logistical challenges of, 139; Middle Eastern political-military network, 90; military of, 299-300, 521; population of, 35, 39, 140, 219; reach of, 552n5 Actium, battle of (31 BCE), 79 Aetolian league, 95 Afghanistan, 285, 298, 435 Afzelius, Adam, 550n19 Aghlabids, 151, 152 Akkadian empire, 112, 112, 543n7 Alexander the Great (Macedonian king), 11, 91, 95, 114-17, 115, 119, 121, 221, 553n8, 553n12 Alfred (English king), 239 Allen, Robert, 491-95, 499, 501, 597n59, 597n71 Ambrose, 315, 574n10 Ameling, Walter, 439n4, 439n6 Americas. See maritime exploration and expansion; New World; United States Anastasius I (Roman emperor), 315

Anatolia, 82, 90, 95, 100, 112, 135, 136, 179, 204, 206, 221, 317 Angkorian empire, 47, 272 Antigonus I (Macedonian king), 117, 553n14 Antiochos IV (Seleucid king), 601n36 Antony, 83 Appian, 85 Aquitaine, 148-49, 153, 156, 160 Arab conquests: Christian Spain repelling, 176, 193; in eighth century, 12, 139-52; fragmentation of, 145-47, 246; inability to maintain a large-scale empire in Europe, 147–48, 152, 215, 512; Islamic religious practices and, 317; in Levant, 301; military practices and, 145-46, 256; Samarra crisis (860s) and, 145; in sixth century, 136, 137, 138; tax practices and, 143, 144, 146-47, 255-56. See also Abbasid caliphate; Iberian peninsula; Umayyad caliphate Arabic language and writing, 311, 329 Aramaic language, 311 Archimedes, 524 aristocracy. See nobility Aristophanes, 553n6 Arrighi, Giovanni, 399, 583n141 Arsaces I (Parthian king), 299 Asia: ecology of, 277; economic development in, 2, 3-4; New World bullion transferred to, 421, 425. See also specific

regions and countries

648 INDEX

assemblies and decision-making bodies, 355–57 Assyria, 112, 221, 299, 543n7 Athenian empire, 55, 113–14, 115, 553n6. See also Greek city-states Atlas of World Population History (McEvedy and Jones, eds.), 533–34 Augustus (Roman emperor), 83–84, 101, 457 Avars, 135, 137, 139, 154, 182, 246, 293 Ayyubids, 176 Aztec empire, 46, 55, 193, 464, 543n7

Bacon, Francis, 478 Baechler, Jean, 396, 515 Baghdad, 191, 207, 256 Bang, Peter F., 539n21 Bank of England, 382 Barfield, Thomas, 277, 279, 287, 295, 568n40 Batu, 174-81, t186, 188 Bayle, Pierre, 474 Bayly, Chris A., 478-79, 496, 539n21 Beard, Mary, 542n4 Beckwith, Christopher, 278, 568n40, 568n42 Béla IV (Hungarian king), 176-78, 180 Belich, James, 470 Bennett, James, 552n36 Berbers, 136, 142, 144, 148-49, 151-54, 213, 302 Billows, Richard, 553n14 Black Death, 4, 142, 190, 371, 417, 491, 498, 499, 597n60, 598n79 Bodde, Derk, 405, 594n23, 595n27 Bohemia, 83, 176, 185, 268, 347, 376, 474 Bosworth, A. B., 553n9 Brahe, Tycho, 483 Brandt, Loren, 394 Braudel, Fernand, 32 Britain. See England/Britain Bryant, Joseph, 392, 589n18 Buddhism, 224, 317-20, 322, 329 Bulgars, 136, 137, 152, 155, 175, 290 Burgundians, 132, 134, 153, 165, 166, 193

Burma, 182, 303, 306, 457

Byzantine empire (Byzantium), 136, 143, 168, 187, 316, 508–9, 511, 572n80. *See also*Constantinople; East Roman restoration (sixth century)

California school of scholarship, 575n1
Calvin, Jean, 197, 200, 474
Campanella, Tommaso, 474
capitalism, 391–92, 396, 411, 414, 473, 589n20, 596n58
Carolingian empire, 153–64, 155, 157; compared to Roman empire, 162–63, 213, 228; demise of, 240; elites as warriors in, 159–60, 162; expansion of, 160, 163; factional conflict in, 160–61;

income from land grants in, 159;

post-Charlemagne, 158, 161; taxes in, 159
Carthage: in counterfactual to Roman
empire, 113, 116–19, 521, 524; maritime
exploration by, 430; population of,
549n6; as rival to Rome, 62, 77–78, 80,
91–100, 103, 109, 222, 439n4, 543n7,
546nn57–59, 549n4, 549nn6–9; troop
numbers for, 551n30. See also First Punic
War; Second Punic War

Casale, Giancarlo, 447-48 Catholic Church: counterfactual scenario for European unity and, 512–13, 601n33; creation of College of Cardinals, 171, 346; excommunication powers, 315-16, 347, 573n10; French education system and, 488; Great Schism (thirteenth century), 348; harmonization of canon law, 346, 514; Latin as lingua franca of, 517-18; Nicaean creed and, 519; papacy and, 171, 224, 346-48, 512; power of, 340, 345-48, 513; Reformation and, 370, 473-74; as victim of its own success, 348. See also Christianity; German empire; Holy Roman Empire cavalry warfare: Abbasids, 256; Carolingian

Empire, 162; in China, 242-45, 248, 250,

252, 285, 570n56; Hellenistic kingdoms, 95; Huns, 295; in India, 296–300; Magyars, 293; Mongols, 175, 177, 181–82, 189; in Muscovy, 292; Parthians, 100; in Roman Empire, 77; steppe effect and, 275, 279–80

Celtic language, 311, 312 Celtic society, 522–23, 526 Central America, 10, 46, 466. *See also* New World

Chagatai khanate, 175, 183, 185 Charlemagne (Frankish king), 35, 36, 154–56, 160–63, 171, 231, 240, 244, 267 Charles the Bald (Frankish king), 161 Charles the Fat (Frankish king), 157 Charles Martel, 154, 160 Charles V (Habsburg ruler and Holy

Roman emperor), 193–98; abdication by, 198; army size and, 199; compared to Charlemagne, 199–200; counterfactual scenario for, 200–201, 203; credit to finance wars of, 199; fighting against France, 195, 196, 198; fiscal constraints in waging war and, 199–200; New World conquests by, 193, 196–97; Protestant Reformation and, 197–98

Chen Qiang, 409

China: as agrarian empire, 441-48; agrarian paternalism in, 406-7, 442; ancestor worship in, 321; bureaucracy in, 226-27, 248, 393; capture of population (not territory) as goal of, 242; censorship in, 404; Central Plain in, 264-65; civil service system in, 225, 244, 394; clans in, 408, 410-11, 542n4; commerce and trade in, 397, 442-46, 588n226; compared to Europe (post-1500), 392–96, 406, 411–13; compared to post-Roman Europe, 17, 23, 228, 243, 254-58, 320-28, 329-32, 331, 343-44, 562n30; compared to Roman empire, 72, 221-27, 294, 320, 505, 507; corruption in, 408-9, 506; cotton imports from India, 426; defined, 529;

developmental outcomes of empire structure in, 342, 392-96, 400-407, 506, 583n138; ecology in, conducive to empire building, 252, 281-90; energy constraints on economic development in, 494; examination system in, 322, 394, 480, 563n46, 594n24; fiscal administration in, 251, 257, 395, 407-8, 585n190; fragmentation periods, relationship to innovation in, 396-400; fubing system in, 248, 251, 255; geography of, 261-64, 266-67, 282; Great Wall and other protective walls in, 285, 289, 437; hegemony and conservatism in, 479-85; Hundred Schools of Thought, 396; ideologies of empire in, 320-28, 329, 331; institutions, logic of, 392-96; land distribution in, 247, 248, 405; language and writing in, 308-9, 310, 312-13, 573n4, 594n23; Legalism in, 320-21, 322, 393; maritime commerce restrictions in, 402-3; migrants from, lack of homeland interest in protecting, 443-45; military mobilization and warfare in, 242-44, 246-51, 257, 397-99; modern China's leadership from south, 569n49; Mongols in, 4, 175, 182-83, 189-90, 230, 285, 286, 398-99, 440, 558n20; monopolistic policymaking in, 400-407; mountains and rivers in, 261-64, 500; north/northwest as origin of unification events, 223, 224, 227, 244-53, 281-82, 289, 566n13; north-south split in, 230-31; overseas exploration not of interest to, 433, 441–46, 591n77; patronage in, 227, 395-96, 476, 481; patterns of empire in, 40-41, 41-42, 43-44, 44, 228, 279; Period of Disunion (fourth through sixth centuries CE), 43, 246-52, 254, 280, 318, 322, 397, 399; population of, 219, 249, 251, 288, 564n50, 587n224; post-Han China compared to post-Roman Europe, 13, 223, 251-52; post-nineteenth-century economic

China (cont.)

