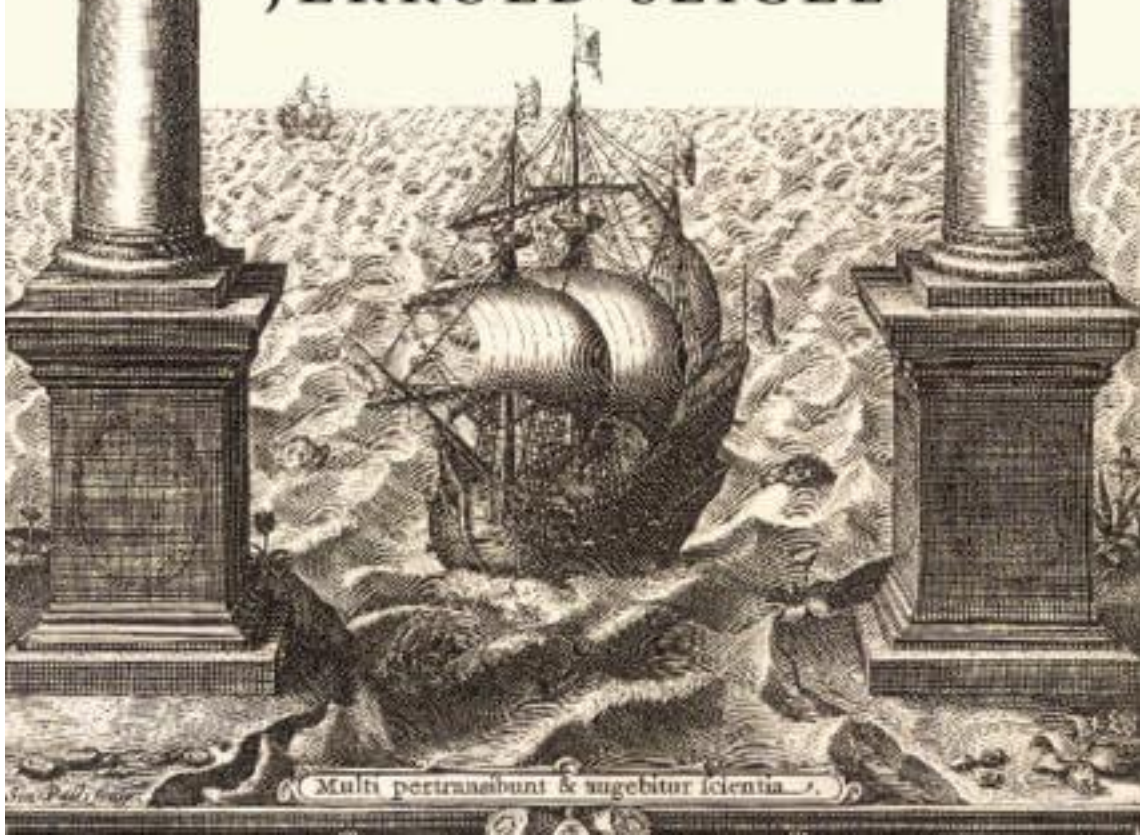# REMAKING the WORLD

European Distinctiveness
and the Transformation of
Politics, Culture, and the Economy

JERROLD SEIGEL

Multi pertransibunt & augebitur scientia.

REMAKING THE WORLD

How should we understand Europe's special role in world history, and the enduring impact it made on the rest of the globe? Jerrold Seigel traces both the positive and negative sides of the continent's distinctiveness to its absence of effective central authority, the division and competition between its states and peoples, and its propensity for developing autonomous spheres of activity. *Remaking the World* analyzes how these features fostered Europe's characteristic preoccupation with a politics of liberty, its evolution of an aesthetic sphere animated by values specific to itself, its singular capacity to revolutionize scientific understanding, and its ability to bring about the first transition to a modern industrial economy. Extended and substantive comparisons with Africa, India, China, and the lands that came under the rule of the Ottomans demonstrate the absence of similar phenomena elsewhere, whereas in Europe they also helped generate the malign force of imperial expansion.

JERROLD SEIGEL is the William R. Kenan, Jr., Professor of History Emeritus at New York University. His work ranges from intellectual and cultural history to the evolution of society and politics. Previous publications include *The Idea of the Self: Thought and Experience in Western Europe since the Seventeenth Century* (2005), and *Modernity and Bourgeois Life: Society, Politics and Culture in England, France, and Germany since 1750* (2012), which won the 2014 Laura Shannon Prize.

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New York University

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Introduction

No issue in world history looms larger than coming to terms with the roles Europe has played in it. In the course of achieving – and then losing – dominion over most other parts of the earth between the sixteenth century and the end of the twentieth, Europe served as the chief agent of global unification, developing thicker and more extended webs of connection between distant points on the globe than had ever existed before, and making originally European ways of interacting with the world points of reference for cultures and peoples everywhere. These modes of practical and intellectual engagement included modern industry with its capacity to remake every corner of existence; a politics defined by concern with the sources, meanings, and limits of freedom and equality; the revolutionary reconceptualization of the cosmos and nature from Copernicus to Newton (and on to Darwin, Einstein, and beyond); and the evolution of contestable but still deeply influential modes of collective and individual self-understanding in the fields of history, anthropology, psychology, and the arts.

One does not have to be a follower of Karl Marx to think that he gave probably the best summary of the difference this compound of new powers and practices made, when he said of the metamorphosis taking place as European influence spread through the world in his lifetime (attributing it too narrowly to "the bourgeoisie") that it revealed for the first time "what human activity can bring about." He knew of course that people in other eras and places had established great empires, constructed populous and imposing cities, produced beautiful and useful objects of many kinds, as well as imaginative systems for understanding the world and themselves, but he had something else in mind: an increasingly palpable capacity to transcend all these achievements, to subject them to being constantly undone and remade. Whether or not Marx was right to locate the core of this power in the sphere of economic production and exchange, he understood that other domains made their contributions to it too. Suddenly rendered visible in the age of multiple revolutions that began in the last half of the eighteenth century, the human potential for ongoing transformation was giving birth to a form of life in which "all that is solid melts into the air, all that is sacred is profaned," and

"man" was forced to confront "his real conditions of life and his relations with his kind."[1]

To affirm humanity's power to remake its world in this way came easily to our nineteenth-century forbears, but it gives us pause today. One reason is that we have become so painfully aware of the dark side of unleashing it. The human potential to remake the world is also a capacity to afflict and deform it, run rampant in catastrophically destructive wars, in malign instruments of oppression and inequality, and in the appalling record of damage to our planet. Marx recognized this other side in his accounts of working-class immiseration and the dehumanizing suffering it brought, together with imperialist devastation of other cultures, as his far less radical teacher, G. W. F. Hegel, did by describing the history that spread the benefits of freedom as simultaneously a "slaughter bench," a repeated scene of violence and suffering. Europe has played a singularly large part in calling this dark side into being, and so strong has awareness of it become that one influential current in historical practice today is content to let Europe's positive role recede into the shadows, so as to make the negative one stand out. Such writing provides a valuable corrective to the many triumphalist accounts that long held the field, but no history of these matters can be adequate that does not keep both in sight at once, recognizing them as two faces of the same unchaining of human powers.[2]

The question of why Europe became so central to this release has been posed by many writers, a number of whom have come together around an answer that is also the starting point for the argument that will be pursued here. This is the failure, once Rome had fallen, to establish the kind of central authority that operated in the great empires with which Europeans came to have close relations – the Arab and Iberian lands dominated by a succession of Islamic dynasties, Mughal India, and Imperial China. Europe contained rulers and states that aspired to such dominion – Emperor Charles V in the sixteenth century, King Louis XIV of France in the eighteenth, Napoleon, Hitler – but their ambitions were never more than briefly realized, leaving the continent fragmented and divided, a field for the emergence of multiple centers of power and loyalty, destined to develop competitive and mutually stimulating relations with each other. Recent writers who follow this line include Walter Scheidel, in a remarkable book to which we will return in the last part of this one, who locates himself in "a long tradition of scholarship that has invoked fragmentation and competition as an important precondition or source of European development," and Peer Vries, in the best critical discussion we have of the many and diverse explanations proposed for the rise of modern industry, who points to the "non-monopolization but at the same time close interaction of the sources of social power, between and within states" as "the fundamental cause of the rise of the West in all its varieties." Others who have worked along similar lines in highly valuable studies include E. L. Jones, John Hall, David Landes, Jared Diamond, and Philip Hoffman.[3]

The feature that most immediately sets the discussion that follows apart from this existing literature is the latter's chief, in some cases exclusive, concern with the emergence of modern industry and the forces it unleashed. Such an emphasis is justified on the important ground that it was the West's greater material strength that allowed it to dominate and oppress other peoples over some four centuries, and that the new economic regime made the West far wealthier than any other region, providing a level of well-being for its population significantly above what had existed anywhere before. (That it also brought new forms of immiseration makes one uneasy with Peer Vries's titling his account of it *Escaping Poverty*.) But it is a chief thesis of this book that European distinctiveness needs to be understood in a broader way, extending to many other domains of activity, as the scope of the formula "what human activity can bring about" suggests. What taking this broader view will show, I think, is that much of Europe's history, both before the rise of modern industry and over a wider range of spheres, has been similarly distinguished by the release of previously obscured or occluded human powers, often unwelcome to established authorities and to most ordinary people as well. These spheres displayed, in their separate ways, a pattern akin to what Joseph Schumpeter (adopting a term first used by Werner Sombart) called the "creative destruction" brought by modern industry. That this release and testing of human powers occurred to some degree in many realms of activity gave European society as a whole an unusual spirit of openness to change that would nurture the imagination and ambition of those who initiated the turn to modern industry.

The book that follows is arranged so as to focus on four main arenas where Europe developed this capacity to give freer rein to human potentiality: politics, more specifically the politics of liberty, in Part I; culture, in the forms of religion, intellectual life, aesthetic practice, and science in Part II; imperial expansion in Part III; and the rise of the modern industrial economy in Part IV. In Parts I, II, and IV, major European ways of cultivating and managing these activities are compared with their counterparts elsewhere (no other world region having ever engaged in so far-flung a project of expansion and domination). In no case, to be sure, do I make any effort to deal comprehensively with these domains, focusing instead on what I argue were revelatory or decisive moments. In every case the absence of a central directing authority makes itself felt as the underlying ground out of which Europe's distinctiveness emerged, beginning with what I call the preoccupation with liberty that Europeans conceived during the Middle Ages, which has endured through its whole history, and which it transmitted to North America. To be preoccupied with liberty is not the same thing as to be in possession of it, and the liberties some Europeans celebrated and defended were often contested by powerful elites, limited or truncated by class and gender divisions, as well as betrayed and denatured by being made to provide justification for one or another form of

domination. All the same, this preoccupation meant that Europeans at many social levels cared about and pursued liberty to a degree unmatched anywhere else over many centuries, and its broad presence in European civic life makes our attempt to trace out some of its turnings in Chapters 2 and 3 into a kind of exemplary history of European politics between the Middle Ages and the era of the French Revolution. Experiences of liberty were by no means alien to peoples elsewhere, but (for reasons I will try to examine in Chapter 4) they seldom conceived of them as instances of liberty, so that it did not become a touchstone for social and political relations.

But Europe's ability to play its special role depended on a second distinctive feature of its history, beyond the region's freedom from effective central authority. This was the emergence there of spheres of activity characterized by a certain species of collective autonomy, akin to liberty, but not identical with it. In order to function coherently, any domain where groups of human beings carry on some common pursuit must be guided by a set of rules or norms; a sphere is autonomous, in the sense we use the term here, to the degree that the principles which regulate it are derived from the main endeavors carried on within it, and are intended to promote those efforts, as opposed to bringing them into harmony with some other, putatively "higher" set of norms. We name this second mode of organization "teleocratic," borrowing from the Greek roots *telos*, meaning a purpose or goal, and *kratos*, power. It denotes the situation that prevails when a sphere is regulated by ends or aims external to it, whether imposed by some outside authority or internalized by those who work within it, or both. The activities of a teleocratically regulated area are regarded as legitimate only to the degree that they support, or at least do not undermine, those externally defined aims. Autonomous spheres have a goal too, but it is the more open one of fostering and promoting the activities carried on within them; they are therefore more concerned with developing the means that sustain those pursuits, whether they be material, political, or cultural.[4]

Thus an economy is teleocratic to the degree that it is regulated so as to support, or at least not to undermine, an existing form of social or moral order, and autonomous when it is governed by principles (in Adam Smith's way, for instance) intended to promote production and exchange, and thus to sustain and improve the material well-being of the population it serves. Science has a teleocratic character when it is governed by norms derived from religion, tradition, metaphysics, or common sense, and autonomous to the degree that those who work within it are free to develop ways of understanding nature that are unrestricted by such limits, their work judged according to its capacity to acquire and improve the particular kind of knowledge they pursue. We will come to the forms autonomy takes in other domains later on. To be sure, just what these principles are can be contested, but to the degree that a sphere is

governed autonomously such arguments take place within it, not between it and some external one.

A sphere regulated autonomously is not necessarily more beneficial to the society in which it operates than one governed teleocratically, but it is likely to function more efficiently and open up more possibilities for those who work within it, including the potential to reorient the work its members carry on. Nor are people who operate in such spheres necessarily exempt from control by others; on the contrary, being regulated by principles is itself a restriction, and the social, generational, or gender-based divisions within a sphere are likely to impose others. The domains within which this kind of autonomy developed in Europe, beginning in the Middle Ages, all initially acknowledged some degree of teleocratic control over their activities, and because they did, they long remained – and in some degree still remain – mixtures of both kinds of principles, often in tension with each other. The spheres considered in Part II belong to the domains of religion, culture, and science, but the same distinction between autonomy and its opposite lies at the heart of the argument developed in Part IV, about why Britain alone provided the original site for the turn to modern industry during the eighteenth century.

I am not the first to employ the notion of autonomy to refer to the way certain activities are regulated, and the explicit definition offered here may only be an extension of what others haves implicitly understood.[5] But both Parts II and IV of the book employ the opposition between autonomous and teleocratic principles to construct an extensive and systematic comparison between developing European ways of understanding and organizing intellectual, cultural, and practical activity, and those that prevailed in other places; in some cases we pursue the same contrast, remembering that it is relative, within Europe itself. Proceeding in this way has two advantages: first, it helps to recognize the existence of similar developmental issues in arenas devoted to different concerns or pursuits – for example the Church and science, or the economy and aesthetics; and second, it aids in identifying the underlying conditions for establishing autonomy in any of them.

We will see that two such grounds favored the development of autonomous spheres in Europe. The first was the already mentioned absence of effective central control, which meant that individual domains were not impeded from evolving their own principles to the degree that their counterparts were elsewhere. Particular spheres were organized hierarchically, but their integration was much weaker than in China or the Islamic world, opening up the possibility that one domain could be played off against another. By the late seventeenth century this advantage was helping to give birth to a second: people with common interests who were seeking release from outside control worked to foster the emergence of horizontal connections that competed with the vertical ones that enforced traditional norms, and over which they could exert some degree of control themselves. These ties served as a means both to

further their shared pursuits and to seek support from interested outsiders. In both cultural and scientific spheres, this shift led to the development of a "public," to whom appeals were made to replace the judgments of traditional authorities (Newtonian science announced itself as explicitly "public," as we shall see). The corresponding development in the economy was the extension and thickening of market ties, creating networks of producers and consumers whose needs or desires could acquire more weight against the political and moral authorities that had long sought to regulate them, thus giving freer rein to the transformation of productive techniques. In these ways the spread of autonomous spheres became a chief distinguishing feature of Europe as a civilization. Making the coming of modern industry one instance of this larger phenomenon in no way lessens its overall importance, but the notion of autonomy will allow us to understand its emergence in terms that link it to the development of other spheres.

This book is also unlike other discussions of its subject by virtue of the more detailed attention given to the ways these activities were carried on elsewhere. I have tried to develop comparisons on this basis; first, in order to treat matters outside Europe with the respect all human cultures deserve; and second, to show that the ways of thinking and acting we describe as singularly European really were. Thus substantial effort is devoted to developments in China, India, and the largely Islamic areas that came under the dominion of the Ottomans. Africa also enters into our story at certain moments, but less prominently. It should be remembered, however, that this is primarily a book about European distinctiveness, and I do not claim to give equal attention to other parts of the world. My ability even to pursue these comparisons responsibly is limited by my having devoted my career until now almost entirely to European subjects, and by my lack of any of the languages necessary for a serious engagement with Asia or the Near East. Claiming no real expertise of my own, I have tried to draw on that of others, seeking to acquire enough knowledge and understanding to sustain the comparisons I try to pursue, and restricting their scope and aspirations in accord with the materials I am able to bring to bear on them.

Because my reading in the rich body of secondary literature (along with translations of a few primary texts) has sustained my conviction that the trajectory of European development has long diverged significantly from that of any other world region, and that this contrast has made Europe the only site from which the list of singular contributions to world history (both positive and negative) given at the start could have emerged, a certain part of the discussion that follows is aimed at refuting the claims of those who seek to deny or minimize these differences. This confrontation is explicit in regard to the topics dealt with directly in the text: the uniqueness of what I call the European preoccupation with liberty in Chapters 2, 3, and 4; the distinctive institutional setting of European intellectual and cultural life and its consequences in Chapters 5 and 6; the similar situation of science in Chapters 7 and

8; and the social and historical preconditions for the beginning of modern industrial innovation in Britain in the second half of the eighteenth century in Chapters 12 through 14. In all these instances, but especially in regard to science and industry, I offer specific reasons why we should not be persuaded by some recent writings which assert that other places, specifically China and India, were no less well prepared than Europe to bring about the transformations it initiated – had certain accidental circumstances not been present – so that Europe's primacy owed little or nothing to elements that gave a special quality to its form of life. It is just this special quality that I think we can understand by examining the contributions that the absence of effective central direction and the emergence of autonomous spheres of action made to it.

But the question of whether Europe possessed such a distinctive character has been called into question in broader and more general terms by an ongoing movement among historians that takes the name of global history or the "global turn." The designation does not refer simply to widening the subject of study – since attempts to write the history of the whole world are ancient and legion – but to a different perspective from which to approach historical subjects in general, including nations, regions, and localities. Whereas more traditional attempts to understand, say, China, India, France, London – or in the current case Europe – commonly begin from within their subjects, seeking to identify features specific to them and that in some degree have given shape to their development, and making comparisons with other entities on this basis, "global turn" historians emphasize the way different regions have all been affected by certain widespread conditions at the same time, and they sometimes employ a multilocal approach from the start, taking more than one area into view in order to highlight the similarities and interactions that make them all sharers in the life of a single planet. In this way no single country or region, and particularly not Europe, is able to occupy a central position in the story.

Thus one contributor to this school, David Motadel, points out that (at least since 1492) world regions have increasingly become hosts to animal and vegetable species originally confined to separate parts of the globe, that diseases such as plague and cholera attacked far-flung populations at nearly the same time, that migration between regions has long created mixed populations whose members both retained connections with their places of origin and became part of life in their new milieux, with the result that "European cultures, like all cultures, developed in relation to complex processes of appropriation, adaptation, and hybridization." European imperial expansion was sometimes facilitated by already existing conflicts between indigenous groups, so that non-European peoples were active participants in early modern globalization too, contributing to the situation in which the more powerful Europeans were able to impose domination and enslavement on others, and to

develop the racist thinking that justified their actions. Thus other peoples contributed to European expansion and the growth of worldwide commerce that was the setting for the industrial transformation that began in the eighteenth century, while also putting financial and political pressure on European states that contributed to the crisis that brought down the French monarchy, opening the way to the Revolution.[6]

Not all these observations are original to the global turn (nor do all who take it claim them to be), and this book will offer many reasons for questioning Motadel's assertion that European historians who do not take this turn are prone to regard their continent's history as "hermetically sealed." But first we need to recognize that the global turn has brought significant gains for historical understanding, of which the first has been to remind us of how provincial and unself-critical much traditional writing on Europe's place in the world has been. Most Enlightenment accounts of world history focused on Europe in a way that exhibited no doubts about its overall superiority to other regions. (However, it should be remembered that, as we will note later on, the earlier primacy of both Arab science and Chinese civilization was widely acknowledged and even celebrated, their subsequent retardation attributed in the first case to the loss of vitality that ensued as formerly enjoyed political liberties were taken away, and in the second to the oppressive burden of a deeply rooted and officially sponsored traditional culture, not to any innate or genetic inferiority.) And nineteenth-century historical writing developed in close connection with the rise of nationalism, state consolidation, and imperial expansion, leading much of it to take on a chauvinistic and sometimes racist character. (However, an unqualified emphasis on these connections risks casting a veil over the degree to which – as we will also note later – all these developments were contested and resisted, first by eighteenth-century assertions of the right of every human group to work out its own form of life in response to the particular conditions it faced, and then by liberal and socialist internationalists and anti-imperialists in the nineteenth century.)

But whatever credit the global turn deserves for giving new emphasis to these limitations and defects, awareness of them did not begin with it, nor must one take this turn in order to escape falling into the pitfalls to which earlier writers succumbed. I believe that the pages that follow avoid such risks in three ways, none of them impeded by our initial focus on Europe. First, seeking the roots of European difference in the distinct structure of its political, socioeconomic, and cultural relations – the absence of effective central authority and the spread of spheres of autonomy – precludes attributing causal power to any supposed European genetic or biological superiority (faith in which has by now happily become the property mostly of fringe groups anyway), because rooting European distinctiveness in such differences implies that any world region whose overall form of life had been organized along the same lines would have been in a position to enable the same release of human energies. All

human groups begin with an equal capacity for such release; how and how far they develop it depends – to begin with – on the different ways in which their forms of life come to be organized.

Second, in contrast to many other attempts to understand European difference, the one pursued in this book does not attribute it to some set of distinct social or cultural values. I make no case for the causal significance of such ideals as Christianity (or "the Judeo-Christian tradition"), secularism, rationalism, Enlightenment, individualism, or democracy. To be sure all of these became significant elements in European life, and shaped its manner of distancing itself both from other peoples and from its own past, but they did so within a context where attempts to establish a unitary central authority or impose some single set of principles were stymied by the multiplicity of competing claims and agents. Had any one of these achieved the (albeit incomplete) degree of dominance that Confucian or Islamic principles did in their home areas, Europe could not have developed as it did. The deepest roots of the continent's ability to play the special role in world history we have been outlining here lay not in the ascendency achieved by some single value or set of them, but in the unwilled circumstances that stood against any of them attaining it. This blockage obtained no less in regard to the principles and practices of liberty and autonomy that figure so prominently in these pages than to the authoritarianism, monarchy, orthodoxy, tradition, and resistance to change that stood in opposition to them; because it did, the two opposing sets of values not only both survived, but found energy in struggling against each other, thus giving birth to modern conservatism and providing fuel for the emergence of totalitarianism in the twentieth century. Nor should we forget that advocates of liberty and equality, put into positions of power, have established regimes that betrayed their principles too.[7]

The third way I think this book avoids the pitfalls into which earlier accounts centering on Europe sometimes fell is by the (already mentioned) expanded attention we give to other peoples and cultures. One purpose of this attention is, to be sure, to strengthen the argument for a certain kind of European singularity by basing it on an informed and responsible consideration of its "others." But I hope that fair-minded readers who follow the presentations here of Chinese artistic, scientific, and economic achievements, Muslim political culture and philosophy, or Indian aesthetics and artisanship, will recognize the degree to which these accounts affirm the high level at which these were carried on. The European distinctiveness for which these comparisons argue is never intended to suggest the inferiority of what people achieved elsewhere, but only the larger openings for "creative destruction" made possible by the singular structure and character of European life. In Part I no claim is made that Europe had any kind of monopoly on the liberty with which its inhabitants became so preoccupied. The "other liberties" examined in Chapter 4 were no less genuine, within their context, than European ones,

and in some ways more extensive (as some nineteenth-century European observers pointed out); what did not develop outside Europe, before its power and influence spread, was the highly elaborated and explicit concern for liberty that was so widely diffused there. In Parts II and IV, Chinese art and science, Arabic astronomy, and Indian craftsmanship all appear as anything but inferior to their Western counterparts; what they did not exhibit was the proclivity for questioning, undermining, and recasting their own culture's basic traditions and practices – the opening toward "what human activity can bring about" – that was Europe's distinctive mark.

Because human society and culture has been increasingly shaped by this capacity for questioning and remaking itself, and because Europe was the environment in which this potential first found palpable realization, I think we must not let our determination to acknowledge what Europe shared with other civilizations veil the productive import of its distinctiveness. It is not easy to achieve a balance between these two imperatives, and to highlight why I think the global turn is not the best way to seek it, I will end the discussion of this topic with a brief consideration of what is widely acknowledged to be one of the – if not the single – most distinguished of contributions to global history of recent times, C. A. Bayly's *The Birth of the Modern World, 1750–1914*. A remarkable combination of seemingly borderless erudition and a passion to uncover unrecognized connections, Bayly's book ranges through all the continents and all the domains of human life. Shedding new light on the usual topics of industrialization, political transformation, imperialism, and ideological and cultural conflict, he shows how the world became increasingly integrated as powerful new technologies and changing forms of political organization accelerated the pace of change everywhere, drawing together formerly scattered networks of connection, making life in some ways more uniform, in others more complex and diverse. In both East and West, states dominated by military aristocracies existed alongside others controlled by royal bureaucracies, and reform movements in many places brought pressure for change, sometimes fomenting crises comparable to the one that laid the ground for the Revolution in France. Both commercial expansion and consumer desire for new goods gave vitality to Eastern economies, and Bayly argues that what Jan de Vries calls "the industrious revolution" – the growing involvement of worker and peasant families, especially in Britain and the Netherlands, in market-oriented work, in order to earn cash to buy personal and household goods – had counterparts in Eastern economies. In these and other ways central features of modernity whose roots have usually been supposed to lie solely in Europe appear in his book as global phenomena.

Bayly's decentering of Europe is far from total, however, not leading him to deny either its special role in world history or that long-standing features of its life underlay it. He warned that there are dangers in going "too far . . . in assailing the idea of the exceptional nature of European development," and

expressed a particular skepticism toward those historians, including some whose arguments we will consider in Part IV, who are unfazed by the improbability of explaining the "huge differentials" between East and West in productivity, power, and general well-being evident by the end of the nineteenth century on grounds that exclude any significant divergence in their starting points. Europe's advantages lay in "certain features of society and the state," rooted in "an economic and social context" that generated "significantly greater cumulative force for change than was the case in ... the rest of the world," giving the transformations that occurred there "more staying power than those of Asia and Africa." The context for this difference was threefold, consisting, first, of "relatively stable legal institutions" that protected both intellectual and material property rights; second, of sophisticated forms of financial organization (such as the Bank of England) that provided material support at once for the state and for the private economy, aiding the development of both; and, third, of the push given to the simultaneous development of financial and productive resources by the recurrent conflicts between states, a condition not present in the same way in the empires to the east. These conflicts fed both an ongoing search for better weapons, materials, and transport (together, to be sure, with a rising and often-employed ability to inflict violence on enemies), and a move to greater efficiency in all the activities that contributed to it, notably mining and metallurgy.[8]

Despite these qualifications, however, the overall tone and argument of *The Birth of the Modern World* remains firmly anti-Eurocentric, and a chief thing that keeps it so is the book's denial that Europe owed these advantages to any singular feature or features that made them all aspects of a recognizably different form of life, or that a general contrast between such forms was responsible for the diverse impacts that the similar phenomena he finds in European and extra-European contexts made in each. "Europe's temporary and qualified 'exceptionalism' was to be found not in one factor, but in an unpredictable accumulation of many characteristics seen separately in other parts of the world." Questions about whether there was anything distinctive about (for instance) the British economy or French political culture that made each of them play so singular a role in modern history never arise, an absence that serves at once to keep at bay the specter of one or another kind of "centrism," and to obviate the question of whether the diverse and widely separated phenomena he describes really were similar. But this question needs to be faced.[9]

The "industrious revolution" that Jan de Vries identified was important in Europe because it helped prepare for the more famous industrial one before any of the innovations that enabled the latter were on the scene. The large numbers of modest people, women in particular, who devoted more time to work outside the home in order to have cash to acquire desired personal and household articles, made in traditional ways and offered for sale in various

markets, added energy to the economy and provided a ready-made consumer base for industrial products once the new mechanized techniques were in place. The same cannot be said of the "fine handicrafts," elegant wooden furniture or porcelain objects purchased by middle and lower Chinese officials, or the precisely honed swords and ceremonial armor Samurai bought from Japanese artisans (all to be sure objects with claims to greater distinction than pots and pans or socks and underwear). Bayly himself recognizes the differences between the two cases, providing two pages on the "internal and external limits of Afro-Asian 'industrious revolutions,'" but by attaching the term to them he assigns them a capacity to diminish the distinctiveness of the European case that could only be justified had they been like their Western counterparts in preparing the ground for industrial transformation. This they were not.[10]

The problem is similar with Bayly's notion that because some reformers and intellectuals in the early modern East made reform proposals and engaged in correspondence with each other about them, "the fabled 'Republic of Letters' of eighteenth-century Europe had analogues elsewhere." Here too Bayly recognizes the limits of the analogy, admitting that the early modern West developed "a density of civic institutions outside the state" unmatched elsewhere; but he does not take note of the specific features of the Republic of Letters that its Eastern counterparts lacked – that its activities crossed national or state borders (the Eastern intellectual linkages he cites were all within a single country, China or Japan or what became Saudi Arabia), that it conducted its exchanges by way of widely circulated periodicals and not just private correspondence, giving it a singular public presence and stability, and that (as we will see later on) it explicitly sought to become a site for undermining local or national prejudices and a vehicle for pursuing generally recognizable truths.[11]

In making these points, I do not mean to detract from the high quality of Bayly's work (I rely heavily on his accounts of Indian history in what follows) or diminish his achievement, but to suggest that his determination to question the distinctiveness of Europe's role draws him perilously close to the trap Raymond Grew identified as set for itself by anti-Eurocentric global history, namely, that the desire to emphasize commonalities over contrasts may create a temptation to "privilege any evidence of interconnectedness, no matter how bland, over distinctiveness, no matter how creative."[12] I think that some of the juxtapositions proposed by other global-turn historians, including some cited a few pages ago, also constitute bait for this trap.

One final issue raised by these historians, but also worthy of attention on its own, has to do with just what it means to speak about Europe as an object of study. Like many other terms in the everyday language used by most historians, it does not always mean the same thing, referring sometimes to a geographical space (whose boundaries are not always subject to agreement); to the human environment – roads, buildings, cities, agricultural installations – constructed by

the peoples who inhabit it; sometimes to those peoples themselves or the institutions, values, or qualities thought to characterize them; and in each case either to the whole or only some part of what constitutes Europe in each of these senses – all depending on the particular context. Recognizing this fluidity can become grounds for skepticism about whether "Europe" can be identified or studied at all.[13]

Such doubts might be well founded in the case of an attempt to write the continent's whole history, since the many choices to be confronted could be bewildering, and the weight of all the relevant materials crushing. But hardly anyone writes history of this sort today, and similar doubts might be raised for many other entities – countries, cities, even universities. The particular subject of the current book is not Europe as a total entity over time, but European distinctiveness, considered in relation to the singular release of human energies that (I argue) it made possible. It is not necessary for the purpose of this inquiry that the features I posit as creating this distinctiveness exist in equal measure in every part of Europe, only that they were sufficiently present in enough places to enable the changes I try to describe. That they were more present in the western part of the continent and that more of the story the book tries to tell took place there, in contrast to the Russian Empire where neither was the case, explains why Britain, France, Germany, and Italy bulk large in our story while Russia seldom appears in it. Another way to say this would be that the Europe that is the chief subject of this book is a historical phenomenon, not a geographical one, just as are all the extra-European places that figure in the story, each one constituted by the interaction of the people who inhabited it with the conditions that both made and were made by them. For similar reasons, the book has no clear chronological boundaries, homing in at widely separated moments when the themes and issues at its center make some kind of significant appearance.

I admit that I think there is much that is positive, and even something heroic, in Europe's revelation of "what human activity can bring about," but there is at least as much of tragedy in it, since the same unleashed energies that brought liberation from the bounds of traditional life also powered the already mentioned catastrophes of unprecedentedly destructive wars, environmental degradation, and imperialism. For this reason, I think there may be no better metaphor for the pages that follow than the ancient figure of Icarus, the mythical Greek who tried to soar into heaven on man-made wings but melted them by flying too close to the sun, fell into the sea, and drowned. So did Europe overreach itself and humanity pay the consequences. But inside the sad tale of Icarus's fall lies a second story. His flight was enabled by his more inventive and prudent father, Daedalus, a great architect and sage who was the designer and maker of the devices on which the pair soared upward. He neither yielded to the temptation to seek impossible heights nor perished on the flight, surviving to carry on his work in later days.

The Greek myth is a cautionary tale about how the powers humans discover in themselves can undo them, but both the capacity that made the flight possible and the vistas revealed by it remain as part of the story too. So also for the powers that Europeans let loose into the world. By recognizing the tragic and yet still generative quality of Europe's impact on world history, I hope to provide an alternative to two other narratives that shape much discussion of it today: the triumphalist one that merely celebrates Europe's achievements, and the anti-Eurocentric one that promotes the marginalizing of a story whose centrality to what the world and humanity have become we can only deny by closing our eyes to it.

PART I

Liberty and Liberties

2

A Preoccupation with Liberty

The idea that people are or should in some way be "free" has found expression in many moments of human history, but until late in the nineteenth century it figured as a goal to which individuals and society should aspire, and a subject of sustained historical and political reflection, only in Europe. This contrast began to preoccupy observers and reformers outside the West from around 1870, appearing to them as an important element in the larger set of differences that laid the foundation for Europe's worldwide ascendency. The conviction spread that Western forms of freedom had been essential to Europe developing both the material power that allowed it to dominate others and the scientific and technical understanding that underpinned it. This being so, other societies wishing to meet the European challenge would have to open up paths to greater freedom for their inhabitants too.

In his *Outline of a Theory of Civilization* of 1875, the prominent Japanese thinker and reformer Fukuzawa Yukichi argued that if his countrymen were to respond successfully to the challenge that burst upon them when Matthew Perry bullied his way into Edo harbor in 1853, they would need to absorb the "spirit" of Western life, one of whose central elements was liberty. Europe had been able to generate the energy and vitality on which its power rested because people there were not constrained by the kinds of hierarchical structures that permeated Eastern societies. This absence allowed them to enter into social and political relations in ways they could determine by themselves, and to create modes of interaction that served both to develop their individual talents and to generate energies that powered the development of society as a whole. No less important, they had benefitted from the "freedom to think for themselves" that allowed them to evolve better ways of understanding the world. It was this spirit that other peoples would have to develop in order to counter the challenge Europe posed to their place in the world.[1]

Three years after Fukuzawa published his book, an Ottoman diplomat visiting the Paris World's Fair of 1878 sent a correspondent this report:

> In front of the central gate there is a statue of freedom; she has a staff in her hand and is seated on a chair. Her style and appearance convey this message: "Oh worthy visitors! When you look upon this fascinating

display of human progress, do not forget that all these achievements are
the work of freedom. It is under the protection of freedom that peoples
and nations attain happiness. Without freedom, there can be no security;
without security, no endeavor; without endeavor, no prosperity, no
happiness."

Some years earlier, the Tunisian writer and political figure Khayr al-Din
(Hayreddjn Pasha), convinced that freedom was "the basis of the great devel-
opment of knowledge and civilization in the European kingdoms," explained
that for Westerners the term simultaneously conveyed two notions unfamiliar
in his own world. One was the "personal freedom" (*al hurriyya al-shakhsiyya*)
that consisted in "the individual's complete freedom of action over himself and
his property, and the protection of his person, his honor, and his wealth"; the
other was the "political freedom" (*al-hurriyya al-siyasiyya*) that lay in "the
participation of the subjects in the political affairs of the state." People in his
part of the world would have to learn to appreciate both senses if they wished to
shrink the gap between Europeans and themselves.[2]

We should not conclude from these pronouncements that freedom or
liberty was not highly valued outside Europe. One context in which love for
it was celebrated was in contrast to slavery, as exemplified by a Chinese
document from as early as the eighth century, recording the emancipation of
a group of unfree peasants. As translated by Mark Elvin, the text declares:

> [W]hen slaves are released to be free persons the mountains of felicity rise
> up high, and that when free persons are crushed down into servile status
> there is hatred deep as hell . . . When the fish who has been in captivity sees
> the open sea, he skims upon the waves. When the breath of spring touches
> the sleeping willow tree, it stretches aloft.