development in, 2; property rights in, 395; Qin-Han China compared to Roman Europe, 72, 221–27; rebellions occurring near end of individual dynasties in, 286-87, 406, 412, 570n61, 586n205; religion and belief systems in, 317-22, 328; serial empire reconstructions in, 9, 12, 224, 229, 246-53, 257, 395, 411; Sixteen Kingdoms period (304 to 439 CE), 227, 242, 284; social development (500 BCE-1500 CE) in, 5; stagnation in thinking and lack of alternative discourse in, 479-85; state formation in, compared to Europe, 228, 251-52, 394, 542n18; steppe effect and, 283-84, 286-90, 444, 452, 569n44, 570n62; tax practices in, 225, 245, 246-47, 252, 253, 257, 394-95, 397, 407–10; Three Kingdoms (mid-third century), 243; urbanization in, 394, 397–98, 442; Warring States period (pre-Qin), 72, 81, 222, 224, 230, 248, 283, 308, 320, 323–24, 327, 339, 393, 396, 406, 480, 481, 544n22, 551n29, 56on4, 575n33; waterworks and flood control in, 264, 499-500, 566n10; White Lotus rebellion (1790s), 412. See also Confucianism; East Asia; specific dynasties and empires Christianity: ascendance in Europe, 224, 314-17, 511, 518-19, 527; colonization and New World interests of, 450; comparison to Islamic and Chinese belief systems, 329; as divisive factor in Europe, 511–12; Eastern Church's division, 316, 574n13; failure of empire-building and, 512-14; modernity and, 511, 516; state formation and, 317; as supraregional organization, 345-48. See also Catholic Church;

church. See Catholic Church; Christian Church; religion and beliefs; specific religions

Protestantism

Cicero, 232 cities. See urban development clans, 408, 410-11, 542n4 Clark, Gregory, 497 Claudius (Roman emperor), 81, 86, 239 Clement VII (pope), 197 coal, 6, 386-87, 425, 492, 494, 500, 537n7, 588n12, 597nn67-68 colonial empires: conflict over, 449; as extensions of competing European polities, 538n17; slavery and, 388, 423–24. *See also* maritime exploration and expansion; New World; specific countries controlling colonial empires Columbus, Christopher, 193, 431, 439, 450, 462-64 commercial transactions and credit: Bourgeois Revaluation, 489-90; Charles V using credit to finance wars, 199; in China, 398–99, 588n226; in Europe and England (post-1500), 356-57, 376, 381-82, 580n77, 581n103; low interest rates, effect of, 497; in Roman empire, 504; unifying set of customs and rule for, 516. See also mercantilism common law tradition, 378, 497, 498 communalism, 14, 352-53, 376, 416, 474 comparative scholarship, 21–22, 26, 502; analytical comparison between equivalent units, 23; premodern rule and, 42-48; variable-oriented parallel demonstration of theory, 23 competition: (Second) Great Divergence and, 18; significance of, 15; stifled by empire, 17, 339-41, 343, 396 Confucianism, 320-23, 393, 394, 395, 406, 442, 480, 482, 490, 5831143, 5941123 Congjian Yan, Shuyu Zhouzilu, 437-38 Conrad I (German ruler), 164 Conrad II (German ruler), 166, 177

Constantine I (Roman emperor), 194, 314,

508, 519, 601n33

Constantinople, 135–36, 139, 140, 142–44, 148, 152, 204, 223; patriarch of, 316 constitutionalism, 361, 375, 380 Coptic language, 311 corruption, 129, 342, 381, 403, 407-9, 506, 508 Cosandey, David, 260 cotton industry and trade, 424-27, 589n20 Council of Chalcedon (451), 133, 346 Council of Clermont (1095), 347 Council of Nicaea (325), 346 councils and synods, 348-51 counterfactual, significance of use of, 23-26, 215, 540n39 counterfactual scenario for France and England (seventeenth century), 208-10 counterfactual scenario for Holy Roman Empire and Habsburgs, 200-201, 215, 512-13, 559n55 counterfactual scenario for Mongol empire, 185-92, 215 counterfactual scenario for Napoleon, 211-12, 215 counterfactual scenario for Ottoman empire, 206-8 counterfactual scenario for overseas exploration, 454-71; changing orientation to New World (East is West), 459-67, 460-61, 463; Chinese economic development, 468–71; shortcuts to access goods, 455-59 counterfactual scenario for Roman empire, 11, 110-23, 521-26, 525, 602n45; eastern hostilities as source of, 111-20; Etruscization of Rome and, 552n2; Hannibal and Carthage as source of, 118-19, 521, 524, 553n16; Italian domestic developments as source of, 110-11, 120-22, 521; Macedonian intervention in Italy as source of, 114-17, 521, 553n17; Persian invasion of southern Italy as source of, 522, 552n5; Social War (91-89 BCE) as source of, 120; warfare between

rival factions of Roman aristocracy as source of, 121, 554nn21-22 counterfactual scenario for sixteenthcentury European powers, 200–204 counterfactual scenario for Song empire, 583n157 Counter-Reformation, 484 Crassus, 83 credit. See commercial transactions and credit Crone, Patricia, 416, 587n219, 598n85 Crusades, 176, 347 culture and cultural unity, 307-34, 331; benefit of simultaneous fragmentation and cultural unity, 514–16; comparisons between Chinese and European systems, 328-30; counterfactual to Roman empire, effect on cultural unity, 522; First Great Divergence and, 307; hegemony and conservatism in China, India, and Middle East, 341, 479-85; Industrial Enlightenment and, 485–88; knowledge and scientific inquiry, 472-73; language and writing, 308-13, 476; polycentrism and Enlightenment, 473-79; (Second) Great Divergence and Industrial Revolution(s) and, 472-73; values of Enlightenment, 488-91. See also literacy rate; religion and beliefs Cumans, 175, 177, 291 Cyrus II (Achaemenid king), 299

da Gama, Vasco, 431, 439
Daly, Jonathan, 538n13
Daoism, 319, 321
Dareios I (Achaemenid king), 299, 432
Dead Sea Scrolls, 524
De Angelis, Franco, 549n5
decentralization, 145–46, 224, 228, 230, 232, 235, 240, 268, 561n24, 561n30
De Crespigny, Rafe, 566n13, 575n44
Demandt, Alexander, 128, 552n2, 552n5, 553n11, 553n16, 554n6

democracy, 8, 538n11, 587n220 Deng, Kent Gang, 279, 406, 586n205 Denmark. See Scandinavian polities Descartes, René, 474, 478 Diamond, Jared, 260, 263 di Cosmo, Nicola, 287–88, 568n40 Diet of Worms (1521), 197 Dincecco, Mark, 358 Diodorus, 549n5 diversity, role of, 391, 414, 496 Dong Zhonshu, 480 Doyle, Michael, 102, 542n2, 550n10, 551n26 Duchesne, Ricardo, 496 Durand-Guédy, David, 587n219 Dutch United Provinces, 356 Dutschke, Rudi, 576n7

East Asia: coastline compared to Europe, 261; defined, 33; divergence from European state formation, 220, 560n13; ecology of, 272, 281–90; geography of, 260–67, 262; imperial state formation in, 45, 45–47; mountains and rivers in, 261–64, 262; parallel of state formation to Roman empire, 220, 221–24; parallels of state formation in Europe with, 220, 221–24; patterns of empire, 10, 12, 40–42, 41–42, 43, 230; plain regions and natural core in, 264–66; polycentrism not applicable to, 230, 418–19, 560n16; population of, 34, 35; size of, 33, 34. See also China

Eastern Europe: failure to export to richer northwest, 427; Mongol incursion into, 174–75, 178; steppe effect and, 290–93; in tenth century, 268. See also specific countries

East Francia, 157
East India Company, 386, 451
East Roman restoration (sixth century), 12, 132, 132–38, 134, 212–14
ecology: East Asia, 281–90; Europe, 290–94; imperial state formation and,

47, 274, 276-80, 331, 332, 501; Iran, 298–301; Levant and North Africa, 301–2; Mongol invasion and, 181-82, 183, 192, 245, 278, 556n1, 557–58n18, 557n9; Roman empire's demise and, 137; South Asia, 295–98; Southeast Asia, 303–4; volcanic activity resulting in famine (ninth century), 162. See also steppe effect economic development: East vs. West, 2, 2-5, 4, 7, 411-13, 537n3; gross domestic product (GDP) correlated with happiness and life evaluation, 8; modestly sized polities' ability to flourish compared to quasi-imperial kingdoms, 415, 431, 494, 578n59; in post-1500 Europe, 370-75; postnineteenth-century, 1, 6; in Roman empire, 505-6. See also Industrial Revolution(s); transformative developmental outcomes; specific countries and empires

Egypt: Council of Chalcedon (451) and, 133; in counterfactual to Roman empire, 112; domestic turmoil in, 550n14; empire of eighth and seventh centuries BCE, 221, 302; Fatimid capture of (969), 151, 302; fiscal and tax practices in, 255, 565n71; horses and chariot warfare in, 301-2; Hyksos occupation of, 301; international trade with, 427, 457; language and writing in, 311; Middle Eastern political-military network (c. 1500–500 BCE), 90; Persia's persistent problems with (525 to 332 BCE), 552n5; Roman conquest of, 83, 456, 457; Sasanians annexing, 135; Seleucids and, 521, 601n36. See also Ptolemies

Eire, Carlos, 200–201, 203, 601133 Elvin, Mark, 403 empire: adaptiveness of, 15; agrarian empires, 15, 397, 441–48; beneficial effect on social development, 4; capstone governments, 339, 342, 362,

407, 413, 414, 576n4; causes of demise of, 240-41; city-state-based empires, 543n7; defined, 529; factors leading to demise of, 129; failure of Europe to re-create after fall of Roman empire, 9, 10, 11, 16, 127-28, 131, 166, 168, 172-73, 214, 333, 496, 503; ideology of imperial unity, 320-28, 329, 331; imperiogenesis, 17, 461, 484, 501, 513-14; institutions, importance of, 326-27; measuring imperial dominance, 31–34; monopolistic, 15–17, 32, 38, 47, 204, 339, 341, 343; outside of Europe, durability of empire-bearing structures, 131; patterns of, 35-37, 35-48; perpetuation as negative factor for further development, 17, 341-42, 479-85; population as most meaningful measure of, 32, 213; population size of largest empires (700 BCE to 2000 CE), 15, 16; "shadow empire" model, 277-78, 568n40. See also specific empires and countries energy capture and consumption, 6, 537nn7-8. See also coal England/Britain: alliance with Spain against France, 201; Anglo-Saxon period, 239, 312, 349, 363; bourgeoisie's freedom and dignity in, 489-90; church's role in, 346, 478; Civil War in, 376, 379, 578n59; cohesion and collective action in, 379, 5811110; colonization and New World trade of, 421-23, 424-27, 449; common law tradition in, 378; Commons, 350; corruption and rent-seeking in, 381; counterfactual scenario for economic rise of, 498-99; counterfactual scenario for seventeenth century in, 208-10; cultural change in, 390; domestic conflict in, 376; economic conditions (post-1500) in, 371; Enlightenment in, labeled as Industrial Enlightenment, 485; escape from Rome in, 378; fiscal-naval-mercantilist state and economic development in, 385-90;

fragmentation in, 363-64, 390; ghost acreages of, 424-25, 426-27, 589n19; Glorious Revolution (1688), 379, 474; governance and politics in, 349, 350, 364-65, 377-82; immigrants coming to, 378, 486; industrialization and modernity in, 341, 359, 377-82, 389-92, 415, 428, 485, 491-95; innovation in, 388-90, 485-88, 497, 581n99; iron industry and metal products in, 388, 423, 424, 494; literacy rates and public education in, 373, 375, 477, 485-86, 492, 596n42; Luddite riots, 487; Magna Carta, 350; naval supremacy of, 385-90; Navigation Acts, 385; Netherlands and, 377; in ninth century, 155, 228; nobility rising in importance in, 239; North Sea economy of, 370-77; parliament in, 350, 376, 379-81; path to Industrial Revolution, 377-82, 491-95; post-nineteenthcentury economic development in, 1, 2; productivity in, 378, 422; protectionism and, 380-81, 384-87; Reformed Church in, 478; religious tolerance in, 484; Roman empire's end in, 363; sixteenthand seventeenth-century rise of, 201, 203, 208, 381-82; slave trade and, 424, 425, 426, 589n17; standing army in, 239; taxes and military commitments in, 369, 379; in tenth century, 241; textile industry and trade in, 386, 415, 423-25, 491–93, 581n115, 588n10, 597n60; trade as economic engine in, 390, 493-94; urbanization in, 371, 373-74, 581n99, 597n64; war and, 366, 382-84; waterways and water use, importance of, 499-500; Whigs in, 380 English language and writing, 312 Enlightenment: hegemony and conservatism vs., 479-85, 594n23; Industrial Enlightenment, 485–88; polycentrism and, 473-79, 497; values of, 488-91 Ennius, 546n57

environmental effects. *See* ecology Epirus, 91, 116, 117, 5511130 estates and grand councils, 349–51, 355, 496 Etruscans, 52, 54–58, 77, 115, 116, 522, 543118, 5451135

Eugippius, 254

Europe: Christianity's ascendance in, 314–17; coastline of, 260–61; corporate organization in, 410; defined, 33, 529-30; demography as factor in developmental transformation of, 497-99; ecology, 290-94; economic conditions (post-1500) in, 371, 372; ethnic loyalty in, 330; expansionism of, 411–13; geography of, 264-66, 270; globalization and, 420-25; imperial state formation in, 9–10, 44–45, 45, 48, 542n18; marriage pattern in, 498-99, 598n81; mountains and rivers in, 261-64, 262; parliamentarianism in, 14, 350-51, 376; patterns of empire in, 12, 35-38; plain regions and natural core not part of geography of, 264-66; population of, 34-38, 35-38; post-Napoleonic (1812), 211; postnineteenth-century economic development in, 1, 2; precondition of disappearance of empire for later exceptionalism, 14; recurrent empires, negative possible effects of, 9-11, 14; sixteenth-century rise of, 200-201; size of, 33, 34; social development (5000 BCE-2000 CE), 5; social development (500 BCE-1500 CE), 5; social development (1500-1900 CE), 7; states constituting currently, 229; steppe effect and, 290-94; taxes and credit in, 368-70, 376; unity in diversity of, 514-16; urbanization in, 373-74; war in, 367-68. See also Black Death; counterfactuals; First Great Divergence (mid-first-millennium Europe); fragmentation of power; Industrial Revolution(s); maritime exploration

and expansion; polycentrism; post-Roman Europe; Roman empire; (Second) Great Divergence; transformative developmental outcomes; specific countries and kingdoms

Fatimids, 145, 151, 302 feudalism, 14, 181, 243, 327, 340, 346, 351, 361, 416, 496, 514, 555n41 First Great Divergence (mid-firstmillennium Europe), 219–21, 227–32; assignment of term, 231, 560n17; Chinese imperial tradition used as counterpoint to medieval and European state formation, 220; comparative scholarship and, 22, 23; culture and religion in, 307, 317; defined, 13, 530; explanation of factors, 330-34, 331; geography and, 259-70, 331, 332; Moore's proposal of different First Great Divergence, 231–32, 561n17; revenue collection as key to power in, 232-34; serial empire reconstruction of China compared to polycentrism of Europe, 9, 12, 224, 229, 246-53, 257, 395, 411 First Industrial Revolution. See Industrial Revolution(s) First Lateran Council (1123), 346 First Punic War, 96, 99, 109, 118, 120, 549n7, 54909, 550013 fiscal extraction, 63, 67, 158, 187, 232-33, 255-58, 330-34, 331, 341. See also military mobilization Flanders, 181, 203, 265, 350, 352, 377 Fletcher, Joseph, 569n45 flood control, 264, 499-500, 566n10 Fourth Lateran Council (1215), 346 Fowden, Garth, 21

fragmentation of power: in Arab empire

(late tenth century), 145; Bourgeois

Revaluation and, 489; in Carolingian

period, 161-62, 240, 555n39; in China,

396-400; development and, 337, 343,

359-60, 495-96; in East Roman restoration (sixth century), 138; Enlightenment and, 474–75, 497; exceptions proving the rule, 396-400, 538n14; fifteen centuries of, 212-15; in first-millennium-BCE Europe and East Asia, 221; in Habsburg domains, 198; in High and Late Middle Ages Europe, 228; modernity resulting from, 9, 359-60; Mongol engagement with fragmented opposition in Latin Europe, 179, 187; as overdetermined outcome for Europe, 220-21, 240, 501; overseas exploration and, 449-53, 471; resilience of state system and, 501, 502; significance of, 15, 27, 359-60; in Southeast Asia, 303; trade and, 360. See also polycentrism France: in alliance with Ottoman empire, 195, 196, 206; aristocracy in, 241, 365; church's role in, 346, 347; class differences inhibiting intellectual innovations in, 487; commune movement in, 352; compared to Roman empire, 213; counterfactual scenario for seventeenth century in, 208–10, 513; French Revolution, 376; German Roman Empire and, 168; governance in, 355; integrity of ruling class in early modern period, 214; late seventeenth to early nineteenth century in, 12, 208-12; Magyar raids into (tenth century), 187, 293; military forces of late seventeenth century in, 78-79, 208; military forces of Napoleonic period in, 214; Netherlands and, 377; New World imperialism of, 426, 432; religious war in, 201; representative assemblies in, 350; taxes and military commitments in, 369; university and academy development in, 485, 488; urban development in, 345. See also Gaul

Franks and Frankish kingdom, 12, 35, 153-61;

in, 213; demise of, 353; duration and

Arab conquests and, 148, 149; aristocracy

scope of, 132, 134; East Roman
Restoration and, 134, 137; land given in exchange for loyalty and military service in, 240–41; repulsion of Arabs and
Berbers by, 512; royal governance in, 349; tax collection in, 237, 254, 565n68; weak internal governance in, 163, 214, 228, 238.