On these grounds and others, the persons named in the text were granted
"their liberation," which was to extend to "their sons and grandsons." Such
notions were not sufficient to do away with slavery, which remained a part of
Chinese life until at least the nineteenth century, although not in the brutal
forms it assumed in the West. But the felt opposition between freedom and
slavery was stark and total. The same was true in the Arab world, where the
antithesis seems to have been more often expressed, fed from the time of the
Prophet by a sense of the difference between what has been called the "rough
egalitarianism" of desert tribal life among the first Muslims and the hierarch-
ical spirit of the neighboring Persian Empire. But insisting on not being slaves
was not the same thing as examining the nature and implications of individual
or collective freedom: what forms it did or should take, how they were
sustained, and where its limits lay.[3]

A major testimony to the foreignness of such preoccupations to societies
outside the West is provided by the absence from their languages of
a vocabulary to describe them. The term for freedom in classical Arabic,

hurriyya, most commonly referred to a legal status, the freedom possessed by someone (presumably male) who was not a slave. In Sufi mystical texts the word's sense was expanded to encompass not being "under the yoke of created things," including wealth, rank, or ritual obligations, but such independence was a purely personal matter (even if extended to groups of holy men); it had nothing to do with the freedom to which Fukuzawa or Khayr al-Din appealed, which was a quality of society as well as individuals. The Tunisian, as we saw, needed to add complex glosses simply to make these dimensions of the term understandable to his co-linguals. Similar problems existed further to the east, where neither Japanese nor Chinese contained a term equivalent to the Western notion of freedom until Nakamura Masanao (a friend and associate of Fukuzawa) translated John Stuart Mill's *On Liberty* in 1871, rendering the title with a new term, *jiyu*. A compound of two existing characters, the new coinage testified to the difficulty of bringing the Western idea into an Eastern mindset, since *jiyu* literally meant self-centered behavior, a connotation at odds with the vision of free individual development as a source of social benefits that Mill developed in his famous essay. Masanao's term was taken into Chinese as *ziyou*, and then into other East Asian languages; nowhere had it appeared in classical texts (although a search in online dictionaries comes up with two examples from vernacular literature, where the meaning is close to "unconstrained"). In the Chinese document about peasant emancipation quoted in the previous paragraph, the term translated as "free persons" is *liang*, and that is one way to render it, but a more literal one would be "rightful commoner," a status usually contrasted with *jian*, a base person or slave, but not bearing all the overtones of "freedom." The linguistic distance from the West was equally great in India, where thinking about freedom was long tied up with the terms *muksa* or *mukti*, the first employed in Buddhist notions of freedom as disentanglement from worldly involvements, the second closer to the Hindu idea of deliverance from some kind of suffering or trouble. Neither bore any implication that freedom might be sought within ordinary temporal existence, which was seen as too replete with moral and material dangers to support it. As a recent Indian writer puts it, "true freedom meant disentanglement from the unending predicaments of daily human life, and was to be sought outside it."[4]

Given the contrasting perspectives suggested by these linguistic differences, it is hardly surprising that even advocates of European-style reforms such as Fukuzawa felt a deep ambivalence toward the Westernizing strategies they recommended, fearing for the survival of their own forms of life, and generating a repertoire of programs for preserving essential elements of them. As a result, the admiration people such as Fukuzawa and Kayr al-Din expressed for the European notion of freedom was often mixed with suspicion: not only did European liberty threaten values and attitudes of great moment in other

ways of life, the European idiom also provided a veil behind which the domination imposed on others could find cover.

* * *

But Europeans did not need outsiders to make them aware of these and other complexities in their appeals to freedom. By the time the three observers with whom we began this chapter spoke out on the subject, the idea of liberty had gone through centuries of evolution in Europe, leaving behind many legacies. This complex history of liberty unfolded in two phases, each corresponding to a different stage in the evolution of European division and fragmentation. The inaugural moment came with the emergence of "feudal" social and political relations in the early Middle Ages and lasted into the early modern period; the second developed as the consolidation of large monarchies that began to gather speed in the fifteenth and sixteenth centuries gave a different form to this segmentation. In both these eras, as we will see in the rest of this chapter, a characteristic feature of this preoccupation, one that testifies to its rootedness in the continent's divisions, was that it found expression in what we will call two distinct languages. One named liberty as a singular condition or quality, drawing on classical usage and eventually becoming the dominant modern form, as exemplified in the *liberté* that was the first component of the French Revolutionary trinity (equality and fraternity being the others) or the middle element of the "inalienable rights" proclaimed by the American Declaration of Independence (flanked by "life" and "the pursuit of happiness"). But the liberty many people cherished and fought to preserve in earlier centuries required a different idiom, because it was not singular but plural, an assemblage of separate rights or privileges, such as enjoying a degree of self-government or taking part in a ruling council, being exempt from a certain tax, being authorized to pursue some occupation or sell goods in a certain market, or being judged only in certain courts. Unlike modern freedoms of speech, the press, and assembly, which are all elements of an inclusive notion of liberty, each helping to sustain the whole that includes them all, these earlier ones had no such inner connections or symbiotic relations. They were not universal or innate but separately acquired (they could however be inherited), their origin attributed either to custom or to a grant or concession by some superior authority. Although rooted in "feudal" forms of rule, with their multiplicity of overlapping jurisdictions, this language was no less operative in many urban situations; and even where the singular idiom largely prevailed, as in many Italian towns and cities, the two were not felt to be at odds. The close association between liberty and privilege fostered by the plural idiom came under sharp attack in the eighteenth century, on the grounds that accepting liberty as a grant from some higher authority blotted out its true nature as a universal (to some, God-given) human right. But in a pre-democratic age it performed the

important function of constituting sovereign powers as in some degree self-limiting, one of their functions being to endow individuals and groups with a measure of control over their own affairs.

That both languages were widely employed was one reason why the pre-occupation with liberty became so pervasive. But its very diffusion kept it from becoming merely affirmative or celebratory. On the contrary, just because the concern about liberty grew to be so widespread, people soon recognized that it could become a rhetorical tool in political struggles, the freedom some claimed to represent serving as a cover for the oppression they imposed on others. The result was that alongside the high value placed on liberty there developed a skepticism that generated not only critiques of both rulers' and subjects' appeals to it, but also analyses, sometimes probing and subtle, of the complex interconnections between liberty and domination.

The first and for centuries last attempt to establish a European-wide political authority following the fall of Rome was the Carolingian Empire founded by the Frankish king Charles, crowned *Imperator Augustus* by Pope Leo III on Christmas Day in the year 800, and celebrated as Charles the Great or Charlemagne. By then the earlier *pax Romana* that imposed political unity on much of the continent was only a memory, its last remnants dissolved between the sixth century and the eighth, under the twin pressures of "barbarian" invasion and internal conflict and decay. Rome's progressive disappearance from the political scene and the persistent conflicts between Germanic tribes and kingdoms combined to eliminate any overarching public authority. Charlemagne seemed to lay the foundation for restoring it by establishing military dominance in much of Western and Central Europe, and he intended his coronation in Rome to mark him as heir to the caesars. But after his death in 814 his successors proved incapable of maintaining the unity he sought to embody. A more or less stagnant and impoverished Europe, still feeling the effects of the population movements and conflicts that contributed to Rome's decline, now became home to a multiform patchwork of mostly local entities, some rural and some urban, some religious and some secular, some dominated by individual people of high status and others constituted by collective bodies of less exalted folk.

But certain of these units bore the potential to develop into powers able to exercise control over larger areas. Some would become regional or national in scope: counties, dukedoms, monarchies. Especially in Italy, some cities would take on comparable positions. This turn toward a world of larger units only began after about 1050, as improved agricultural techniques and expanding trade encouraged population growth (the population of Western Europe is thought to have doubled between 1000 and 1300). The resultant increase in wealth gave aspiring rulers access to the material resources necessary to expand their dominions. The result would be a situation in which territorial powers of various sizes, all seeking to develop ways to strengthen themselves in their

competition with others, had to interact with smaller units that had secured some kind of independent status earlier. It was within this situation that freedom would first emerge as a widespread European preoccupation.

Of the forms of fragmentation, the one with the greatest potential to contribute to later consolidation, but which also constituted a focus of resistance against it, was vassalage. Vassals were persons bound to some lord by personal ties in the form of ceremonial oaths and pledges of military and political support, in exchange for which they received protection and privileges. Forms of personal dependency much like vassalage existed earlier and elsewhere, but with the difference (as Jenö Szücs points out) that they generally coexisted with or formed part of relations between sovereigns and subjects. In post-Carolingian Europe, by contrast, they became the chief form of those relations, filling up most of the space we usually consider political. Charlemagne was instrumental in spreading the web of vassalage, by giving his own vassals significant roles in government, and encouraging others to become vassals of them in turn. He also extended the practice, not at first inherent to vassalage, whereby vassals received – or were confirmed in their possession of – fiefs: lands over which they exercised control, and where they could maintain cadres of followers, some of whom were their vassals, some simply retainers. The failure of Charlemagne's successors to maintain his imperial project turned the web of personal relations between lords and vassals into a substitute for central authority rather than an instrument of it. As territorial rule began to recover after 1050, even kings, often quick to enhance their power with legal language that characterized their authority as public rather than private, often exercised their control less as sovereigns than as suzerains, the topmost figure in a chain of vassalage. Much later this whole system came to be known as feudalism.[5]

The central role played by vassalage and the fief (in Latin *feudum* or *feodum*) in medieval politics led people to speak of liberty as both a quality belonging to certain persons or groups, and as a territorial entity. At its base, as Alan Harding emphasized in a seminal essay, a medieval liberty was a "territorial immunity," an activity or place freed from certain obligations that a lord might impose on it. The term had Roman roots, referring to the exemptions from certain taxes or duties granted to large landowners. Medieval usage echoed this Roman antecedent, making liberty first of all a negative quality, exempting some territory, or those who controlled or inhabited it, from taxes or services, from the jurisdiction of a certain court, or simply from direct governance by outside authority. From the start, however, this primarily negative liberty took on a positive face, because the powers ceded by the lord devolved in practice on those who received the exemption. Thus the term liberty could acquire a territorial sense, referring to an area that possessed some defined set of rights to govern itself.

The usage long survived; one example was the "City and Liberty of Westminster," the name given to the governing body in the part of London that contains the famous Abbey and the Houses of Parliament; it operated between 1585 and 1900, taking over functions that had been carried out earlier by the Abbey itself, dissolved like other monasteries in the Reformation. When William the Conqueror founded the "Abbey and Liberty of Battle" to commemorate the victory he won in 1066, what he accorded the monks who lived there was freedom from certain "labors, services, charges or burdens" they had previously owed to the local bishop. But by taking away the latter's power to impose such obligations in his diocese, William effectively created an administrative and judicial vacuum that the Abbey filled, not just for its own members, but also for the peasants and smallholders in its district (such ecclesiastical holdings expanded as medieval people donated land to the Church). It held courts, extracted resources in the form of agricultural products, fees, taxes, and services, and provided various forms of protection in return. As Harding concludes, "Grants of territorial liberty were in effect grants of public powers of government." That this was the case often makes it difficult to distinguish between a liberty in the sense of an immunity or privilege and a Liberty in the territorial sense.[6]

The first beneficiaries of territorial immunities were religious communities; they were "the natural, and at first the exclusive, recipients of such privileges," partly because the Church, as the chief custodian of literacy, was also the main preserver of Roman traditions, and partly because it already possessed the semblance of a hierarchy (albeit much less clearly structured than it would later become), from which people or groups "might wish to be free." The earliest example of a *privilegium libertatis* Harding has found, issued around 700, is a grant to an abbey from a bishop, exempting its monks (in the same way, the text notes, as other monasteries – Battle Abbey would later inherit the model) from paying certain fees, and promising that the bishop's agents would not enter the abbey's lands. The liberty was then confirmed by the king, who promised in addition that his judicial officers would not intrude on the abbey's domain either, so that no "public judicial power" (*publica judiciaria potestas*) would interfere with its liberty.[7]

But religious entities were not the only bearers of collective liberty; secular communities were endowed with it too. The most famous examples are the urban communes that became increasingly prominent all over Western Europe from late in the eleventh century. In much historical writing the communes and the form of liberty they sought have appeared as the creations of a new class of townsmen, an alien bourgeois presence in a society dominated by landed nobles, and the first phase in the long struggle between them. But recognizing urban freedom as one species of a larger diffusion of liberties that included fief holders and religious entities puts this relationship in a different light. This is especially the case because, as Susan Reynolds has emphasized, it

was rural villages that were the first to claim such rights for themselves: city liberties were modeled on these earlier country ones. Both were part of the diffusion of public authority into society that began with fief-holding and monastic immunities. Fernand Braudel recognizes the same connection: "Towns grew in harmony with villages and clearly outlined urban law often emerged from the communal privileges of village groups. The town was often simply the country revived and remodeled." Alan Harding notes that "the costly charters of freedom which villagers all over France were clubbing together to buy" in the 1100s, giving them exemption from villein status, were attempts to acquire and defend control over such things as "rents, dues, and rights of inheritance; exemptions from more burdensome legal proced-ures; and sometimes the right to elect their own officials," including priests. To be sure, growing towns took on features villages lacked, hosting and organizing a wider variety of activities and evolving more elaborate procedures to deal with them; among the things they came to govern were taxation, finances, public credit, customs and excise duties, and the guild organization of com-merce and manufacture. But it was the fragmented political structure of society as a whole that created the space for these forms of urban autonomy; towns were not a separate and antagonistic element in medieval society but one locus of the widespread openings for some kind of independence it fostered. Thus the origins of the European preoccupation with liberty lay in the general character of society as it developed in the medieval and early modern periods, not in elements of the population in some way at odds with it.[8]

Once these forms of liberty began to spread, people in towns and villages that had to manage their own affairs grew accustomed to the experience, and sought to maintain the independence it gave them. That this was the case has been difficult to recognize because of the ways liberty became associated with charters. Charters were documents specifying what prerogatives a particular village or town (or abbey or region) possessed. Signed and sealed by kings or lesser rulers such as counts or dukes, they codified the relations between overlords and their subjects, specifying and setting limits to what each party owed the other. Because the charters represented communal freedoms as gifts or favors from the higher authority that issued them, it has often been assumed that the liberties had their origins in the charters. But recent historians have concluded instead that the states of affairs charters recognized were often older than the texts that registered them; rather than authorizing communities to act in ways they had not done before, charters usually codified situations commu-nal groups had evolved previously, sometimes in an only dimly remembered past. Just what these arrangements were was open to contestation, of course, and one common occasion for a charter was the need to resolve disputes over just how far the freedoms of towns or cities extended. But even as they affirmed the assumption that legitimate authority had to flow from an acknowledged higher power, the texts also affirmed that communities had a right to maintain

the practices of self-government to which they were accustomed. A complex body of legal commentary and argument grew up in connection with these relationships, giving widespread currency to ancient notions of collective liberty, perhaps best represented by the often-cited Roman legal formula, *quod omnes tangit omnibus tractari et approbari debet* – "what concerns all should be discussed and approved by all." It would be wrong to see this formula as a proclamation of democracy; the "all" it names, as would be the case in many later instances, implicitly left certain categories of people out – women, servants, recent arrivals from outside, the poor. But many people participated in self-government in some way, and where their right to do so was contested liberty became an issue for them, and the Roman principle was invoked to protect it.[9]

There were limits to what medieval communities claimed in this regard; where people defended liberties set out in charters, the assumption was that these freedoms – both negative and positive – remained intertwined with their obligations to their overlords. This way of thinking would be roundly decried by eighteenth-century critics such as Tom Paine, who (as we will see in the next chapter) condemned charters as instruments of tyranny, on the grounds that making rulers the source of rights was a way of denying that all human beings were endowed with them by nature, thus subjecting people to an artificial dependency on purported superiors. That medieval and early modern people accepted such dependence, however, is not a sign that they were deficient in either understanding or courage. Early Europe was often a disordered and violent place, in which people needed the protections offered them, and this necessity reenforced the sense that liberty could only be plural and partial. What endowed non-noble individuals with it was their membership in some local collective, within which they "were in the end only free in respect to certain specific rights." The often-quoted German formula *Stadtluft macht frei* (city air makes you free) may give the impression that the former peasants and serfs to whom it applied (by virtue of a year and a day of urban residence) became immune from all the limits and obligations of rural life. But as Susan Reynolds points out, what they actually received was freedom from particular dues or duties. Even when quite abstract language was employed, the liberty it called up was likely to be bounded and enumerated, as in the case of a Tuscan town in 1207 whose lord invoked the memory of Roman "equity, justice, and liberty" in reducing and regularizing, but not abrogating, the designated services owed him by local men.[10]

The "freedoms" possessed by English burghers were similarly particular rather than general, involving the right to sell goods in a certain market, sue or be judged in a certain court, or participate in some election of officers. In a usage jarring to modern ears, they spoke of people in this situation as "free of" the corporate bodies of which they were members, meaning not that they were exempted from the rules these entities imposed, but just the opposite, that

they possessed certain liberties by virtue of belonging to them. In a similar way, German towns and cities accorded different degrees of *Bürgerrecht* to individuals depending on how long their families had lived in them, what section of the city they inhabited, or how much they paid to have their status recognized. Such ways of attributing political rights did not disappear with the Middle Ages. A similar division operated in what was still New Amsterdam in the 1650s, giving inhabitants a "greater" or "lesser" freedom (only the first conveying the right to hold office) depending on how much they expended to acquire it. As Jennifer Jenkins puts it, "early modern cities were tangles of legal distinctions, special provisions for special groups, stratified levels of rights, privileges, and duties."[11]

Complex and diverse in its origins, and enfolded in a fluid and unstable world, early European liberty was often in danger. Ambitious overlords were regularly on the lookout for ways to curtail the privileges claimed by both fief holders and chartered communities, whether sacred or secular. Thus much of the history of liberties in medieval and early modern Europe is the story of how the targets of such attacks sought to resist them. To be sure material resources were often decisive in determining outcomes, and subordinates were usually weaker than their lords. But the former could sometimes conclude alliances with others on their level, and legal instruments could be important too, encouraging such unions and sometimes justifying "end run" appeals to still higher authorities. Both vassalage and charters were contracts, at once establishing obligations and setting limits to them, and resistance to lordly transgressions was regularly justified on the basis of those limits.

Although vassalage by definition placed overlords above their dependents, the nature of the contract it established was seen from the beginning as releasing vassals from their bond if lords failed to abide by it. In one famous early instance an assembly of Frankish and Aquitainean nobles in 856 asserted that if Charlemagne's son Charles the Bald "acted against the contract in anything" he should be deposed. Similar notions long animated political debate and practice, as exemplified in the widely known Aragonese oath promising obedience to the sovereign "provided that you preserve our laws and liberties; and if not, not." Variations on the formula appear in myriad medieval and early modern documents, in such varied places as Spain, Germany, Hungary, and Poland (on which more later), and it was clearly echoed in the list of grievances with which the American colonists justified their Declaration of Independence.[12]

It was exactly this sense of the limits of princely power that animated the English barons who forced King John to accept the *Magna Carta libertatorum*, the "Great Charter of Liberties," in 1215. In the century-and-a-half between the Conquest and this critical moment, the English kings had acted toward their subjects, and particularly toward the barons who stood closest to themselves, in two distinct ways, one affirming mutual obligation on the model of

lordship and vassalage, the other asserting the existence of an independent royal mandate. The latter mode was partly justified on the basis of classical concepts of public authority beginning to spread northward from Italian law schools, and partly on the Christian ground that kingship had to be seen as a divinely ordained institution. Neither way of thinking was very far advanced in England at this point, and the second in particular was still well short of asserting the "divine right of kings" that would be employed on behalf of absolutist notions of monarchy later on. But medieval kings regularly styled themselves as rulers *dei gratia*, by the grace of God, a formula sufficient to portray royal power as rooted in an authority no set of merely secular arrangements could rival. Partly on this basis John, like his father Henry II, asserted that the rightful source of law was his royal will (*voluntas*), and used that claim to justify measures that weakened his vassal barons: taking over jurisdiction in court cases they had previously handled, demanding higher payments for judicial fees, as well as for fines, and exemptions from military service, plus excluding people he disliked from his royal court – all adding up to what his critics saw as "disseizin [dispossession or theft] of chattels, persons, and land." What the barons accomplished by their revolt against him, as Walter Ullmann puts it, was "to fetch the king back into his feudal habitat, from which he had, to all intents and purposes, escaped." Although Magna Carta has sometimes been accorded an importance in legal and constitutional history it does not really deserve (especially in regard to individual rights), it remains a paradigmatic moment in English history, establishing the primacy of kingship based on reciprocal ties between sovereign and subject, in opposition to the divine or theocratic version that liberated the monarch to rule by personal will. To be sure the struggle between the two would break out again in later times, but in the end the outcome would be much the same. Ullmann rightly points out that the opposite result would obtain in France, where clear intimations of the ultimate triumph of theocratic kingship were already becoming visible in these same years, a contrast of much importance for the history of liberty in the two countries. We will return to it later on, when we will also consider some reasons for the difference.[13]

   That charters were also contracts provided similar aid to towns and cities that came into conflict with their overlords. Since the liberties behind these struggles were often enshrined in charters, one way of undermining them was to attack the charters themselves, claiming they were forgeries (some were), or no longer valid on some ground. Fairly often the real motive of such attempts was not to do away with the privileges the charters recognized but to force those who held them to buy them back, often at a steep price. Examining some twelfth-century Spanish examples, Thomas Bisson notes that such assaults on chartered liberties were frequent during the Middle Ages as a whole, and that they could be terrifying for the groups subjected to them. The assaults would continue into the early modern period.[14]

As with the struggles between rulers and vassals, the outcome for towns varied with local conditions and the resources available to rulers and subjects. In France urban communities came under increasing royal pressure as the monarchy began to lay the foundations for the centralized bureaucracy that would become so prominent in the country's later history, fortified from the thirteenth century by the wealth and prestige the kings gained from successful wars against their English rivals, and their championing of Catholic orthodoxy against heretics in the South. Towns did not lose the privileges they had gained earlier, but they had to accept a higher level of interference by royal officials. We will see later that this situation grew more conflicted and tense under the last three French kings before the Revolution, Louis XIV, XV, and XVI, who boldly employed the tactic of abrogating privileges in order to force towns to repurchase them, eventually contributing to the loss of faith in royal rule that played a large role in bringing down the monarchy. English towns mostly retained their chartered privileges, but they often had to pay considerably to keep them. Flemish towns, notably Bruges, Ghent, Ypres, and Antwerp, gained considerable independence during the eleventh and twelfth centuries, often by virtue of inserting themselves into the rivalries between the local counts and dukes and the French kings; but over time they came to be dominated by territorial rulers, especially the Dukes of Burgundy in the fourteenth and fifteenth centuries, then the French monarchy and the Habsburgs once the Burgundian state collapsed in 1477.

Much more favorable to urban autonomy, and productive of both heightened claims to liberty and of complex meditations on it, were the situations of Germany and Italy. Central authority long remained far weaker in both than in England or France, and for reasons that drew the histories of Germany and Italy into close contact with each other. The first of these was that the two countries were the homes of the two aspirants to universal dominion in Europe: the German emperor, known as the "Holy Roman Emperor" from the thirteenth century and claiming descent from Rome and Charlemagne, and in Italy the pope. The second link was that both were difficult places in which to establish a unified state, neither able to establish one before the mid-nineteenth century. By the time the Hohenstaufen family came to occupy the imperial throne in the middle of the twelfth century, the German lands were already divided into myriad large and small principalities, their independence shored up by the anti-imperial campaigns waged by the papacy during the late eleventh-century "Investiture Controversy" (about which more in a moment). Thinking that Italy might be a more favorable place from which to draw resources, a series of monarchs beginning with Frederick Barbarossa (d. 1190) sought to conquer territory and establish dominion there, and in order to have their hands free to do so they made little attempt to follow the example of their French counterparts in consolidating authority within a proto-national realm; instead they gave existing power holders in

Germany a relatively free rein, confirming the latter's privileges in exchange for cooperation with the emperors' schemes of pursuing power elsewhere. This policy gave cities such as Augsburg, Nuremberg, Cologne, and Strasbourg openings to solidify their independence, although they had to defend it against powerful local rivals, both secular lords and bishops.[15]

In Italy the Hohenstaufen achieved success for a time, but they eventually met defeat at the hands of increasingly well-off cities who banded together to preserve their independence, finding an ally against the invaders in the Roman pope. The first of these alliances, the Lombard League, decisively defeated Barbarossa in 1176. In the first half of the next century his brilliant grandson Frederick II had more success for a time, becoming king of the then rich region of Sicily, but he too eventually succumbed to the fierce opposition mounted by a mix of papal and urban enemies. These struggles introduced an added level of complexity into what was already an agitated rivalry between large and small Italian cities. In parts of the peninsula where papal power was strong some towns looked to the imperial forces as aids in escaping it; the same was true in reverse where the Germans enjoyed powerful positions. The pro-imperial side came to be known as Ghibelline and the pro-papal one Guelf (both terms deriving from German roots). Smaller places tended to join the side opposed to their nearby bigger rivals; thus, if Florence was Guelf, Arezzo and Pisa would be Ghibelline, and similarly for Milan and Pavia. But in most cities the same opposition was mapped onto internal factions of various sorts, which meant that many towns passed from one rival camp to the other, depending on their internal condition. This situation framed Italian politics for more than two centuries beginning in the twelfth, keeping rival aspirations for independence and domination alive because no unified authority could be established to put an end to them.[16]

The basic sense that freedom was a quality of urban life that had to be defended against enemies was present in Italy even before these struggles became pervasive, clearly visible at least from the middle 1000s. It was then that many towns constituted themselves formally as communes, sworn associations of citizens set up in order to end internal strife and thus compete more effectively against enemies and rivals, who might be either nearby nobles or bishops, or other towns. In doing so they ascribed to themselves a *libertas*, generally conceived in the singular language they found in ancient sources. Such liberty was not a set of privileges or immunities accorded by some external authority, but a quality inherent in the communal entity that endowed itself with it, and realized by its collective acts of self-government, much as would be the case with Revolutionary France or Britain's North American colonies later on. The singular language came naturally to a Milanese chronicler in the 1040s, who recounted with approval the struggles the ordinary people of his city (*populus*) pursued against citizens of higher status (*maiores*). The former sought "to acquire liberty (*pro libertate aquirenda*)," or rather to

recover it, since the writer believed that it had flourished in a time before population decline weakened the city's resources. A writer involved in similar struggles in Lucca exalted liberty more fervently in a verse: "the cause is more just, more honest than any other, / when liberty is taken from the people. / After all, can liberty perish alone? / Does not everything perish when liberty perishes?"[17]

Such notions often found expression in speeches given on public occasions, such as the ceremonial installation of a new *podestà*, the name given to the high magistrate many communes employed for a limited term to resolve quarrels between factions and keep order (often the people appointed were outsiders whose absence of ties to local interests were expected to make them impartial). In these declamations the list of goals cities ought to pursue were usually headed by growth in population, wealth, and power, sometimes summed up as a Rome-like *grandezza*. In order to achieve these aims, the model texts go on, citizens need to preserve justice and concord among themselves, joining together to manage their own affairs and pursue the common good. This meant that cities aspiring to greatness had to govern themselves; rule by outsiders hindered people from developing the civic and martial virtues that made urban greatness possible. Treatises on city government sounded kindred themes, specifically naming liberty as the quality that had to be preserved if cities are to thrive. So closely were urban life and freedom linked that one writer proposed an imaginative (but false) etymology for *civitas*, as a contraction of *civium libertas*, the liberty of citizens.

Toward the end of the thirteenth century these notions took on a more admonitory character, because many towns were in the process of succumbing to just the lordly rule that the texts condemned. This development owed much to the growing importance of factional and party divisions that emerged as immigration, inspired by growing urban wealth, brought in new people with no ties to the established elites; the tension and disorder these developments bred led some groups to see rule by an outsider as better for them than subjection to their neighbors. As rule by such *signori* spread, freedom became a slogan both cities and parties within them wielded against each other, and the conflict between papal and imperial factions raised the ideological temperature still further. As with vassals and villagers north of the Alps, the need to defend forms of freedom coming under attack from the growth of new powers gave a heightened public presence to the issue of liberty.[18]

By this time however the conviction that Italy with its cities possessed a special connection to liberty was well established. Already in the 1150s the German chronicler Otto of Freising noted that the land was "almost entirely divided among cities" who "so much love liberty" that they refused to allow the emperor to appoint any of their officials, keeping their government wholly in their own hands. Cities elsewhere enjoyed a considerable degree of self-government too; what set Italy apart in Otto's eyes was their success in keeping

outside authorities from putting any reins on them. This was also the view of the Florentine writer Brunetto Latini in the 1260s, who noted that French and German cities, like Italian ones, managed their own affairs to a large extent, but they had to acknowledge their dependence on royal or princely overlords, and accept the officials these superiors sent to oversee them. Ptolemy of Lucca, the friar and historian who served for a time as prior of the Florentine Dominican Convent of Santa Maria Novella, concluded that Italians were by nature more resistant to outside control than others, so that attempts to establish princely rule over them could only succeed if conducted in a tyrannical manner. All these views are more or less incompatible with the idea that liberty derives from some royal or imperial source, which is one reason why some writers, most famously the fifteenth-century Florentine humanist Leonardo Bruni, attributed the foundation of their city to the Roman Republic rather than to the Empire.[19]

But this enthusiasm for the singular language of liberty did not make the plural one unusable south of the Alps. Although literary supporters of the Lombard League such as Boncompagno of Signa declared that "liberty is our gold" and that Italians were "born free and would die free," what the cities were guaranteed in the Treaty of Constance that marked the League's triumph over Frederick Barbarossa in 1183 was not *libertas* in the singular, but a series of individual privileges and customs (*consuetudines*), which the emperor accorded to them by virtue of his sovereign powers (*regalia*), and which, even in victory, they were not unwilling to accept. In later instances too, Italian towns accepted grants of liberties and immunities from emperors with whom they had some reason to cooperate. Thus in 1260 the Tuscan town of Grosseto (willing, like other places in the same region, to seek imperial protection against the threat of Florentine expansion) received a charter from Frederick II's son Manfred, confirming all of their "good practices and customs" as well as "*libertates, franchitias, [et] iura.*" The barriers to creating unified authority in Italy raised by the Guelf–Ghibelline struggle were a boon to urban independence, but by keeping the peninsula inside the general frame of European politics, the conflict also preserved the relevance of its language.[20]

The Guelf–Ghibelline struggle was not the only source of the two languages remaining compatible in Italy. The same result was encouraged by another and earlier European-wide struggle, namely the so-called Investiture Controversy, which gave impetus to both idioms. Breaking out just at the moment when increasing numbers of towns were organizing themselves formally as communes, the Investiture Controversy was actually a struggle between secular and ecclesiastical authorities over which of them would control the Church. In the period that followed the collapse of Charlemagne's empire many ecclesiastical properties and appointments had come under the sway of secular powers; bishops and abbots were chosen by local magnates, and elections to the papacy itself were controlled by the German emperor and his allies among Roman

aristocratic families. Against this situation there arose a reform movement that viewed this subordination of the Church to lay power as the root cause of clerical corruption and immorality; the ceremony of "investing" abbots and bishops with the insignia of their office became the symbol around which the campaign to restore independence and therefore purity to the Church was organized. The reform party, called Gregorian after the leader who reigned as Pope Gregory VII from 1073 to 1085 (originally an Italian monk called Hildebrand, associated with the Cistercian Abbey of Cluny in Eastern France), succeeded in wresting control of papal elections from Emperor Henry IV and his allies, and used their power to free other Church offices from secular dominance, and to impose a purer form of life, including celibacy, on members of the clergy. In Germany the fight mostly pitted Gregory against Henry, with the pope finding allies among the powerful German princes who controlled much of German life. In Italy, however, the struggle came to be tied up with urban independence, because the figures whose power the reformers sought to curb were often the same overlords against whom the communes fought to establish their independence. In such cases towns or powerful factions within them allied themselves with the Gregorians and took up their program (some moved chiefly by political calculation, others by genuine sympathy with reform); in other places, however, Gregorian attempts to impose a puritanical mode of life on clerics met resistance, often because priests and monks accustomed to a more worldly existence had close ties to urban elites there.

From the beginning the reformers identified the independence they sought as *libertas ecclesiae*, the freedom of the Church. Speaking about the Abbey of Cluny that was the original home of the reform movement, Gregory declared his determination to reject any claim by any lord or official, secular or religious (since there were old-style bishops and abbots on the opposing side) "that harms the liberty of the monastery," which had to "remain safe from any secular power and undisturbed in the liberty of the Roman See." Liberty here meant immunity from secular power, but this autonomy was also a framework for rights of self-government, since, as one canon lawyer put it, "this is the honor, this is the liberty of the Holy Church: namely that her clergy and people choose their own bishop" (which was indeed often the case among early Christians). These themes in the program of the reformers harmonized easily with the classical motifs that sounded in some of the appeals to urban liberty we quoted earlier. In fact, both the Milanese chronicler who described the struggles in his city *pro libertate acquirenda* and the Luccan poet who asked "Does not everything perish when liberty perishes?" were speaking in favor of groups allied with the Gregorians. There were good reasons for urban citizens to seek a religious sanction for their political aims, since, as Serena Ferente points out, the association with spiritual values and moral purity (Gregorians sometimes compared the Church under the control of secular rulers to

a female servant prey to her master's lusts) "lent legitimacy to political aspirations and forms of government that could otherwise be, and in the eyes of existing authorities actually were rebellion, usurpation and conspiracy."[21]

But here too the singular idiom shared by secular and religious advocates of *libertas* showed itself to be compatible with the plural one. In principle the liberty of the Church did not need to be guaranteed by worldly authorities because its justifications were divine in origin: in a Christian context sacred values could always claim a priority over secular ones. All the same, ecclesiastical institutions operated on the basis of privileges accorded by higher officials, both religious and lay. We have seen that some of the earliest recorded grants of "feudal" immunity were given by bishops to monasteries, and such acts became models for later ones accorded to both nobles and commoners. When Gregory VII, in the pronouncement quoted in the previous paragraph, asserted Cluny's right to remain undisturbed "in the liberty of the Roman See," his formula echoed descriptions of other ecclesiastical entities as Liberties in the territorial sense, and the papacy would continue to regard itself as the overlord of bishops and abbeys, protecting but also circumscribing the liberties the latter exercised. Although the idea of *libertas ecclesiae* was often invoked in order to separate the Church as a spiritual entity from worldly dominion, some supporters of papal power saw the "visible" Church as necessarily needing to exercise secular authority, even in defense of its spiritual liberty. Grants like the one the city of Grosseto received from Manfred had ecclesiastical counterparts in privileges accorded to bishops, abbeys, and other religious entities by both kings and Church officials.[22]

The same compatibility appears in German documents, although approached from the other side. All through the Middle Ages and well into the early modern period, German townspeople conceived their rights to self-rule in the plural terms of *iura et libertates*, the coupling of "rights and liberties" expressing the continuity felt to exist between them: rights were not separable from privileges and immunities, but another way of naming them. As elsewhere, law was closely linked to custom, so that *iura* could mean "usages" as well as laws. Neither innate nor universal, such rights were specific to individual towns (even if similar formulas were used to name them in diverse places), and dependent on their relations to an overlord. That even wealthy and powerful places such as Augsburg or Frankfurt acknowledged this dependency reflected their need for protection by more powerful entities – the princes, counts, and bishops who were the chief centers of power in the German empire – in a region subject to high levels of conflict and violence.