See also Carolingian empire
Frederick I (German ruler), 165–66
Frederick II (German ruler), 166, 171, 174, 176, 178, 197, 347, 512, 541n11
freedom, 8, 538n11
Fronda, Michael P., 553n15
frontier theory, 275. See also steppe effect
Fukuyama, Francis, 539n26

Galileo Galilei, 474
Gaul: Arab conquests and, 139, 140;
Carolingian empire and, 153; Celtic influence in, 522; East Roman restoration and, 132, 134; Habsburgs and, 198; language and writing in, 311–12, 601n39; Merovingians and, 237; Roman Empire's conquest of, 83, 101, 198, 239; state deformation in, 234; taxation in, 234, 237, 254
Gelasius I (pope), 315
Gellner, Ernest, 86, 87, 553n7

Gelasius I (pope), 315
Gellner, Ernest, 86, 87, 553n7
Genghis Khan (Mongol ruler), 174, 186
Genoa, 355, 377, 430, 439, 450, 499, 509
geographic constraints and differences,
259–70, 331, 332, 429, 502, 526, 565n4;
coastlines, 260–61; geographic
determinism debunked, 270; mountains
and rivers, 261–64, 499–500, 566n6,
566n10; plain regions and natural core,
264–66; shape, isolation, and scale,
266–69. See also counterfactual scenario
for overseas exploration; specific
mega-regions and countries

German empire, 164–73, 167; ability to sustain empire of, 12, 35, 172; aristocracy in, 213, 241; castle construction in, 169;

German empire (cont.) Great Divergence. See First Great Diverchurch's role in and relationship with, gence (mid-first-millennium Europe); 171, 346, 347, 512; compared to China, Second Great Divergence 562n30; compared to Roman empire, Great Escape: British leading the way in, 213; ducal elites in, 168–69, 241; failure 363, 501; escape simile, 537n1, 539n26; Roman legacy and, 510–26; Second to expand, 166, 168, 172-73; fragmentation into quasi-polities, 169, 228; Industrial Revolution's effect, 17; governance in, 350; integrity of ruling significance of, 1, 8, 27, 502; values at class in, 214; internal conflicts in (1025 to center of modernization and, 489 1142), 165; land given in exchange for Greek city-states, 52, 56, 58, 91, 93, 95, 100, loyalty and military service in, 235, 238, 103, 109; in counterfactual to Roman 240-41, 562n30; Magyar raids into empire, 113-14, 121, 522, 553n7; maritime (tenth century), 187, 293-94; military exploration by, 430; troop numbers for, controlled by nobles in, 169-70, 237-38, 554n18 244, 245; no standing armies in, 238; Greek language, 311, 522-23, 573nn5-6, weak central power coupled with fiscal 601n39 Greek mathematics, 524, 601n42 constraints in, 169-70, 214; zones of armed conflict in, 168 Gregory VII (pope), 165, 347 Germanic languages, 311-12 Gregory IX (pope), 176 Germany: position in Holy Roman Empire, Greif, Avner, 585n199 195; Protestants in, 196, 197. See also Holy guilds, 352-54, 361, 382, 450, 496, 509 Roman Empire; Prussia Gungwu, Wang, 444 "getting to Denmark," 19, 539n26 gunpowder, 182, 200, 399, 452, 453, 558n20 Ghaznavids, 296, 301 Gupta empire, 40, 219, 295, 432 Guyuk (Mongol ruler), 175, 178, 183, 186, 188 ghost acreages, 424-25, 426-27, 588n12, 589n19, 589n21 Gibbon, Edward, 18, 128, 131, 149 Habsburgs (sixteenth century), 192-204; Glahn, Richard von, 401, 412 compared to Roman empire, 213; globalization: criticism of and response to, counterfactual scenario for, 12, 200-201, 215, 512-13, 559n55; failure to subdue 425-28; European colonial reach, 420-25, 452. See also maritime Europe, 496; geopolitical dynamics in, exploration and expansion; New 212, 421; integrity of ruling class in, 214; Napoleon and, 18. See also Holy Roman Goethe, Johann Wolfgang von, 18 **Empire** Goffart, Walter, 236 Hall, John, 358, 414, 515 Golden Horde in Eastern Europe, 183-85, Hall, T., 568n40 188-89, 213, 292 Han empire: ancestor worship in, 321; bureaucracy in, 226-27; central Goldscheid, Rudolf, 232 Goldstone, Jack, 208-10, 497, 560n16, government control in, 43; compared to 586n216, 595n38, 596n44, 597n68, Roman empire, 311; Confucianism in, 598n76 324; decentralization during, 230; Goths and Gothic language, 311-12 demise of, 241, 243, 250, 397, 405; First Grainger, John D., 550n14 Great Divergence and, 229, 229; in

heyday of empire, 281, 56on5; merchant class in, 397; mobilization in, 248, 551n29; patronage and simony in, 227; population of, 243, 564n57; steppe effect and, 284, 444; territorial expansion by, 222, 223 Hannibal, 77, 94, 103, 118-19, 553n16 Hansen, Mogens H., 549n5 Harsha empire, 40, 219, 296 Hartmann, Mary S., 598n81 Heather, Peter, 268 Henry I (German ruler), 164 Henry II (German ruler), 165 Henry III (English king), 176 Henry IV (German ruler), 165, 347, 512 Henry V (German ruler), 165, 166 Henry VIII (English king), 197, 200, 370, 378 Hinduism, 329 Hitler, Adolf, 36, 37, 212 Hittites, 90 Hobbes, Thomas, 370, 474 Hoffman, Philip, 260, 327, 452, 567n26, 574n13 Hohenstaufen dynasty, 165, 177 Holland, Cecilia, 190-91 Holy Roman Empire, 192-204, 194; counterfactual scenario for, 200-201, 215, 512-13, 559n55; duration of, 43, 541n11; Germany's position in, 195; northern Low Countries' revolt against Philip II, 202; resistance to concept of empire within, 195–96 Hoppit, Julian, 381 horses and equine warfare. See cavalry warfare; ecology Hudson Bay Company, 386 Huguenots, 378 Hume, David, 473 Hundred Years' War, 366, 374, 578n59 Hungary: Austria's claim to, 196; Golden Bull, 350; Mongol incursion into, 175-78, 180-82, 185, 187; Ottoman control of, 204; in tenth century, 268. See also Avars; Magyars

Huns, 130–31, 133, 135, 182, 187, 292, 295, 300 Hurrians, 90 Hus, Jan, 474

Iberian peninsula: Arab conquest of, 139–40, 142–43, 148, 150, 153, 302, 317, 512; British exports to, 423; Castile kingdom in, 176, 431; fiscal value to Roman Empire, 130, 234, 255; language and writing in, 311–12; Magyars in, 187; Napoleon in, 209, 211; Ottomans in, 207; parliamentary tradition in, 350; Roman military mobilizations in, 78, 80–81, 94, 103, 106, 239; Visigoths in, 132, 134, 148, 236, 317 ideologies of imperial unity, 320–28, 329, 331 Ilkhanate in Iran and Iraq, 183–85, 189, 213, 563n30

Inca empire, 193

India: cotton exports from, 426, 427, 589n20; foreign conquest of, 415; fragmentation in, 257, 573n8; geography of, 265, 295; Islamic invasion in, 416–17; Mongols in, 182, 185, 192; no Enlightenment period in, 483–84; patterns of empire, 10, 39–40, 40, 415–16; Portuguese expansion into, 431; post-Gupta period regional empires in, 415–16; post-nineteenth-century economic development in, 2; religious beliefs in, 329; rivers and flooding in, 500; steppe effect and, 295–98. See also Mughals

Indonesia, 47, 430, 434

Industrial Revolution(s): China compared to Europe and, 413–14; conditions conducive to, 392; England as cradle of, 377–82; First Industrial Revolution, 17, 425, 426, 428, 486–88, 491–95, 5821121, 598n81; modern Great Divergence and, 13, 337; Second Industrial Revolution, 6–7, 17. See also England/Britain; Second Great Divergence
Indus Valley, 113, 140, 552n5

Inikori, Joseph, 423

Innocent III (pope), 347 James II (English king), 208-9 Innocent IV (pope), 347 Japan: claiming parts of China, 41; Mongols innovation: Chinese stifling of, 396-400, and, 192; Qing and, 306; as secondary 415, 479-85; Enlightenment and, Chinese state, 230; Tokugawa Shogu-473-79; in Europe and England, 391, 393, nate (after 1600), 452; transformative 415; Industrial Enlightenment of Britain economic development in, 2 and, 485-88, 497; knowledge and Jews, 360, 378, 483 scientific inquiry, 472-73, 478-79; Jin dynasty (China): conflict under, 227, macroinventions and microinventions, 242, 253; decentralization during, 230; 486; in Roman empire, 504-5; demise of, 242; ecology and, 280, 282; technological innovation of Industrial imperial restoration under, 241–42; Revolutions, 6, 472, 487; values of militarization under, 242-43; religious modernization and, 488-91 beliefs under, 318 institutions: Chinese imperial institutions, John Bar Penkaye, 143 392–96; European institutionalization of Jones, Eric, 265, 344, 359, 388, 393, 495, progress, 344-67, 376, 390-92, 582n136; 514-15, 592n85 importance of, 326-27 Julian (Roman emperor), 320 international trade. See specific countries and Julius Caesar, 101, 198, 239, 562n30 Jurchen empire, 41, 174, 230, 285, 288 empires Iran: competitor to Roman empire in, 84, 223; in counterfactual assuming no Kant, Immanuel, 337–38 Roman empire, 522; ecology of, Karayalcin, Cem, 598n79 298-301; Safavids in, 207-8, 301; steppe Kassites, 90 Kasten, Brigitte, 555n37, 555n40 effect and, 298-301, 302; trade with, 456. See also Achaemenid empire; Sasanians Kavadh I (Sasanian king), 300 Iraq, 143-46, 182-85, 207, 255-56, 565n71. Kennedy, Hugh, 141 See also Mesopotamia Kepler, Johannes, 483 Islam and Islamization, 142-43, 150, 317, Khorasan, 143, 144, 301, 572n94 573n9; decline in learning and scientific Khwarezmian empire, 174, 301 Kievan Rus', 175, 291 research and, 482-84, 595n32; Islamic (conquest) polity, 587n219; Islamic knowledge and scientific inquiry, 472-73, trusts (waqf), 418; language differences 485-88, 497; Greek influences, 523-24, among constituencies of, 329 6011142; Islamic decline in learning and scientific research, 482-84, 595n32; Italy: aristocracy in, 241; coalition of city-states in, 213; coastline of, 260; liberty and dignity for ordinary people commune movement in, 352; German tied to, 489; "Republic of Letters," 475, campaigns against (tenth and twelfth 516, 595n38; in Roman empire, 504-5; centuries), 165, 166; kingdom of, 157; values of modernization and, 488-91. See also innovation language and writing in, 312; Magyar Ko, Chiu Yu, 306, 573n102, 587n224 raids into (tenth century), 187, 293; trade with Byzantium, 509 Kocka, Jürgen, 22 Iuba II (king of Mauretania), 432 Korea, 230, 251, 260, 266-67, 275, 435, Ivan III (Grand Prince of Moscow), 189 565n2

Koyama, Mark, 306, 573n102, 587n224, 595n32, 599n6 Kublai Khan (Mongol ruler), 182-83, 186, 285 Kushan empire, 40, 223, 295, 560n5 laissez-faire tendencies, 313, 407, 505, 507 land distribution: Carolingian empire, income from land grants in, 159; China (fifth through seventh centuries), 247, 248; Franks, 240-41; German empire, 235, 238, 240-41, 562n30; Mongol empire, 563n30; Roman empire, 56-57, 66, 67, 71-72 Landes, David, 6, 17, 359, 59911 language and writing, 308-13; China, 308-9, 310, 312-13, 573n4, 594n23; English, 312; Greek, 311, 522-23, 573nn5-6, 601n39; Islamic world and, 311, 329, 483; post-Roman Europe, 311–13; Romance languages, 312, 510, 517; Roman empire and spread of Latin language, 66, 67, 309-13, 476, 510, 515-18; Southeast Asia, 329; spread of knowledge and, 476 Latin language, 66, 67, 309-13, 476, 510, 515-18 Lattimore, Owen, 275, 280, 572n89 Leo III (pope), 154 Levant, See Middle East and North Africa Levine, Ari D., 575n44 Lewis, Mark, 319 Liao Qidan, 285, 288, 571n70 liberty and dignity for ordinary people, 489-90 Lieberman, Victor, 265, 275, 297-98, 303, 330, 573n4 life expectancy, 7, 537-38n9 literacy rate, 8, 373, 375, 375, 477, 485–86, 492, 538n11, 596n42. See also knowledge and scientific inquiry Lithuania, 193, 292, 571n72 Little Divergence, 231, 370, 373 Liu, William, 399, 584n168

Livy, 100, 116-17

Locke, John, 474 Lombard League, 168 Lombards, 135, 137, 153, 155, 156, 238, 312 Lorge, Peter, 327 Lotharingia, 156, 181, 240, 353 Louis the Pious (Frankish king), 156, 244 Louis XIV (French king), 78–79, 208 Luther, Martin, 197, 200, 474

Ma, Debin, 394 Macedon: as Carthaginian ally, 551n31; in counterfactual to Roman empire, 114-17, 521, 553n11; Roman conquest of, 92, 95-97, 99, 104; troop numbers for, 550n12, 551n30, 553n18. See also Alexander the Great macro-regions: described, 33-34, 34; imperial state formation in, 43–48, 45. See also East Asia; Europe; Middle East and North Africa; South Asia Madagascar, 430 Magellan, Ferdinand, 431, 440, 465 Maghreb, 43, 91, 93, 132, 139, 143-46, 150-51, 204, 207, 293, 302, 311, 317, 512. See also Middle East and North Africa Magyars, 158, 164, 168, 182, 187, 246, 293-94 Mair, Victor, 282, 569n45 Majapahit empire, 47 Malacca, 431, 434, 438, 441, 443-44 Malaya, 47 Mamluks, 184-85, 204, 360, 416, 431 Manchus. See Qing empire Mandarin dialects, 308-9, 312 Mann, Michael, 360 Mao Zedong, 338 marginal zones or contact zones, 279-80, 298, 572n89 maritime exploration and expansion: China's lack of interest in or need for, 433, 441-46, 591n77; comparison of Chinese and European missions, 439-40; counterfactual scenarios for,

454-71; by European states, 429-32,

maritime exploration and expansion (cont.) in, 255-56, 565n70. See also Arab 590n51; by Ming China, 433-39; conquests; specific countries Ottoman lack of interest in or need for. military mobilization: in Achaemenid 447-48; polycentrism's role in, 449-53; empire, 299; in Anglo-Saxon England, in Roman empire, 505; South Asia's lack 239; in Arab conquests, 145-46; in of interest in or need for, 446-47. China, 242-44, 246-51, 257, 397-99; See also New World compared to Roman empire, 213-14; Marks, Robert, 496 fiscal-naval-mercantilist state in England, 385-90; in France (late Mary Stuart, 202, 203 Massimiliano, Onorato, 358 seventeenth century), 78-79, 208; in mathematics, 479-80, 524, 601n42 German empire, 169-70; in Han empire, Maurya empire, 39, 43, 219, 295, 432 248; importance of, 564n64; in modern McCloskey, Deirdre, 489-91, 538n13, 596n44 times, 368; in Mongol empire, 176, 214, McNeill, John Robert, 263-64 557n2, 557n5, 557n17; in Napoleonic Medes, 299-300 France, 214; in Ottoman empire, 204-6, Meeks, Elijah, 106 453, 507; in post-Roman Europe, 239, MENA. See Middle East and North Africa 243-44, 257, 339; in Qin empire, 224; in (MENA) Roman empire, 63-64, 77-81, 81, 84, 135, Menzies, Gavin, 468 224, 543n16, 546n49, 550n10, 550nn18-22, 551n24; in Roman empire compared mercantilism, 268, 344, 353-56, 376-81, 392, 404, 447–51, 497, 581nn109–10, 582n121; to in post-Roman Europe, 239 fiscal-naval-mercantilist state in Ming empire: agrarian focus of, 443; England, 385–90, 492–93; unifying set of compared to Roman empire, 507; customs and rule for, 516. See also decentralization during, 230, 407; commercial transactions and credit duration and scope of, 229, 282, 569n48; Merovingians, 148, 153-54, 161, 163, 237 dynastic discord in, 435; economic Mesopotamia, 83-84, 144, 301. See also Iraq policies inhibiting growth in, 400-402, Middle Ages. See post-Roman Europe; 440; imperial governance in, 407; specific kingdoms maritime commerce restrictions in, 402, Middle East and North Africa (MENA): 434, 438, 443, 496; Mongols and, 285, collapse at end of Bronze Age, 221; 399, 438; naval expeditions during, commercial growth and trade in, 417; 433-39; neo-Confucianism in, 480; rise defined, 33, 541n7, 541n9; ecology of, of, 433, 569n48; taxes and funding in, 293, 301–2; foreign conquest of, 415; 233, 237, 409, 421, 433; walls to fend off fragmentation of, 207, 415; geography of, attacks in, 285, 289, 437; Yongle emperor, 260, 266, 270; imperial state formation 434, 435, 437, 438, 59on4o in, 45, 45-47, 333; language and writing Mitterauer, Michael, 496 in, 311; Mongols in, 182, 191, 415; patterns modernity: California school of scholarship of empire, 10, 13, 38-42, 43, 254-55, 293; on, 575n1; conditions inhibiting, 479-85, polycentrism not applicable to, 418-19; 487, 490; conditions over long term population of, 34, 35, 39, 504; Roman leading to, 14, 128, 501, 526-27; Eurocentrism and, 501–2; fragmentation empire controlling, 84, 142; size of, 33; steppe effect and, 302, 333; tax practices of power as source of, 9, 360-63;

polycentrism as essential to development of, 15; price to humanity for, 502; Roman empire's contribution to, 520; values of modernization, 488-91 Mokyr, Joel, 473, 476, 478, 485, 497, 515, 516, 593n5, 594n21, 595n38, 596n44, 597n68, 598n85 Mongke (Mongol ruler), 175, 183, 185, 186 Mongol empire, 12, 168, 174-92, 184; in Asian countries other than China, 192; Baghdad sacked by, 191; in Central Europe, 175–78, 185; Chagatai khanate in Central Asia, 183; in China, 4, 175, 182-83, 189-90, 230, 285, 286, 398-99, 440, 558n20; compared to Roman empire, 213; counterfactual scenario for, 185-92, 215, 560n16; in Eastern Europe, 174-75, 178; fragmentation of Latin Europe and, 179, 187; inability to maintain a large-scale empire in Europe, 214–15; integrity of ruling class in, 214; internal discord and instability of, 183-85; land allotments in, 563n30; in Middle East (Levant), 182, 191, 301; mobilization of forces in, 176, 214, 288, 557n2, 557n5, 557n17; naval expeditions conducted by, 443, 444; population of, 288, 541n3; reasons for retreat from Europe, 178-79; steppe effect and, 181-82, 183, 192, 245, 278, 556n1, 557-58n18, 557n9; stone fortifications and castle construction as barrier to, 180-81, 188, 557n16, 558n20. See also Genghis Khan; Kublai Khan monopoly: monopolistic policymaking in China, 400-407, 440; non-monopolization as fundamental to rise of the West, 391; polycentrism vs., 338-44, 339. See also empire Montesquieu, Baron de, 259, 260, 261, 265, 337 Moore, Robert Ian, 231-32 Morris, Ian: on Chinese lack of need to

pursue overseas exploration, 441;