All the same, at moments when cities struggled to resist some imposition by an overlord, the liberty they called for could take on a more general and singular character. One thirteenth-century document describes Strasbourg citizens as fighting "for the whole honor of our city and our liberty" (*pro toto honore civitatis nostre et libertate nostra*), and in 1258 the governing council of

Cologne demanded that the archbishop acknowledge both the city's *privilegia* (privileges in the plural) and its "law [or custom] and liberty" (*ius suum et libertas sua*). By around 1500 some German commentators were attributing the right of city councils to legislate for their towns not to any imperial grant or charter but rather to the fact that they represented the citizenry as a whole, which may have indicated a move toward the singular conception, since it viewed urban liberty as rooted inside the town walls. But the other idiom did not disappear, and we will see in the following chapter that as early modern emperors sought to centralize previously scattered powers of government in their own hands, cities would resist them by appealing not to any general notion of freedom but to privileges and customs sanctioned by long tradition. As in Italy, so in Germany those who spoke one of the two languages did not reject the other. Each could serve to keep the idea of liberty alive in a situation where it could neither be fully realized nor effectively suppressed.[23]

This ease of movement between the two idioms would seem both insufficient and naive to later champions of liberty, including Rousseau, Tom Paine, and many participants in the French Revolution. They were right that modern democratic theory and practice are difficult to cultivate in the plural language. But in another regard early champions of liberty appear as perhaps less naive than some of their successors, in that they became intensely aware that liberty, in addition to being a deeply cherished value, could also serve as a rhetorical tool in the hands of people whose determination to achieve it for themselves did not restrain them from acting to take it away from others. This awareness was especially characteristic of Italy, because there more than elsewhere rival claims to represent freedom came into conflict with each other, as powerful cities exploited the absence of central authority to gain power in their regions. Both Venice and Florence were regularly accused of betraying their vaunted commitment to liberty by depriving their weaker neighbors of it. Thus the part of Europe where liberty was most highly prized simultaneously became the one where claims made in its name become most suspect.

This side of the story was already emerging in the early fourteenth century, when a Guelf alliance against Emperor Henry VII took shape, portraying itself as the embodiment of Italy's singular attachment to liberty. Among its members were the papacy and numerous northern Italian towns such as Florence, but the lynchpin of the coalition was the Kingdom of Naples, as centralized a monarchy as the time could produce, its ruler Robert of Anjou supported by his cousin the King of France. But this did not stop the alliance from claiming to be the party of freedom. Among the arguments put forward by some of its publicists was one to the effect that no individual or community was required to respect any obligation to the Holy Roman Empire, however acquired, because the latter, like its ancient namesake, was dedicated to the destruction of popular liberty. So radical a view played into the hands of those who rejected the whole rhetoric of liberty as opening the way to anarchy and licentiousness,

leading Dante for instance to argue that the only genuine liberty was "freedom from appetites and passions, and freely chosen obedience to the laws." Dante's political fate (a supporter of imperial power, he was exiled from his beloved Florence by Guelf partisans) reminds us that many so-called struggles for liberty were actually fights between contending parties, not just Guelf and Ghibelline but also subgroups within each, as well as social factions such as the Florentine *magnati* (magnates) and *popolani*. It is not surprising that a deep skepticism about the whole notion of communal liberty developed in such an atmosphere. One critic of Venice's subjecting lesser towns in its region to its control in the name of republicanism, the writer and jurist Giovanni Conversini, concluded that there was no such thing as a wholly free government, since freedom was bound to be limited in any regime in which people had to accept established authority (a point that foreshadowed Thomas Hobbes's denial that genuine political freedom could exist anywhere, even in a proudly independent republic such as Lucca). To Conversini, the only true liberty was individual and mental.[24]

But it was one of liberty's most passionate advocates and enthusiasts, the celebrated (and decried) Florentine official and writer Niccolò Machiavelli, who developed its connection to domination with the greatest determination and – there is reason to say – penetration. His concern for their relationship reflected his complex identity as simultaneously a hard-headed analyst of politics and a dedicated republican. His famous litany of advice to princes to employ whatever means were required to *mantenere lo stato* – preserve their position as rulers – including violence and deceit, to make themselves feared rather than loved, and to learn both how to be good and "how not to be good, and to use this knowledge or not . . . according to necessity," has often made him appear as a pure theorist of raw power. It is not easy to understand how the Machiavelli who gave such counsel to rulers can have been the lifelong republican we know that he was, supporter of a broadly inclusive form of government in Florence and an enemy of the increasingly princely kind of domination being achieved by the Medici family in his time. Some part of the explanation lies in the violent and sometimes chaotic situation into which Italy was plunged by the French invasion of 1494 and the struggles for control over the peninsula by large foreign armies it unleashed. But the legacy left by the earlier history of conflicts over liberty we have just outlined also contributed significantly to forming his conviction that liberty and domination were not simple opposites but elements of a dialectical pair.

Indications that the two were interconnected are evident in *The Prince*, where the often cynical and disillusioned program of advice ends with an idealistic call for a new leader who will inspire Italians to recover their liberty by rising up to drive out the hated foreigners. But Machiavelli's sense for the complex relations between domination and liberty found more complete and acute expression in Book I of his *Discourses on Livy*, where he discusses the

Roman writer's account of the harsh and sometimes violent history of conflict between the commoners of the *populus* and the aristocratic Senate. In his commentary the Florentine asks whether the Roman Republic would have been better off had it avoided such struggles, in particular by excluding the popular classes from politics and vesting power wholly in the patrician elite, a mode of rule to which some thought both ancient Sparta and modern Venice indebted for the more stable and tranquil quality of their histories.

Machiavelli's answer was a decided no. Cities such as ancient Rome and modern Florence needed to develop large armies in order first to protect themselves against ambitious neighbors, and then to pursue the *grandezza* that secured their independence and fostered civic pride. Pursuing this goal required, first, that they encourage immigration to expand their populations and, second, that they give the newcomers some role in government, so that they felt themselves part of the civic order. Because the interests of the newcomers often differed from those of more established citizens, this course was bound to generate political tensions and conflicts. But rather than threaten freedom, these struggles were the means of maintaining it, because each of the two groups acted as a brake on the ambitions of the other, so that neither was able to obtain sole power and establish an autocratic regime. "The dissensions between nobles and commoners" were "the prime cause of Rome [and also Florence] becoming free."[25]

What made this situation an instance of the complex relations between liberty and domination was that both groups displayed the all-too-human impulse to impose their will on others. To be sure, the two sides did not enter into this arrangement from the same starting point. Sometimes, as in the chapter in *The Prince* that recommends the people as a better ally for someone seeking to establish a stable regime in a city than the nobility, Machiavelli portrays only the wealthy and powerful as seeking to dominate others; what groups without the resources to achieve mastery desire is only to escape being dominated. But this rather rosy view of the populace (perhaps put forward to draw Lorenzo de' Medici, to whom *The Prince* was dedicated, toward the anti-oligarchical faction in the city) is not quite maintained in the *Discourses*. There we are made to understand that ancient Romans found themselves on both sides of the question "whether he who would retain power or he who would acquire it, is the more dangerous citizen; the desires of both being likely to lead to the greatest disorders." Even in siding more with those who feared noble incursions, the Florentine diplomat saw it as a universal human trait that "men never think they hold what they have securely, except when they are gaining something new from others," adding that if more powerful people used their resources to exploit weaker ones, then the latter would respond by trying to revenge themselves, creating disorder so that the rich could not enjoy their gains. Thus it was because both groups were subject to the same passions that some form of equilibrium had to be established between them.[26]

Moreover, Machiavelli admitted that republics were not less likely to seek to dominate their neighbors than were princely states, noting that "there are two causes which lead to wars being made against a republic; one, your desire to be its master, the other the fear lest it should master you." In a later chapter he went even further, arguing from Roman history that there is no harder servitude than subjection to a republic, partly because well-established republics are more lasting than mortal princes, but also because republics will enervate and weaken the cities they take over, by seeking to usurp the activities and functions their citizens otherwise exercise for themselves (including, it seems, economic and commercial ones, although Machiavelli does not quite say this), whereas princes can profit from their conquests by simply taxing their new subjects, otherwise leaving them free to pursue their lives. Rome owed its exemplary success in maintaining liberty over a considerable period to its wise management of the general human ambition to subject others to one's will. Later city-states needed to heed this example, broadening their governments and accepting the sometimes harsh but constructive conflicts this brought, instead of seeking to put an end to partisan and social struggles by exiling defeated groups as many had long done.[27]

Machiavelli's analysis of these things broke with more traditional ones, stemming in good part from Aristotle, that saw a well-ordered republic as resting on laws and institutions that infused citizens with virtue, teaching them to identify their own interest with the public good. Seeking to preserve freedom by way of institutions that transmuted the desire to dominate into a stable political order presumed a more disillusioned view of human nature. To be sure the more optimistic one survived too (and Machiavelli himself gave expression to it sometimes), but echoes of Machiavelli's dialectic between domination and liberty would reappear in influential later writers, including Jean-Jacques Rousseau, G. W. F. Hegel, and Marx, sometimes tinged with his pessimism, other times not. Rousseau characterized the genuine social contract as one in which all individuals alienate their separate urges for power over others to the community as a whole, so that the potential powerful people always retained to dominate others could at least be restrained by the universal subjection of all citizens to the laws. Hegel saw modern life as the site of the highest attainable form of freedom because it combined the "civil society" that offered generalized opportunities for unhindered individual development, but unequally realized so that some would come to dominate others, with the universal principles of the state which made the liberty of every individual and group dependent on the recognition that all citizens could in some way participate in it. And Marx saw the proletariat as the agent of full human liberation because, in order to

emancipate itself, it had to rise up against the complete subjugation to which its members were subjected under capitalism. All served to keep alive the sense that humanity possessed powers it had yet to realize, while also maintaining the recognition that the liberty that preserved them remained in a dialectical relationship with its contraries.

From Liberties to Liberty

From around the year 1500 Europe's internal divisions began to change their form. Whereas at that moment more than 500 highly varied political entities, princely and republican, ecclesiastical and secular, could claim an independent existence, this jumble would be reduced to around 25 mostly monarchical states by 1900. Along the way a number of rulers – Charles V, Louis XIV, Napoleon – conceived ambitions to create a European-wide – even a global – monarchy, but all these projects failed; what endured was a system of competing states, each seeking advantages over the others by means military, commercial, diplomatic, and dynastic, and all held in check by the balance of power repeatedly upset and reinstated by their interactions. Many writers have rightly seen the competitive pressures this situation generated as a major spur to the development of the forms of economic and military power on which Europe's world supremacy would rest.[1]

This still divided and yet solidified Europe contrasted in many ways with the more fragmented one it succeeded, but this does not mean that the older Europe simply faded away. On the contrary, its legacy made a deep imprint on the world that replaced it. Central to this continuity is the too-often overlooked fact that the adjective "unitary" or even "unifying" only partially describes most European states between the sixteenth and the eighteenth centuries (and even beyond). A more accurate term, proposed by John Elliot, is "composite monarchies." On the simplest level this designation merely points to the fact that practically every modern European state came into existence as a union of formerly separate and independent territories, which rulers worked to bring under a single authority. But what made this manner of forming states significant was that behind the façade of unity erected by kings, the constituent territories often retained customs, orientations, and identities rooted in their past independence. There were a few cases in which princes were able to merge the component parts of their realms so that the whole was governed by a single set of laws, as occurred for instance when Wales came under the English crown in the sixteenth century. But much more often the originally separate areas retained many of their traditional institutions, including assemblies (if they had them), tax privileges, and legal codes, so that they were ruled in a manner one seventeenth-century writer dubbed *aeque principaliter*, meaning that the

king had to govern each one on its own basis, acknowledging what Elliot calls "their distinctive identity and status," and respecting their customs, privileges, and exemptions. This situation long obtained in Spain, where the regions of Aragon (whose famous oath we mentioned earlier), Valencia, and Catalonia, as well as Sicily, Naples, and the various provinces of the Netherlands (during the period when Habsburg Spain controlled them) each retained all or most of its separate status (the region of Navarre remained "in most respects a kingdom apart until 1841"). England, the only one of the major European monarchies that emerged largely free of the regional diversities in law and institutions that characterized composite states, still had to wait for the Reform Bill of 1832 to do away with the warren of local rights and rules for electing members of Parliament that was a kind of analogue to it.[2]

In such a context it is not surprising that the plural language of liberty was taken up by people in a wide variety of circumstances, often but not only because it provided a shield against the centralizing projects of rulers. The singular language remained very much alive too, although there were instances where those to whom it was available resisted using it. During the eighteenth century it gained currency as a vocabulary of critique and reform, but in only one country had it largely supplanted the plural idiom by 1800, namely France. There alone, for reasons we will examine in more detail, did privileges, long accepted as a source of liberties and even a synonym for them, come to appear to people at large as incompatible with social and civic freedom. First, however, we need to consider the ways in which the plural language continued to operate and how it was related to the singular one.

Germany provides one revealing instance. Beginning toward the end of the fifteenth century, the Habsburg emperors instituted a series of reforms intended to increase their authority by giving their power a more stable institutional structure. Hoping to make a unified state out of what had been "a fragmented pluralist polity governed by rules of custom and feudal *Landrecht*," the emperors enlisted the service of the Roman law, long taught in universities but with little practical effect, and whose principles of respect for imperial authority offered stronger support for a centralizing program than feudal ones based on contract and precedent. The introduction of Roman law was part of "an emerging clash between statecraft and the preservation of local liberty and privilege." The stakes in the conflict were well understood by the sixteenth-century Italian jurist Andrea Alciato who, in praising the Roman censors for preserving the Republic by exercising control over ambitious officials, remarked that "this old character is retained only in the cities of Germany which they call 'free,' where they gladly recognize the Emperor's dignity, but will not suffer themselves to be worn down by tribute, goaded by violence, or oppressed by tyranny."[3]

As Daniel Lee (whom we have just been quoting) notes, there was a certain irony in the cities' preference for the privileges and immunities accorded by

their old charters over Roman legal notions, because the language of the charters limited liberty to particular exemptions and circumscribed rights, while the idiom of Roman law portrayed it in broader and more general terms, based on a sharp distinction between the status of free individuals and slaves. Conceived in this way, freedom meant not being subjected to the will of another. But this more general and abstract approach made Roman notions ill-adapted to recognizing the kinds of partial and particular freedoms that characterized early modern people and cities. Because German peasants, even ones who were not serfs, owed their lords labor services from which people at higher social levels were exempt, in the eyes of the Roman law they could only be slaves, *servi*. In fact, however, their obligations were legally limited, so that people at the time resisted this categorization; as a sixteenth-century writer pointed out, they "are like slaves in certain respects but are more like freedmen in other respects." Similarly, by exalting the authority of the emperor, the Roman law made urban privileges and liberties depend wholly on his will, giving him license to rescind them if he thought them inimical to the well-being of the realm. This is just what emperors (like rulers elsewhere) often did, making their subjects pay more dearly to buy their liberties back as the princely need for cash mushroomed. Even if some early modern defenders of town privileges were drawn to the singular conception of liberty, they had to turn to liberties in the plural in order to stand up against imperial ambitions. The "essentially monistic concept of liberty in Roman law," Lee concludes, "was structurally incapable of acknowledging the pluralism and particularism of early modern German [and not only German] liberty," which created diverse pockets of autonomy for individuals and groups at different levels of a society whose hierarchical nature few people had the intellectual or practical means to challenge.[4]

It was crucial for later German history that the Habsburg project of establishing more unitary rule in the Empire had very limited success. True, the Roman law principles introduced in the sixteenth century eventually contributed to "the rise of princely absolutism and the triumph of the *Obrigkeitsstaat*," an evolution best exemplified by the consolidation of Prussia during the eighteenth century, and its later role in unifying the country.[5] But that outcome was long in coming. What forestalled it was the failure of the sixteenth- and seventeenth-century emperors to damp down the fires of Protestant revolt and prevent the consolidation of the religious divisions it effected. This failure had its roots in the policies of Frederick Barbarossa and his successors we considered earlier, willing to allow Germany's many divisions to persist in order to pursue the Italian projects that lured them. The Habsburgs followed a similar path of seeking their fortunes largely outside Germany, notably through dynastic marriages rather than by force of arms ("Others make war, you, happy Austria, marry"). The situation these policies helped promote by the time of the Reformation was a major reason why Emperor Charles V found

himself incapable of imposing unity against the Protestant cities and princes, as he acknowledged in accepting the Treaty of Augsburg in 1555. The mix of religions and the political disunity acknowledged by the Augsburg settlement, signaled in the formula *cuius regio eius religio* that gave each ruler the right to determine the official religion of the state (and thus control over Church properties and fiscal resources), was definitively written into law a century later by the Treaty of Westphalia (1648). The condition of the German lands as a splintered field where more than 300 small and medium-sized states jostled against each other was henceforth confirmed and solidified.[6]

After 1648 the emperors, their inability to impose unity on their domain made evident by the war and its outcome, had to pledge, as part of their coronation oaths, respect and support for "Germanic liberties," a general term for the privileges and exemptions of the individual cities and states. This meant that the earlier effort to employ Roman legal principles as weapons against the plural and contractual notion of freedom was effectively put aside, despite attempts by Habsburg loyalists to invoke them. One thing that con- tributed to this result was a highly fluid system of shifting political alliances, some between larger and smaller states within the Empire, others linking German states to foreign ones. Towns in particular, whether in theory subject directly to the emperor or to some lesser prince (sometimes a bishop), used their privileges to play off overlords against each other and enlarge their autonomy. Fearful that some large state might challenge its primacy, the imperial court generally favored smaller entities against these potential rivals, making the Empire into what Mack Walker calls "the incubator of German localism." In David Blackbourn's formulation, the central authority "protected the particular in the name of the universal."[7]

The language of plural liberties served to preserve particularity in a far more radical way to Germany's east, in Poland. Like the imperial throne, the Kingdom of Poland was an elective monarchy, dominated by the *Szlachta*, the nobility. Making up some 8 percent of the population (a much larger proportion than in countries to the west), its members used the competition between candidates for the throne to wrest concessions from the winner. Seeking ways to formalize their right to resist and even disobey the monarch from early in the sixteenth century, they succeeded by 1576 in requiring every new ruler to declare that "should we (God forbid) infringe on rights, liberties, articles and terms, or fail to attend to some matters, we release all citizens . . . from their duty and fealty due to us." One early seventeenth-century chancel- lor reminded the king that, should he fail to preserve the liberties of the nobles "we shall have no choice but to follow the steps of our ancestors and send you, Your Majesty, our gracious lord, away beyond the sea, for you . . . willingly divest yourself of your kingly office." Like the famous Aragonese "if not, not," the situation in Poland showed how far the contractual basis of vassal fealty could be drawn on to constrain monarchical rule. The resulting weakness of

central authority would be one reason why Poland would disappear from the map in the eighteenth century, its weakness giving its hungry and ambitious neighbors, Austria, Russia, and Prussia, license to divide its provinces among themselves.[8]

Although many of the beneficiaries of plural liberties were nobles and aristocrats, the German example shows that lesser people, some of them quite modest, sheltered behind them too. What determined how particular groups lined up in this regard was less social class or the desire for a different kind of freedom, than historical circumstance, as two examples from further west suggest. The first is that of the Dutch Republic that emerged out of the revolt against Spanish domination in the Low Countries. Starting out with a traditional appeal to plural liberties, the rebels were pushed toward an affirmation of singular and self-constituting freedom, but only after it became clear that the Spanish overlords would not allow them self-determination within the old framework. As a recent historian sums up this evolution:

> Their rebellion was not a revolution against monarchy and monarchs in principle; it was directed against one very specific tyrant [the Spanish king, Philip II] who had violated their good traditional rights and customs. The very first article in the Union of Utrecht in 1579, another founding document of the United Provinces, noted that the Dutch "provinces will form an alliance, confederation, and union among themselves . . . in order to . . . retain undiminished its special and particular privileges, franchises, exemptions." . . . It was only when the Dutch could not find a new king respectful of their privileges . . . that they slowly realized that they had become what they had not intended to be: a republic.

Even as they became more independent in practice, the United Provinces remained reluctant to claim what Jean Bodin – with his eye on the French state – identified in his *Six Books of the Republic* (1576) as the defining quality of sovereignty, namely being dependent on no other earthly authority. They may have feared, as others in their time surely did, that such liberty carried the danger of being left "alone and defenseless, exposed to the mercy of stronger powers." At first they sought to ward off this danger by claiming that their one common institution, the States General to which each province sent a delegate, represented the Spanish prince in his absence; but as hostilities intensified they had to recognize that his sovereignty had devolved onto themselves. By around 1620 Dutch writers began to equate their *libertas* with what monarchs called *majestas*, defining it as the power to legislate entirely on their own, without authorization from any worldly superior: it was a liberty they had won for themselves. The peace treaty with Spain in 1648 recognized Dutch sovereignty in just these terms. Certain questions internal to Dutch politics were involved as well, but it was the sharper edge given to European politics by state

competition and post-Reformation religious divisions, not the desire for a different species of freedom, that chiefly determined this linguistic substitution.[9]

Not constrained by circumstances like those that shifted the Dutch onto this track, the cities of the Swiss Confederation explicitly resisted proposals that they adopt the singular idiom, clinging instead to the plural one. Some of the prodding to abandon it came from the Dutch, with whom they had numerous ties. Both were highly urbanized areas, each engaged in defending their liberty against domination by the Catholic Habsburgs (in the Swiss case the Austrian rather than the Spanish branch), and Protestants were important elements in the population of both. Several sixteenth-century writers thought it natural for the two to ally against their common enemy, and a certain degree of cooperation developed between them, encouraged by a considerable level of travel back and forth by their citizens.

But most Swiss remained attached to the plural vocabulary. A widely read description of the region's politics by a member of a prominent Zurich family, published in 1576 and translated into several languages, insisted that the freedom the cantons sought was not liberation from the Empire but liberty within it, a species of privilege rather than an inherent right. The members of the Confederation, he explained, were not enemies of the Holy Roman Empire but its defenders against some of the emperor's misguided servants. What drew many Swiss burghers to such views was their sense that the liberty they cherished was collective, not individual, a notion buttressed by the belief that stable societies could only exist on the basis of shared religion (each canton determined its own, although there were a few cities with mixed Protestant and Catholic populations). The region was not host to significant numbers of foreign immigrants, as the Dutch provinces were, nor did any proponent of individually based natural freedom appear there to match the Amsterdam philosopher Benedict Spinoza, the son of Portuguese Jewish refugees. Moreover, residents of the larger Swiss cities relied on imperial law to convey legitimacy on the rule they exercised over their smaller neighbors, each canton deriving its power from long-standing imperial privileges. Only an "ideal concept of empire could explain the archaic Swiss mixture of powers and privileges that generally belonged to the cantons, but to a small extent also to the Confederation itself." During the negotiations for the peace treaty that ended the Thirty Years War in 1648 the French representative encouraged the Swiss to regard their sovereignty as fully independent in the way the Dutch now did, won by their own force of arms; but the Swiss delegate preferred to describe it in the language of "exemptions," a better fit with the complex relations and tangled threads of integration and autonomy that joined the cantons to each other. Claiming a more centered kind of sovereignty would have opened up the knotty and divisive question of just where it lay.[10]

That liberty might be better secured under an umbrella of multiple and conflicting forms of dominion than by way of a fuller claim to independence was also the lesson projected by what was, to be sure, an unusual but still illuminating case, that of the Republic of Ragusa on the Dalmatian coast. Led by the patrician residents of its chief city, Dubrovnik, Ragusa succeeded in preserving its status as an independent republic, at least in the eyes of many European observers, until it was absorbed into the Napoleonic Empire in 1808. But its independence, although partly sustained by the prosperity it derived from the Mediterranean commerce conducted by its large fleet of ships, was intertwined with subjection to outside powers, chief among them Hungary (until that country was weakened by the defeat at Mohacs in 1526), and after 1453 the Ottoman Sultanate in Constantinople. Toward the latter, Ragusa maintained an unusual and never wholly clarified relationship, securing its privileges by paying a large yearly monetary tribute, but remaining immune from some of the debilities imposed within the Empire on semi-privileged non-Muslim groups (*dhimmi*). The Ottomans may have regarded the money as sufficient reward for letting the small Christian state continue to claim its degree of liberty, or they may have been moved by the Ragusans' success in obtaining a cluster of Western protectors, including at various moments Venice, Naples, France, and the Papacy, who may or may not have taken seriously the Ragusans' claim that they served as a useful intermediary between Christian Europe and the Muslim state.

European attitudes toward Ragusa alternated between disdain and admiration, some scorning what they called "the seven-flags republic" (*la repubblica delle sette bandiere*) because it had to display the emblems of all the outside powers it acknowledged as overlords; but others, notably the political theorist Jean Bodin, accepted its self-rule as a sovereignty equal to that of much larger states, on the grounds that it was able to make its own laws. In 1763 the French consul in Dubrovnik wrote that "Ragusa is the only community which has found the secret of subjecting itself to many masters and thereby conserving its liberty. Namely, one who acknowledges more than one master at the same time in the end does not obey anyone." Looked at historically, the Ragusan situation can be seen as an early modern version of the common medieval one in which individuals and communities found ways to counter the power diverse authorities sought to exercise over them by playing them off against each other. Montesquieu recognized the importance of such situations for the history of liberty in Europe when he simultaneously deplored the maze-like quality of authority under feudalism and extolled its ability to reduce "the weight of lordship." As the judicial and administrative functions acquired by local people in such situations were taken over by more unified states, they left behind "rights when domain was ceded."[11]

Similarly rooted in a feudal past, and combining the plural idiom of liberty with a more modern-sounding singular one, was a case often recognized as highly

significant in the history of democracy, that of the Levellers in seventeenth-century England. Emerging out of groups within the New Model Army set up by Cromwell to fight against the Stuart kings during the Civil War, the Levellers put forward a program that bears comparison with nineteenth-century Chartism. In a famous debate held at a church in Putney in 1647, the Leveller spokesman John Lilburne rejected making voting rights dependent on property ownership (a condition that would persist until the twentieth century) on the grounds that "the poorest he that is in England hath a life to live as the greatest he," and argued that no man should be subject to a government to which he has not given active consent. Although not yet recognizing any need to bring women into the political nation, the Leveller program included full legal equality for all males, active participation in civic life, an independent judiciary, consent to taxation, and a citizen militia "to enforce right and justice." These demands rested on the status of individuals (excluding those who, as servants, were subject to the will of some superior) as "free men" or "free-born Englishmen." Similar sentiments had animated groups claiming liberty for the propertyless earlier ("When Adam delved and Eve span / who was then the gentleman?" a fourteenth-century verse slogan asked) but the situation created by mobilizing soldiers for the Civil War gave them new access to a national platform.

Lilburne expressed these views in the language of his time, and in doing so revealed just how radical its implications could be. The most common contemporary understanding of a "freeman" was a person who possessed rights by virtue of membership in some group that conveyed them: as one treatise put it, "a Citizen of London, or other City, or Burgesse of any Towne Corporate" was free "because hee is made partaker of those liberties that appertaine to the Corporation, wherinto he is enfranchised." Like the author of this text, Lilburne and his fellow-Levellers saw freedom as deriving from some kind of corporate membership, and they were wholly comfortable with the plural language their contemporaries used about it, regularly invoking the "privileges," "immunities," and "franchises" that comprised the liberty they valued. In their view, if some possessed these advantages as members of the nation, then it followed that all Englishmen who were not dependent on the will of some other person had the same right to them. Monopolies that deprived some of access to privileges others enjoyed were "conspiracies against the lawes and liberties of England." As Rachel Foxley puts it, "It is not that some Englishmen have some privileges and others others. All are supposed to have the same privileges and liberties" – not as individuals but as members of the same social body. Using both languages, the Levellers saw the singular one as designating what an earlier historian calls "a composite" of all the individual elements named by the first, expressing "the rightful claim to all these things" from which no one could legitimately be excluded.[12]

Lilburne stood at a junction where the two languages of liberty flowed into each other. Like many of his contemporaries he often spoke of natural or

divine law alongside the law of England, but he never found the second wanting by virtue of its rootedness in a particular place; on the contrary the inheritance of "the ancient common law," embodied in Magna Carta and the political practice that flowed out of it, made English law a model for what other legal systems should be, more an equal partner with divine law than a derivative from it. The measures that needed to be instituted in order to realize freedom, such as annual parliaments and universal manhood suffrage, were extensions and generalizations of English historical practice. For Lilburne and his fellow-Levellers, singular liberty was not a substitute for the plural kind but a product of it, effected by broadening the traditional understanding of privileges as local and particular to the level of the nation as a whole.[13]

Although some may be made uncomfortable by the potentially nationalistic implications of Lilburne's language, there are reasons to think him right that England was especially fertile ground for such a generalization of older liberties into a modern and even radical form of freedom. In none of the other situations we have discussed in connection with relations between the two languages would it have made sense to refer to the population as a whole as born into a society whose laws made all its members free (Rousseau's later and famous "Man is born free and everywhere he is in chains" acknowledged as much), and nowhere else did conditions encourage envisioning a common right to liberty as the summation of all the privileges accorded to particular groups. The contrast is particularly clear with France, the country from which emanated the widespread modern notion that liberty needs to be founded on a revolutionary remaking of society and its principles (and not just on independence, as in North America), and the one where the incompatibility between liberty and privilege would be most intensely and momentously asserted.

The differences between the two countries arose first of all at the intersection of geography and politics. Roughly a third of the area of modern France, England became a unified kingdom in the single fell swoop of its conquest by William of Normandy and his band of some 6,000 knights in 1066. Conflicts and rivalries long kept the country unstable, but the need to impose rule on a resistant populace created an underlying motive for cooperation between William and his successor kings on the one hand and those who received grants of land from them on the other, becoming the foundation of a new aristocracy. Ties of vassalage spread through the country, connecting those who became local lords and magnates to the monarchs, and lesser fief holders to them. That William was able to conduct a survey of all the landholders in the country, the famous Domesday Book, in 1087, is one sign of how far and how early the central government was able to extend its reach (building on precedents developed by the pre-Conquest monarchy). Over time many conflicts about the nature and extent of royal authority would erupt, most famously the one that produced Magna Carta in 1215 and those that led to the Civil War and

(peaceable) revolution in the seventeenth century. But the underlying frame of much later English history was already in place; nowhere else did so high a degree of common interest exist between central authority and local power holders capable of considerable independence, both giving magnates reasons to support the kings so long as they did not overstep acceptable bounds, and encouraging the former to develop ties among themselves that would strengthen their resistance when those limits were breached. These are some of the reasons why, to repeat the formula borrowed earlier from Walter Ullmann, the balance between "feudal" and "theocratic" elements in medieval kingship tipped toward the contractual side in England, creating the situation out of which the continuous history of Parliament, originally an extension of the king's household and court, could take shape.

That the balance swung the other way in France had much to do with the very different way in which national unity was imposed there, and the kinds of social and political relations that developed as a result. The France of which the Capetians were kings was only the region around Paris (still known today as the Île de France). Gradually over the centuries, by battle and treaty, dynastic diplomacy and inheritance, the monarchy extended its control over the formerly independent areas (Normandy, Flanders, Brittany, Provence, Dauphiné, etc.) that became part of the modern nation. As it did so, the kings had to confront competitors hardly less and sometimes more powerful than they. The need to make various compromises with these rivals led them to create what Joseph Strayer dubbed a "mosaic state," an assemblage of separate pieces each of which bore some distinctive coloration and fit differently into the whole. Whether or not these should be seen as an example of provinces ruled *aeque principaliter*, the result was a country unified on the basis of separately negotiated relations to the monarchy. One significant contrast distinguished those territories where the king had the right to name high administrative officials on his own, the so-called *pays d'élection* (in which the last word referred to royal choice, not any kind of voting), from those where their designation remained in the hands of local assemblies, the *pays d'états*. Many territories not only retained their own excise duties and customs barriers, but enjoyed full or partial relief from certain taxes the king was able to levy elsewhere. These arrangements overlapped with the general exemption from the *taille*, the major direct tax of the Old Regime, accorded to all nobles, both "sword" (the term invoked the common medieval association between nobility and military prowess) and "robe" (whose status derived from having purchased judicial or administrative offices). Cities had immunities too, reducing or eliminating certain charges (few towns of any size paid the *taille*), and confirming their particular form of self-government. In addition, many well-off bourgeois possessed tax exemptions equal to those of nobles, by virtue of some special status accorded by the Crown.[14]

All these arrangements were, in the language of the time, privileges and liberties, much as in other countries. But in France such rights and exemptions took on roles they did not play elsewhere. Important as liberties were in Germany and Italy, they did not define people's relationship to a central state, since neither country was ruled by one. In England they linked people throughout the country to the royal administration, but they had never been the basis on which different regions came under its authority, nor did they create separate regimes of taxation or jurisdiction. Spain, as a composite monarchy, was more like France in these respects, but since it was a dynastic union of only two kingdoms, Aragon and Castile (later joined by Navarre) conjoined at a single moment by the marriage of Ferdinand and Isabella in 1469, the state was not built up around the varied deals with local power holders that gave the French Old Regime its mosaic character. It was this quality that led the relations between privileges and liberties to become so problematic in France, eventually making them incompatible. On the one hand the system of privilege was the basis on which the king governed the country, since it defined the relations between the monarchy and its various components; as David Bien observed, that system functioned as a kind of "constitution" for the Old Regime. But it was at the same time a chief cause of the state's weakness, because the multifarious tax exemptions enjoyed by towns, corporate groups, regions, and individuals, constituted barriers to efficiently tapping the wealth of the country to support royal projects and ambitions. The sole way for the monarchy to overcome these barriers was by circumventing or rescinding the tax exemptions it had accorded to its subjects, but the latter saw such policies as attacks on their liberties, so that past a certain point such moves amounted to subverting the very system by which people consented to be ruled by the kings. Manipulating the system of privilege was a temptation the kings could not resist, but it led them to actions that came to appear ruthless and despotic in the eyes of their subjects.[15]

This outcome took shape under the three Louis's who were the last pre-Revolutionary monarchs. The expansionist ambitions of the first of them, Louis XIV, required that he raise unprecedentedly large armies that demanded correspondingly higher levels of expenditure, and to pay for them he adopted a range of new measures. One was a system of tax farming, by which agents paid a fixed sum to the royal treasury in exchange for the right to gather as much revenue from some particular area as they legitimately could. Such an arrangement regularized royal income but it was rife with potential for exploiting weaker subjects, chiefly peasants, as well as for corruption. A second solution was to impose new taxes, first a *capitation* (head tax) and later a *vingtième* (twentieth), to which everyone was in principle subject, including nobles and bourgeois exempt from the *taille* or other levies. Put out by the door, however, the system of exemptions came back in through the windows, because at moments of budgetary distress the government sold new privileges

to those able to pay for them. Thus the monarchy came to appear increasingly mercenary and less trustworthy in the eyes of its subjects. The third tactic was simply to abrogate existing privileges, a measure that, like the new taxes, made the system more equitable in theory; but it too was folded back into the existing order as royal agents pressured those whose exemptions had been cancelled to buy them back, putting the need for current state revenue ahead of genuine reform. What often made the people to whom these arrangements were offered willing to accept them was, first, that they thereby recovered their tax exemptions, and, second, that the recovered privileges included rights of local self-government, which both regions that possessed functioning local assemblies (*états*) and cities wishing to preserve some degree of autonomy were willing to pay to preserve. As this scenario was replayed across the eighteenth century and throughout the land, awareness grew that privileges in the positive sense, the one that made them equivalent to liberties, were becoming absorbed into an oppressive and untrustworthy system, exploited by the monarchy for its own ends. People did not lose their old liberties but increasingly felt, as David Bell concludes, that the king's actions would "violate the delicate, tacit foundations upon which the politics of privilege had been built," making the whole political structure unstable.[16]

As this balance teetered, the long-standing presumption that maintaining liberty required the preservation of distinct locally based privileges began to lose its footing too. Once it became evident that the monarchy's attempt to manipulate traditional liberties to its own advantage was a countrywide effort, opposition to it broadened in response. Whereas in the 1690s urban populations had sought to confront the king's demands largely on their own, negotiating directly with the local *Intendants*, after the middle of the eighteenth century various forms of cooperation developed between people faced with similar challenges in different parts of the country. Gail Bossenga notes that opposition to royal policy in Lille took on a more national focus in the last decades before the Revolution, and that mobilization "was not achieved through class alliances, but through corporate networks of town councils, Chambers of Commerce, *bureaux des Finances* and the like." A similar reaching out to entities like themselves occurred as the law courts called *parlements* became focuses of opposition to royal policy; individual ones such as Toulouse communicated with their confrères in different places, "and used a language that referred to the entire nation," integrating their activities into "a form of politics transcending the city and province." A historian of Bordeaux reports a similar shift in focus and language.[17]

As this situation developed, attempts to maintain traditional privileges became not just counterproductive in the face of royal manipulation of them, but rhetorically and politically less effective than appeals to a generalized liberty. In the past, local groups whose privileges gave them some degree of political power, such as *parlementaires* and members of local

governing councils had been rivals. But in the face of repeated inroads on what they all considered established rights of property (offices and the exemptions they conferred being purchasable and inheritable in the Old Regime), they came together in opposition to a despotism that "lurked in the very machinery of the state." Not yet at the point of being able to imagine a fundamental change in the mode of governing the country (this would come only with the crisis of 1788–89), they began to yearn for a regime under which they could pay taxes willingly, as they believed their ancestors had, without exposing themselves to oppression and double-dealing. In this context, as Michael Kwass noted in his study of Old Regime taxation and privilege, liberty took on new meanings, one of which was "the freedom of citizens to contribute taxes voluntarily to the crown." Such freedom included "participating in the estimation of the needs of the state and the resources of the citizenry, fixing the proper scale and distribution of taxes, and willfully providing the sums to the king. In short, it meant the freedom to tax oneself." Already integrated into the country by participating in the making of public opinion, these fledgling citizens desired what Gail Bossenga calls "an unmediated existence in the state." To be sure, people sought their own advantage in resisting royal claims; when the *parlement* of Rouen spoke about liberty it still invoked "the sum of liberties and privileges enumerated in the medieval Norman charter," which limited the charges the monarchy could impose. But "[n]ever did the court invoke the term to claim that nobles and officers were exempt from the *capitation* and the *vingtième*. Instead, liberty came to stand for the general principle of judicial consent to legislation and the freedom to participate in the levy of taxation." It meant "freedom from the encroachments of the state, the feeling of security that came with that freedom, and the right of sovereign courts, as temporary organs of the nation, to deliberate on and consent to royal law."[18]

In the face of these new understandings, both privileges and plural liberties were at once discredited and eclipsed. When lawyers justified their speaking out on public issues (such as the famous case of Jean Calas, a Toulouse Protestant unjustly convicted of murder) on grounds of a universal right to "the freedom of speech which, ideally, belonged to all the citizens of a nation," they implicitly undermined the system of corporate distinctions on which their special status rested. More generally, as Bossenga notes, many people came to feel that "their privileges were of less and less worth to them . . . The translocal mobilization of corporate groups and their invocation of more universalistic concepts like those of popular consent, uniformity, rights of property, and citizenship helped to undercut the foundations of their own particularistic privileges." So did the increasing sense that privileges by their nature divided the nation into separate and warring groups, each protecting its own turf. As one publicist wrote early in the 1780s, "The French are all ranked, and each have their own occupations; they have a corporate spirit and hardly any other.