counterfactual to Roman empire proposed by, 114; on Norse ability to reach America (compared to Chinese ability), 462, 468, 592n99; social development index of, 4, 6, 537nn5-7 Mughals, 39, 179, 219, 257, 298, 343, 416-17, 432, 452, 483-84, 507, 572n86, 587n221, 590n31 Muscovy, 193, 292 Muslims. See Arab conquests; Islam and Islamization Napoleon Bonaparte: battle size compared to Roman battles, 79; counterfactual scenario for, 211-12, 215; empire duration and scope under, 36, 37, 483; failure to overcome English and European opposition, 18, 210 nature. See ecology; geographic constraints naval exploration. See maritime exploration Needham, Joseph, 266, 594n23 Netherlands: bourgeoisie's freedom and dignity in, 489-90; eclipsed by Britain's rise, 492; economic rise of, 371, 391, 415, 580n81; joining England in war against Spain, 202-3; literacy rate in, 373, 477, 596n42; military and war costs of, 369-70, 376-77; New World trade and imperialism of, 203, 422, 426, 444, 449, 451; Protestantism in, 202; taxes in, 369-70, 579n65 Netz, Reviel, 601n42 Newton, Isaac, 478 New World: agrarian empires, 441-48; Atlantic trade, expansion of, 422; bullion imported from, 194, 233, 421-22, 423, 425, 496; China and, 468-71; cotton imports from, 424-25, 427; counterfactual scenario for seventeenthcentury colonies in, 209; counterfactual scenario of flipping Old World on its

axis so East is West, 459-67, 460-61,

463; European expansionism, 420-25,

New World (cont.) 449-53; globalist perspective, 420-25; incumbents, 431-40; limits of globalism, 425-28; marginals, 429-31; New Spain, establishment of, 193, 196-97; Pre-Columbian imperial state formation in, 46; sugar imports from, 424–25, 589n17; timber imports from, 424–25 Nicaean creed, 519 Nicholas I (Constantinopolitan patriarch), 573-74n10 Nine Years' War, 208 nobility: in France, 241; in German empire, 169-70, 237-38, 241, 244, 245; inhibiting modernization and innovation, 487, 490; rise of aristocracy in England, 239; rise of aristocracy in Europe, 169-70, 237-41; in Roman empire, ruling class of noble houses, 68-71, 79, 88-89, 225; society of estates in Europe, 349–51; in Spain, 241; in Tang China, 411; values of, no effect on lives of ordinary people, 596n54 nomadic societies, 276-79, 283, 287-89, 291–96, 299, 305, 568n40. See also specific groups North, Douglass, 380 North, John, 73 North Africa. See Middle East and North Africa Northern Song. See Song empire Northern Wei, 230, 246-47, 282, 284, 318-19, North Sea region (post-1500), 202, 370-77, 391, 477, 496, 579n71, 582n132. See also England/Britain; Netherlands

O'Brien, Patrick K., 589n22 Odoacer, 254, 562n30, 565n68 Ögödei (Mongol ruler), 174, 178, 179, 183, 186 Ophellas, 91 Orestes, 562n30 Orientalism, 392–93, 583n138, 587n221 Ostrogoths, 132, 134, 137, 153, 254, 562n30 Otto I (German ruler), 164, 187 Otto II (German ruler), 164-65, 168 Otto III (German ruler), 165 Ottoman empire, 204-8, 205; commercial growth and trade in, 417, 578n48; compared to Roman empire, 213, 507; compared to Umayyad caliphate, 205; counterfactual scenario for, 206-8; duration of, 12, 35; European relationships with, 195, 196, 201-2, 206; extent of empire, 12, 193, 204-5, 267, 301, 415, 452; hegemony and conservatism in, 483; imperial consolidation under, 38, 43; inability to maintain a large-scale empire in Europe, 214–15; integrity of ruling class in, 214; military mobilization and naval strength of, 204-6, 453, 507, 565n73; obstruction of intellectual innovation in, 484; overseas exploration not of interest to, 447–48; population of, 219; tax revenues in, 206, 417, 565n73 Ottonian empire. See German empire overseas exploration. See maritime exploration and expansion Oxford Roman Economy Project, 505 Oxford World History of Empire, 16

Pala empire, 40
Palma, Nuno, 597n64
Papal States, 166. See also Catholic Church parliamentarianism, 14, 350–51, 376
Parthasarathi, Prasannan, 585n191, 587n221
Parthians, 100, 223, 299–300, 521, 560n5, 601n36
pastoralists, 255, 274, 281, 283, 287, 295, 299, 301–2, 306, 568n40, 569n45
patent law, 486–87
patriarchal structures, 498, 544n31
patrimonialism, 68, 225–27, 366, 544n31
Paul, gospels of, 518–19, 523
Peace of Augsburg (1555), 370–71

Peace of Westphalia (1648), 371 World and colonies established by, Pechenegs, 290, 291 421, 426, 430-31, 449; Genoa and, Pepin, 154 450; international trade of, 422, Pepin the Short, 160 457-58; as threat to Ottoman trade Peroz I (Sasanian king), 300 routes, 447-48. See also Iberian Philip II (Habsburg ruler), 195, 199, 201-3, peninsula 202, 213, 378 post-Roman Europe: compared to China, Philippi, battle of (42 BCE), 79 17, 23, 228, 243, 254-58, 320-28, 329-32, Philippines, 444, 445 331, 343-44, 562n30; cultural evolution and, 327; ethnic loyalty in, 330; fiscal Phoenicians, 429, 431-32 Phrygian language, 311 decay, effects of, 257; governance in, Pines, Yuri, 323-26, 328, 574nn27-29, 575n33, 349; language and writing in, 311-13; local resistance to tax remissions to 585n185 central authority, 235, 237; polycentrism Poland: Mongol incursion into, 175-77, 180-81, 185, 187; Pact of Koszyce, 350; in in, 12, 16, 37, 43, 214, 338, 501, 503, 508; tenth century, 268 possible successors to Rome, failure to political economy, 387, 392, 413, 442, 470, emerge, 127-28, 214, 333; principal 486-88, 581n110 sources of social power in, 339-40; state Pollack, Sheldon, 484 formation in, 12, 63, 131; tax collection in, Polybius, 546n57 234-39, 254, 257. See also Carolingian polycentrism: in Central America, 46; empire; East Roman restoration (sixth church's role as driver of, 348, 519-20; century); fragmentation of power; defined, 530; development dynamics of, polycentrism 339, 419, 497, 510; Enlightenment and, poverty reduction, 7, 538n9 473-79; essential to (Second) Great Prados de la Escosura, Leandro, 589n22, Divergence and Industrial Revolution, 598n85 15, 337; intermittent in imperial settings, primogeniture, 240, 555n40, 563n33 17; Mongol presence in Europe and, 190; property rights, protection of, 360, 380-81, overseas exploration and, 449-53; in Protestantism, 196-98; counterfactual post-Roman Europe, 12, 16, 37, 43, 214, 338, 501, 503, 508; significance of, 9, scenario for, 200-201, 203, 512-13; 338-44, 339; tax practices and, 256. immigration to England, 378; spread of See also fragmentation of power knowledge and, 477; work ethic and, Polynesian explorations of the Pacific, 477, 491 430-31, 469, 593n103 Prussia, 208, 211, 484 Pomeranz, Kenneth, 424, 427, 428, 482, Ptolemaic empire, 95-101, 104-5, 117, 521; 597n67 annual military outlays of, 550n21; navy population: basis for determination of, of, 552n33, 554n18; overseas exploration 533-35; controversy over estimates, by, 458; troop numbers for, 551n30, 599n3. See also specific empires and 553118 Puritanism, 478 countries Portugal: Eastern expansion and trade of, Pyrrhus (Epirote king), 91, 118, 546n57 431, 438-39, 444; exploration of New Pytheas, 430

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664 INDEX

Qing empire: agrarian focus of, 443; bureaucratic structures and, 587n218; clans in, 411; contact with British, 442; duration and scope of, 229, 452, 470; imperial governance in, 407; maritime commerce restrictions in, 402-3, 443; military mobilization and warfare in, 399; neo-Confucianism in, 480; obstruction of intellectual innovation in, 484; rebellion risks in, 443, 586n205; state revenues used to support warfare in, 585n189; steppe effect and, 281–82, 285-86, 399, 584n162; Taiping rebellion (1850s and 1860s), 287, 412, 586n205; taxes and revenue collection in, 233, 237, 407, 409; walls to fend off attacks in, 289 Qin kingdom/empire: ascent of, 281, 283, 560n4; breaking power of aristocrats and setting up civil service system, 225, 244; core China defined by territory of, 229; demise of, 242, 325; ethnic identity in, 282; geography of, 283; language and writing in, 308; Legalism in, 320-21; manpower mobilization in, 224; merchant class in, 397; military mobilization in, 72, 81, 222, 224, 551n29; state formation in, 222; tax structure in, 225

Rawski, Thomas, 394
Reformation, 370–71, 375, 473–74, 477, 478, 489–90, 512
religion and beliefs, 13, 313–20; in China, 317–22, 328; counterfactual of religious unity in Europe, 512–13, 524; English establishment of national religion, 378; European ascendancy of Christianity, 314–17; religious toleration in European countries (seventeenth century), 484, 497. See also Reformation; specific religions and belief systems
"Republic of Letters," 475, 516, 595n38
Ringmar, Erik, 391, 496
Robinson, James, 496, 525, 602n45