Wherever you travel you will find priests, financiers, army officers, magistrates, merchants, but hardly ever citizens . . . I prefer to see a single nation, a single family, brothers who at heart have the same interests and the same rights." By the time the crisis that set off the Revolution broke out, the inhabitants of Lille, who had defended their liberties in the old terms as recently as the 1760s, had shifted significantly to the new idiom, demanding that the Estates General called into session by the king be organized so that they would be represented not as bourgeois members of a privileged order, but as citizens of a unified nation.[19]

It was in this context that the critique of privilege as simply a form of inequality and discrimination penetrated into social consciousness, receiving a powerful boost from widely read advocates of democratic sovereignty, most notably Jean-Jacques Rousseau. As he wrote in an article published in the *Encylopédie* (edited by his then friend Diderot), no well-ordered government should ever grant any exemptions from its laws, which needed to apply equally to everyone:

> Citizens to whom the *patrie* owes some special recognition should receive it in the form of honors and never in that of privileges. For the republic will stand on the eve of its ruin as soon as any person thinks it a good thing not to obey the laws. If ever the nobility or the military or any other order of the state adopts such a maxim, everything will be lost, with no recourse.[20]

Rousseau's rejection of privilege was one expression of his general critique of all the forms of legal inequality that oppressed him in the society of his time, and of the cultural norms that supported them, notably in France but also in his native Geneva, where degrees of privilege divided citizens into two distinct categories with greater and lesser access to political power (Rousseau's family belonged to the lower of these two groups). His political theory (as we noted at the end of the previous chapter) grounded all legitimate authority in the equal subjection of all the members of a community to the laws that constituted it as a political entity; only if everyone was equally subject to these basic laws could the mutual agreement by which people moved from natural to civic life – the "social contract" – work against the human impulse to dominate other people that constantly threatened political freedom. From this point of view the literal meaning of privilege as a "private law" became a contradiction in terms. We will return to his understanding of these relations later on; what matters at this moment is that, in France, Rousseau's highly influential way of thinking about inequality and privilege dovetailed with the growing alienation from the traditional equivalence of privileges and liberties generated by the monarchy's manipulation of its own system of rule to overcome its fiscal dilemmas.

When the ultimate failure of this tactic led to the calling of the Estates General in 1788, the most prominent spokesman of the opposition to privilege

was the Abbé Emmanuel-Joseph Sieyès, author of the highly influential pamphlet *What Is the Third Estate?* His answer was that the Third Estate, despite its exclusion from the regime of privilege that defined the Old Regime, was the core of the nation. It furnished the whole of the productive activity, the totality of goods and services the country needed to survive, including most of the administrative functions that made the French into a nation, defined as "a body of associates living under a common law." This understanding lay behind the central role Sieyès would play in the first, liberal, phase of the Revolution; it was he who proposed the motion by which the deputies of the Third Estate constituted themselves as the National Assembly, representing France as a whole (soon after, in the famous "Tennis Court Oath," they would promise not to dissolve until they had provided the country with a constitution). This was the defining moment for the demise of the Old Regime, since it bypassed the political organization of the nation into separate orders whose privileges defined people's relationship to the state. For Sieyès, privilege was the great enemy of national unity and justice, and his hostility to it was important in opening the way for democracy in France. But his portrayal of the Third Estate as consisting of those who stood outside the regime of privilege was importantly misleading, since it conjured away all those non-clergy and non-nobles who in fact participated in the regime of privilege – as beneficiaries of the liberties of towns or rural communities, or as members of guilds or other corporate bodies, not to mention those commoners who were in the process of attaining noble status, usually in the second generation, by virtue of ownership of an office.

This view was reflected in a different way in a lesser-known pamphlet Sieyès published just before his famous one, titled *On Privileges*. Its main ideas were eminently Rousseauian: privileges were exceptions to laws that ought to have no exceptions, thus their effect was to create a body of people who live outside the law, weakening both its force and people's respect for it. "If the law is good, it should obligate everyone, if it is bad it should be annulled"; anything else was "against liberty." But what is most noteworthy in this text is what Sieyès said, or rather did not say, about the history of privileges. Declaring at the start that he would have liked to discuss their origins and nature, he abruptly dismissed the whole question, saying that it would have forced him to "double back on the same ideas." In other words, defining privileges as exceptions to laws that should apply universally was enough to elucidate their role in French life. That they may once have been inseparable from liberties people cherished and fought hard to retain could be forgotten.[21]

In this Sieyès was on the crest of a wave that would soon carry the older meaning out to sea. People still understood it well enough in the years leading up to the Revolution; the older sense appears in numerous articles in the *Encyclopédie* and in royal decrees, and the last confirmation of the "privileges and liberties" of the city of Dijon was issued in 1781 (doubtless in return for

a stiff payment). As late as 1788 one spokesman for the Estates of Dauphiné denied that the king had a right to abolish the assembly, because the province "was ceded to him only on condition that he preserve its rights and privileges, one of which was to have Estates."[22] As the meeting of the Estates General approached, hope that the monarchy and aristocracy might cooperate in reform efforts that would end the despotic manipulation of privileges but not their role in political life led some representatives of the Third Estate to propose compromises. Expecting that a liberal faction among the nobility would prevail, the Third Estate of Dijon sent a conciliatory message to the king in January of 1789, saying:

> We will always respect distinctions founded on social order, and necessary to the glory and security of the state. The ministers of the altars will always have our respect; the heads of armies will always have our gratitude and our consideration; the Clergy and the Nobility will not cease to be distinct and separate orders. Honorific privileges, more worthy of them than pecuniary privileges, will forever class them in a rank properly superior to that of the Third Estate.

But once it became clear that recalcitrant nobles had succeeded in preventing their order from meeting together with delegates from the Third Estate, and that the monarchy would take their side, such compromises were given up. Sieyès's sense of what privilege meant now took charge.[23]

Its moment of triumph was the great bonfire of privileges ignited on the famous night of August 4, 1789. Sparked by a series of limited and hesitant proposals for freeing peasants from remaining forms of servitude and abolishing noble judicial authority, a great conflagration suddenly spread through the Assembly, as one bishop and noble after another rose to renounce his own special exemptions and benefits; by the time the flames died down, practically the whole of the Old Regime system of government and social relations had been consumed – save for the monarchy itself. Church tithes, legal inequality, venal offices, and finally (as one historian notes) "provincial and municipal privileges, cherished and defended for centuries," were thrown onto the pyre. The heated atmosphere became so confusing that afterwards people were unsure what exactly had been done; a week later the Assembly responded by decreeing that "all the particular privileges of provinces, principalities, regions, cantons, cities and communities of inhabitants, wither pecuniary or of any other nature, are abolished without recourse, and will be merged within the law common to all French people."[24]

With privileges demolished, the idiom that had foregrounded them now merged into the language of rights with which it had long coexisted. Amplified and fortified as criticism of privilege mounted during the eighteenth century, the new language was enshrined in the Declaration of the Rights of Man and Citizen passed by the Assembly on August 26. Much influenced by recent

American precedents, certainly the Declaration of Independence with its ringing affirmation of divinely instituted and inalienable rights, and probably including the Constitutional Bill of Rights proposed by James Madison early in June of 1789, the French Declaration defined rights as natural, universal, and equal for all, naming them as life, liberty, and property. In February of 1790 the Assembly declared that "Innumerable privileges, irreconcilable enemies of all good, used to compose our entire public law; they have been destroyed, and at the voice of your Assembly, the provinces most jealous of their privileges applauded their fall." This was an accurate statement, recognizing the central role privileges had formerly played as well as the effects of the development then reaching its climax.[25] To speak of liberties in the plural could now refer only to the particular forms this universal and innate liberty took, and that public law was called on to guarantee, listed in the French Constitution, of 1791 (the country's first), as rights to freedom of conscience, speech, the press, petition, movement, and assembly. Other rights would be added later.[26]

The history just recounted is a uniquely French one, nowhere else was so determined and thoroughgoing an attack on privileges carried through. All the same, the French were helped in formulating this shift in language and thinking by people with whose revolution theirs had many ties, namely the thirteen British colonies who declared their independence in 1776. Thomas Jefferson, the primary author of the Declaration of Independence, was in Paris on a diplomatic mission when the Estates General met, and he helped his close friend Lafayette (who had fought for the colonies against the British and was now a member of the National Assembly) to draft the French Declaration of Rights. But the Americans had not come to the singular language of liberty in the way the French did, nor did they have similar reasons for rejecting the plural one. In the period of struggle that followed such hated measures as the Stamp Act of 1765 (which imposed a duty on newspapers and commercial documents), American spokesmen based their protest not on natural or human rights but on "the rights of Englishmen." These their British overlords refused to grant on the grounds that the colonies were "dominions," not regular parts of the kingdom, and therefore had no right to be represented in the Parliament that legislated for both. Typical of the American responses was the declaration by the First Continental Congress (1774) that settlers who came to the New World were "entitled to all the rights, liberties, and immunities of free and natural-born subjects, within the realm of England," language that echoed the Declaration of Rights which issued from the "Glorious Revolution" of 1688–89. The colonists commonly equated these rights and liberties with privileges, for instance in the "Charter of Privileges" that William Penn issued for his domain in 1701, guaranteeing both religious freedom and political representation. Some historians have concluded that the American Revolution was fundamentally a struggle for traditional English rights rather than for human or natural ones, and they are correct up to a point; but that

point was left behind once it became clear that the king and his ministers would not yield on it. The political life of the colonies as "free and independent states" demanded a different foundation, and Jefferson's Declaration famously sought it in rights with which "all men are endowed by their Creator."

In terms of content, however, the Americans seem to have regarded these natural and universal rights as essentially identical with those they had earlier demanded as Englishmen, much in the way John Lilburne did over a century earlier. The list of tyrannical measures charged against George III in the Declaration was a litany of acts that contravened the liberties affirmed in the English Declaration of Rights of 1689, which detailed measures that no monarch had the right to take against his or her subjects. In moving from the language of the rights of Englishmen to that of universal natural rights not because they thought the former provided an inadequate basis for the freedom they sought, but because King and Parliament refused to let them have them, the colonists followed a path much like that of the Dutch rebels two centuries earlier, seeking first to preserve what they saw as their traditional privileges and liberties, and turning to rights established on a more universal basis only when the first alternative crumbled. To be sure the term privileges in the older sense, like liberties in the plural, would have little or no place in later American constitutional or legal history; one article of the Constitution referred to them, but such language simply faded away in American conditions, no great battles being needed in order to exclude it.[27]

The British case is more complex. Before 1789 the liberty to which people appealed was generally assumed to be an extension of traditional rights rather than an alternative to them, much as it had been for Lilburne. Once the example of the French Revolution became a reference point for reformers, however, new horizons opened up. In *The Rights of Man* (1792), his response to Edmund Burke's critical *Reflections on the Late Revolution in France*, Tom Paine joined with the Revolutionaries in asserting that the inherent human potential for freedom could only be realized by a radical break from Old Regime notions and practices, and one way to effect such a rupture was to reject any dependence of rights and liberties on chartered privileges: "It is a perversion of terms to say that a charter gives rights. It operates by a contrary effect, that of taking rights away. Rights are inherently in all the inhabitants; but charters, by annulling those rights in the majority, leave the right by exclusion in the hands of a few." In such a perspective the traditional idea that privileges could be a source of liberties appeared as nothing but a cheap trick, conjuring away the rights people possessed by nature in order to make rulers appear to be their source. (A contemporary book less remembered today but well known in the time, T. B. Oldfield's *History of the Boroughs of Great Britain*, took a similar tack.) Such claims no longer left room for Lilburne's view that true freedom could arise as the generalization of all the "privileges, immunities, and franchises" to which the common law entitled Englishmen,

since that law ignored their genuine basis. Liberty and rights had now to inhere in something that preceded any of their particular embodiments; to derive them from custom or history was to rob people of the freedom inherent in human nature.[28]

But the inadequacy of this view for grasping the complex state of British politics at the time is shown by the fact that in England the defense of privileges was taken up by people who cannot be dismissed as merely conservative. The movement to reform Parliament and make it more representative of the country as a whole focused on such anomalies as the control over elections held by one or a few people in small or even wholly depopulated towns (the "pocket" or "rotten" boroughs), the lack of parliamentary representation under which newly populous places especially in the industrializing North suffered (Manchester and Birmingham were not even incorporated, and possessed no institutions of self-government), and the consequent disenfranchisement of people who lived there. In response, the Reform Bill of 1832 would at once deprive some shrunken boroughs of their seats in Parliament, assigning them instead to unrepresented larger ones, and introduce uniform qualifications for suffrage in all boroughs (and in most counties).

Historians looking back have usually seen the pre-Reform electoral system in the same negative light as those who worked to do away with it, and with much reason. But in fact the uniform standards introduced by the Bill disenfranchised some modest residents, artisans and small traders, who had possessed voting rights as freemen before, but did not meet the new property qualification (set at paying £10 per year in rent). It was to prevent this that some opponents of the Bill stood up for local independence, equating it, as Rosemary Sweet notes, with "the protection of the very privileges which the more comprehensive plans for reform sought to undermine." Candidates for election on both sides were able to claim to be what one opponent of the Bill called "*the real protectors*" of their constituents' "*Rights and Privileges*, and the true friends of LIBERTY."[29]

Campaigns were conducted in these terms well into the 1820s, but they constituted a kind of last hurrah for the old language of privileges and liberties in England. In 1835 Parliament passed a Municipal Corporations Act, following the recommendation of a Royal Commission that excoriated the existing ones (perhaps too globally) for their narrow membership, partisan behavior, and openness to corruption. The Act set up a uniform system under which all boroughs were to be governed by town councils, elected by taxpayers and obligated to publish their financial accounts. Taken together, the Reform Bill and the Corporations Act marked the end of local privilege as a way of organizing political participation, doing away with the warren of separate arrangements that made England in its way something of a "mosaic state" too. In France, replacing that model with a uniform national organization had required both the holocaust of privileges that lit up the night of August 4, 1789,

and the subsequent division of the country into uniformly administered *départements*, named for geographical features such as rivers and mountains, and consciously blotting out the distinct governing systems that characterized the Old Regime *pays*. In England establishing countrywide rules for the representation of towns and counties was the functional equivalent of these French changes; but because tax exemptions had never been the mammoth and tangled issue they had become across the Channel, no frontal assault on either the monarchy or the aristocracy was required, and none took place. The power of the House of Lords was sharply curtailed as a by-product of the struggle to pass the Reform Bill of 1832, but the social position of the aristocracy was hardly affected, and aristocrats remained dominant in government to the end of the nineteenth century.

A similar and similarly pacific move away from the old order of privileges and exemptions took place in regard to the surviving "Liberties" that were independent administrative districts (like the Liberty of Westminster referred to earlier). In 1850 Parliament passed a "Liberties Act" establishing procedures by which any of them could be absorbed into the counties or other units of local government where they were located. Administrative efficiency and convenience, plus a general sense that people throughout the country should be governed on the same basis, were the motives. Most of the surviving territorial Liberties were eliminated in this way by 1875, but traces of others (including Westminster) persisted until altered by the Local Government Act of 1888. Many of the provisions eliminated through these measures were privileges in the old sense, but abolishing them raised none of the overtones that resounded in France.[30]

In the German-speaking lands the plural language of liberties held out longer against attacks on it, receding only with the national unification that brought the country out of the fragmented condition that long made it a kind of microcosm of Europe. Until then (and even after) towns and regions continued to invoke the old idiom as a shield against rulers' attempts to expand their power, just as they had in the sixteenth century. Since the main path to such expansion, as illustrated by the case of Prussia, was by assembling formerly independent territories under a single head, these states began as composite monarchies, able to absorb their new subjects peacefully only by taxing and ruling them in ways that maintained some degree of respect for the liberties they had formerly enjoyed. One reason why the Prussian kings relied so much on their famous royal army as an instrument for consolidating the monarchy was that, as a newly established entity – established in 1701 – it was the sole state institution that could be organized on a uniform model in all the Prussian domains and without reference to any earlier exclusions or immunities.[31]

The first major challenge to the persistence of the latter came from outside the country, namely with Napoleon's conquest and his inclusion of large parts

of the German lands in the Confederation of the Rhine constituted in 1806. The French emperor sought to consolidate the new entity by introducing reforms modeled on the political reorganization carried through by the Revolution from which he had sprung, not for democracy's sake but in order to eliminate older practices that impeded central control. These measures included abolishing guilds, introducing legal equality, setting up uniform administrative procedures, regularizing citizenship rights, and separating office-holding from property rights, thus sweeping away the arrangements by which such matters were managed in terms of liberties or privileges. But the power to maintain these changes disappeared with Bonaparte's fall, and once he was gone some towns and territories returned to their old arrangements, reviving both traditional social distinctions and the guild economy. Some of the territorial rulers however, seeing French-style reforms as favoring control from the center by instituting more uniform and direct connections between governments and their populations, took over elements of the Napoleonic program on their own account. Chief among these was Prussia, where the modernizing agenda attracted much liberal support, at least until it became clear that one crucial element of it, the promise of representative institutions, would not be fulfilled. Although the reforms offered advantages for some sections of the population, ending serfdom for many peasants, reducing the noble domination of the army and opening the way to freer trade, their main effect was to regularize and expand royal power.[32]

Even the new *Reich* constituted by Bismarck could not be constituted without residues of the old regime of privileges and liberties. It employed a single electoral system for choosing members of the central *Reichtstag*, but its component states (*Länder*) and cities retained their own requirements for local elections, and both territorial assemblies and urban governments kept their preunification forms too. The city of Hamburg was allowed to operate a free port independent of the tariff applied to the rest of the Reich for around a decade after the unification, and Bavaria had its own army. These residues of the old regime of privileges and liberties were increasingly seen as anomalies, their days numbered, but their history in Germany had its own shape, just as in England and France.[33]

These separate trajectories suggest that the plural language should not be regarded as an imperfect version of the singular one, nor as a backdrop against which to project the latter's advantages. For all its limitations, the idiom dominant earlier belongs no less to the history of liberty than does the one that has prevailed in modern times. Its early spread and long persistence, and the many different contexts in which it served to protect people against the intrusions of rulers bent on expanding their power, all testify that what made Europe the home of a preoccupation with liberty unmatched in any other part of the world was not the rise of a new social class in the Middle Ages, or of democratic theory and the efforts undertaken to realize it in later times, but the

division and fragmentation that impeded efforts to establish a central imperial authority once Rome had fallen. The eighteenth-century attack on privilege, and with it the insistence that only if all society's members are subject to the same laws can the human capacity for freedom find a significant degree of realization, has been and remains a crucial foundation of modern political life. But the modern singular idea of freedom has proven susceptible to serving as an instrument of domination no less than the older plural one, as medieval Italians learned from the behavior of Florence and Venice, and as regimes set up in the aftermath of revolutions have taught us since the eighteenth century. Whatever importance we may attach to the contrasts between the two ways of organizing and thinking about political life, we also need to recognize the continuities between them.[34]

4

Other Liberties

As the observations about Europe's preoccupation with liberty considered at the beginning of Chapter 2 tell us, people elsewhere around 1870 found no comparable concern in their own societies. Even their languages needed a new vocabulary in order to discuss it. In this chapter we will try to understand why this was the case. But we should not take this contrast to mean either that peoples elsewhere were indifferent to freedom, or that they had no indigenous experience of it. Escaping from servile status, overcoming both natural and social constraints, standing up against overbearing or unjust individuals or officials, finding ways to express opinions – all could be goals and achievements valued even where they were not named as freedoms. Partly this was a difference of linguistic inheritance: the European story we have tried to follow so far would not have been the same without the Greek and Roman heritage on which it drew. But other things contributed to this contrast at least as much, one being that peoples elsewhere placed a higher value on other ideals or qualities. To understand why this was so, we need to take up four separate cases: Africa, the Arabic-speaking lands that eventually came to be ruled by the Ottoman sultans, Mughal India, and China.

Of these, Africa was in one way the most like Europe: it remained divided through its whole history, never evolving the kind of unified direction or central authority that played a significant role in in the other three regions. Given its vast extent (nearly 12 million square miles, roughly three times the size of either Europe or the continental United States), this is hardly surprising, but it leaves unaddressed the question of why this situation did not generate the kind of preoccupation with liberty that the absence of unity helped to bring forth in Europe. Part of the answer lies in the linguistic contrast just noted: it is not possible to say that no term comparable to liberty in the Western sense existed among African peoples, since most of them left no written record, but the conditions of life in most parts of the continent made other preoccupations more weighty, even where some proportion of the population benefitted from what would appear to us (and eventually to them) as freedoms.

The most basic of these conditions lay in the many challenges that African geography, climate, and ecology posed to the continent's inhabitants. In his recent and remarkable brief survey of African history, John Iliffe suggests that

the single most distinctive overall determinant of historical development south of the Sahara was the region's underpopulation, long enforced by "poor soils, fickle rainfall, abundant insects, and unique prevalence of disease," barriers only overcome (and not completely) after the middle of the twentieth century. The Mediterranean lands at the continent's north benefitted from maritime links to societies around the whole littoral, giving them access both to long-distance trade and commerce, and to the information and stimulation it brought. But the rest of the continent was – and parts of it remain – less favored; cut off from these connections by the great barrier of the desert, its regions also suffered from the impediments to interior communication constituted by thick forests, dangerous animals, and the limited range and navigability of the river system. The constraints these difficulties imposed meant that social expansion proceeded in a different way than in Europe, the Near East, China, or the Americas. Whereas in all these places people "colonized by pressing forward linear frontiers and extending cultures formed in nuclei of dense population," here "colonization was mainly an internal process, taking the form of thrusts into uninhabited forest or grassland along innumerable local frontiers."[1]

Such new settlements were often spearheaded by some individual "Big Man" – the term was explicit and commonly employed in several African languages – "whose personal qualities attracted kinsmen and clients," and many villages founded in this way were dominated by such figures and their descendants. Cohesion was maintained, first of all, by personal loyalty, often in the absence of formal political organization, leaving wide areas of the continent "stateless when Europeans first described them." Social integration was maintained less by public authority than by ritual practices of a religious or quasi-religious kind, and through membership in subgroups based on kinship, occupation, age, or gender, many of them formed into secret societies requiring special initiation ceremonies (for which many of the remarkable masks avidly collected in the West were fashioned). Both the "Big Men" and the members of these groups could experience a form of independence that might be felt as freedom.[2]

The same was true of certain modes of political organization. Forms of rule varied greatly, based on history, geography, and relations to surrounding groups, but many states were kingdoms, and Jan Vansina has proposed a classification for them that suggests some of them gave their inhabitants at least a relative sense of being free. At one end of the spectrum were essentially despotic regimes, where a king controlled all appointments and intervened actively in both internal and external affairs; at the other lay a form of federation, where independent local chiefs lived close to their subjects, giving favors to some, governing their own domains, and coming together as a council chaired by the king to consider relations with outsiders. In some of the less centralized cases, the "only link between the center and the provinces is

the payment of tribute and allegiance to the king by the chiefs." The spaces made available for freedom were likely greater under some of these forms of rule than others, and it seems likely that inhabitants became aware of these differences, especially where councils brought people from different subking-doms together, or where struggles over succession developed (as was often the case) when a king died. Kinship groups seem to have been particularly import-ant in setting limits to rulers' ability to establish authoritarian control, because, as Frederick Cooper points out, "organized groups of kinsmen could move elsewhere to establish their communities," so that attempts to entrench power by monopolizing control over land "would have risked an exodus of would-be subjects and followers." Taken together with some other features of African life (to which we will come in a moment) this mix of personal and political situations created what Crawford Young describes as "an incipient idea of freedom as communal endeavor," making "freedom – understood as the absence of restraint from above . . . an everyday experience and an unarticu-lated norm."[3]

But there are reasons to think such an awareness was indeed embryonic and unexpressed before the arrival of the Europeans. Oral traditions generally stressed other values: chiefly honor, courage, loyalty, and the ability to endure hardship. The same challenging conditions to which Illiffe attributes the continent's underpopulation helped to generate a high regard for those able to act effectively in the face of adversity and suffering. It was the strength to stand up against nature and gain control over it that made "Big Men" success-ful as founders and leaders of villages; even if such figures carved out spaces of freedom for themselves, it was the ability to prevail against difficult conditions that gave them status both in their own eyes and others'. Further testimony that these were the qualities that conferred recognition comes from the often demanding and painful initiation rites that marked the passage to adulthood, especially for males, testing their ability to contribute strength and endurance to a community whose continued survival depended on them.[4]

In a similar way, it seems unlikely that notions of freedom were articulated as a yardstick for differentiating between the various types of regimes distinguished by Jan Vansina. Some kind of unspoken contract may have been felt to exist between kings and their subjects in regimes that were not despotic, but the absence of written records meant that no understanding about the limits to each side's obligations was explicitly codified, so that it could not be appealed to in moments of conflict. How far such disagreements might be managed by orally transmitted custom, as opposed to simple force, depended on both the collective memory of the parties, and their willingness to be guided by something beyond their own interest. The conditions that held back the development of literate elites also made it difficult or impossible to build up a collective discourse around political and social issues in general or in comparative terms. Some of these situations were altered by the introduction of sharia law, text-based and

highly codified, in those parts of Africa that adopted Islam, but we will see in a moment that neither liberty nor setting limits to what legitimate rulers could do were significant concerns of Muslim political thinking. Rulers were expected to deal justly with their people, but the obedience the latter owed to the former was not tempered by any obligation of sovereigns to respect the liberty or liberties of their subjects.

One can see these elements at work in the history of various African peoples. One was the great empire of Ethiopia (the Black African society with the earliest written records), initially organized "chiefly for the control of nature and the colonization of land," goals highly valued by the Christian monks and holy men who were important in its early history. Society there long remained "dispersed and mobile," its government "loose and personalized" as a consequence. Only after the fifteenth century did the Solomonic kings abandon their vast itinerant camps in favor of permanent capitals. A seventeenth-century European visitor was struck by the absence of written laws, so that the custom and ancestral example appealed to in judicial proceedings could only be based on memory and oral witness. On the other side of the continent similar features can be seen in the very different society of the Ibo (or Igbo), native to what is now Nigeria, who remained "resolutely stateless" despite achieving a degree of prosperity sufficient to sustain both population growth and a certain level of trade. Their villages seldom had designated heads, and collective decisions were made in informal assemblies that would be seen as harbingers of freedom once the idea was diffused by Europeans. But the call-and-response form through which they functioned gave them more the character of rites of communal affirmation than of enactments of liberty; setting limits to authority was not part of their aim, and "Big Men" who had taken ceremonial titles (by performing rituals of largesse that converted their wealth into status) exercised great influence in them (points still emphasized by their eminent literary interpreter Chinua Achebe in the twentieth century).[5]

The one African state which may be said to have developed a more institutionalized system of limits was the single entity Jan Vansina assigns to the category of federative regimes, namely the Asante (or Ashanti) Union that arose on the west coast in the eighteenth century. Although the king (the Asantehene) possessed a uniquely high status and was an object of ritual veneration, power was shared both with the council of chiefs and with a sophisticated bureaucracy, whose officials pursued specialized functions (one unit conducted diplomatic relations with outside powers, including European ones). The overall structure provided what some scholars see as a system of "checks and balances." But leaving aside the point that such arrangements seem to have been rare in Africa, and that what made them possible in the Asante Union was its unique level of prosperity, based largely on the gold deposits with which the region (now that of modern Ghana) is favored, liberty does not appear to have been a distinguishable value there

either. The bureaucracy emerged as an extension of the king's household, and he used it to impose control over the formerly independent tribal military leaders whose subjection created the new state. The veneration of which the king was an object put him at the apex of a ladder of reverence where lesser and greater chiefs all swore fealty to those above them, creating a hierarchy of personal status and authority whose aura permeated all state institutions, and whose religious overtones have led some scholars to regard the regime as quasi-theocratic. Explicit limitations on power at the top, of the sort instituted by vassalage in Europe, were not part of the system. At the core of the federation stood the six metropolitan chiefdoms that had participated in its founding wars of expansion in the early 1700s. Together they dominated an inner ring of heavily taxed, conquered peoples who were (like the Asante themselves) ethnically Akan, and an outer non-Akan band of "tributaries . . . from which Asante residents demanded a thousand slaves a year, repressing frequent rebellions. The Asante Union always remained at root a military society with a citizen army, a harshly militaristic ideology, and great brutality towards the weak."[6]

That the Asante Union demanded 1,000 slaves a year from those over whom it ruled leads us to a delicate but unavoidable aspect of the question about what role freedom played in traditional African life – namely, the widespread existence of slavery there, and the limited extent to which any organized opposition to it developed before the twentieth century. It is well known that the forms slavery took on the African continent were – with exceptions – less severe and less humanly damaging than the ones into which Europeans dragged their cruelly maltreated captive prisoners. Both in West Africa and in the East, where enslavement was less common, it often took the form of "lineage slavery, in which individuals detached from their kinship group by some crisis were incorporated into another as subordinate members." Capture in war constituted one such critical event, but sometimes people would enslave themselves, if famine or destitution left them unable to survive on their own. In Islamic regions of the Niger Valley to the west, male slaves might be salt miners, but also craftsmen or soldiers, some riding their masters' horses into battle or working as administrators, although at a low level, reins on their emancipation reenforced by castration. Overall many, perhaps most, slaves were women, serving as domestic servants or concubines. But their children might become free, and if their masters were of high enough position, the males among them might enter ruling circles (even fairly often, as was the case in the empire of Songhay).

From the fifteenth century however, in the western river valleys, in the southern state of the Kongo, and on the eastern coast of the continent, numbers of slaves began to be used as agricultural laborers, often on large plantations run by overseers. Frederick Cooper has provided good grounds for thinking that even in these situations enslaved people on the east coast were

not subject to being regarded as less than fully human, or normally treated as such – as was often shockingly the case in the West Indies and the American South – because their status could be seen and felt as only the lowest form of a personal dependency that was continuous with many other kinds of social relations. Thus they occupied a recognized, if lowly, place in a self-consciously hierarchical society. But under certain pressures their lives could become more severe. One recent historian of slavery in Islamic parts of Africa notes that in many places "slaves worked in the fields, sometimes in great numbers," and that in such situations "slave-owning groups . . . held cultivators in contempt." Similar attitudes seem to have infected slave traders, whose practices, as described in songs and chronicles, recall the horrors of the American South: families broken up, children snatched away from their mothers, men dying in large numbers along the routes across the desert to Tripoli (where they were sold to Muslim slave merchants for transportation to the East). One chronicle lauded a ruler for "slaughtering all the fully grown male captives from among the pagans . . . As for the women and children, they merely became booty." The 1,000 slaves a year demanded as tribute by the Asante were taken into a harshly run military society whose conditions (as in the "sugar islands" of the Caribbean) provoked them to regular rebellions.[7]

It was in this mix of conditions that West Africans came to cooperate with European traders in search of enslavable people. Among the goods the former sought in exchange were such staples of international commerce as cloth, metals, tobacco, alcohol, and firearms; but the most powerful among African participants were chiefs for whom the traffic offered the possibility of converting captive or kidnapped members of other tribes into resources they could use to increase or solidify their power within their own. By what John Illiffe calls a "brutal irony," a continent unable to build up its population over most of its history "exported people in return for goods by which elites sought to enlarge their personal followings." It was this ability of the commerce in human beings to fit into traditional elite aspirations (fed by endemic conflict and hostility between neighboring peoples) that kept opposition both to the trade and to slavery itself within strict limits.

Some rulers and peoples turned against it to be sure, bravely and sometimes ferociously resisting attempts to enslave themselves, and refusing to participate in the enslavement of others; and accounts tell of ordinary people willing to take great risks to free captives before they could be put aboard European ships. But these had far less impact on the overall situation than the continuing commitment of powerful individuals both to the commerce and to slavery itself. In the West antislavery activists succeeded in getting both Britain and the United States to make the international trade illegal in 1807, followed by Britain's outlawing of slavery in the whole of its empire in 1833. These policies were enforced by the Royal Navy, which seized slave ships and freed their captive cargoes (over 1,600 such actions were carried out). But the economic

benefits this traffic brought to powerful African states led the rulers of Asante, Dahomey, and Lunda to resist the whole effort, proclaiming that if captives could not be sold they would have to be executed. Non-British traders (mostly Spanish) were only too willing to cooperate, and the numbers exported remained on a level with earlier ones into the 1820s and 1830s. But the altered conditions led to economic disruptions and a rise in armed conflict in some West African regions, and one long-established but small state, Bamoun (in what is now Cameroon), took advantage of the situation "to conquer, enslave, and resettle thousands of captives, much like the creation of Asante a century earlier." The same situation led other states to expand slaveholding either as a source of agricultural workers or to provide human commodities to exchange for increasingly available firearms. The overall result was that "the prohibition of slave exports positively expanded slavery within Africa, where slaves became more numerous than in any other continent." The growing numbers seem to have generated a deeper level of fear about slave rebellions among owners, leading to new and often harsh measures to keep them in line. Overall, the place of slavery in precolonial African society was part of the complex pattern within which many spaces of freedom might be found, but liberty itself never emerged as an identifiable goal, or a subject of general aspiration and reflection.[8]

* * *

The question of freedom was posed very differently in the chiefly Arab lands where Islam had its roots and major centers, and that eventually came to be dominated by the Ottomans. A number of things made liberty a far greater preoccupation there than south of the Sahara. Arab society exhibited an egalitarian spirit that contrasted with the many forms of social distinction prevailing in Europe and Asia, and early Muslims were especially conscious of the contrast between their form of life and the far more hierarchical one that comprised the Persian Empire just to their east. Although Arab families might pass down wealth and prestige to their children, there existed no formal and inheritable social distinctions. The strong emphasis on the equality of all men before God stood against rulers claiming a special nature distinct from their subjects (although that barrier would be breached in other Muslim contexts), and their actions were seen as limited by the requirement that they obey Quranic precepts. All the adult male members of tribes had an equal right to participate in making collective decisions, a sign that they were free men and not slaves, a distinction of much moment in Arab life (in which enslaved people imported from Africa often played a part). All these features made both the experience and to some degree also the idea of freedom palpable elements in the societies where Islam first spread.

But this does not mean that a concern about either political or individual freedom on anything like the scale that developed in the West was present in premodern Islam. Asking the question, "Is Political Freedom an Islamic Value?" the historian Michael Cook gives several reasons for responding in the negative. From a religious point of view the only source of true freedom was obedience to God ("Islam" literally means submission), and no set of social or political relations that did not promote it could be regarded as a source of such liberty. Although questions about the relationship of religious to secular authority would become important as Islam developed in the centuries after Muhammed's death, the historical and conceptual starting point for considering them was the fusion of the two he exemplified, as both the bearer of divine truth and the conqueror who ruled in accord with it. Freedom was not a condition that depended on some definable set of political arrangements. As Patricia Crone puts it, medieval Muslims

> did speak of political oppression and enslavement, but they did not call the opposite freedom, for the choice as they saw was not between slavery and freedom, but rather between slavery to other human beings and slavery to God. No humans had the right to impose obligations on other humans, whether they were rulers, masters, fathers or husbands, or for that matter prophets; only God could do so. To be governed in accordance with God's rules was to be protected from other people's arbitrary desires (hawa).

The only form of liberty that genuinely counted was that which people enjoyed by virtue of subjecting themselves to divine law.[9]

These notions worked in concert with ideas that reflected a kind of social experience common to Muhammed's early followers, in which the survival of a community depended on having a leader who could guide it through dangerous terrain to a safe place. "To survive, one needed to band together under the leadership of a guide (imam, al-huda-hadi, mahdi) who knew the right paths . . . that is the right things to do; the terms sunna (normative custom), sira (exemplary behavior) and sharia (Islamic law) are all derived from roots to do with traveling and roads."[10] The authority of such a leader only endured as long as he could provide such right guidance, but while he did his rule was unconditional. It did not depend on how the leader behaved toward his followers or on how well he kept some implicit contract (there was no question of any explicit one, even of a feudal sort), but on personal worthiness, a mix of moral virtue, religious understanding, and the ability to lead. If a leader lost these qualities the community was no longer obligated to follow him, and could turn to someone else, which was precisely what happened in the succession struggles that followed the Prophet's death. What divided those who became the party of Ali, the Shi'ites, from the rest of the umma, the Islamic community as a whole (only later would the designation

Sunni be generally applied to them) were questions about the merit or worth of particular individuals, not doctrinal or political differences. One legacy of these origins was that, in the later history of Islam, questions about the suitability of a ruler and the propriety of his actions were posed primarily in moral terms; strictly political or constitutional issues were of much less import.

These basic attitudes would persist in the centuries after Muhammed's death, but in a different context. As Islam spread over a wide and diverse area, the fusion of religious and political authority he embodied was lost.

> There was a distinct secularization of the political order . . . The political fragmentation of the Muslim world transferred power from the caliph to men who styled themselves amirs, kings, or sultans, first in the provinces and eventually in the capital itself. Government was now in the hands of rulers who were not successors to the Prophet, merely wielders of brute force, and who did not rule the Prophet's polity, merely an arbitrary section of it, which they had taken over by force of arms.

The first Muslims saw mere secular kingship in highly negative terms; now, however, it began to enjoy a new kind of acceptance. Government became "separated from religion, not in the sense that it had ceased to have anything to do with religion, but rather in the sense that it had acquired autonomous existence. It was no longer a mere branch of religion."[11]

One aspect of this change was that questions about rulership came to be treated by secular intellectuals, people who (like the group out of which the early humanists developed in Italy) served the needs of an expanding and increasingly urban society through their training in letter-writing, record-keeping, and administration, as well as medicine and astrology. The abilities and interests of people in this group were central in the discovery and translation of classical Greek texts that made Islam in this period crucial for the preservation and transmission of ancient learning, and it was within it too that there developed a form of political literature called the "mirror of princes." The genre would later spread to the West, and in both contexts it at once exalted rulers as raised up by God and possessed of a quasi-divine power and provided them with a set of moral injunctions to regulate their relations with their subjects. The result was an image of kingship that gave it a legitimacy that did not depend on the ruler being also a source of religious authority.

Politics thus acquired a kind of independence from religion it had not possessed before, a change that religion itself could not help but support. The great eleventh-century theologian and philosopher al-Ghazali, like many others, regretted the disappearance of the caliphate, and he was sometimes critical of the cruelty shown by the Seljuk Turks, who became the dominant power in the Islamic world during his lifetime. But because they had been crucial in preserving Islam against its enemies, notably the Byzantines, he concluded that their success must in some way have been ordained by God.

Theirs was a largely secular regime, leaving many religious functions in the hands of their predecessors, the Abbasids, and by giving it legitimacy in this way al-Ghazali contributed to a recognition that would be of great moment in the development of Sunni Islam (which at this point was crystallizing as the alternative to the Shia), namely that the Muslim world contained "two types of community, one of believers and another of subjects." The same individuals constituted both, so that, as Patricia Crone observed, Islam now exhibited a division comparable to the medieval European one between State and Church.[12]

But this similarity was only partial. In the first place, there was in Islam no organized Church as such, no separate ecclesiastical hierarchy giving direction to local imams, so that the question of its *libertas* in relation to secular authority never arose; no kind of churchly freedom could become a model for other forms of independence. Nor could conflicts resembling those between popes and emperors or kings in the West (not to mention republics, which never acquired a similar prominence) arise. This became especially the case under the Ottomans, since the sultan was not just the political sovereign but also head of the community of the faithful, the *umma*. He was, as Ira Lapidus notes, both imam and caliph: "The Muslim character of the sultanate, expressed in the control of the religious establishment, was at the core of Ottoman legitimacy." And, second, again in contrast to the West, the same form of law was preponderant in both spheres – namely, Islamic sharia. Secular forms of law developed alongside it, both the state law (*Kanun*) decreed by the emperors and a body of customary law, and sometimes conflicts broke out between them, for instance over payment of interest on loans, on which state jurists looked more favorably than clerical ones. But civil law never developed a body of independent institutions comparable to the law schools of Bologna and other Western universities, providing both private individuals and state officials with essentially secular grounds for judging legal disputes; nor was there a separate system of ecclesiastical courts, which clergy could declare to be the sole venues with jurisdiction over them. The sultan's court system placed all these matters inside a single legal frame, limiting the degree to which friction between the spheres could generate challenges to either one.[13]

No less important, sharia law operated very differently in relation to private and public life, providing detailed guidance about everyday relations and activities, but having little to say about strictly political matters. "By and large people had to accept that the shari'a was only the constitutional law of everyday life, not of the government appointed for its protection." Or, as Ernst Gellner put it, "The entrenched religious constitution of society provides rules for the conduct of life, but no blueprint for the organization of power." Rulers had strong moral obligations to their subjects, but it was difficult to formulate specific limits to what they could do, and law carved out no spaces into which sovereign authority could not intrude. Absent the idea of chartered spaces

where subjects had the right to organize significant segments of their own lives, there developed a strong emphasis on generalized obedience as an obligation of subjects. Al-Ghazali himself insisted that resistance, even to tyranny, was a worse alternative than submission, since it would open the way to factional fighting and chaos (a point bound to seem prophetic in the early decades of the twenty-first century). "Under the pressure of political necessity," as Lapidus observes, "Muslim jurists were led to accept any established government as legitimate." Even radical reform movements fell into this pattern, notably the eighteenth-century current usually called Wahabism (its followers prefer Salafism), that sought to purify religious observance from such "idolatrous" practices as visiting shrines and venerating saints, in favor of an exclusive emphasis on the Quran. Its founder formed a pact with a local leader, Muhammed Ibn Saud, providing spiritual backing and a promise of divinely ordained support in exchange for material protection, and creating the powerful formula for unlimited political power justified by religious purity that survives in the Saudi regime even today.[14]

To be sure this did not mean that rulers were exempt from criticism, although little of it was expressed in public, or that rebellions and changes of dynasty did not occur. But neither the criticisms nor the rebellions were carried out in the name of liberty, but in that of justice, which was expected to guide and limit the actions of those at the top. If it did not, even rebellion might be justified, but only if it successfully restored the state as keeper of the moral balance on which stable social life depended. This was the relation between state and society envisaged by the often invoked formula of the "circle of justice," taken over by Muslim sovereigns from their pre-Islamic predecessors, and regularly appealed to under the Ottomans. The loop began and ended with sovereign power: "no sovereign authority without an army, no army without wealth, no wealth without subjects, no subjects loyal to the sovereign without justice, no justice without harmony on earth, no harmony on earth without the State, no state without the Law, no maintenance of the Law without sovereign authority," and back round again. The "circle" was invoked to justify criticism of corruption, by which a sultan might upset the balance through allowing his relatives or officials to enrich themselves at the community's expense. The rebellion this might provoke could be justified in the name of justice, but only if it succeeded in reestablishing sovereign power. Later the major Islamic theorist of history, Ibn Khaldun, would draw on this model to build his understanding of the succession of dynasties, each one bound to fall into corruption once the temptations of power presented themselves, at which point they could be legitimately replaced by ambitious and at first righteous outsiders who began the cycle again. Neither the formula of the circle of justice nor Khaldun's historical theory offered any ground for society itself to make a claim against sovereign authority until its corruption upset the balance on which social stability depended. This sense

of the relation between society and the state was not simply a concomitant of Islamic doctrine, as some of the "Orientalist" scholars rightly criticized by Edward Said believed, owing much also to the continuing contrast Khaldun emphasized between the softening influence of courtly life and the toughening conditions of desert existence, plus the felt need for strong leadership which the latter still bred into numbers of Muslim groups. But all these factors contributed to keeping liberty from becoming a central concern within Muslim life.[15]

In this regard no contrast between Muslim societies and European ones is more revealing than the absence in the first of the kind of communal independence that was so repeatedly defended in the second. The difference has often been noted, chiefly and properly in regard to cities, although we should remember that rural communities or villages possessed degrees of autonomy in the West too. In the Islamic world, by contrast, the reach of imperial authority extended into all such spaces. Not only did cities not develop an independent system of law and justice, their populations never acquired the sense of social and cultural distinctness that marked European ones. What was true of Egyptian cities during the Mamluk period (1250–1517) applies to urban places in the Ottoman Empire later on: they were administered by officials tied to the ruling dynasty by kinship and patronage, and who were often large rural landowners. The "regime and the society it ruled came to interpenetrate and form one political and social whole" (Ira Lapidus). Although wealthy merchants composed an important section of urban elites, they too were drawn into the web of social and political ties that made cities simply part of the encompassing imperial fabric.[16]

One dimension of this contrast lay in the differing nature of urban guilds. Guilds existed under the Mamluks and Ottomans (claims that they were present earlier have been rejected by recent scholars), and as in the West they sought to serve the interests of their members. But guilds in European cities were building blocks of urban independence; guild membership was often a requirement for entry into the councils that were chief institutions of urban self-government. Not all guilds were equal in status, and some of the social and demographic conflicts that marked European urban history took the form of confrontations between more and less prominent corporate bodies, what Italians called *arti maggiori* and *arti minori*. But the prominence assumed by these oppositions was a sign that guilds were an important locus of urban liberty. Not so in Muslim cities: although some guilds had a degree of control over who could join them, and even in selecting their leaders, "guilds that produced vital commodities in places critical to political stability (for instance the bakers and butchers of Istanbul) had leaders chosen directly by the government, usually from among military officers loyal to the sultan." In Cairo guilds managed in this way decided who was "allowed to open a shop or to practice a profession," and eventually even pickpockets and prostitutes

were organized into guilds, almost all of which had their top officials appointed by the sultan. Thus, as one scholar concludes, the main function of the guilds was "the effective control of the urban population by the government," especially in matters of security and taxation.[17]

To the general absence of communal autonomy in the Islamic world there existed two exceptions. The first lay with groups united by some form of Sufi religious observance. Becoming prominent during the thirteenth century, Sufi practices were of many types, involving mystical experience, detachment from worldly concerns in the form of voluntary poverty or a wandering lifestyle, and the veneration of holy men considered as saints. Some who took up Sufi ways did so as individuals, but others grouped themselves as followers of some master (*sheikh*) or devotees of some saintly cult. Such groups commonly claimed independence from outside authority, providing a form of escape from the tissue of political and personal connections into which most people's lives were woven. But such freedom was an evasion from politics rather than a way of participating in it; giving realization to a potential for anarchism present in many forms of unorthodox religious practice, it opened up its space of freedom at a distance from more ordinary modes of social existence, but it offered no model of political liberty that could be followed by others.[18]

The second exception was the Ottoman practice of allowing groups of non-Muslims to manage some of their own affairs. In return for tax payments, bodies of Jews and Christians, as well as secularly organized Greeks and Serbians, managed their everyday affairs through institutions of their own. Some had a degree of both legal and commercial autonomy. All these non-Muslims were *dhimmi*, which meant "protected peoples," but also bearers of an inferior status. Their leaders had to be approved by the government; members of such groups were expected to wear distinctive clothing when going about in public spaces; they could not organize religious manifestations such as processions or bell-ringing where others would be exposed to them; and their men were not allowed to marry Muslim women. The autonomy these communities (*millet*) enjoyed was not a way of participating in the larger social and political system, but a guarantee of exclusion from it. The system provided no general model of communal independence, instead assuring that no such pattern could spread to those who enjoyed full status as Ottoman Muslims.[19]

All the same, these conditions were attractive to numbers of Jews, who before the seventeenth century, found life under the Ottomans more welcoming than in Europe. Between 1500 and 1700 the Empire's Hebrew population comprised what David Sorkin calls "the largest and most prosperous Jewry in the world." By the latter date, however a sharp decline in their status had set in, as economic conditions under the Sublime Porte deteriorated and the increasing presence and influence of Christian converts to Islam in both business and administration pushed Jews out of their once-favored positions. Many of the latter now sought better opportunities in Holland, Prussia, or Denmark, so

that the migration eastward imposed by the Iberian *Reconquista* ended with a counterflow toward Western Europe, where reform movements would soon begin to offer paths to a degree of civic freedom for Jews.[20]

All these elements contributed to what one historian, Hamid Enayat, acknowledges as "the absence of independent political thought" through most of Islamic history. Only the experience of Western domination and the attempts to counter it would make politics the central preoccupation of Muslim thinkers and activists it remains today. From the time of al-Ghazali to the abolition of the Ottoman caliphate after World War I, Islamic political attitudes were "centered around the belief in the unquestionable duty of Muslims to obey their rulers and the inherent sinfulness of any rebellion against the established order." Modern alternatives, as the twentieth-century Egyptian writer Ahmad Shawqui al-Fanjari suggested, were based on attempts to ground Western ideas of freedom (and other foreign notions as well) in such Quranic values as justice, mercy, and kindness. "What is called freedom in Europe, is exactly what is defined in our religion as justice (*'adl*), right (*haqq*), and equality (*musawat*) . . . the equivalent of freedom in Islam is kindness or mercy (*rahmah*), and that of democracy is mutual kindness (*tarahum*)."[21] Admirable as these qualities surely are, the necessity to invoke them at this point only highlights the absence of any equivalents for the European preoccupation with political and personal liberty through most of Islamic history, and of debates about its nature, value, and limits.[22]

* * *

Because the dominant power in India in the centuries before the establishment of British hegemony was the officially Muslim Mughal Empire, some features of the relationship to liberty we have just been considering were operative there too. But other aspects of Indian life pushed it in very different directions. The majority of Indians were not Muslims but Hindus (Buddhism had largely died out by the fifteenth century, although it would be revived in the nineteenth), their experience and consciousness shaped by a form of life that had little in common with the desert conditions within which militant Islamic monotheism achieved its first triumphs. Hindu communities exhibited a high degree of diversity, including the worship of a wide variety of local deities, giving them a kind of independence no comparable Muslim entity could claim. But one core feature of Indian society limited this contrast, namely the top-down structure imposed by caste membership. Recent writers have shown that caste before the coming of British domination was more flexible and fluid than it became afterwards, or than it appears in popular understanding today; some people (nomads for instance) were not part of the system; and others, who were, worked in occupations not prescribed by their supposed place in it. But there can be no doubt that the basic understanding of society as strictly

divided into warriors, priests (Brahmans), and merchants, as well as myriad subgroups, had long been accepted and was widely diffused in Indian life and thinking. It was enshrined in ancient texts whose heroes were staples of popular consciousness, and that promoted an understanding of existing social distinctions as eternal and unquestionable, needing only to be described, not justified. The great narrative epics, in particular those dealing with problems of political power (such as the *Arthasastra* and the *Manusmriti*) portray moral complexities connected with the difficulty of identifying goodness (*dharma*), but "they did not generate a tradition of critical debate on the justifiability of social arrangements." Such an absence, Sudipta Kaviraj observes, precluded any "pre-figuration of the modern conception of freedom." As we noted in Chapter 2, the two words associated with the notion, *muksa* and *mukhti*, expressed respectively the Buddhist notion of freedom as disentanglement from worldly involvements, and the Hindu understanding of it as deliverance from some kind of suffering or trouble. Both functioned inside "the framework of a predominantly pessimistic picture of ordinary human existence, condemned to social prohibitions, vulnerability to death and disease, [and] the insatiability of desires."[23]

But the Mughal rulers of the country encouraged forms of freedom that neither Islamic nor Hindu teaching envisioned. As foreigners who were greatly outnumbered by natives in a vast country, the Mughals did not attempt to establish the kind of unified imperial regime instituted by the Ottomans to their west or envisioned by Chinese emperors and administrators to the east. Faced with a potential for religious and cultural conflict that might have generated opposition to their rule, the Mughals were prudent enough to avoid it for the most part, often absorbing elements of local religious culture into their own ceremonies and supporting it as a way of connecting to their subjects. Some Mughal emperors exhibited a similar openness toward Christians, showing an interest in their symbols and rituals, and the sixteenth-century sultan Akbar issued an edict declaring that "no man should be interfered with on account of religion, and anyone is to be allowed to go over to a religion that pleases him." Both on the level of dealings with village communities and on the higher one of relations with Hindu princes whose rule had long been a feature of Indian life, such policies provided scope for considerable native autonomy.[24]

In secular matters too, the Mughal regime opened up certain potentials for independent action, operating less as an integrated empire than an assemblage of kingdoms. There were, as C. A. Bayly noted, "many sharers in the dignity and power of kingship with overlapping rights and obligations," so that certain "attributes of what we would call the state pertained not to the emperor or his lieutenants, but to the Hindu kings of the localities, the rajas, or to the notables who controlled resources and authority in the villages." This was a situation with obvious parallels to both European feudalism and to the system of

connected and competing political entities that replaced it. Some historians have even argued that Indian states benefitted from competition with each other much as European ones did, strengthening both their administrative structures and their military capacities in response. We will see later on that the early modern Indian economy was far from backward, possessing a highly developed textile industry, agricultural techniques that were impressive and advanced for the time, and a commercialized economy integrated by complex webs of monetary exchanges. Just how either the political system or the economy might have developed had the British not succeeded in establishing their dominion, or the textile industry not been undermined by cheaper British goods once industrial innovation made them plentiful, we have no way to know.

But India's political structure did not generate a European-style concern for exemption from sovereign authority, whether on the part of princely states, towns, or villages. For these differences there were a number of reasons. The first was that the various kingdoms, whether Hindu or Muslim, did not seek to justify the rights they claimed by locating themselves in some degree outside the flow of Mughal authority but, quite the contrary, by virtue of serving as channels for it. Throughout the period of Mughal control, and even into the era of British domination, C. A. Bayly explains, "the emperor continued to be a fund of authority" and "all powers seeking to establish their rule … needed to acquire imperial titles and rights." Even Sikh and Maratha princes "sought to become agents of Mughal sovereignty," copying its rituals and ceremonies and paying obeisance at its ancestral shrines. Although to some degree independent, all these entities sought to define their status by virtue of becoming arteries through which the lifeblood of imperial sovereignty flowed, not by sheltering behind some barrier to it.

Second, although authority in villages was largely vested in local headmen, these figures were caught up in a web of relations to imperial governance that kept them from serving as nodes of independence. Village leaders were "predominantly drawn from high-caste peasant communities with a tradition of warfare and … linked together by kinship bonds," but they operated in such a way that they "coincided with the lowest unit of Mughal administration, the *pargana*." In some circumstances such people could become (in Bayly's term) "little kings," smaller versions of the officially royal figures who participated in imperial sovereignty at a higher level, but like their grander counterparts they were simultaneously channels of imperial authority, the state conducting its negotiations with agrarian communities through them. Perhaps more important, the state system of which they were a part was, as D. A. Washbrook observes, "very loosely articulated."

> Rulers sought more the recognition of a "universal dominion" over a broad range of corporate local groups enjoying a high degree of auton-omy than the establishment of an intrusive control. The direct functions

of the state seldom extended beyond the collection of revenue and tribute; questions of justice and of right in local society were largely left for local resolution.

If this situation gave traditional Indian villages the character of "little republics," as has sometimes been said, what made them so was more the minimal nature of the demands made on them by a state power aware of its own limits than by the communities' desire or ability to erect walls against it.[25]

Third, concern for local liberties was absent from many towns and cities because they were established and populated by rulers, or by gentry aspiring to enter their ranks, both of whom saw urban places as sites for enhancing their prestige by displaying their wealth, courtliness, and the size of their clientage. New centers were often set up as the residences of "gentry who served as soldiers or administrators for the regional states." One Nawab rebuilt an old citadel as "the house of the Mughals" he sought to represent, settling numbers of his own retainers there, along with a large body of troops and a grain market to serve their needs. Groups of merchants were sometimes invited to settle in these places, encouraged by tax exemptions and other privileges, but their presence and even the buildings they inhabited were intended to generate an aura of importance around the founder, who also took precautions to make sure that none of his followers could usurp any of his power. They could neither make their grants hereditary nor build their own permanent edifices. A number of these new towns attained a certain stability, some as centers for diplomatic activity and places for bankers to be in contact with rulers in need of their services, others because local gentry families sought to sustain pockets of power in locales where they had land rights and control over bazaars. But all these people were in the service of ruling families, so that the urban places they dominated did not claim exemption or immunity from higher authority. Thus neither villages nor cities served as the kinds of barriers to the intrusion of outside powers that European townspeople defended in the name of their privileges and liberties.

In addition, the social and cultural character of Indian cities was shaped by the large presence of two kinds of residents within them. The first consisted of soldiers, retainers, and dependents of the aristocrats who dominated them. The second was made up of people connected with the religious observances that rulers sponsored and supported, whether out of conviction or in order to enhance their legitimacy. This population included priests and other ritual servants, mendicants, and people who facilitated the large movements of pilgrims and visitors to shrines, fairs, and other special religious destinations. One estimate suggests that around 1810 there were 40,000 Brahmans living on charity in the city of Benares. This prominence of religious activities in towns and cities both helped drive the Indian economy and gave a certain coloration to it. On the one side it provided not only customers for both settled merchants

and innkeepers and for traveling traders and peddlers, but also personal linkages that served as channels for transferring funds and settling debts. Such flows of goods and money between areas with no direct political links "helped maintain the broader unity of the Indian economy," especially at moments when other sources of revenue were in decline or dried up. The other side of the influence this closeness between religion and economic life exercised was especially visible in the most important branch of manufacturing, textile production, because (as studies have shown) village weavers viewed the actions they performed in their work as ritual enactments, their tools and materials combining into gestures of veneration connected to certain sacred texts. We will suggest later on that this way of experiencing work played a role in limiting the potential for innovation within the Indian textile industry.[26]

Taken together, these aspects of Indian society and culture go some way to account for the highly otherworldly inflection given to the idea of freedom. To understand liberty as *muksi* or *mukhta* was part of a cast of mind that regarded it as hardly conceivable "in mundane social terms," so that it could only be attained by disentanglement from the trammels of daily life. Religious doctrines "suggested ingenious ways of enlarging an internal 'freedom' of the mind, taking social restrictions as given." To be sure, European theologians and mystics pursued similarly spiritual notions of freedom, but the high importance they gave them did not impede the development of the far more worldly understandings of ecclesiastical *libertas* that made the Church a player in secular politics, even a model for the liberty more worldly entities sought for themselves. In India by contrast, not only were ideas of spiritual disengagement diffused through society by virtue of the pervasive presence and influence of people who promoted or embodied them, they were seldom challenged by more earthly notions of freedom because, as we saw, both elites of various kinds and people at lower social levels often conceived whatever authority or autonomy they could attain as entwined with their connection to Mughal sovereignty, not as rooted in some kind of immunity from it.[27]

In a way the caste system provided a departure from this pattern, since the identity and status that groups claimed within it, and which rulers were widely expected to protect, were based on their way of life and social function, not on any derivation of sovereignty; this led Brahmans in particular to press claims to regulate certain features of their lives on their own, claiming entitlements that bore certain resemblances to Western liberties. But apart from the fact that the rights at issue in such disputes were chiefly matters of ritual performance or display – who could perform certain ceremonies or which groups should eat together with others – the fact that it was Brahmans who were involved in them worked against the emergence of any generalizable secular notion of liberty, since of all the segments of Indian society they were inherently the most committed to identifying freedom with the realm of spiritual experience.[28]

What chiefly encouraged notions of liberty to spread into other spheres of life was contact with Europeans and the exposure to Western ideas it brought. As early as the seventeenth century, upper-caste Indian converts to Christianity in Goa, who found that their new status did not gain them access to office-holding under the Portuguese regime, criticized the foreigners for not practicing what their principles preached. Their spokesman, Marcus Castro Mahole, described their exclusion as a kind of slavery, and marshaled arguments against it based on both traditional Iberian liberties and the Christian universalism in the name of which the papacy sponsored missionary efforts; he also "dwelt on the particular insult to the status of Brahmans implied by their exclusion from offices of state and Church." This was not the only moment when Brahman entitlements would be reconfigured as something closer to European liberties. Similar arguments, combining European notions of rights with Indian ones, would be raised against the limitations on native employment practiced by the East India Company, and later by the British Crown, feeding both the campaign for independence and the development of Indian nationalist sentiment.[29]

Even so, Indians who found no difficulty understanding and appreciating European notions of freedom recognized them as foreign to their own way of life. The two earliest Indian travelers to Western Europe to compose extensive accounts of their visits were both struck by the high value their hosts placed on liberty. Visiting London on an abortive diplomatic mission for the Mughals in the 1760s, Sheikh I'Tessamuddin reported that "In England everyone is free; no one can lord it over another, and there is no such thing as master and slave; which is totally different from other countries in which all are slaves of the King." Forty years later Abu Taleb Khan was similarly struck: "Liberty may be considered as the idol, or tutelary deity, of the English; and I think the common people here enjoy more freedom and equality than in any other well-regulated government in the world." He praised the English system of rule for giving stability to the country, making it possible for the state to function even under a king weakened by mental illness, George III, and he credited the constitution with preventing the kind of violence that accompanied succession in the Mughal regime (where, as he noted, Emperor Aurungzebe could only secure his power by imprisoning his father and murdering his three brothers). Neither writer was without negative things to say about European life, and Taleb Khan, in particular, gave a long and detailed account of English vices. In this they already resemble the nineteenth-century Indian intellectuals that Tapan Raychaudhuri describes as simultaneously affirming Western superiority in both politics and worldly knowledge, and sharply criticizing the West's own prejudices and limitations.[30]

The views of these writers would owe much to contacts between educated Indians and British officers and administrators, some personal and informal and some arising within educational institutions set up by the British,

particularly in Bengal. It was there that such notable figures as Ram Mohan Roy would emerge as advocates of both religious and political reform. Although his deepest concerns were in the realm of religion, where he worked to give Hindu texts a rational and monotheistic interpretation and supported the abolition of Sati (the practice by which widows were to immolate themselves on the funeral pyres of their husbands), Roy was well versed in European political issues, and had many contacts with liberals in the West; he was much feted when he visited England, where he died in 1831. In his eyes European struggles for liberty were of worldwide importance; he grieved over the defeat of the Neapolitan revolution of 1820 as a setback to his cause too, spoke out against British conservatives who resisted parliamentary reform and the political emancipation of Catholics, and criticized the French for violating their own principles by restricting the entry of foreigners into their country.[31]

The prominent place Roy achieved in both his own land and Europe has made the relative importance of Indian and European sources in his thinking a question of much interest. There is no doubt that both contributed to his largely rationalistic approach to religion, and scholars have argued that the same is true of his and other Indian liberals' political notions too, pointing to the village councils that managed many local affairs and the Brahman claims to autonomy we noted a moment ago. But as C. A. Bayly found himself constrained to admit, looking for the Indian roots of his liberalism requires a good deal of "imaginative manipulation," demanding that "the privileges of groups within the caste order ... [be] adjusted to resemble something more like the universal individual rights of classic liberalism," and that liberal notions of legality and contact be "merged ... with Indian notions of sacrifice, love, and commitment." Whatever "elective affinity" existed between the undertone of concern for liberty modern Indian intellectuals found in native traditions and the explicit cultivation of it they were exposed to through their contacts with the British, seeing the two as kin requires overlooking "the weight of Hindu and Muslim tradition, Indian familial and caste relations, [and] the self-abnegating interpretation of Hindu devotionalism."[32]

Untangling these relations would require a far more extensive foray into Indian intellectual and political history than we can attempt here, especially because Indian advocates of liberty – like Western ones – were pursuing a wide variety of different goals, some moderate and some radical. But one path on which many of them found it necessary to embark was overcoming the spiritualistic orientation that long dominated Indian thinking about freedom, in order to find a space for it in everyday life. Various prominent figures took this path, among them Swami Vivekananda, an important figure in encouraging the notion of a syncretistic unity between Eastern and Western ideas that spread in England and the United States in the late nineteenth century; part of his message was that full realization of individuals required freedom on all planes of life, including the political one. But he refrained from political action

himself, and insisted that the lower levels of liberation, such as politics, were valueless unless they contributed to the highest one, still naming the Indian "national purpose" as *mukti*. One figure who went further on this road was Rabindranath Tagore, the poet and writer who received the Nobel Prize in 1913. Tagore argued for what Sudiptha Kaviraj calls "a re-conceptualization of *mukti* in distinctly this-worldly terms." In one poem he denied that deliverance could ever be entirely spiritual "since the creator himself is tied to every part of the universe by his acceptance of the bonds of creation." Describing his aim as to experience "the joyous taste of freedom within innumerable bonds," Tagore pictured the nectar of liberty as able to be imbibed only from an "earthen cup."[33]

In some ways Gandhi's understanding of freedom was in Tagore's vein, since he made the political dimension of self-rule (*swaraj*) essential to attaining the other ones, insisting that India and its people could only return to their true nature by achieving liberation from British domination. He both called out for independence and famously led practical campaigns on behalf of it. Taking over some Western ideas about civil society, he supported the abolition of caste distinctions and basic equality for women. But all these remained lesser goals, means to the end of the "disciplined rule from within" that was the core of *swaraj*, and that made possible his vision of a future India as an ensemble of self-sufficient villages, cleansed of modern technology, where individuals freed from material concerns and the conflicts they generated would need no state or legal system to regulate their relations. (Tagore rejected this vision as retrograde and unrealistic.) Such an understanding of liberty, rooted as it was in notions of spiritual withdrawal from the travails of ordinary existence, remained devoted more to keeping untried human possibilities at bay than to opening up spaces where they might find scope to expand.[34]

* * *

Seeking to understand the same matters in China confronts us with a paradox. Of the three regions we consider here that were ruled as empires, it was in theory the most autocratic. All worldly authority derived from the person of the emperor, the "son of heaven" who was thought to rule over the whole earth (*tianxia*, "all under heaven"). More than for the Ottomans or Mughals, the emperor's position was personal and unmediated. His authority descended to him directly from on high, and it was not limited by the wishes of a creator God known from a revelation whose meaning might be diversely interpreted. Moreover, there existed no figures who could claim a comparable ruling authority within subsections of the realm, as was the case for Indian rajas, Egyptian Mamluks, and European counts and dukes. Some military leaders had sought to establish such authority for themselves early in Chinese history,

but the state responded by effecting what one historian calls "the destruction of the medieval Chinese aristocracy."[35]

Recent historians, however, have made clear that much about both the Chinese state and the way it was understood renders such notions deeply inadequate as guides to political theory and practice. First, the principles on which imperial authority had been founded from ancient times introduced restraints on what officials – including the emperor himself – might do. Among them was the widely accepted notion that the ruler's mandate was founded on acceptance by the people, who formed the true basis of the nation. The great interpreter of Confucian doctrine, Mencius, wrote that the people comprised the first element in the constitution of power, the sovereign the last, and that "it is in drawing the people to him that the sovereign becomes the son of heaven." An emperor who lost his people's love through failing to secure their welfare no longer bore the mandate, making it "legitimate for the people to overthrow him."[36]

Not only were the many rebellions and changes of dynasty in Chinese history justified on these grounds (both Confucius [551–479 BCE] and his great follower Mencius [372–289 BCE] wrote in the time of the "Warring States," when violence and disunity were persistent dangers, and debates raged about how to overcome them), such notions lay behind the accepted and even institutionalized practice of scholars and officials making public criticisms of the government, conduct justified by their role as guardians of the principles on which rule should be based. This criticism was directed first of all toward officials who were thought to be unfair, corrupt, or overly harsh, but it extended to the emperor too; indeed, a special bureau of the state, the Censorate, was established to verify the legality of administrative acts, monitor the behavior of officials, and remonstrate with the emperor about his conduct, should it deviate from the right path. To be sure, such activities had often to be carried out with subtlety and restraint, and they were more prominent at times when a particular emperor's character or behavior led to conflicts. But these could be sharp, as was the case toward the end of the Ming dynasty (1368–1644), when Emperor Wanli revealed himself to be capricious and irresponsible, provoking reactions that led to the formation of parties within the bureaucracy, and to sometimes radical demands for recognition of the popular foundation of sovereignty. When critics sought to repress this opposition, its spokesmen asserted their right to speak out freely (toward the throne, but a wider public was listening too) when conditions required it. They did not claim any general right of free speech, but they specifically extended it to "laborers and artisans," who could express the interests of the common people.[37]

Nor was this merely a partisan claim, since there is considerable evidence that popular protest against wayward officials was a lively feature of Chinese life during the last centuries of the Empire. One common vehicle of it was the

poster or placard, set up to denounce local officials who drew popular ire, or to advertise meetings to protest against them. The language of both the bills and the people who gathered to read them was often hostile and dismissive toward their objects; at least one report claims that it was not unheard of for a newly appointed official who arrived with a bad reputation to be sent back, and in some cases people seem to have succeeded in effectively reducing their tax burden by refusing to pay the bribes and fees that were a well-known part of officials' incomes (their salaries being too low to sustain their expected style of life without them). In some locales, moreover, ordinary people had a large say in determining both who would represent them in negotiations with outsiders, and in choosing the heads of their villages.[38]

If any single reason accounts for the contrast between the image of the Celestial Empire as autocratic and these many exceptions to it, it is that the government's ability to impose its will was limited by the resources it could muster. China was and is a vast and complex country, and no regime before the twentieth century possessed adequate means to rule such an entity in the close way that emperors and officials sometimes imagined. The famous bureaucracy, staffed by people who had passed the state examinations for entry to it, was remarkable in many ways, but its ranks were simply too small to assure that decisions made somewhere along the administrative chain that stretched from the court into the country would be accepted or enforced, or that when problems or disputes arose, they would be resolved in accord with official wishes.[39]

Thus rather than view the governing of the country in terms of a "relationship between an absolute ruler and his subjects," Timothy Brook proposes to understand it as "the working through of some of the possibilities and constraints of bureaucratic administration." Among the limits were the independent powers people could develop through the alliances and connections they made with others in their localities or beyond, especially at moments when, as in much of the Ming era, economic expansion (stimulated in part by bourgeoning trade with Europe) opened up opportunities for people at various levels of society both to improve their material situation and to rise socially. Although some observers deplored what they saw as a decline in morals and social cohesion brought on by increasing commercialization, Brook argues persuasively that neither the government (at least beginning with the second Ming emperor) nor existing elites resisted these developments. "The state more or less followed in the wake of these shifts, attempting to manage a realm of unprecedented complexity rather than remake what it found. Even when an activist emperor was able to impose organizational frameworks and limitations on local society, his agents could sustain them only by fitting them to the social networks that predated their imposition." Although state actions projected imperial authority "more deeply into society than was the case in Renaissance Europe," people who were dissatisfied with official

decisions in matters that concerned them (such as disputes over the use of land) were able to push back against them by enlisting others in their cause, and not uncommonly with success. When, for instance, one emperor sought to impose draconian controls to halt the spread of Buddhist monasteries (which were sometimes seen as a foreign presence that drew both authority and tax revenue away from the state) he soon found that, because some of the abbeys had ties to wealthy and well-connected patrons, he "had to negotiate with local interests concerned to protect institutions and practices salient to their own strategies of local control."[40]

Lower down the scale too, there is evidence that the state was less rigid in its attempts to control its subjects than historians have often believed. Whereas in Europe state administrations judged popular practices against the standards of a generalized law code, comparable Chinese authorities toward the end of the imperial period proceeded "by roughly distributing them into three categories: 'good: to be encouraged,' 'evil: to be repressed,' and 'indifferent: let people do as they please.'" Although it may not be possible to say what proportion of cases fell under each of these rubrics, the very existence of the third one (and the likelihood that an overextended bureaucracy might find it an easy way out of difficult decisions) justifies taking it as evidence that the intrusiveness of the state was limited.[41]

Some of the information we have been drawing on here comes from European observers who visited China during the nineteenth century, and some of the details they included may be exaggerated or fanciful. But Pierre-Étienne Will, who has recently called attention to these reports, pointing to the contrast between them and the widespread assumption that Westerners in this period regarded China as a place of ignorance and despotism, notes that many of the general observations the writers made are corroborated by indigenous materials, and that when they are not they offer a useful broadening of perspective, recognizing features of everyday life often invisible in the documents generated by officials tasked with establishing order in their districts. His discussion makes clear, however, that there exists one point of contrast between this foreign commentary and native discourse on the same matters – namely, that it is only the European texts that use the language of freedom in regard to them. Thus the British consul and Sinologist Herbert Alan Giles proclaimed that "Everyone who has lived in China, and has kept his eyes open, must have noticed what a large measure of personal freedom is enjoyed by even the meanest subject of the Son of Heaven." A French priest and missionary, Évariste Huc, remarked that although China was "an absolute monarchy, moderated, indeed, by the influence of the educated classes, the people enjoy beneath it much more liberty than is generally supposed, and possess many privileges which we might vainly seek in some countries boasting a liberal constitution." And the British diplomat T. T. Meadows (an admirer in particular of the state examination system), concluded that "In all, Chinamen

enjoy an amount of freedom in the disposal of their persons and property, which other European nations than the Russians may well envy them." But Westerners had been employing the terms liberty and freedom in these connections for centuries; not so the Chinese, who as we noted at the beginning of Chapter 2, did not have a term that corresponded to liberty in the Western sense until *ziyou* was taken over from a coinage contrived for the Japanese translation of John Stuart Mill's *On Liberty* in 1871.[42]

This contrast raises the question to which the rest of this chapter must be devoted: why did a society accustomed to assumptions and practices that seem to us to fall naturally under the rubric of liberty not view them in that light? The first answer is simply that (as in Africa) other values mattered to it more, chief among them political stability and moral order. To see why this was so we need to look at the Chinese state from a perspective different from the one we have employed so far, one that highlights not its limitations or weaknesses but its no less characteristic and enduring strengths, which led people to seek fulfillment not where it left them free to escape or resist it, but where its presence provided the framework and even some of the substance of their lives.