Romance languages, 312, 510, 517 Roman empire: abolition of debt bondage in, 69; adaptations in the core, 68-69; allies and, 59, 60, 67, 73, 79; bureaucracy in fourth century CE, 226-27; capacity for collective action in, 64; capitalized coercion mode of, 63; Christianity during, 314-15; citizenship rights in, 59, 65-66, 73, 75, 79; civilian governance confined to metropolitan core, 68; colonization schemes in, 66-67, 71, 545n42, 548n75; commercial transactions and credit in, 504; compared to Chinese empire, 72, 221-27, 294, 320, 505, 507; compared to Ottoman empire, 213, 507; co-optation and mobilization of citizenry, 10, 59-65, 62, 75, 549n6; cultural assimilation in, 66; demise of, 16, 128, 223, 338, 344, 363, 541n11, 599n1; domestic conflict, 120–22; in early fourth century BCE, 53; economic development in, 505-6; erosion of, thoroughness of, 131, 136-37; explaining creation of, 21, 51-52; extent and expansion of, 34, 75-77, 76, 83, 83-84, 223, 432, 456, 538n15, 543n9, 566n21; factors leading to demise of, 130; failure of similar empire to return after its fall, 9, 10, 11, 16, 127, 131, 503; final phase of expansion and end of conquest, 82-88, 83, 548n72; geography and, 266; growth and triumph, 75-86, 76, 56on5; Huns' takeover of, 130-31, 133; integration and evolution of Roman commonwealth, 65-68; international trade and trade routes of, 455-58, 504, 592n89; land distribution to soldiers of, 56-57, 66, 67, 71-72; language and writing in, 66, 67, 309-13; legacies of, 14-15, 510-26; legal influence on post-Roman Europe, 514, 516; logic of continuous war, 67, 72-73, 544n31; longevity of, 11, 88, 122, 128-29; manpower as critical to military success, 77-81, 81, 84, 224, 225, 546n49, 550n10,

of, 57, 68, 70, 85, 547n70; military outlays and payments of, 135, 507, 550nn20-21; modern development resulting from, 503; monarchy in, 226, 234; naval supremacy of, 11, 63, 77, 96, 104-9, 107, 120, 122-23, 432, 456; Oxford Roman Economy Project, 505; parallel of state formation to East Asia, 220, 221-24; patrimonial and clientelistic society in, 68, 225-27, 544n31; patterns of empire and, 35, 35–38, 36; peace (pax Romana) duration during, 504; plunder as funding of, 61, 64, 72, 80; population of, 34-38, 35-38, 55, 62, 74, 76, 76-77, 219, 504, 542n12, 549n6; positive effect on European development, 4; power and leadership concentrated in Rome, 225; public good provision in, 68; religion allied with war-making in, 69; roots of, 11, 52–58, 222; ruling class of noble houses in, 68-71, 79, 88-89, 225; Samnite federation, conflict with, 75-76, 111, 116, 546n55; slave society in, 69, 74, 599n6; Social War (91–89 BCE), 64, 78, 120; starting advantages enjoyed by, 138; stratified layers of classes and roles in, 86, 87; success in and incentives for war in, 57, 70-72; sustainability of continuous war in, 65, 73-74; taxation and revenue in, 61, 64, 72, 80, 81, 234, 235, 506, 600n10; technological innovation in, 504-5; in third century BCE, 60, 222; uniqueness of, 10-11, 13, 18, 19, 35, 122-24, 212, 215, 521-22; urban development in, 504; Veii conflict (early fourth century BCE) and, 57-58, 75, 521; war machine of, 67, 79-82, 119-20, 547nn66-67. See also counterfactual to Roman empire; Roman periphery Roman periphery, 89-109; benefit of Rome's location, 89, 551-52n33; Carthage conflict with (third century BCE), 62, 77-78, 80, 91-100, 103, 104,

550nn18-22, 551n24; military leadership

109, 546n57; characteristics of tribal peripheries, 551n26; compared to Qin China, 225; core and periphery as essential to rise of empire, 213, 225; core and periphery compared, 102-4, 548n1; critical preconditions for military success (mid-third- to mid-secondcentury BCE), 101, 103, 109, 222, 234; eastern periphery, 95-101, 538n14; failure to form single political-military network in eastern Mediterranean city-states, 91; Gallic conflicts (fourth century BCE to 225 BCE) and, 58, 77, 101, 116; Macedon, conflicts with, 92, 95-97, 99, 104; Mediterranean advantage of Rome, 104-9; Mediterranean divide, 89-92; Mediterranean political-military network (first millennium BCE), 91, 92; Middle Eastern political-military network (c. 1500–500 BCE), 90, 90; northern and western periphery, 101; routes of advance in, 106-8, 107; Sicily conflicts, 93-94; southern periphery, 93-94; stylized typology of peripheries, 102, 103; Syracuse conflicts, 91, 92, 93, 103; travel time and transportation cost in, 107, 107; troop deployment by region (200-168 BCE), 97-99, 98 Rome, sacked by Charles V (1527), 197 Rosenthal, Jean-Laurent, 358, 389, 492–93, 495, 496, 586n215, 597n60, 597n71, 598n85 Rouran clan, 246, 247, 284, 287, 288, 399 Royal Society of London for Improving Natural Knowledge, 475 Rudolf I (Habsburg ruler), 166 Runciman, Walter, 553n7 Russia: Golden Horde incursion into, 188-89; infrastructure development of, 453; khaganate of Rus', 291; Kievan Rus', 175, 291; Mongol's effect on economy of, 189, 558n29; Muscovy, 193, 292; Orthodox Church and, 511; population size of,

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666 INDEX

Russia (cont.) and, 343, 497; search for origins of, 37; pre-Napoleonic Wars, 269; size of 19-26. See also Industrial Revolution(s) Russian empire, 32, 538n14, 571n72; Second Punic War, 78, 121, 546n59, 549n9, Tatars in, 189, 292 551n29 sedentism, 32, 275, 277-79, 287, 295, 298, 305, Safavid Iran, 207-8, 301 568n35 Saka empire, 40, 298, 299-300 Seleucid empire, 95–101; annual military Salian dynasty, 165, 168-69, 170, 171, 173. outlays of, 550n21; ascent of, 117, 521; Cilician pirates as offshoot from failure See also German empire of, 552n34; Egypt and, 521, 601n36; Samanid dynasty, 145, 301 Samarra crisis, 145 internal strife and fragmentation in, Sanskrit language, 329 550n14; military mobilization in, 104, Sasanians, 38, 133, 135, 137, 139, 141, 215, 256, 550n21, 551n30, 553n18, 554n18; navy of, 554n18; population of, 541n3; Roman 295, 300 provisioning in war against, 552n35; scaling-up: challenge of city-state environment for, 54; challenge to Rome from troop numbers for, 551n30, 553n18 tribal periphery, 130; co-optation of Seljuqs, 38, 278, 301, 317, 483 Rome and, 59, 79; in counterfactual to Septimius Severus (Roman emperor), 86 Shang dynasty, 282, 308, 323 Roman empire, 120; of Germanic tribes to threaten Roman territory, 551n25; Siam, 47, 303, 435 incorporating manpower of conquered Sicily: in counterfactual to Roman empire, regions into Roman military and, 63-64, 113, 118, 553n6; French rule over 543n16; Middle Ages, failure to scale-up (thirteenth century), 166; German during, 128; military scaling up as campaigns against (960s), 165; Roman essential to empire building, 233, 246; of empire and, 91, 93-94, 103, 105, 549n3, steppe peoples, 274, 278-79 549n5; saved from Arab conquest (740), Scandinavian polities, 156, 187, 197, 209, 228, 136 Sima Guang, 251 260, 268, 269, 294, 349, 430, 483, 484, 578n59. See also Vikings Singhasari empire, 47 Scheidel, Walter, 539n21 Sivin, Nathan, 482 Schiavone, Aldo, 599n6 slavery: British trade in, 424, 425, 426, Schmalkaldic League, 197, 199 589n17; colonial trade and use of, 388, Schumpeterian growth, 79-80, 232, 341, 423-24, 427, 466, 470; Genoa's role in 408, 507, 547n63 chattel slavery, 499; in Roman empire, Scythians, 290, 299 69,74 (Second) Great Divergence, 13; causal Slavic languages, 311-12 conditions for, 337-44, 491, 497, 501; Slavs, 135, 137, 139, 165, 175, 268, 294 counterfactual derailing, 467; culture Smithian growth, 409, 412, 504, 507, and, 472-73; defined, 530; European 586n207 trade with New World and, 428; First Sng, Tuan-Hwee, 306, 573n102, 587n224 Great Divergence paving way for, social science scholarship, 19-20, 21 231-32; First Industrial Revolution and, social welfare, 539n26

sociology scholarship, 20

425; fragmentation of power in Europe

solar energy, 6

Song empire: centralization of power in, 249; civil service system in, 394; Confucianism in, 322, 394; duration and scope of, 229; ending fragmentation of tenth century, 227, 231, 253, 285; imperial state formation, 41, 44, 249; kinship networks, rise of, 410, 411; military's effect on economy of, 398, 584n168; money inflation in, 507; Mongol advance on, 175, 182–83, 187, 230, 231, 398, 558n20; population in, 564–65n67, 566n13; positive effect on economic development, 4, 285, 343, 398–99, 400, 403, 409, 440, 443, 585n199; steppe effect in, 282

South Asia: conquests of, 417–18; cultural traits linked to state formation in, 330; defined, 33; ecology and, 276, 295-98; foreign conquest of, 415; fragmentation and fiscal structures in (fourth and fifth centuries), 257; fragmentation into regional states (from sixth to twelfth centuries), 297; geography of, 261, 266, 267, 270, 295, 333; imperial state formation in, 45, 45-47, 257; overseas exploration not of interest to, 446-47; patterns of empire, 10, 13, 39-42, 40; polycentrism not applicable to, 418-19; religious beliefs in, 329; size of, 34, 34; steppe effect and, 295-98, 572n89. See also India