One strong strand of the attachment that subjects of the Celestial Empire felt toward it was the widespread sense that only the unity it established could bring peace and stability to a potentially fractious, disordered, and violent country and people. The state did not always succeed in effecting this unity; to the contrary, it repeatedly failed, overcome by factional divisions, internal rebellions, or foreign invasions. Despite these limits, however, it long possessed what Yuri Pines calls an "exceptional ideological prowess," based first of all on the recognition, in many ways justified, that no stable form of life could be achieved without it. Its many ups and downs described a "peculiar historical trajectory," in which spectacular collapses were followed by "its repeated resurrection in more or less the same territory and with a functional structure similar to that of the pre-turmoil period. This resurrection, in turn, was not incidental: it reflected the conscious efforts of major players to restore what they considered [the] normal and normative way of sociopolitical conduct."[43]

This pattern can be traced at least to the era of the Qin dynasty (221–206 BCE), the first to impose unitary rule on China. This "revolutionary new regime," as Frederick Mote described it, "fundamentally altered the structure of society and government, controlled cultural life in unprecedented depth and detail, managed the economy, imposed reforms on the language and standardized its writing system, weights, measures, coinage, and even the gauges of vehicles and roads, and mobilized masses of people for building projects." Mote's description (penned before the scholars on whom we have just drawn did their work) may exaggerate the degree to which the Qin succeeded in all these things, but it conveys very well both the regime's ambitions and the memory it left behind. Before this moment China had experienced a centuries-long era of pervasive violence, in what is known as the "Warring States" period

and its predecessors, when competing regional powers blocked each other's claims to establish imperial rule, subjecting people to "pillage, indiscriminate killings, enforced mobilizations, deliberate destruction of civilian infrastructure, the burning of the enemy's granaries, and, of course, mass-scale murder and rape." By defeating its rivals and instituting the unifying program just described, the Qin laid the foundation for the enduring association between the Chinese state and the ideal of unity and order it promoted.

That the state ought to be the instrument for achieving such an order, and how it had to be constituted, were linked questions in the work of the great classical sages Confucius and Mencius. Drawing on much earlier thinking both popular and learned, the two traced out the shape of a "Way" (*Dao*) that was a path at once to civilized life for society, to human (and particularly moral) fulfillment for individuals, and to the integration of both with a beneficent political authority. Describing their object in such formulaic terms makes their thinking sound more structured and linear than it was; they were not systematic philosophers, proceeding instead by maxims, illustrative anecdotes, and poetic allusions, whose meaning has to be contemplated and teased out. Giving an overall outline of what the Way involved may obscure some of this quality, but only by doing so can we describe their thought briefly enough to serve our needs here.

Confucius and Mencius (perhaps more explicitly the latter) taught that seeds of virtue were present in all human beings, but that they could only flourish within certain kinds of environments, of which the model was furnished by filial loyalty in a well-ordered family and community. Two things about this formulation earned it this status. First, it provided an experience of how dependence on nurturing superiors in a properly regulated world gave individuals the environment they needed in order to grow and develop, learning to actualize their potential, and preparing them to repeat the same experience with teachers and guides outside the household. And second, it readied them to seek and accept their place in the world where such experiences were made possible, showing it to be no less necessary for their personal fulfillment than was their individual being itself.

Thus the Way was a path to individual moral and personal development, only traceable within a certain form of social order. The notion of order, more precisely of finding and giving order, was (as Anne Cheng stresses) central to classic Chinese thought, even regarded as the highest good. Such order could not be theorized a priori, it had first to be found through experience, and then taken up as a goal, a sequence invoked in many contexts, but nowhere better illustrated than by the relationship between filial loyalty and all the situations outside the family for which it provided a model (although these also followed precepts of their own, as we will see). These contexts included community, schooling, marriage, and lineage (affirmed in the cult of ancestors), as well as

other social and practical relations; but the most important one was less immediate than these – namely, the imperial state.[44]

Distant and impersonal as it might often be, the state too had to embody the spirit of filial devotion, since the sovereignty of a true son of heaven rested on the love he drew from his people, inspired both by his position and his acts. In the state, however, the order made spontaneously visible in the relationship of parents to children had to be purposefully cultivated, in two ways. First, it required providing the nation with the stable unity without which there could be no end to violence; thus the regime had to be strong enough militarily to meet the challenges of internal rebellion and external invasion. A dynasty that failed to retain this strength lost the mandate of heaven. Second, the state had to nurture the seeds of virtue in its inhabitants, not through coercion, but by creating an environment in which everyday life was infused with such qualities as devotion, benevolence, and respect for others. This implantation was pursued partly through direct teaching, but still more by seeding social relations with rites or rituals (*li*) by which people enacted the precepts that following the Way required. Spreading such models through society required a large body of officials, and making sure that they understood the principles behind them was one reason why the examination system came to be so rigorous and competitive; but however bureaucratized relations with the state became, they had to be felt as emanating from the person of the emperor, and as animated by his direct participation. Confucius summarized these relations when he wrote that "The Way prevails in the world when the ritual ceremonies, the court music and the disciplinary activities are all directed by the son of heaven in person," his ministers and officials propagating his spirit from the court into the country.[45]

Several features of this understanding of society and government stood against people experiencing their ability to act independently of the state as some kind of exemption or immunity. The first was the close connection between unity and both political and social well-being. Whatever disrupted unity could not be beneficial, therefore no spaces into which the authority of the central state was denied entry could be legitimate parts of collective life. Europe was full of such enclaves. The royal confirmation of the *privilegium libertatis* issued to a French abbey around 700 which we encountered in Chapter 2, promising that none of the king's judicial officers would enter the abbey's lands, so that no "public judicial power" would interfere with the operation of its courts, was unimaginable under the Celestial Empire, as were the many other European entities that served to protect liberties – semi-independent counties or dukedoms and even more the "composite monarchies" identified by John Elliot. In China all these examples would have been regarded as opening the way to the destructive and violent divisions that it was the Empire's vocation to overcome.[46]

In Chinese eyes, what made the ideas and forms of action that appeared to nineteenth-century European observers as evidence for the existence of liberty significant was not that they allowed people entry to a sphere of action outside the orbit of sovereign authority, but quite the contrary, that they comprised ways of upholding or repairing the moral-political order whose basis was the state. Criticism of state officials, whether from within their own ranks or by private individuals and groups, was an accepted mode of public behavior because it was seen as a way of restoring a moral balance that had been somehow upset. Although members of the Censorate "could provide political advice, they were essentially expected to act as watchdogs guarding against corruption or breaches of etiquette within the bureaucracy." Criticism of the emperor in particular "was *a priori* conceivable only on the basis of principles of rule or moral values transcending dynastic authority and legitimated by the Classics" (sometimes extended to encompass "ancestral institutions" or "old models"). Even the harsh polemics against the sometimes violent and tyrannical Emperor Wanli in the years before his death in 1620 saw the root of his unfitness for rule in moral terms, charging him with having turned "an empire that was bequeathed to You by Your ancestors" and "entrusted to you by Heaven" into a source of "honor and riches benefitting only one person."[47]

This same moral, as opposed to contractual, conception of political authority gave a particular character to the primacy sometimes accorded to the people as the source of power, the ground on which the legitimacy of the son of heaven rested. As we have seen, it was the sage Mencius who most explicitly voiced this notion, concluding from it that rebellion was justified against an emperor who lost his mandate by failing to retain the love of his people. To Western readers such an image is likely to appear as a kind of social contract theory *avant la lettre*, anticipating formulations developed by Locke or Rousseau. But Mencius qualified his endorsement of popular sovereignty in a peculiarly Chinese way, making the capacity of the people to contribute to stable and humane social relations depend on their socialization, rather than on any quality they possessed by nature. The state, he held, has an a priori obligation to protect the people from hunger and violence, but "The Way of the people is this: if they are full of food, have warm clothes, and live in comfort but are without instruction, then they come close to being animals." Mencius does not say explicitly here that people in such a condition are not capable of following the Way of Confucius or of making valid judgments about when rebellion against a wayward emperor is justified, but he does list two things necessary in order to bring them toward a more human level: first, participation in rituals that model the proper forms of civilized social interaction and, second, instruction in the qualities that should inform the fundamental "human roles": "between father and children affection; between ruler and ministers righteousness; between husband and wife distinction; between elder and younger precedence; and between friends faithfulness." The people Mencius described as "coming

first" must already have begun to be shaped by such influences, otherwise their limitations might keep them from fulfilling the role he attributes to them. In one regard it is the people who are primary, but in another they must at least share this primacy with the state.[48]

Such a conclusion might be seen as incoherent, since it attributes priority at the same time to both sides, state and people. But as Anne Cheng points out in her illuminating history of Chinese thought, shunting aside such questions of what comes first is typical of Chinese thinking in many realms. In contrast to the Greek *logos*, with its constant need to give an account of its own foundations and clarify its propositions, Chinese thought proceeds from "an implicitly accepted common substrate," formed out of both ideas and practices. Contradictions are not perceived as irreducible but as "complementary oppositions," alternatives that shade off into each other "by an imperceptible transition." One of the most often invoked of these dichotomies is *yin* and *yang*. Literally dark and bright, this contrast serves as a model for many other intertwined polarities: female/male, cold/hot, disorder/order. The aim of such an intellectual style is not to sharpen reason as a tool of inquiry, but to think and live in harmony with the world. In the case of the political primacy of the people proclaimed by Mencius, as Pierre-Étienne Will notes:

> In theory the public had a moral right . . . to censure morally and politically those in power and, implicitly, the emperor . . . [and in consequence] it was necessary to let the people express their grievances–and listen to them–lest the situation become dangerous . . . But in practice, the right to denounce abuses was reserved to "qualified elites" – that is scholars with academic degrees who knew the principles contained in the classics and belonged to the same milieu as the officials.

Putting theory and practice together, the idea of popular sovereignty might be said to be *yin* to the *yang* of a steeply hierarchical society capped by an absolute emperor, the only structure within which both the need for social stability and the necessity that the people undergo the civilizing influence of rituals and instruction could be met.[49]

For similar reasons, the latitude given to officials and *literati* to criticize the state was at best an ambiguous space of freedom too. Gaining their positions through the famous examination system, these elite persons were at once administrators and intellectuals, many highly accomplished as poets, artists, or writers, and they constituted – after the sovereign and his closest associates – the group with both the greatest power and the highest status in the Empire. But their position depended on their being the conduit through which imperial power and the values expected to direct it flowed outward into society, making them constitutionally averse to regarding actual or potential exemptions or immunities from that power as liberties to be cherished or defended. They might, as we have seen, assert a right to speak

truth to power for themselves – and others in moments when attempts were being made to silence them – but it was a right to serve as channels for the expression of shared moral and political principles of which they were the special guardians, not to speak as or for individuals or groups whose rights needed to be defended against an encroaching authority.

A similar pattern appears when we turn to one final aspect of this topic, local self-government. At certain moments in Chinese history, and particularly in the last two dynasties, the Ming and Qing, a range of governing or administrative activities was increasingly taken over by gentry who were not officials, so that functions formerly regarded as belonging to the state came to be exercised by private individuals. The phenomenon developed in both rural and urban areas, and the matters attended to included schools, orphanages, and temples, but also city walls, granaries, bridges, and hydraulic systems. There thus developed what some recent writers have called a "public sphere," taking over a term originated to describe the interconnections private people were developing to gain influence over political discussion and decisions in early modern Europe. The fact that urban areas witnessed such developments in China indicates that Max Weber went too far in asserting that cities there never served as sites of self-government in the way European ones did; several recent writers have stressed the capacity urban communities developed for "organized purposive action," and some of the activities in which they engaged were much like ones their European counterparts undertook in the name of their liberties.

Looked at more closely, however, this situation does not really alter the picture we have been sketching. First, a chief reason for the movement of governmental activities into private hands was, as Timothy Brook notes, that the state needed to find helpers outside the circle of officialdom because it did not have the resources to do the work itself. If this was a public sphere, it was one called into being by the state in order to solve its own problems, not one developed by private citizens in order to gain a new kind of influence over public life. Second, in responding to this call the people who took on these responsibilities were not asserting any kind of independence from either the state or its chiefly Confucian ideology but affirming their integration into both. In his rightly acclaimed social history of the city of Hankow, William T. Rowe observes that the "confirmed urbanites" who contributed money or time to improving their community were affirming their commitment to "Confucian ideals of gentlemanly conduct, social harmony, and paternalistic public service." In their ethic, taking on such tasks was one way of demonstrating their elite status (or, in the case of "esteemed commoners," seeking to acquire it), one not just harmonious but directly continuous with such other marks of gentry membership as devoting family resources to preparing one or more sons to take the official examinations – often more for the prestige they conveyed than in the hope of entering government service – or participating

in poetry societies. The Chinese terms most often used in connection with civic action were the equivalents of virtue (*shan*), propriety or right conduct (*i*, which also had an overtone of free, in the sense of open to all), and philanthropy (*iz'u-shan*). Thus taking part in such a public sphere was not in some way parallel to the actions by which European town-dwellers asserted or defended their privileges and immunities against challenges by higher authority, but just the opposite: a way of declaring identity with the official powers and principles whose diffusion into society gave it stability and order; reserving control over local matters to local people was not its aim. As R. Bin Wong has remarked, participation in quasi-governmental activities by private individuals and groups was "a delegation not a devolution" of authority, preserving the state's intellectual and practical position by enlisting private people to represent and support it.[50] It is this concatenation of structures, practices, and attitudes that allows us to understand why people in China did not cherish the spaces of independent action they enjoyed as forms of freedom.

PART II

Autonomy and Teleocracy

Spaces of Autonomy

The Church, Universities, and the Bounds of Reason

When Marx described people's doings in his era as revealing for the first time "what human activity can bring about," he had in mind both the ability to gain control over nature and the power to alter traditional forms of life. Modern industry – still only in its infancy when *The Communist Manifesto* appeared in 1848 – was crucial to both, since it freed people from limitations long thought to be "natural," thereby undermining the control exercised by traditional ways of thinking and acting. But long before the age of steam power and railroads, Europeans had borne special witness to the human capacity to liberate particular spheres of life from these kinds of limits and restraints, in the process giving freer rein to otherwise obstructed potentials. The manifold aspirations to political and personal liberty considered so far provide one example, but no less – perhaps more – important is the emergence of what we will call spheres or spaces of autonomy, areas of practical or intellectual endeavor liberated from control by external authorities, so that they could come to be regulated by principles derived from the activities carried out within them. Of these arenas, none has been more significant than that of modern science. By the middle of the seventeenth century seekers of scientific knowledge and the entities they evolved to support their work were self-consciously asserting that understanding nature could only advance if it was exempt from outside direction or control, especially on the part of religious and intellectual – churchly and scholastic – authority. Such claims were strengthened and validated by the remarkable transformation of cosmology and physics effected by Copernicus, Kepler, Galileo, and Newton.

But the need "natural philosophers" (the term then used for those we now call scientists) experienced to emancipate themselves from control by Church officials, and by the theologians and metaphysicians who bolstered their intellectual authority, has often hidden the histories by which these inter-related powers had come to claim such positions in the first place. Both had first to establish their independence against forces that had achieved some form of external dominion over them: in the case of the Church the secular rulers and nobles who emerged as dominant forces after the collapse of the Carolingian Empire; in that of intellectual inquiry the very ecclesiastical officials who (as we saw in Chapter 2) fought off secular control in the eleventh

century, and whose power was far enough advanced by the thirteenth that they could claim jurisdiction over what ideas and opinions could be publicly discussed and taught. The outcome of both struggles would be of great moment, the first because it would establish the separation between religious and secular realms, never total to be sure but sufficient to distinguish Europe from other world regions in ways that would crucially matter ever after; and the second because the arena of philosophical inquiry provided an example that the larger spheres of cultural, aesthetic, and scientific activity would follow in their turn. This chapter and the next are devoted to these intellectual and aesthetic spheres, and to the contrasts that the autonomy they gained created with what prevailed outside Europe. We turn to science in the two chapters that follow.

That the medieval Church was not "born free," that it had to achieve the autonomy and power we often associate with it, may surprise some readers, since a widespread view rooted in Protestant and Enlightenment critiques of Catholic domination identifies it as the very foundation of the impediments to freedom both sought to overcome. And the history of the Church certainly contains moments that justify this view. But in order to acquire such dominion the Church had first to win autonomy from the power secular forces had gained over it in the long period between the fall of Rome and the late eleventh century, when the Gregorian reform party we encountered in Chapter 2 rose up to demand the *libertas ecclesiae*. Nor was this the only moment at which such liberty had to be fought for, since later monarchs and nobles would seek and sometimes obtain comparable control over the Church and its officials. Thus the ambition to establish a single directing force for society and culture as a whole was present on both the religious and the secular sides, so that either might in principle have become the site for such a fusion of spiritual and material dominion, as occurred in the great empires to Europe's east. That this did not happen comprises one of the most distinctive and consequential features of European life, and the successful achievement of autonomy by the Church was its enabling condition.

Christian tradition, to be sure, contains pronouncements in favor of separation between the two realms. But these have seldom been the simple calls for balanced equilibrium later eyes may see in them. When Jesus directed his followers to "Render unto Caesar the things that are Caesar's and unto God the things that are God's" (Matthew 22.21), he was far from putting the two domains on the same level, only telling his adherents that paying taxes to the Roman Empire need not estrange them from the higher life of faith. Saint Augustine, asserting (in the aftermath of the sack of officially Christian Rome in the year 410) that the history and fate of the genuine City of God was wholly unaffected by the ups and downs of the earthly City of Man, was not giving equal value to the two either, but seeking to free believers from worry that the failure of worldly events to exhibit the divine presence meant God might not be

in control of the history that counted most. The well-known proclamation by Pope Gelasius a century later that the world was ruled by two distinct "swords," one held by kings and the other by priests, was intended to make sure that, in things of the spirit, kings and princes would bow before the ministers of the Church (among whom the pope was the highest). How far Churchmen could go in this direction is suggested by the mid–ninth-century pope, Nicolas I, who asserted that his authority extended not just to archbishops and bishops but also to emperors, while priests were exempt from being judged by kings. Later pontiffs put forward similar claims.[1]

In the early medieval period, however, the imbalance came to be very much on the other side. Charlemagne regarded his imperial authority as extending over Church organization and law, and he exercised it by calling Church councils and guiding their decisions. He saw his role as defender of the Church as including a duty to govern it, and he seems to have viewed the pope almost as his personal chaplain (one of whose obligations was to crown him as emperor). Lesser princes and nobles in the following centuries treated Church institutions and properties in their domains as subject to their control too (many of the lands having been donated by lay people), assigning monasteries and bishoprics to their relatives or allies, and using the wealth of these entities as a resource for struggles against their enemies. By the time the Gregorian Reform movement arose in the eleventh century the German emperor had attained control over papal elections, exercised through his allies among the Roman nobility.[2]

It was the "Investiture Controversy," better described as a struggle over the independence of the Church, that turned the relations between religious and secular realms in a different direction. Beginning as a struggle between Emperor Henry IV and Pope Gregory VII, it continued after both had passed from the scene. What lay behind it was not just differing conceptions of secular and spiritual power, but the basic condition of European politics then and for long afterwards, namely the persisting division and fragmentation of political authority, especially in Germany and Italy (France at this point was still far from unified too). In this situation each opponent was able to find allies among rivals of the other in the latter's home territory, and it was Gregory's ability to join up with some of Henry's opponents in Germany that produced the most dramatic moment in the story, when the emperor was forced to retract harsh things he had said about the pope, and to humiliate himself by standing barefoot in the winter snow outside the castle of Canossa in 1077. But the emperor recovered sufficiently to invade Rome in 1081, and hostilities went on for some years, until the papacy was able to impose conditions favorable to itself at the Concordat of Worms in 1122. There, Henry having died, his successor renounced imperial control over papal elections as well as most but not all of his influence over Church appointments in Germany.

But it is important to understand just what this outcome did and did not mean. The victory of the papacy in the Investiture Controversy did not establish the Church as an institution able to remain free either of worldly entanglements (as some reformers hoped it would) or of attempts by secular rulers to gain power over it. Both sorts of involvements were visibly and, to many, painfully evident in the struggle between Guelph and Ghibelline partisans in Italy from the middle of the twelfth century, and even more so in such later episodes as the "Babylonian Captivity," by which the popes left Rome to inhabit the southern French city of Avignon for most of the fourteenth century, and the near half-century Great Schism that followed, during which there were regularly two and sometimes three claimants to the throne of St. Peter, all supported by competing secular powers. No less scandalous was the participation of fifteenth- and sixteenth-century popes (most notoriously of the Borgia and Medici families) in the bloody and unprincipled politics of Italy made famous by Machiavelli's unblinking accounts of them in *The Prince*, and the later papal tactics that placed devoted Catholics who were the papacy's political enemies, such as the citizens of Venice, under interdicts intended to prevent them from receiving the sacraments on which salvation was thought to depend.

What the Investiture Controversy did effect was an end to the post-Carolingian situation in which a single secular ruler, the German emperor, could imagine himself as Charlemagne's successor, able to aspire to a supremacy at once worldly and spiritual, and in some way extending over the whole of Latin Christendom. Pope Gregory VII and his successors nurtured parallel aspirations, but since their material resources were never sufficient to give teeth to them, the best way to describe the situation that now emerged is as a terrain of unstable and constantly shifting relations between sacred and secular areas of power and everyday life. Lay and clerical forces now faced each other on a ground sometimes marked by mutual respect and cooperation, but that was also a field of recurring struggles where each sought to gain some kind of influence or control over the other, as well as to define and manage the disputed boundary regions between their spheres of authority.[3] The resulting contention between competing hierarchies opened up more spaces for undirected activity and innovation than a more stable relationship between them (not to mention some kind of integration of the two) would have allowed. This persisting division between religious and secular authority, each established in a distinct sphere but in ways that generated an ongoing competition between them, would be one of the most basic and consequential differences between the trajectory Europe followed and the patterns that defined life in the great empires to its east. The collapse of European religious unity in the sixteenth century was still far in the future, but the underlying conditions that would make it possible were already coming into place.

Within their separate spheres, both the Church and European states now began to consolidate their authority and better define the principles on which it was based. The papacy should probably be seen as the first to do this. Now able to assert more direct authority over lower Church officers and institutions than before, the popes elaborated a new architecture of government, setting up a complex ladder of connections between Rome and the far-flung panoply of priests, monks, abbots, bishops, teachers, and theologians over whom they claimed dominion. As Gabriel LeBras concluded, the pope now "ruled over the whole church. He was the universal legislator, his power being limited only by natural and positive divine law . . . He summoned general councils, presided over them, and his confirmation was necessary" for carrying out their decisions.[4]

A central element in this transformation was the system of canon law the Church now evolved to regulate this structure. Christian legal principles had existed before, to be sure, in Scripture, in the decrees of early Church Councils, and in the writings of the Church Fathers. But only now was an effort made to codify them so that they could be universally applied. This reordering of ecclesiastical law was fostered by schools and by the collections of texts and commentaries produced for their use, providing a unified set of principles for the expanding system of Church courts. The rise and spread of canon law and the institutions that supported it was met by a similar upsurge in the arena of secular legal theory and practice, developed by both growing cities and expanding principalities, and which regulated such matters as crimes and punishments, commerce, markets, fiscal and tax policy, and obligations between lords and subjects. Canon law had its centers in cathedral and monastic schools, while homes for the study and codification of civil law developed in the new universities (whose relevance in this context we will consider in a moment), chief among them the law faculty of Bologna, which drew large numbers of students after the rediscovery of the sixth-century Roman compilation of civil law, the *Corpus Juris Civilis*, around 1070. Both were in good part responses to the same conditions in society as a whole: population growth and rising prosperity in country and town, and the emergence of new institutions to meet needs generated by these changes. Both relied on techniques for comparing and analyzing the diverse and sometimes contradictory rules and principles found in the sources they drew on. In order to reconcile them or to advocate one against others, they created a method of "scholastic" discussion and disputation that spread to other areas of intellectual life.

Thus the movement to reform the Church was part of a broad reorganization of society with far-reaching effects. The legal historian Harold Berman, in a valuable and often-cited book, has highlighted the social, cultural, and political consequences of the "papal revolution," stressing the crystallization of sacred and secular spheres it fostered, the broad impetus given to intellectual

debate and analytical argument by the new legal culture, the strong impact these developments had on philosophical and scientific inquiry, and finally, in his view, the inspiration given to the development of secular states by the model of centralized administration and bureaucratic organization pioneered by the Church. But the last of these results needs to be qualified and trimmed back a bit. It is true that later monarchies would develop organized networks of rule in some ways modeled on those the post-Gregorian papacy built up, but their path in this direction was much longer and more convoluted. Well into the early modern period and even beyond, as we saw earlier, they remained not unitary states but composite ones, able to grow and expand only by acknowledging the separate institutions, customs, and privileges of their formerly independent regions, some of which had been powerful rivals.

Berman is surely correct, however, to recognize one further significance of the papacy's self-liberation for Europe's later history – namely, that it marked the first of many instances in which previously subordinate spheres or groups successfully threw off some restrictive external control. One sign of this continuity was the highly polemical tone in which the arguments between pope and emperor were conducted, prompting one historian to identify the period of the Investiture struggle as the "first great age of propaganda." Some of the polemical tone of quarrels about liberty within Italian towns and cities may have owed its harshness to the influence of these struggles over the *libertas ecclesiae*. Gregory decried kings in general as "blind with greed and intolerable in their audacity." Henry, in response to one papal attack on him, sent a letter calling Gregory "not pope but false monk," and exhorting him to "come down, come down, and be damned throughout the ages."[5]

The last phrase just quoted seems to have been a later addition, but it was much in the spirit of medieval and early modern Church–State polemic. Rival religious and secular authorities attacked each other in a language aimed at humiliating their opponents, tarring popes no less than kings and emperors with the brush of heresy, corruption, tyranny, or service to the Antichrist. In his famous and much-read *Divine Comedy*, Dante Alighieri, moved largely by his antipapal Ghibelline politics, put three occupants of the Holy See in Hell, listing their sins as greed, simony, nepotism, heresy, and blasphemy. He berated Nicholas III for "making gold and silver your God," thus becoming like some "idol-worshiper, save that he prays to one and you to a hundred" fetishes. In such hands the Church, supposed to be the bride of Christ, became a "whore."[6] The period of the Avignon papacy was especially rife with sordid struggles between popes loyal to particular rulers and rival pontiffs put in office by their opponents, conflicts that involved accusations of sin and heresy much like Dante's. Such polemics became if anything more bitter as time went on. In his light-hearted but sharp-toothed dialogue *Julius Excluded from Heaven*, the sixteenth-century humanist Erasmus of Rotterdam portrayed the recently deceased pope Julius II in a drunken stupor, seeking to unlock the gates of

heaven with the keys to his money-box. It needs to be stressed that these satirical blasts came from within the Church, not from outside it: Dante and Erasmus were both loyal Catholics, the latter refusing to follow his contemporary Luther in exiting from the Roman Church, although voices like his helped prepare the situation that forever shattered Europe's religious unity.

Such battles were not part of public life elsewhere, because no equivalent separation between religious and worldly authorities existed outside Christian Europe. In Hindu India, as a recent writer observes, the very idea of religion as an independent realm long remained an alien notion, "if by religion we mean a separate sphere of experience, requiring, for example, a distinction between the 'religious' and 'secular' aspects of a Hindu royal procession in which kings and gods are honored by an assembled populace." What gave currency to this otherwise foreign understanding were the activities of British "Orientalist" scholars in the late eighteenth century, whose efforts to recover and publish Sanskrit literature encouraged Brahmans to regard the essence of their religion as lying less in everyday life practices and more in sacred texts such as the Bhavagad Gita.[7] In the Ottoman Empire there could be no opposition comparable to what set popes against kings and emperors in Europe because the sultan was not just the political sovereign but also head of the community of the faithful, the *umma*. He was, as we noted in the previous chapter (quoting Ira Lapidus), both imam and caliph: "The Muslim character of the sultanate, expressed in the control of the religious establishment, was at the core of Ottoman legitimacy."[8] Polemic and satire in the style of Dante or Erasmus would have been repressed and severely punished. In China, where quasi-religious notions and ceremonies associated with Confucian writings (and into which more specifically spiritual notions had been absorbed from Daoism and Buddhism) were integrated into everyday life in ways analogous to traditional Hindu practice, it was the imperial state rather than any religious entity that acted as their official teacher and sponsor, seeing them as essential for maintaining the social unity and balance of life. As R. Bin Wong observes, no Western state before the nineteenth-century advent of mass primary education combined the task of establishing political order with the spiritual and ethical formation of its subjects in the way the Chinese Empire long sought to do. "Early modern European states did not share the Chinese state's view that shaping society's moral sensibilities was basic to the logic of rule." Nor was the emperor's religious role only educative, since as the "son of heaven" he was the agent of cosmic power on earth, charged with performing ritual ceremonies and sacrifices on which the well-being of his realm depended.[9]

The struggles between competing spiritual and secular powers in Europe laid the ground for the emergence of other spheres of autonomy, giving those who worked within them some degree of immunity from the control outside authorities sought to impose. One context in which the potential for such autonomy was quickly evident, provoking conflicts that would not bear their

full fruit until later, was provided by universities, the first of which appeared in the very same decades as the spread of communes and the Investiture Conflict. Both the term "university" and the institution it describes are specifically European in origin, and for reasons that are directly related to the fragmentation and division that gave the region its special character. Institutions of higher learning existed elsewhere, and earlier than in Europe. In China, however, they were mandated by the state, which required localities to establish schools where students could prepare for the examinations that gave entry to careers in the imperial bureaucracy. In Islam by contrast *madrasas* were independent of state authority, in their early form typically founded by some scholar whose renown drew students, and from whom they could receive a creditable authorization to teach a particular subject. Such students and teachers sometimes enjoyed considerable freedom, but this could be limited if the teacher was supported by patronage from some elite donor with ideas about what ought to be taught, or when a school was financed (as came to be increasingly the case) by a charitable endowment, a *waqf*, set up for some designated purpose. But because Islamic towns had no independent institutions of government, students or scholars who migrated to Cairo or Baghdad simply became residents there, state law protecting them in the same way it did natives; thus the question of their freedom did not become an issue.[10]

In Europe, by contrast, outsiders drawn to Bologna, say, or Paris – two of the earliest university towns – by the reputation of teachers or schools faced severe problems, because only established residents enjoyed the privileges that conferred civic rights; newcomers often found themselves subject to arbitrary and even harsh treatment by the local authorities. In response they organized into communities of their own, taking the name given to all such collective bodies, including guilds: *universitas*. The term did not refer to buildings or libraries, but to groups of masters (in the case of Paris or Oxford) or students (in Bologna, where they were generally older than elsewhere). Like the cities where they clustered, these groups took on a common corporate identity and a legal personality in order to achieve some degree of immunity from outside authorities, in their case those very cities themselves. They negotiated their relations to local governments (putting pressure on the latter by threatening to take their contributions to the local economy elsewhere, and in some cases actually doing so for a time), getting special treatment in fiscal and judicial matters, such as how they would be taxed and in what courts they could be tried (students then as now being famously disorderly). They were exemplary of the ways that the "liberties" which gave independence to a wide variety of groups in medieval Europe could become modes of domination over those outside them, creating conflicts requiring some kind of resolution. Like rural and urban communities, the associations of teachers and students sought to protect their status by receiving charters from more distant and higher authorities; the universities of both Bologna and Paris received recognition from

popes early in the twelfth century, and later ones acquired similar privileges from kings or emperors.

The autonomy from local authorities these papal bulls and princely charters conferred distinguished these corporate groups from the guilds whose organization they had originally copied, since the latter remained under local jurisdiction. Such autonomy was not complete, to be sure; like some other medieval liberties it was partly sustained by the ambiguity of being subject to more than one higher authority, making it possible to play one off against another. The same was true in regard to intellectual matters. As universities multiplied, it was not always clear whether graduates who had been granted a teaching diploma (*licentia docendi*) from one had the right to offer instruction in other places. In response, a movement grew up during the thirteenth century to establish a *ius ubique docendi*, a privilege to each anywhere. The impetus for this development seems to have come from the papacy, which hoped to foster loyalty to itself by aiding institutions it favored. But the status the license conveyed was contested by some faculties, notably Paris and Oxford, which continued to insist on their right to decide for themselves who could teach on their turf.[11]

From early on, therefore, the outsider status of university teachers and students led to competing claims about who could regulate scholarly life; the institution of the university, created in order to give civic status to groups of students and teachers, became the site where debates about the nature and extent of their intellectual autonomy broke out too. Similar questions arose outside Europe, but they were typically resolved in significantly different ways, as we can see by attending to the contrasting outcomes of the very similar debates that took place among both Christians and Muslims, about how to deal with the dangers to faith posed by the Aristotelian thinking that exercised a large influence on both. The issue arose earlier in the Arab world, where previously unknown texts were first translated and studied, but since we are in the midst of a discussion of European universities, we take up the story in that context first, before turning to the contrast with Islam.

Interest in philosophical speculation and debate grew in Europe as the techniques of analysis and disputation developed in legal study spread to philosophy and theology. Peter Abelard compiled his highly useful and influential catalogue of conflicting views found in Christian sources, *Sic et non*, around 1120. Texts by Plato and Aristotle had long been known in Europe, especially Plato's *Timaeus*, thanks to a fourth-century Latin version, as were some of Aristotle's writings on logic, translated by Boethius in the sixth century. But these were narrow windows on ancient thought compared to the opening provided by translations made from Arabic sources in the twelfth century. The Arabic versions owed their existence to a vigorous interest (the nature of which we will consider in a moment) in Hellenic learning on the part of certain Muslim scholars and the caliphs who supported them two centuries

earlier, and the Latin renderings based on these Arabic ones were the fruits of contacts between Christian and Muslim (as well as Jewish) scholars in border regions such as Sicily and Spain. By the year 1200 the whole corpus of Aristotle's writings as we have it today was available to Europeans who could read Latin.