Southeast Asia: cultural traits linked to state formation in, 330; ecology of, 303–4; fragmentation in, 303; geography of, 267; imperial state formation in, 46–48; language and writing in, 329; patterns of empire in, 10; religious beliefs in, 328; steppe effect and, 303–4. *See also specific countries*

Southern Song. *See* Song empire Spain: aristocracy in, 241; bullion imported from New World, 194, 233, 421–22; counterfactual in which Spain prevails over England (sixteenth century), 203–4; domestic conflict in, 376; failed invasion of England (Spanish Armada defeat 1588), 202, 378; New World colonies of, 201–2, 421, 426, 431, 444, 445, 449; obstruction of intellectual innovation in, 484, 487; representative assemblies in, 350; taxes and military commitments in, 369–70; Unions of Aragon and Valencia, 350. *See also* Iberian peninsula

Sparta, 91
Sri Lanka, 275, 433, 434, 446, 457
Srivijaya empire, 47, 447, 543n7
Stasavage, David, 353
state: defined, 530–31; formal state, focus on, 43; survival of state structures, 539n23

state formation: Christian Church and, 317; city-state culture and, 327; comparison of East and South Asia and Middle East with Europe, 419; in counterfactual scenario of no Roman empire, 524-26, 525; defined, 531; development dynamics of types of, 338, 339, 498; ecology and, 47, 274, 276-80, 331, 332, 501; geography and, 269-70; homogenization and, 268; imperial state formation and split of Christians into Catholics and Protestants, 197–98; imperial state formation in macro-regions, 9-10, 12, 43-48, 45, 268; in post-Roman Europe, 12, 63; Roman, 11, 52-58; test for effects of threat direction and strength on, 306, 567n33; Tilly's capital-intensive mode of, 63, 67. See also culture and cultural unity; empire; monopoly; polycentrism; scaling-up

state system: defined, 531; institutional development and, 391; productive dynamics of, 17, 344, 475; resilience of, 306, 501. *See also* institutions

status quo, 508-10 development, 4; religious beliefs in, 319; Staufers, 169-71, 173 steppe effect and, 444 Stein, Peter, 516 Tatars in Russia, 189, 292 taxes: in Arab conquest regions, 143, 144, steppe effect, 245, 270-81, 271, 331; access to horses and, 181-82, 245-48, 252, 274-75, 146-47, 148, 255-56; in Carolingian 278, 280-81, 284, 289, 296; China and, empire, 159; in China, 225, 245, 252, 253, 283-84, 286-90, 399, 569n44, 570n62; 257, 394-95, 397, 407-10, 417, 433; conquests by steppe invaders, 274, comparing post-Roman Europe to Chinese Period of Disunion, 254-58; in 276–79, 563n30; defined, 531; Europe and, 290-94; India and, 295-98; Iran and, England (post-1500), 379; in Europe 298-301; Levant and North Africa and, (post-1500), 368-70, 579n65; in 302, 333; on polity size, 306; proximity as Habsburg territories, 202; in Mongolfactor in empire formation, 13, 271-72, controlled Russia, 189; in Mughal empire, 417; in Muscovy, 292; in 273–74, 275; Rome's limited contact with steppe warriors, 571n80; shadow empires Netherlands, 369-70, 579n65; in and, 277-78; size of steppe empires, 32; Ottoman empire, 206, 417, 565n73; in South Asia and, 295–98; Southeast Asia post-Roman Europe, 234–39, 254, 257; and, 303-4. See also Mongol empire religious exemptions and, 315-16, 319, Strabo, 85, 601n39 320; in Roman empire, 61, 64, 72, 80, 81, 225, 234, 235, 506; in Umayyad caliphate, Strayer, Joseph, 241, 514 Sui empire, 281, 284, 289, 319, 397 143, 146, 148, 255 Sumerian empire, 543n7 Teutonic Order, 175, 292 Sunni-Shia rift and competition, 145, 207 textile industry and trade, 386, 415, 423-25, Sweden. See Scandinavian polities 491-93, 581n115, 588n10, 597n60. See also cotton industry and trade Syracuse, 91, 92, 93, 103, 109, 222, 549n3; in counterfactual to Roman empire, 113, Theodosius I (Roman emperor), 315 114, 116; troop numbers for, 551n30 Thermopylae, 99, 550n10 Syria: Council of Chalcedon (451) and, 133; Thirty Years' War, 200, 269, 417 Parthians annexing, 601n36; Sasanians Thomas, Robert, 380, 569n46 annexing, 135 Thracian languages, 311 Syrian Wars (274 to 101 BCE), 96, 550n14 Tilly, Charles, 63, 67, 232 Timurid empire, 296, 301, 563n30 Toltec empire, 46 Tabellini, Guido, 585n199 Taiwan, 260, 402, 443, 445-46, 468 Toynbee, Arnold, 116, 117, 553n12 Tang empire, 229; An Lushan rebellion trade. See specific countries and empires (750s), 286; commercial development Trajan (Roman emperor), 86 in, 397; conflict during, 289, 411; transformative developmental outcomes, Confucianism in, 322; decentralization 501, 587n219; causes and trends of, 8-11, during, 230, 252; duration of, 43; 495-500; demography as factor in, ecology and, 280, 281; Huang Chao 497-99; ecology and geography, effects uprising (late ninth century), 286; of, 501-2; Western exceptionalism, avoidance of, 502. See also ecology; First imperial state formation in, 44, 228, 251, 284-85; positive effect on Chinese Great Divergence; geographic

constraints and differences; Great Escape; Second Great Divergence Treaty of Meersen (870), 353 Tuoba clan, 242, 246–47, 284, 287, 563nn47–48 Turchin, Peter, 271, 275, 279, 280, 295, 569n46, 573n102 Tvedt, Terje, 499

Uighurs, 174, 285, 287 Umayyad caliphate, 139-44, 140; Arab forces of, 142-43; compared to Roman empire, 213; conflict with Central Asian Turks, 301; demise of, 144, 150, 155; imperial consolidation under, 38; inability to maintain a large-scale empire in Europe, 147-48, 153, 267; integrity of ruling class in, 214; interregional rivalries among armies of, 144; naval blockades of Constantinople by, 135; overseas exploration not of interest to, 432; population of, 219; revenue collection in, 233; taxation in, 143, 146, 148, 255; tribal structures as limitation of, 143 United States: American Civil War, 427; American Revolution and independence, 376, 589n20; Bourgeois Revaluation in, 490; cotton exports to Britain from, 425, 427; transformative economic development in, 2 universities, founding of, 475, 485 urban development: autonomy of cities, 345, 353-55, 577n28; in China, 394, 397-98, 442; in England, 371, 373-74, 581n99, 597n64; growth correlated with, 356-59; Protestantism and, 477; in Roman empire, 504; Roman road network and, 576n8; urbanization rates in Europe (post-1500), 371–76, 373–74, 580n82

Vandals, 132, 134, 135, 138, 153 van Zanden, Jan Luiten, 375, 496, 515, 585n185, 589n19, 597–98n73, 598n81 Venice, 55, 58, 189, 206, 355, 369, 377, 430, 439, 450, 509 Vespucci, Amerigo, 440 Vietnam, 185, 192, 230, 267, 303, 306, 437, 457 Vijayanagara empire, 297 Vikings, 157-58, 161, 430, 465 Visigoths, 132, 134, 135, 137, 138, 140, 148, 153, 239, 317, 349 Vladimir the Great (Kievan ruler), 291 Voigtländer, Nico, 499, 598n83 Voltaire, 474 Voth, Hans-Joachim, 499, 598n83 Vries, Peer, 344, 391, 406, 497, 538n13, 539n22, 567n26, 576n7, 579n63, 582n131, 596n42, 596n44, 596n58

Wallerstein, Immanuel, 420, 440 Wang Anshi (Chinese chancellor), 405 Wang Mang (Chinese regent), 405 war and development, 9; England (post-1500), 382-90; European, 357-59, 579nn61-63, 586n207; financial development and, 368-69, 411, 581n102; increase in state capacity allowing for interstate conflict, 391; Roman empire and, 70-74, 79-82; social responses to warfare, 14; war-making capacity, 6-7. See also military mobilization Warde, Paul, 537n8 War of the Spanish Succession, 208, 209 Weber, Max, 23, 491, 596n58 Weingast, Barry, 380 Western Europe. See Europe Western Zhou. See Zhou regime West Francia, 157, 158, 164 Wickham, Chris, 241, 539n23, 578n59 William the Conqueror (English king), 239 William of Orange, 203, 208-9 Wittfogel, Karl, 264, 566n11 Wong, Bin, 358, 389, 396, 413-14, 493, 495, 496, 586n215, 597n60, 597n71, 598n85 World War II, 12, 41

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670 INDEX

Wrigley, E. Anthony, 598n79 writing. *See* language and writing

Xerxes I (Achaemenid king), 112, 432 Xianbei, 242, 244, 246–48, 255, 280, 284, 289 Xiongnu, 174, 242, 244, 246, 251, 255, 283–88, 570nn53–54

Yates, Robin D. D., 583n157 Yuan empire, 229, 281, 403, 507 Zhao, Dingxin, 393–94, 412, 583n144
Zheng Chenggong, 445
Zheng He (Chinese eunuch), 433, 439, 445, 468
Zhenzong emperor, 241
Zhou regime: demise of, 221, 222, 570n52; in heyday of empire, 281; language and writing in, 308; religious beliefs in, 319; steppe effect in, 282, 285, 286; unity as concept in, 323
Zoroastrians, 207, 317
Zwingli, Ulrich, 474