Drawn on first by individual philosophers (including some of the translators), the newly available texts made their biggest impact when taken up and discussed by members of university faculties of philosophy and theology, especially in Paris, where the two most celebrated thirteenth-century thinkers, the Dominican Thomas Aquinas and the Franciscan Bonaventure (the first canonized in 1323, the second in 1482) wrote and taught. Both were at once theologians and philosophers, but Thomas's way of thinking gave broader scope to philosophical reason as a source of truth than Bonaventure's, and people closer to the latter sometimes evinced suspicion about the former's more rationalistic temperament. What worried them were certain ideas put forward by Aristotle, and more clearly by Ibn Rushd, the influential Arabic interpreter known as in the West as Averroes ("the commentator"), that were difficult to square with the biblical account of divine creation, and with the notion of an immaterial soul. These anxieties prompted the Bishop of Paris to condemn thirteen propositions associated with Aristotle and Averroes in 1277. One was that "the world is eternal" (which implied that its existence did not depend on a specific act of divine creation), another that "the soul ... is corrupted when the body undergoes corruption" (i.e., its substance is not purely spiritual or immortal), and a third "that man wills and chooses in a necessary way" (so that we do not act or believe through free will). Although Thomas Aquinas had been careful to distance himself from such views, the broad place he gave to philosophical reason led some to think he was one of the targets of the condemnation (his works would be explicitly exempted from it in 1325).[12]

What critics of Aristotle found troubling in these notions was not just their content, but what they seemed to imply about the limits of divine creativity. In Aristotle's teaching, logic gives access to the way things are in the world, so that intelligibility and reality are closely linked together ("the rational is the real," as Hegel would somewhat similarly declare many centuries later). To think about God in such a way may imply that the divine will itself might be restricted by what logic seems to tell us about the order of things. If deductive reasoning leads us to the notion that the world is eternal (since, if it came into existence only at a certain moment in time, the existence of that moment would still need to be explained with reference to some prior one, initiating a chain that extends backward *ad infinitum*), then from an Aristotelian perspective it follows (as Etienne Gilson explained) that "God cannot not produce it, and if the world is such as it is, it is because God cannot produce it other than it is." Such implications conflicted with the liberty and omnipotence of the biblical God,

and one current of scholastic thinking after 1277 (mostly associated with the Franciscan order to which Bonaventure belonged) sought to preserve scriptural faith by making sure these qualities were not taken away from Him.

The chief way that fourteenth-century thinkers pursued this aim (drawing on other sources, among them Neoplatonism and St. Augustine) was by insistently affirming God's absolute power (*potentia absoluta*), arguing that nothing, certainly not Aristotelian logical necessity, could rein in His will. Had He wished, He could have created a world wholly different from the one we inhabit, governed by principles unknowable within the conditions we encounter on earth, or a universe of multiple and diverse worlds. Such an exaltation of God's power implied a more modest status not just for philosophy but for theology too, since even in interpreting Scripture it had to rely on concepts formed in our minds. As the philosopher and theologian Duns Scotus held, theological reasoning always remains unable to understand the nature of God, because even the notion of "infinite being" provides only a vague and limited access to the divine essence.[13]

But the thinkers who went in this direction – some in Paris, some elsewhere – did not abandon philosophical discussion and speculation, nor did they seek to deprive Aristotle of his place as a central reference point for debate and argument. Some remembered that Thomas Aquinas too had acknowledged that God's creative power was unlimited, while adding that His having such power did not mean He actually made use of it. They argued that we cannot conceive of His making a world that would not embody the harmony and coherence Christian revelation attributes to Him, and that speculating about worlds that do not exhibit it would add nothing to our understanding of either cosmology or theology. But others went in a contrary direction, combining an enhanced recognition of God's *potentia absoluta* with a continued use of Aristotelian logic in ways that widened the domain of philosophical speculation instead of narrowing it.

Among these were some who began to ask what other kinds of worlds, or a universe consisting of multiple ones, might actually be like. A certain playfulness characterized some of this speculation, and some of it might appear to us as scholastic hair-splitting. What made it significant in its time, however, and seems to have drawn people into the discussions, was the speculative freedom that such thinking licensed. Some, in particular, experimented with setting aside the fundamental Aristotelian notion that rest was the natural state of all bodies, the idea that underlay Ptolemy's placing of the motionless earth at the center of a bounded universe. Supposing that multiple worlds might exist, could the natural state of bodies in some of them not be rest, as on earth, but motion? and would an object located in one behave the same if it were moved into another? Could the directions "up" and "down" that described the relations between the heavens and the earth in both common experience and the geocentric Ptolemaic universe be constant everywhere? Aristotle believed that

a vacuum was impossible, but if God's power was absolute, then could He not create one if He so willed, and what would follow from that? "Would it be possible to measure distances within such a vacuum? If people were placed in it, would they be able to see and hear each other?" Such "thought experiments," as Edward Grant concluded, "did not replace, or cause the overthrow of, the Aristotelian world view," but they did "challenge some of its fundamental principles," making people "aware that things might be quite otherwise than were dreamt of in Aristotle's philosophy," and in the everyday assumptions of believing Christians. Such an awareness, still limited in the 1300s, would become both more challenging and more productive during the seventeenth century, when some of these very questions would be central to the cosmological revolution.[14]

What made it possible for scholastic philosophy to take these new directions following the condemnation of 1277 was partly the emphasis on God's absolute power that allowed for them, and partly that university faculties retained a certain degree of independence from higher authorities. As universities in the medieval sense, teachers and students enjoyed immunities from control by local authorities and organized their own intellectual life. The Bishop of Paris had no authority in Oxford or Padua, and even in France his power over philosophical disputation and writing was limited to denouncing propositions as heretical. What gives this institutional autonomy and its consequences significance in the current context is the contrast it displays with the course taken by the reception of Aristotle in the Islamic world, from which had come the translations from Greek to Arabic on which Europeans relied for their knowledge of the Aristotelian corpus.

There, both in the Middle East and in Muslim Spain, the institutional setting for the interest in Aristotle had a different character, arising in the courts of rulers and dependent on their patronage. The main impetus for the translation of Aristotle in the ninth and tenth centuries came from the Abbasid caliphs in Baghdad, and their reasons for sponsoring the project appear to have been largely political. As a new dynasty, the Abbasids were faced with various kinds of opposition, both from other Muslims and from nearby people whose religious loyalties were to older Persian and Zoroastrian traditions. One prime motive for making Greek philosophy (including Ptolemy's astronomical treatise the *Almagest*) part of their court culture lay in the resources ancient cosmology provided for astrological authentication of Abbasid legitimacy: astronomical indications of some significant forthcoming event could be cited to show that the coming of the new dynasty was predicted in the heavens and thus ordained by God. Second, some of Aristotle's works, notably his treatise on dialectic and rhetorical argument, the *Topics*, provided techniques that could be used against rival believers, notably Jews and Christians. And third, like the Zoroastrians whom they aimed to replace (and like later Eastern peoples confronted with scientific ideas developed in alien contexts), the

Abbasids sought to take possession of foreign knowledge in order to sustain their belief that it had originally been formulated by their own Arab ancestors, from whom Persians and Greeks had appropriated it. It was on these grounds that the Abbasids set in motion what one scholar calls a "massive movement," sending out emissaries in search of manuscripts and employing both Muslims and infidels (notably Syrian Christians) as translators.[15]

Among the chief figures in the movement was Abu Yusuf al-Kindi, often hailed as "the father of Arab philosophy." Having come to the notice of the Abbasids while he was a student in Baghdad, he was chosen by them to oversee the translation project. Perhaps they already saw in him glimmerings of what would become one of the chief themes of his many writings, namely the compatibility between philosophy and Islamic theology. From the start, however, such a view was seen as suspect by some, and the favor shown him by two Abbasid caliphs was withdrawn by two later ones, fearful that rational argument could challenge the truths of faith. At a certain point al-Kindi was physically beaten and his library confiscated. All the same, the translations had a vitalizing impact on philosophical studies, and the harmony of reason with Islam was championed by a group called the Mutazilites, which flourished in Baghdad and other cities at this time. In their eyes reason was the attribute that distinguished both humans and God from other beings, and God could do nothing either unreasonable or unjust. Like Western Aristotelians later, they voiced views that some of their coreligionists would consider heretical, such as that the Quran could not be co-eternal with God (as Muslims held it to be), since if the great book was God's word, he had to exist before he could speak it.[16]

Both the ups and downs of al-Kindi's situation and the support the Mutazilites received from the Abbasid caliphs show the important role that patronage, both royal and noble, played in Islamic intellectual life. The careers of both Averroes and Avicenna (Ibn Sina), the two most distinguished and influential Islamic philosophers, illustrate it too. Neither ever relied on teaching for a livelihood. Averroes was appointed both as a judge and as court physician to the Almohad caliph, Abu Yuqub Yusuf (who ruled Spain from his court in Marrakesh), from whom he received protection against critics suspicious of the antireligious implications of his Aristotelianism. But when Abu Yuqub was succeeded by a caliph more connected to conservative scholars, the philosopher was banished to another city. Avicenna was sustained by a series of high-born patrons in Syria, who employed him as both physician and vizier; losing this support toward the end of his life, he suffered a much reduced existence, living for a time in the house of an apothecary. Such relationships had some advantages to be sure, but overall they left intellectual life in a vulnerable position. As the power of the Abbasids declined (it was on the wane by the 950s and their major domains were effectively taken over by the Seljuks during the next century, including Baghdad which they captured in

1055; the Abbasids retained religious and ceremonial functions into the thirteenth century, but were shorn of their secular power), the viewpoint represented by al-Kindi and the Mutazilites lost the social support that gave it prominence earlier. What largely superseded it was a much more skeptical attitude toward the benefits of philosophical thinking and its harmony with Islamic faith.[17]

Two people critical in effecting this shift were Nizam al-Mulk, grand vizier of the Seljuks and one of the most powerful figures in the dynasty's early history, and the philosopher he patronized, Abu Hamid al-Ghazali (whom we encountered in Chapter 4 as an upholder of purely secular authority once the original caliphate had fallen). Among al-Mulk's achievements was his establishment of what George Makdisi calls a "vast network" of new *madrasas*. Endowed with resources for the support of students, these schools were administered as parts of a charitable foundation (*waqf*) set up to defend Muslim orthodoxy. Their spirit can be best understood by looking at the thinking of al-Ghazali, whom al-Mulk appointed to teach at the *madrasa* founded in Baghdad at the time of the Seljuk conquest, and whose views became deeply influential throughout the Islamic world over the next centuries.[18]

Although no enemy of reason or logic in themselves, which he saw as necessary to interpret all texts, secular or sacred, al-Ghazali laid great stress on the inferiority of worldly knowledge to the religious understanding that prepares us for life in the next world. Medicine and arithmetic were to be cultivated to be sure, but only to the extent that they provided practical benefits; as for philosophical inquiries into general questions about the world, they were at worst dangerous and at best of so little value that they were better left unasked. This anti-philosophical position had a philosophical justification, however, which al-Ghazali developed out of the writings of an earlier Islamic antirationalist, Abu al-Hasan al-Ashari. He held that rational inquiry could provide no genuine knowledge about the world because everything that happens comes about through the operation of the divine will, which humans are incapable of understanding, and not through any sequence of knowable causes and effects. We are wrong to speak of causal links between any event or action and any other one, because every phenomenon in the world is an independent product of divine activity: "the connection of these things is based on a prior power of God to create them in successive order, though not because this connection is necessary in itself and cannot be disjointed – on the contrary, it is in God's power to create satiety without eating and death without decapitation, and to let life persist notwithstanding decapitation, and so on with respect to all connections." Only revelation can rescue humans from the dark night of their illusions, and there was no point in deepening the latter by encouraging people to seek answers on their own.[19]

Those who championed these ideas were called Asharites, after the thinker out of whose writings al-Ghazali developed them, and their way of thinking became a widely accepted orthodoxy, especially in those parts of Islam then coming to be distinguished as Sunni. Nizam al-Mulk's *madrasas* were one vehicle for their diffusion. To be sure rationalism of the kind advocated by al-Kindi did not wholly disappear from the scene. Averroes would pen an attack on al-Ghazali's rejection of philosophical inquiry, and Arab thinkers would continue to make contributions to subjects where debate revolved around ancient philosophical texts, for instance the fourteenth-century astronomer Ibn al-Shatir, whose revisions of the Ptolemaic system led him to diagrams and calculations nearly identical with those of Copernicus – save that they remained firmly enclosed within a geocentric universe (we will give him more attention later). But it was the Asharites who came to dominate both education and formal thinking. In the curriculum of the new *madrasas* logic and mathematics were taught only as adjuncts to other subjects, and people with an interest in non-Islamic philosophy had mostly to pursue it on their own. Al-Shatir was not a teacher but the timekeeper in a Damascus mosque. Averroes, who like al-Kindi, ended his life in obscurity after he lost the support of his patron, came to be more celebrated in Europe than in either Islamic Spain or the Near East.[20]

Thus in Islam, just as later in the West, the recovery of Aristotelian texts led first to a moment characterized by attempts to draw on ancient logic and metaphysics in order to further both religious and secular understanding, and then to one in which fear of the heretical implications of rationalism turned influential figures against philosophical inquiry as a means for seeking knowledge about the world. In both the Islamic world and Christian Europe the turn was accompanied by a renewed insistence on the unlimited power of God's will. Despite this parallel movement, however, this second moment took sharply different forms in the two cases. In Europe it opened the way for a new and more adventurous mode of philosophical speculation, some of it with potentially radical implications, whereas in Islam it greatly narrowed the space for rational inquiry, giving scope to a widespread rejection of cause-and-effect reasoning as a pathway to genuine knowledge, and leaving divine activity as the only meaningful explanation for both events and natural phenomena. A number of scholars have described this result as a marginalization of philosophical inquiry (with good reason, it seems to me), but one eminent historian of Islamic culture, A. I. Sabra, argues that we should instead see it as a "naturalization" or "assimilation" of the Greek heritage, a "consciously Muslim" acceptance of other modes of understanding the world, but only to the extent that they helped to "perfect the human soul and prepare it for a state of eternal happiness." Given that Sabra acknowledges that al-Ghazali's putting "a curb on theoretical inquiry" lay at the core of this resolution, however, and that it amounted to an "instrumentalist view" that subjected all intellectual life

to the purposes of religion, allowing reason no space to pursue knowledge about the natural world on its own, it is very hard to see what difference his terms make. Like other writers, Sabra recognizes that this turn in Islamic intellectual life made it less likely that anything like the European cosmological revolution of the seventeenth century would take place within it. We will return to this issue later.[21]

The dilemmas Muslims faced when drawn to an exemplary model of philosophical inquiry about the world that was based on materialist premises were fundamentally the same as for Christians. Thus the chief reason why such investigations continued to occupy a central place in European intellectual life but came to be marginalized in the Islamic world lay not in some inner difference between the two systems of belief, but in the different frameworks within which education and learning were pursued in each case. European universities enjoyed a degree of autonomy sufficient to resist attempts to dictate what they could discuss and teach that their counterparts in Muslim *madrasas* and princely courts did not. This contrast, between a Europe seeded with spaces of autonomy, and societies whose lack of them derived from the power higher authorities possessed to diffuse and enforce some single set of cultural values, would reappear in many other contexts.

6

Classical Humanism and Aesthetics

The story told in the previous chapter testifies to the way that European forms of liberty provided spaces for activities that officials anxious to preserve orthodoxy would have been happy to suppress. Universities enjoyed a sufficient degree of autonomy to allow the speculations in which thinkers engaged to be regulated and judged by principles derived those activities themselves, as opposed to ones intended to assure the well-being of some "higher" domain. So far as I know, however, those who participated in these discussions did not view them as located in a sphere external to the one where more orthodox inquiry took place. By invoking God's *potentia absoluta* as the ground for their work, they set them expressly within religiously sanctioned intellectual life, licensing their own freedom to pursue unorthodox lines of thought by tying it to God's limitless power. Locating themselves in such a space, they had no need to ask whether liberation from guidance by other spheres might be beneficial for the advancement of their, or any other, form of activity, or whether it might foster the release of otherwise unrecognized or dormant human powers.

Such notions would begin to find expression soon after, however, first of all in the circles of classical humanism and the artistic currents associated with it that emerged in the Renaissance. To be sure, giving voice to such ideas was not part of what the early humanists or their friends set out to do: what moved them was a desire to recall and cultivate certain intellectual attitudes and practices that were prominent in ancient culture. It was in the course of defending and promoting these that some of their votaries were moved to put forward more exalted views of human capacities, and to call out the at least potentially deleterious effects of subjecting them to a "higher" sphere, notably religion. Sporadic and incompletely developed in the Renaissance, these notions would become more common, and receive more systematic elaboration, in the seventeenth and eighteenth centuries.

Although humanism would become a European-wide movement, its origins were specifically Italian, rooted in the special conditions that made the peninsula the most urbanized part of Europe, and in the broad need that urban life generates for professionally literate people: scribes and letter-writers, record-keepers, notaries, teachers, public speakers. In a region urbanized in the competitive way Italy was, people with these skills were called on for public no less than private

employments – as municipal secretaries, diplomats, propagandists, and orators on official or ceremonial occasions. It was from this group, and not from university faculties of philosophy or theology that the first humanists emerged. The discipline in which they were mainly trained was rhetoric, a central subject in Greek and Roman culture, and the medieval rhetoricians' familiarity with some of the classical texts devoted to their subject gave them access to ideas that could add heft to political argumentation, such as the celebrations of liberty we noted in Chapter 2. During the fourteenth century rhetorical culture expanded and deepened, becoming at once more philosophical and more literary, in part as a response to the spread into Italy of Northern European scholasticism and French poetry (the papal "captivity" at Avignon was one site of transmission); its orientation toward public questions also deepened, as town administrations expanded at the same time that spreading literacy among business people made them more able to produce private letters and contracts on their own.[1]

One figure who participated in all these currents was the celebrated poet Petrarch (Francesco Petrarca, 1304–74), who had many ties to the rhetoricians without actually working as one, and who fostered a kind of cult of his favorite classical writers, the poet Virgil and the orator Cicero. Petrarch and others close to him sought to replace medieval Latin with an idiom more cognizant of classical grammar and syntax, and revived Cicero's discussions of the relations between rhetoric and the major classical schools of moral philosophy – Aristotelianism, Stoicism, Academic Skepticism, and for some (against Cicero's own preference) Epicureanism, presenting them as storehouses of ideas and guides to the good life. Platonism, largely ignored by Cicero, came to be part of the mix after the Ottoman conquest of Constantinople in 1453 drove many Greek-speaking Christian scholars to seek shelter in the West. Petrarch also penned one of the first anti-Scholastic polemics (*On My Own Ignorance and That of Many Others*), defending the morally and socially useful learning his kind of culture nurtured against the devotion to abstract reasoning characteristic of university faculties of philosophy and medicine. The intellectual program set up on these foundations was called the *studia humanitatis*, the studies of humanity, consisting (most often) of grammar, rhetoric, poetry, history, and moral (but not speculative or metaphysical) philosophy.[2]

The special conditions that allowed urban life to become the cradle of this new movement did not obtain elsewhere. Professionally literate people were features of city life in many other places, but their culture did not develop in the same way where the heritage of Rome was a less immediate presence, and where interurban rivalries were less formative than relations with outside authorities; the latter was the case not only in France and Germany, but also in the various parts of the Dar-al-Islam. Muslim cities fostered a mix of urban occupations similar to those from which humanism emerged – notaries, secretaries, administrators – and their ranks supplied some of the supporters of ancient rationalism under the Abbasids, as well as contributors to the "mirror of princes" literature mentioned

earlier. But no comparable movement to unfold the cultural potential of grammar and rhetoric – much less to cultivate a pagan tradition of moral philosophy – emerged there. Ottoman officials were imbued with the suspicion of "foreign sciences" that spread under the Seljuks (and later the Ottomans) and carried these attitudes into the cities they administered. Such a situation provided little scope for the development of a self-consciously secular intellectual movement.[3]

By contrast, the *studia humanitatis* was born, as it were, into independence from both theology and the metaphysical philosophy pursued in universities, neither of which was part of the humanist program. Some early humanists were pious Christians, others less devout but not antireligious (a number of them worked as secretaries and administrators for the papacy, not yet so suspicious of potentially heretical currents as it would become once the Protestant challenge came to preoccupy it), but humanism was a distinctly secular movement, and the critical stance some humanists took toward corruption in the Church added to the anxiety it bred in some defenders of orthodoxy. One of the most learned and polemical of the early humanists, Lorenzo Valla, used his knowledge of Roman history and classical Latin diction to demonstrate that the so-called Donation of Constantine, on which the papacy based some of its claims to worldly power, could not have been written in the fourth century (as it declared itself to be), and was thus a forgery (he was right). Both Valla and his sometime friend Poggio Bracciolini were hospitable to pagan, notably Epicurean, moral sentiments. But the *studia humanitatis* spread outside Italy in the sixteenth century, providing models and guidance for a world altered by the voyages of discovery, the spread of printing, and the effects of religious division.[4]

Almost from the start, humanism developed ties with another cultural current recognized as a new departure – namely, the remaking of the visual arts in which Giotto and Cimabue were pioneers. One early figure who felt this connection was Leon Battista Alberti, poet; linguist; author of books on painting, sculpture, and education; and in the eyes of Jacob Burckhardt the exemplary "Renaissance man." Scion of an old Florentine family, Alberti was born in exile in 1404, and was not able to take up residence in the Arno city until his thirtieth year. When he did he was immediately struck by an array of creative achievements that included works by such painters, sculptors, and architects as Massaccio, Donatello, Ghiberti, and Brunelleschi (whose dome for the Florentine cathedral, the largest such structure produced since the fall of Rome, was then moving toward completion). The spectacle led Alberti to believe that the work of his contemporaries was "in no way inferior to any of the ancients," and that their "fame should be all the greater" since they had discovered "arts and sciences hitherto unheard of and unseen," all "without preceptors and without any model to imitate."[5]

The sense that human activity, loosened from hierarchical constraints, had powers not recognized before, found new expression in Alberti's successors in

the decades after his death. The most famous example was Giovanni Pico della Mirandola's Oration (planned but never delivered), known as *On the Dignity of Man*. In it he advanced a radically enlarged vision of human creative power, portraying our species as the only form of being that was free to choose its place in the universe. Invoking the common notion of a great chain of being, he noted that other created things had a nature that confined them to a fixed position within it, from angels at the top to inanimate clods of earth at the bottom. But humanity (conventionally assigned the midpoint in the series) possessed the unique power to descend or ascend the ladder at will, drawing on its intellectual faculties to seek unity with divinity, or yielding to its animal nature and becoming like beasts. Not even angels shared this power of choosing their own place on the ranked order of being.

Pico did not derive this idea only from observing the world of his time, nor was his intention to encourage his fellow humans to experiment with all their possible ways of living. His aim was to spur those who could to cultivate the potential to draw close to divinity. The method he put forward for doing this relied especially on the corpus of writings called the Kabbalah, a body of esoteric Jewish texts that sought to draw on a secret content lying within the sacred works – Torah, Talmud, Mishnah, and others – whose origin was the revelation Moses received on Sinai. The secret content could be accessed by penetrating below the literal meaning of these texts to a deeper one, reached by recombining the letters of Hebrew words (notably but not only the names of God) so as to make them yield a different content. Jewish Kabbalists used this method to support their own positions in debates, to penetrate to what some called the secret of creation, and to pursue mystical and spiritual experiences. Pico did not take over all their interests, but he used their techniques to provide what he thought was the best proof of Christianity's truth – namely, that it was already covertly present in God's revelation to the ancient Jews – as well as to seek magical powers that could sustain an adept's intellectual and spiritual quest. Thus it was Kabbalistic reasoning and contemplation that generated the powers which allowed people to ascend the scale of being.[6]

Pico was not, however, the only person in his circle to celebrate human creativity. Others did so without drawing on Kabbalistic thinking. One was a poet and writer much celebrated in the time, Cristoforo Landino. Landino asserted that poets, by virtue of rearranging the things they find in the world in new and imaginative ways, exhibited a quasi-divine creative power. This notion had been approached by earlier writers (including Saint Augustine) but resisted lest it infringe on God's dignity. In developing these ideas, both Pico and Landino owed much to their association with the philosopher Marsilio Ficino, whose Platonic (more accurately Neoplatonic) Academy was a center of intellectual life in Florence (and well known elsewhere). Ficino similarly affirmed the near-divine nature of human creativity but in a different sphere, namely the civic order people devised to replace brute natural

existence. Such a notion had some of its roots in the long history of Italian affirmations of *libertas* and communal self-government that created the institutions out of which the *studia humanitatis* emerged. The earlier struggles over what liberty meant were still alive in Ficino and Pico's time, with Machiavelli (as we saw) supporting a party in favor of broad participation, in opposition to the more oligarchical program of Lorenzo de' Medici and his heirs.[7]

Although none of these figures made an explicit point of it, most of them in some way recognized that the human creativity they celebrated could best find realization when particular spheres of activity were free of control by standards imposed from outside them. Implicit in the separation between the *studia humanitatis* and the metaphysical philosophy that dominated universities, this notion would receive more direct and explicit expression by the artist and writer Giorgio Vasari, in his *Lives of the Most Eminent Painters, Sculptors, and Architects*, first published in 1550. Vasari's book contained sections on a wide variety of Italian artists, many of them like him active in two or even all three of the genres listed in the title. The main body of the work contained entries that progressed from the late medieval artists Cimabue and Giotto to his own time, celebrating most of the star-quality names that still ornament the history of Renaissance Italian painting (and centering it too much on Florence in the eyes of art historians today), which he conceived as a coherent, forward-stepping movement. By presenting the visual arts in this way, Vasari helped create the idea that the Renaissance was an integrated cultural phenomenon (he was the first writer to use the term *Rinascita* in print), a testimony to the human capacity to effect a general transformation of life.[8]

What made this story prefigure later and more radical assertions of cultural and aesthetic independence was Vasari's assignment to Christianity of the chief responsibility for the decline of the arts, from the high level reached in Greece and Rome to the medieval nadir that made the rebirth necessary. To be sure, other factors were at work as well.

> But the most harmful and destructive force which operated against these fine arts was the fervent zeal of the new Christian religion, which, after long and sanguinary strife, had at length vanquished and abolished the old faith of the heathens, by means of a number of miracles and by the sincerity of its acts. Every effort was put forth to remove and utterly extirpate the smallest things from which errors might arise, and thus not only were the marvelous statues, sculptures, paintings, mosaics and ornaments of the false pagan gods destroyed and thrown down, but also the memorials and honors of countless excellent persons, to whose distinguished merits statues and other memorials had been set up in public by a most virtuous antiquity . . . Now, although the Christian religion did not act thus from any hatred for talent, but only in order to condemn and overthrow the heathen gods, yet the utter ruin of these honorable professions, which entirely lost their form, was none the less entirely due to this burning zeal.

Despite the author's attempt to soften the charge by acknowledging Christianity's powers and virtues ("miracles . . . sincerity of its acts") this was a sweeping indictment of the destructive potential that could be released if one domain of human activity was subjected to another.[9]

To be sure, Vasari did not condemn every form of religious influence over art, and in his own career he worked on both religious and secular subjects. What was demonstrated by the medieval developments he deplored was not that this destructive potential had always to be warded off, but that it could be realized in moments when religion felt threatened by art's ability to be a bearer of independent values. Vasari seems to have felt that this potential was not an active threat to art in his own time, partly because Church officials were often sponsors and patrons of the figures whose careers he recounted (he himself maintained many ties to Churchmen and the papacy), and partly because the latter's work had brought art back onto its own proper path, discovering the principles and techniques that made the progress he celebrated possible. His sense that the arts needed to be independent of precepts imposed on them from some other realm was thus quite limited in comparison to the frontal assault on culturally sovereign values that later aesthetic movements would mount. But his critique was akin to theirs, foreshadowing the broader claims for artistic independence that would often make vanguard artists partners with other advocates of radical liberation.

The road between these two moments was too long to be traced out here, but its general shape can be suggested by focusing on one point along the way – namely, the moment for which Immanuel Kant provided a theorization at the end of the eighteenth century. By this point what Max Weber later called "the aesthetic sphere" was already taking the form it maintains to this day, becoming, in Richard Wolin's summary, a "historically unique network," composed of "artists and persons of taste, whose interactions are mediated by a new series of public institutions" – museums, galleries, libraries, and periodicals. Within this structure the people with the power to set standards were those whose everyday existence was involved with making, judging, displaying, and publicizing art, both visual and literary – artists and writers themselves, plus the critics, dealers, curators, booksellers, publishers, and editors who mediated between them and their public.[10]

Although to theorize such a domain was not Kant's intention, his thinking effectively did so. A self-conscious partisan of the Enlightenment, he defined the movement to which he belonged as the casting off of what he called humanity's "self-caused immaturity." Kant saw his task as helping to free people from self-imposed restrictions and liberate unrealized human potentials, chiefly in the realms of intellect ("pure reason") and morals ("practical reason"), providing analyses ("critiques") that could establish the principles and activities appropriate to each. He extended that endeavor to aesthetics in his *Critique of Judgment*, published in 1790. In it he separated beauty from the moral or religious purposes

artistic activity was traditionally expected to serve, by defining it in purely internal terms. When we say something is beautiful, he proposed, we mean that the pleasure it gives us is tied up with a sense that it fulfills its own purpose, that its way of being what it is corresponds to what we intuitively think such a thing ought to be. Beauty is a quality that at once pleases our senses and satisfies our minds (both reason and the imagination), and the pleasure we get from it springs from the harmony it generates between these two parts of our being. Nature (and for Kant its divine Creator) provides us with many such things (landscapes, oceans, bodies, faces), but so does the realm of art; here the objects (poems, pictures, musical compositions) we judge to be beautiful are the products of a human maker, but like the divinely created things in the world, they have a form we recognize as fully appropriate to being what they are. As individuals we may disagree about which objects qualify as beautiful (since people of different temperaments must all perceive things through their own particular bodily senses); but by calling an object beautiful we affirm that it fulfills these requirements in some manner. Thus despite the subjective elements in aesthetic judgments, we make them with reference to universal criteria that make objects which meet them affect us in a particular way.

Defining beauty in this fashion makes the aesthetic sphere autonomous because no "higher" considerations operate within it; the judgments we make are based on principles we discover from reflecting on what we do when we make or contemplate objects we recognize as beautiful. Kant's way of understanding beauty may not be the best way of regulating the aesthetic sphere, just as his contemporary Adam Smith's views about work and productivity may not be the most beneficial way to manage the economy, but both were attempts to reconstruct those spheres on the basis of principles inherent to them. Like Vasari, Kant sought to make art independent of putatively higher criteria, but in a more fundamental and comprehensive way.[11]

Of the various developments between the times of Vasari and Kant that provided a foundation for this enlargement of aesthetic autonomy, the connection is especially clear in regard to those that come under the rubric of what M. H. Abrams christened "art as such." The phrase applies to a shift visible in the seventeenth century, away from focusing on the particular kinds of products artists or writers produced (sacred paintings or family portraits, church music or dance tunes, devotional manuals or political treatises) to emphasizing what they shared as products of one or another form of cultural expression. The change took place as new institutional settings for experiencing art objects – and, for some, acquiring or collecting them – created new social relations between producers and consumers. Patronage had long been, and still remained, the main source of support for visual artists in this period, but the circle of patrons grew larger as aristocrats and even a few untitled people began to assemble collections. A famous early example was Thomas Howard, the fourteenth Earl of Arundel, parts of whose trove of Renaissance and early

modern drawings and paintings, classical sculptures, coins, and books later found their ways to Windsor Castle, Oxford University, and the British Museum. Collections such as his were not arranged according to style, period, or subject, but as "spectacles of treasures," testimonies to the taste and generosity of their owners, and they were only open, by invitation, to people regarded as worthy of seeing them. But they were ancestors of the public museums that began to multiply from the middle of the eighteenth century, marking an important turn in the development of a public for visual culture. In both, viewers were confronted simultaneously with religious and profane subjects; Madonnas previously seen only in churches or abbeys were hung close to pagan goddesses or mythological scenes made for secular settings; art objects previously seen in contexts that announced their nonaesthetic purpose, be it encouraging piety, providing a setting for ceremonies or social life, or depicting the history of a proud family, were now encountered in spaces that called attention to something they had in common.

Within such spaces there could occur, as Francis Haskell noted, "a growing appreciation of pictures as pictures, rather than as exclusively the record of some higher truth; a body of connoisseurs was coming into being prepared to judge pictures on their aesthetic merits." The expansion of the circle of patrons also nourished a growth in the number of picture-dealers who could serve them, and of critics who could praise or question their judgments; by 1780 visitors to a London art merchant could contemplate a scene in which a group composed of artists, experts, and dealers stood together to select paintings for the annual show at the recently opened Uffizi Gallery in Florence. Related cultural domains were acquiring comparable sites for people to experience their products in a similar way, such as the growing number of booksellers' shops where buyers encountered both confessional texts or tracts and pamphlets involved with some question of the day. Music, whose religious or social aims were clear in churches or princely courts, began to be offered in public halls in the decades just before 1700, and increasingly during the eighteenth century.[12]

One indication that audiences in such venues felt encouraged to respond to them by developing a more explicitly aesthetic response to what they encountered lies in the growing prominence, in the same decades, of the category of people called *virtuosi*. The Italian term's use in English and other languages reflected the prestige of Italy as a site for encountering great works of all kinds, especially by the elite travelers who made the "Grand Tour" famous in this period (some of whom were moved to become collectors by what they saw on their journey), and it referred to people whose sensibilities and proclivities were cultivated by such experiences. It was in the circles of *virtuosi* that there developed a particularly self-conscious relationship to art, based on the pleasure to be derived from its purely aesthetic qualities. We will see later that some among them also played a comparable role in developing an audience – sometimes a participatory one – for the new science; the same curiosity that

drew them to art works exhibited in these new spaces also led them to become close observers of singular or unusual natural phenomena, and to seek new ways to comprehend them, as older ones came under question.[13]

Thus Kant's theorization of beauty as a quality internal to objects and our experience of them, and not deriving from their relations to some external sphere, was in part a reflection of the new conditions for viewing art in the increasingly public sites where it could be encountered. The earlier contexts were ones in which value was determined by what can be called vertical relations, where authority descended from both people and ideas deemed "higher," to those expected to be governed by them. The new conditions encouraged the expansion of horizontal relations between artists, experts, collectors, and dealers at a distance from each other, connected by virtue of their common membership in the sphere itself. These shifting social relations had by no means wholly transformed the domains of art and culture by Kant's time; in some milieux resistance to them has persisted until the present. But they provided the foundation on which the autonomy of the aesthetic sphere was coming into being. We will find this same evolving pattern within the "Republic of Letters" that emerged at the end of the seventeenth century, and in the contexts where the new science was finding its footing. Both Galileo and the supporters of Newton would devote themselves self-consciously to cultivating horizontally plotted connections as a ground for their autonomy, creating a new and more public kind of science, self-consciously set apart from the narrower precincts to which only those capable of representing "higher" standards of judgment had entry.

* * *

Before we turn our attention to those developments, however, we need to take cognizance of the much smaller degree to which counterparts to the aesthetic autonomy that evolved in Europe emerged elsewhere. To recognize this difference is in no way to diminish the quality or value of Eastern art-making, nor to question the devotion to beauty exhibited by Hindus, Muslims, Buddhists, or Confucians. The cultures nourished by these belief-systems all produced art objects of the highest order, equal or superior to European ones, and some of them generated sophisticated inquiries about aesthetic theory and practice. But here the question is not about the relative value of what different peoples have thought or produced, but about whether and for what reasons they did or did not foster the emergence of autonomous spheres. We approach it by seeking to grasp some of the ways that cultural activity fitted into political and social life more generally in India and China (our discussion of the first will involve Muslim attitudes toward art, and thus bear also on the Near Eastern regions that came to be ruled by the Ottomans).

If what chiefly underlay Europe's proclivity for breeding such spaces was the division and fragmentation that impeded the formation of an effective central

authority, then we might expect India to have given birth to them too. Even under the Mughal Empire, at its height in the sixteenth and seventeenth centuries, India was divided into highly distinct regions with separate economies, customs, and languages, and many quasi-independent princely rulers (and within them scattered villages) limited the power of central authority. In addition, the country was divided religiously, with a majority Hindu population (itself displaying a high degree of local diversity in beliefs and practices) governed by a Muslim state. Probably no two major world religions contrast so sharply with each other as do Islam and Hinduism, and one chief element of the difference lies in their opposed attitudes toward visual representation, especially in places devoted to religious practice. Islam, fiercely monotheistic, developed a general prohibition against images of God, prophets, or saints in mosques or other public places, lest they become vehicles of idolatry, and this iconoclastic spirit has led many Muslims to reject public image-making much more broadly. Hindu usage by contrast makes image worship central to its polytheistic devotion; statues and painted illustrations constitute essential features of temples and other ritual sites. (Buddhism, although it greatly reduces the power attributed to Hindu deities, shares this veneration of images. But Buddhism's presence in India was much reduced between the fifteenth and the nineteenth centuries.)

Both these general features of Indian life and the sharp contrast in content and tone between Muslim and Hindu devotion might lead us to expect that the country's internal divisions could have kept any unified set of cultural attitudes from establishing itself there. But the Mughal emperors worked successfully to surmount or mitigate this enmity. Recognizing their minority status and wishing to avoid disruptive conflict with their subjects (as we noted in Chapter 4), they sought reconciliation along various paths, taking over Hindu practices in their court rituals, intermarrying with local high-caste families, and sponsoring popular devotion to local shrines and deities. Along the way they found that circumventing the Muslim prohibition on image-making yielded them other advantages, allowing them to use portraits of themselves as icons of their power, and brighten the life of their court. These efforts were mirrored by the Hindu kings and princes who were officially their subjects, but who retained much independence, notably in the western region of Rajasthan. These rulers adopted Mughal ceremonies for their courts and helped their family members to achieve high positions in the Mughal administration. In this situation, it is not surprising that the art and music fostered in Muslim states came to share many elements with Hindu practice, often employing the same subjects, painters, musical instruments, and performers. So close were these exchanges, that some Hindu court poets began to envision the first Mughal emperor, Akbar, as an avatar of the supreme god Krishna. Beginning while the Empire was still relatively healthy in the sixteenth and seventeenth centuries, these connections continued in the period usually described as its decline, following the sacking of

Delhi by a Persian army under Nader Shah in 1739. Even into the period of British dominance, as we noted earlier, Indian princes and nobles continued to seek recognition and legitimacy by associating themselves with Mughal court ceremonies and symbols.[14]

Until around the middle of the eighteenth century, the chief site of these interactions was the imperial court itself. But as the weakening of central Mughal authority proceeded, giving the Rajput princedoms chances to achieve greater independence, the earlier Mughal attempt to gather artistic talent from various parts of the Empire in their capital Delhi gave way to a more dispersed system of artistic production. Manifold courts became sites for it, local subjects and themes gained popularity, and continuity in content and style across generations was established, as families of painters used their ateliers to train their successors. In this situation strictly Hindu themes became more prominent in the works themselves, which departed from the formal portraiture that was a chief form of Mughal painting, to focus on more intimate and sentimental subjects, such as the mutual love between the god Krishna and his sometimes plebeian consorts. The passions represented were at once human and divine, calling up the continuity between sensual pleasure and religious devotion common to Hindu stories, poems, and music.[15]

But many elements of the old Mughal–Hindu synthesis persisted. The love play between Radha and Krishna had already been celebrated at the court of Emperor Muhammed Shah in the 1730s, and at Sufi shrines in Delhi. If Hindu artists now departed from styles and practices adopted when Muslim domination was stronger, theirs was still the official painting of ruling courts, and by then, as one art historian notes, the two traditions were drawing "from a common vocabulary and sensitivity." Thus the Hindu–Muslim rapprochement fostered by the Mughals continued to leave its imprint on art-making as their power declined; little or no opening appeared for the kind of tension and hostility between the two ways of life that had surfaced in the pre-Mughal period.[16]

These practical and political motives were not the only reasons why the divisions within Indian life did not foster the emergence of an autonomous aesthetic sphere, however. Within each religious tradition, Hindu as well as Muslim, basic considerations operated against it. These were more evident in Muslim contexts than in Hindu ones, since only in Islam was the very use of visual images in public resisted. Hindu culture exhibited no similar friction, since its stories, legends, and central texts harbored little counterpart to the often puritanical spirit of the Quran. This spirit made itself felt even in the Mughal court, despite the conciliation with Hindu practice that was pursued there; as B. N. Goswamy has noted, "debates . . . still raged" about the right of painting to exist as a legitimate activity for Muslims. This was one reason why image-making first flourished in the relatively private form of manuscript illumination. Public painting gained ground as time went on, especially scenes of official audiences (*durbars*) that represented imperial or princely power and the devotion

of subjects. In promoting such representations, the Mughals drew on a dimension of their power from which other Muslim sovereigns (notably the Ottomans) would also benefit: because their authority was at once religious and secular, and no separately organized Church existed to contest their jurisdiction, challenges to their decision to put enhancing their rule above strict adherence to religious prohibitions had no unified institutional force behind them.

But regardless of how much attention the Mughals paid to it, this underlying Muslim suspicion of images was itself a hindrance to the emergence of any separate aesthetic sphere. As one Muslim scholar notes,

> The term "aesthetics" never existed in Islamic culture and traditional society did not use it or any other term that might imply the same meaning and significance. The contemporary Arabic term *jamâliya*, which is synonymous to aesthetics, is borrowed from the West and is defined as the "science of beauty," *'ilm al-jamâl*. In Islam, neither the Quran nor the Prophet's traditions (*sunna*) refer to art. There were no treatises written expressly on Islamic aesthetics, nor were there set rules for what constituted Islamic principles in art and what did not.

Viewers and audiences clearly experienced beauty in painting, poetry, and music, but there was no significant attempt to explore any grounds for separating the appreciation of it from the moral and spiritual development to which all these forms of expression were expected to contribute.[17]

In Hindu traditions, by contrast, aesthetic issues were discussed from very early, and in much detail. The oldest surviving text is the *Natya Shastra*, literally a manual or compendium of knowledge about drama or performance, its date uncertain but composed perhaps as early as 200 BCE. Its 6,000 verses treat musical composition, the proper structure for a dramatic work, dance and bodily movements, plus costumes and theater building, all considered as elements of public performances. Attributed to the sage Bharata Muni, the treatise envisions something like what later Western writers would call a system of the arts.

Aesthetic pleasure was an essential part of the experience such performances were intended to generate: attending them was likened to relishing a meal, and the elements of the presentation to "flavors" (*rasas*). But such enjoyment was not valued for itself; rather, it served to provide an opening for moral and religious instruction, creating the sensual dimension necessary in order to draw people toward higher ones in what even so ancient a text regards as the degenerate present. The pleasure produced by *rasas* is associated with corresponding *bhavas*, the states of mind they engender (in the *Natya Shastra* there are eight of each), the highest of which transports individuals into a transcendent region of being where the wonder induced by beauty inspires reflection on spiritual experience. If such a drama is properly carried out, its audience will not become fixed on aesthetic quality itself, but on the larger realm of moral existence to which it belongs. Hindu discourse on art in terms of *rasas* and *bhavas*, which has persisted ever

since, extends the same orientation, absorbing aesthetic principles into the higher domains of morality and religion. It would be hard to find a better illustration of a teleocratically regulated understanding of aesthetic practice.[18]

Imperial China gave birth to many supreme artists, including some who both declared and demonstrated their individuality and independence. But the aesthetic sphere as a whole exhibited little if any movement toward autonomy, in the sense of being governed by principles specific to itself. Both its content and the aims of those who worked within it mirrored the notions and precepts that made morality, social relations, politics, and metaphysics all expressions of a single way of understanding and inhabiting the world (the one of which we tried to give a summary account in Chapter 4).

One thing that underlay these connections was that the great majority of those who achieved recognition as painters came from the class of scholar officials who had passed the competitive examinations (or at least studied for them). Because they did, there existed a more substantive link between painting and classical learning, namely the intimate connection both shared with calligraphy, a tie witnessed in the many scrolls, fans, screens, and other media where poems or prose written in elegant Chinese characters appear alongside visualized scenes. Advancement in calligraphy was seen as a way to develop a more beautiful and personal style of written expression, while simultaneously deepening access to the corpus of classic writings that provided the foundation at once for civilized life and the careers of the literati. But this same mastery over the fundamental tool of literacy provided the basic training for handling the ink brush that was the essential tool for painting as well. Thus it should not be surprising that such central elements of Chinese thinking as *yin* and *yang*, the five elements, and *li* and *ch'i*, were prominent building blocks for visual culture too.[19]

These ties left little room for the constitution of an aesthetic sphere regulated by its own separate standards or values. Beauty, as Karl-Heinz Pohl explains, was not a quality sought for itself:

> In early Confucian scriptures, the character *mei* (beautiful) was used almost synonymously with "moral goodness" (*shan*) without further differentiation or emphasis on a category of beauty. Apart from this connotation, Confucian discourse on literature and art seems to have slighted formal beauty, deeming it, as outward ornament, less valuable than the substantial ethical or moral content. For Daoist writers, the recognition of beauty only led to the notion of ugliness, as Laozi succinctly states: "When everyone in the world knows the beautiful as beautiful, ugliness comes into being." In Chinese literary theory and art philosophy "beauty," thus, is used to carry more a negative, if not a vulgar (*su*) connotation.[20]

It is difficult to imagine how any positively valued domain of "art as such" could arise in such a context, recognizable in locales (such as museums, which did not exist before Western ones were taken as models in the nineteenth

century) where the merit attributed to art objects became independent of their ability to invoke the "Way" that gave society its necessary principles of order, and where some Kant-like view of art as properly understood and valued by principles specific only to it might find a footing. This does not mean that Chinese art was hemmed in by its connections to values rooted in other domains, or that artists were devoid of freedom in pursuing their work. On the contrary, we will now see that Chinese artists, like other subjects of the Empire, exhibited a wide range of what there are good reasons to call freedoms. But even in displaying them, painters did not make the aesthetic sphere into a vehicle for setting limits to where the hegemony exercised by central authority and the cultural traditions that upheld it could operate.[21]

This was notably the case in the centuries when the Empire was ruled by its last two dynasties, the Ming and the Qing, as a recent account by the art historian Jonathan Hay makes clear. Hay cites a number of developments that contributed to freeing up artists from traditional loyalties and constraints, including the economic expansion that bred a new audience for artwork, but perhaps the central matter was politics. When the Ming dynasty fell in 1644, the triumph of the alien Manchus forced numbers of literati into exile and led others to choose it. The Qing stabilized things for a time, but their position would weaken as a consequence of defeat at the hands of European (and later Japanese) power, and by the internal disruption of the massive Taiping Rebellion it helped to foment in the 1850s and 1860s. Hay highlights three responses to this long-term situation on the part of artists: "some sought in art the order that escaped them in political life. Others rejected abstract concerns in favor of a radical commitment to naturalism. Yet others allowed an unprecedented authority to the imagination, introducing unprecedented distortions into pictorial representation."

We cannot follow these alternatives in detail here, but the mix of what Hay calls "structural tensions" in the work artists produced, together with a continuing nostalgia for traditional forms of order, is evident in a number of careers. Gong Xian (1619–89), a Ming loyalist forced into exile by the coming of the Manchus, "created frankly disturbing images of social and psychological dislocation," depicting "dark landscapes" in which "paths which should lead from and to a given point do not, [and] seemingly straightforward compositions turn out to impose different and contradictory viewpoints," making his art emblematic of the pain induced when expectations of coherence are frustrated by conditions inimical to it. Dong Qichang (1555–1635), whom Hay describes as the most important of a group of scholar officials who turned to calligraphic painting as the Ming declined, "in his finest works . . . wrests order from fragmentation, as he aspired vainly to do in his role as a government official," attempting self-consciously to exert an authority that could no longer be assumed to belong to either of these roles. He also turned to history in response, establishing a perspective that would long influence historical understanding of Chinese art. Taking a division within Chan (Zen) Buddhism as a starting point, he set "a 'Northern' tradition of painterly craft (the slow path to

enlightenment) against a 'Southern' tradition of calligraphic expression (the path of sudden enlightenment)," the second one describing his own practice. Thus, a century after Vasari envisioned the history of Italian painting in terms of an opposition between a decline induced by subjection to religious imperatives and a rebirth that marked art's return to its own principles, Dong viewed the past of Chinese art as inspired by one or another form of participation in time-honored forms of spiritual understanding.[22]

But perhaps the figure who best expresses this mix of innovation and attachment to the past is Shitao (he used only one name), the most prominent of a group of painters known as "individualists" (although taken literally the Chinese term *qishi* is closer to "originals" or "strange gentlemen"). Perhaps the striking independence he displayed, both as an artist and the author of a treatise on the theory of art, owed something to his exalted origins as a member of the Ming royal clan, compounded by the peril in which this put him when the Manchus expelled his family from power in the years just after his birth in 1642. He began his artistic career during the time he was a Chan Buddhist monk, before resigning from his monastery and devoting himself more fully to painting from the 1690s. His intellectual orientation moved toward Daoism (with which Buddhism shares certain elements), but his sense of individual independence was evident in both periods. Asked to which of Dong Qichang's schools he belonged, he laughed loudly and declared "I always use my own method." The sometimes shocking points to which this led him included portraying a large craggy mountain as seeming to bow down to the tiny monk standing up in a boat on the stream below it, an image in which Hay sees "the economy of respect that circulates between man and nature" (Figure 1) and naming a rural scene spotted with fluid dark shapes that stand for leaves and bushes "10,000 Ugly Inkblots," calling attention at once to the artificiality of pictorial representation and to its transformative power (Figure 2).[23]

Just such power was a main theme of his *Treatise on the Philosophy of Painting*. Here Shitao called up the ability of painting to achieve spiritual comprehension by way of a physical act, accomplished when artists, with a single stroke, unify the brush and ink at once with the hand and wrist that employs them, and with the individual mind that gives direction to the whole process. Steeping oneself in tradition can be an aid in achieving this "oneness," but only if the artist remains free from subjection to rules: "works by the ancients are the means to knowledge," but they can be traps if taken to provide fixed principles that others must follow; art requires a method, but it must be one that does not obstruct the free movement of the mind on which creativity depends. Hence "the perfect method" is "no method," not in the sense that every act of painting must begin from a zero point, but that the proper method "is produced in the act of painting," in the moment when the painter, by transforming physical materials into a representation of nature, realizes the human potentiality to perceive the inner life of objects. This realization brings

Figure 1 Shitao, *Reminiscences of Qin-Huai*. Ink and wash painting, *c.* 1680. Qin-Huai names both a river (a branch of the Yangtze) and the district through which it flows. Courtesy of The Cleveland Museum of Art, www.clevelandart.org.

Figure 2 Shitao, *10,000 Ugly Inkblots* (left panel). Ink and wash painting, 1685. Courtesy of Archive World / Alamy Stock Photo.

the painter into unity with the world, which like art itself comprises a spiritual reality brought into existence by the transformation of material elements into a kind of being that transcends them.[24]

Shitao explicates this relationship by noting that the connection between heaven and earth can be considered as a series of abstract "motions of circles and squares," which can be traced out with compasses and rulers; but understanding it in this way does not yield "the meaning of the revolution of heaven and earth." Just as painters are misled by their devotion to classical masterpieces into thinking that principles abstracted from the past should guide the method of painting in the present, so do others confuse this superficial kind of knowledge of cosmic architecture provided by measuring instruments with an authentic comprehension of the universe. In both cases, it is when "men grasp the power of evasive concealment and vitality, [that] mountains and streams and the myriad things offer their spirit to man." Because painters are able to go below the surface in this way, it becomes possible to "enable brush strokes and ink washes … to create embryonic and structured forms, openness and closedness, substance and function, forms and power, bowing and standing" and thus "fully to reveal the spirituality of things":

> Painting is the great way of the transformations of the world. The very essence of the conditions of mountains and rivers, the creation of nature (both ancient and modern), the movement of *yin* and *yang* forces, all these are revealed through brush and ink; upon sketching heaven, earth, and the ten thousand things, their forms joyfully swim in my mind.
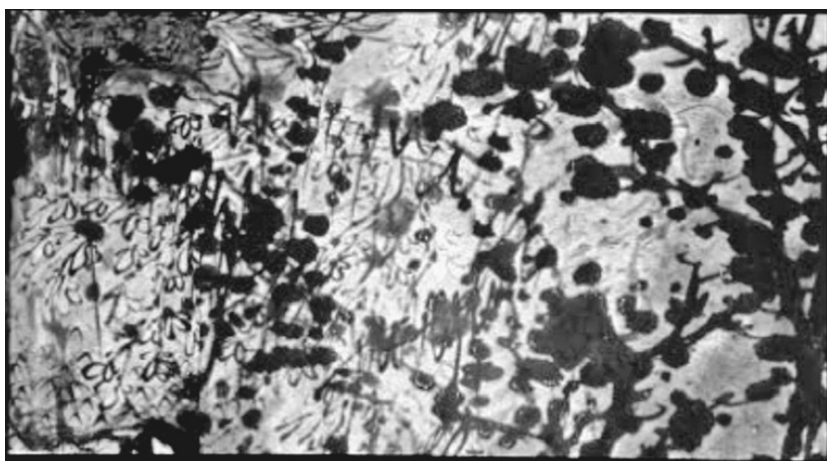
Figure 2 (cont.) *10,000 Ugly Inkblots* (right panel).

To proceed in this way, he added, was to follow the example of Confucius, whose power to make the past of Chinese culture serve as a platform on which to establish its continuing vitality was tied up with his declaration that "I love the past and earnestly pursue it." In Shitao's reading this meant that "To love the past and earnestly pursue it, one should carry out transformations."[25]

Thus painting, as Shitao conceived it, was a particular embodiment of the larger phenomenon of creative transformation by which a meaningful universe constitutes itself out of what appear to be merely material components. That human beings were able to effect such transformations was the reason they could participate in the spiritual world that lay beyond ordinary perception. The notion that transformation was a basic feature of this world was both ancient and pervasive in Chinese culture. As Anne Cheng puts it, the reflection on ultimate reality carried out in both Confucian and Daoist thinking does not focus on the particular elements that make up the universe (and much less on some creator God) but on "mutation, the mainspring of the universal dynamism that is the breath of life," and that animates all of its manifestations. In calling painting "the great way of the transformation of the world," Shitao was exalting it as representing such mutation, at once providing images that bring nature's inner dynamism to mind and recording a creative experience of gaining access to it.[26]

But the freedom from rules this understanding of painting justified did not mean that the sphere of artistic activity should evolve a distinct body of principles or precepts specific to it and independent of other domains. When Shitao connected painting with the more general phenomenon of transformation, what "joyfully swim in my mind" were the self-overcoming polarities around which the Chinese understanding of nature had long been organized, cited a moment ago as "embryonic and structured forms, openness and closedness, substance and function, forms and power, bowing and standing," as well as "Yin and Yang forces" and "the ten thousand things" (a formulation for describing the way the world presents itself to human consciousness common to Buddhism and Daoism). Such a conception of painting might confer radical independence on particular artists, but it pointed away from the kind of autonomy we have seen developing in the European aesthetic sphere – that is, its liberation from regulation by principles intrinsic to other domains. The very principle of transformation that freed the artist from subjection to a priori rules of method tied Shitao to the particular ways of specifying its modes that Chinese culture had long cultivated.[27]

Thus Shitao's conception of painting gave individual artists a wide independence, but within an aesthetic sphere that did not posit or seek autonomy for itself. Painting was part of the overarching realm whose subdivisions – politics, morality, social relations, aesthetics – were integrated by virtue of all being regulated by a common set of governing notions, without which, as authorities from the time of Confucius and Mencius held, society would fall

into chaos or barbarism. For aesthetics to have constituted a sphere of its own would have destroyed the integration on which – as we saw in regard to experiences of freedom – civilized life depended. One might object that there is no practical difference between the independence Shitao or other Chinese artists achieved and the autonomy from which we are distinguishing it, and as a way of evaluating individual careers there is much to be said for such a view.[28] As could be shown in numerous other contexts as well – Islamic, African, medieval European – working within an aesthetic sphere whose values originate outside itself imposes no restrictions on the level of achievement that can be attained within it. But our concern in this book is not with comparing the quality of different cultural products, but with understanding why it was Europe, rather than India, the Islamic world, or China, that first revealed "what human activity can bring about," taking this formula to mean (as Marx did when he proposed it) releasing energies capable of dissolving and remaking established forms of life. Having argued that this difference was rooted in the relative proclivity for giving birth to autonomous spheres in the realms dealt with so far, we turn now to the related but more momentous domain of natural science.

Science as a Sphere of Autonomy

Whether or not we choose to call the transformed understanding of cosmology and physics effected between the lifetimes of Nicolaus Copernicus in the sixteenth century and Isaac Newton at the end of the seventeenth a scientific revolution, this mutation marked a significant moment in European and world history. By altering long-held notions about the universe, it posed challenges to religious, cultural, and even political authorities, and laid essential foundations for the unprecedented kind of human control over nature that is a core element of modernity. Although most people are likely to associate the revelation of "what human activity can bring about" with modern industry and its consequences, the intellectual achievement marked by the new science merits such a designation on its own, partly because it unleashed powers of human understanding denied or reined in before, and partly because of the new appreciation for those powers it fostered. Whatever may be the causal relations between the new science and the emergence of the modern economy (a question to which we will return later), there are powerful reasons to see both of them, together with the forms of autonomy considered in the previous chapters, as all fruits of the same field of conditions that set Europe apart from other regions of the world from early in its history.

To seek out these connections has been one reason for considering the aesthetic sphere before coming to the domain of science, but there is a second. Although the early modern remaking of cosmology and physics depended on precise measurement and rigorous mathematical reasoning, it was also an imaginative transformation of the first order. Few readers will need to be reminded that the reconfiguration consisted in displacing the earth from the center of the universe, where everyone from illiterate peasants to learned philosophers and astronomers had believed it to repose in splendid immobility, and recognizing that what produced both the alternation of day and night and most of the observed movements of planets and stars is our globe's constant but imperceptible rotation and its annual journey around the sun. Reconfiguring this structure required overcoming the age-old assumption that the relations between these cosmic elements really are as they appear in everyday experience, the base line from which thinking about such things had always begun, and which had been enshrined in tradition or myth, sacred texts, and philosophical speculation, in myriad human groups. (A few commentators, such as the ancient

astronomer Aristarchus of Samos proposed a sun-centered model, as did a small number of scattered later figures in both India and Europe, but they remained isolated and largely ignored.) What "natural philosophy," as the activity we today call science was long termed, had to accomplish in order to effect this reversal was therefore a reimagination of the world, not unlike the ones medieval philosophers had pursued in connection with God's *potentia absoluta*, and that writers such as Cristoforo Landino (and others we have not paused over, such as Philip Sydney) attributed to poets, but with the crucial difference that it was now seen as a pathway to literal truth.[1]

The most powerful feats of imagination were those accomplished at the beginning of the story and at its end, by Copernicus and Newton: the first in transforming the basic model of the sun, stars, and planets, the second in creating a physics appropriate to a world not centered on the earth, in which the same forces of gravity and inertia accounted for the motion of objects everywhere in the universe. Both figures were at once uncompromisingly empirical thinkers, resting their conclusions on careful observations and measurements, and mathematical theorists, able to ground the cosmic order they sought to establish in complex numerical relations. At the same time, they were both human beings moved in some degree by extra-scientific, even religious considerations, Copernicus encouraged to regard the sun as the center of the universe by the reverence in which he held it, and Newton associating universal gravitation with the presence throughout the cosmos of a single divine force that he associated with the God of the Bible – but not with the Trinitarian divinity constructed by theologians. The careers and achievements of both should serve to remind us that science can be a mixture of many things, some of which have sometimes been mistakenly excluded from it in the effort to distinguish it too rigorously from other human pursuits. Its autonomy does not depend on its being in some way sealed off from other realms of culture and intellect, but only that none of these be accorded the right to regulate its endeavors from some "higher" place. It is in order to show how achieving this autonomy became central to the development of science in this period, and how it relied on the conditions that made Europe distinct, that we now try to locate the interconnected moments that made up the revolution in cosmology and physics in the contexts where they arose.

The first of these contexts was the impact the voyages of discovery made on how the world was understood. Although the old myth that all people before Columbus believed the earth to be flat has long been put to rest, this does not mean that our forebears understood the spherical earth in the way we do today. The reason is that classical theory, rooted in Aristotle, made it difficult or impossible to understand how land and water were distributed over the globe in the ways that make life on it possible. Earth, the heaviest element, had to occupy the central, which is to say lowest, place in a universe both spherical and hierarchical, whereas water and air, progressively lighter, had their own separate spheres, at once higher than that of gross matter and encompassing it.

In such a universe water should occupy a higher place than solid matter: how then could land rise out of the oceans that border it? How could life as we know it exist? In general, the puzzle was solved by way of divine intervention on behalf of humanity. God separated water from dry land by establishing the centers of their spheres at different places, displacing that of earth upward so that a portion of it stuck out at the top, like an apple floating in a bowl of water. This part of the earth was generally understood to be curved, but it could only comprise a small section of the whole terrestrial globe. In particular, there could be no habitable land at the "Antipodes," the part of the world opposite to the section we know, since there (as most everywhere else) the earth had to be wholly covered by water.

The discovery of a major land mass – North and South America – at a great distance from Europe and Asia made this picture untenable. Knowledge about it was spread by various writers, especially Amerigo Vespucci (whether his account of his voyages was true or fictional), and by Martin Waldseemüller's innovative map of 1507, on which Albrecht Dürer and Johannes Stabius drew a few years later to picture a spherical earth whose overall representation (although not yet the outlines of continents) was strikingly modern, showing land and water on the same rounded surface (Figure 3). Images such as these
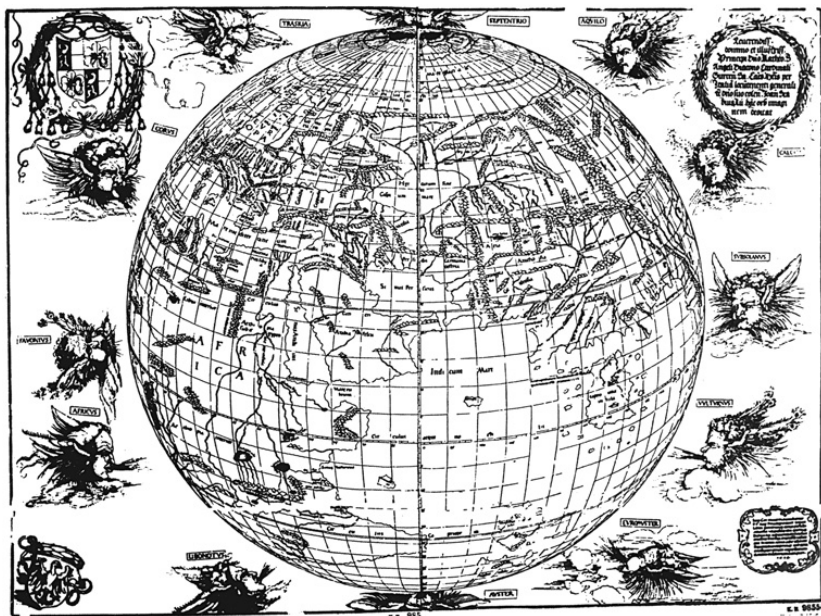
Figure 3 Johannes Stabius, World Map, 1515, engraved by Albrecht Dürer. From Wikimedia Commons.

were not the first to call the long-dominant account into question, some medieval writers (Dante for instance) had described the relations between earth and its waters more or less as we do; but theirs was a minority view in universities, largely forgotten during the fifteenth century, and Copernicus does not seem to have started out with it. As long as he thought in terms of separate spheres of earth, water, and air, it was very difficult to conceive the earth, including the liquid and gaseous elements we now think of as belonging to it, as a single entity able to rotate on a central axis, or revolve as a unit around the sun. In order for a heliocentric cosmology to make sense, the earth had to be posited as what came to be called a terraqueous globe, such that, as Copernicus wrote in *On the Revolutions of the Heavenly Bodies*, "the earth rotates together with the water and the neighboring air which flow around it," the last two elements no longer occupying distinct natural places. David Wootton has recently made a strong case that coming to this recognition was crucial to Copernicus's ability to imagine a rotating earth revolving around a stationary sun.[2]

Nor was he the only person to recognize the challenge that the discovery of the new world posed to basic assumptions of traditional cosmology. "In 1475 the two spheres theory of the world [one for earth and one for water] was universally held by philosophers and astronomers; by 1550 every expert had abandoned it." Wootton regards this transformation as a signal moment in the history of science: never before had a philosophical theory been "destroyed by a fact"; this was the first "occasion on which new empirical evidence determined the outcome of a long-standing debate between philosophers," ushering in a new phase in "the relations between theory and evidence." These are strong claims and no doubt they will be resisted by some (they jibe very badly with many assumptions of current day "science studies"). Even toned down, however, they point to why the intellectual impact of the voyages of discovery was not confined to the field of geography, challenging accepted notions about the physical make-up of the universe.[3]

The new knowledge also contributed to a sense of what kind of endeavor science (even if people did not yet call it that) was, no longer stably tied to already known postulates, but subject to disquieting changes. The voyages were central in giving a new meaning to the words "discover" or "discovery" themselves. Wootton offers evidence that the terms were almost wholly absent from European languages before 1500, after which they began to spread and take on the meaning they have borne since: bringing to light information or understanding that no one had possessed before. Such a notion was incompatible with the widely held idea that ancient knowledge was superior to modern, and that the path to intellectual improvement for latter-day people lay through recovering truths known to Moses or Solomon or Aristotle but lost since their time. Once it emerged, the idea of discovery would lead in unprecedented directions, including disputes about who was the first to unearth some new

truth; early instances involved (leaving aside Columbus himself) Galileo's status as the first to employ telescopes to discern new features of the heavens, Newton's squabble with Leibniz over who invented Calculus, and whether Robert Boyle was the first to establish what came to be known as his law about the relations between the pressure and volume of a gas.[4]

Historians and philosophers of science have, to be sure, engaged in much argument over what constitutes the objects of such discovery, how new facts come to be known and what reports about them are seen as worthy of belief, and we will need to consider some of these debates later in this chapter. But over the course of the sixteenth century there emerged a sense, shared by a wide array of commentators, that the range and extent of the knowledge to which people could gain access had vastly expanded, shattering the limits previously thought to be imposed by what the ancients had known and moderns forgotten, and breeding expectations that this sphere would swell further in the future. This way of thinking created a framework within which the later cosmological revolution that stemmed from Copernicus no longer belonged to a culture validated by its harmony with traditional authorities but just the opposite, by its ability to become independent of them. In addition to the voyages of discovery, this changed sense of the relations between past and present knowledge was often expressed in connection with three inventions closely associated with them, namely the compass (which made the voyages possible), the printing press (which spread knowledge about them, as of many other contemporary changes), and gunpowder (which sharpened the competition between European states and gave their inhabitants military superiority over the distant peoples they now began to dominate). Few claimed to know precisely where and when the three inventions had emerged, but Chinese primacy was widely recognized for gunpowder and printing, often in terms that harmonized with the broad admiration given to China's high level of civilization (encouraged by the Jesuit missionaries we will come to later). But it was the use made of these inventions by Europeans in the recent past, especially the compass and printing, that made them part of the changed attitude toward knowledge.[5]

This perspective was well developed by the time Francis Bacon gave symbolic expression to it in 1620, by putting an image of a ship sailing through the Pillars of Hercules (the Strait of Gibraltar) on the title page of his *Instauratio Magna* (Figure 4). In the ancient Mediterranean world this western boundary was regarded as the limit of the knowable and habitable earth, and was associated with the motto *ne plus ultra*, "nothing further beyond," a warning to sailors – and by extension to others for whom they stood – to stop. Bacon took this admonition as expressing the attitude toward knowledge dominant until his time, explaining in a letter to King James that "a feewe receiued Authors stand up like *Hercules Columnes*, beyond which there should be no sayling, or discouering." Just such a view had been affirmed in 1499 by the
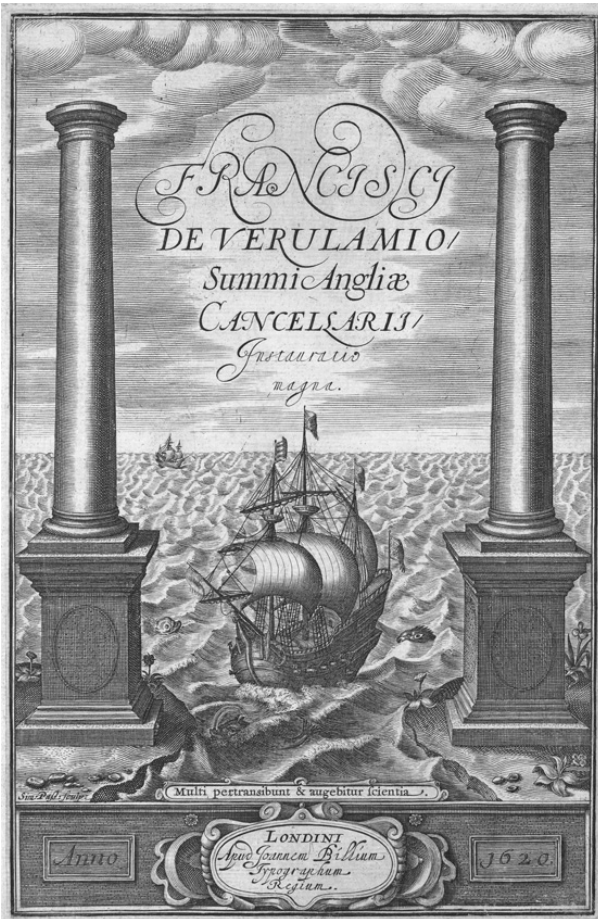
Figure 4 Frontispiece to Francis Bacon, *Instauratio Magna*, 1620. © Courtesy of the Trustees of the British Museum.

humanist Polydore Vergil, who wrote that "the human race gets its due reward when, found out in its madness and audacity, it does not know to keep safe within its own limits," citing the flight of Daedalus and Icarus. By contrast, what Bacon saw in the scene he chose for his title page was a space which (quoting from the Book of Daniel) *Multi pertransibunt et augebitur scientia*, "many will go through and knowledge will increase." The idea had been building up for decades. In 1537 Niccolò Tartaglia praised the three inventions, stressing that the advance they constituted was not beholden to Plato or Plotinus or any other Greek or Latin, having been taken "instead from art, measurement, and reason alone" (his language echoing what Leon Battista

Alberti said about his Florentine contemporaries). In 1566 Jean Bodin avowed that although the ancients discovered many useful and important things "yet they left most of these unfinished, which we now pass on perfected to our descendants." The discovery of new lands and of new routes to old ones was turning the world into something like a single republic or city. Once started, the French scholar and translator Louis Le Roy declared in 1575, the process was bound to continue: "That which is now hidden, with time will come to light, and our successors will wonder that we were ever ignorant of them." Early in the next century Tommaso Campanella concluded that "our present age . . . has produced more history in one hundred years than the world had in the preceding four thousand." To be sure, such a notion of the relations between past and present would have been resisted by many people (and was explicitly rejected later by those who took the side of Latin and Greek literature in the French "quarrel of ancients and moderns"), but such pronouncements signified a spreading readiness to believe that classical knowledge could be and was being surpassed.[6]

This readiness preceded the revolution in cosmology (Copernicus published his *De revolutionibus orbium coelistium* in 1543, but as we will see in a moment few people suspected the radical impact it would have until Galileo came out as a supporter of heliocentrism in the 1610s), and it helped to create the atmosphere in which so large an intellectual upheaval could take place. That both this atmosphere and the possibility of the transformation it helped to foster were uniquely European, despite the ability of countries elsewhere to accomplish things Europeans could not match, becomes clear when we remember that nearly a century before Vasco da Gama and Columbus made their marks the Chinese Empire had assembled a series of fleets to assert its preeminence in the Indian Ocean and beyond, captained by a remarkable admiral, Zheng He. The expeditions took place between 1405 and 1433, and involved hundreds of vessels, some very large, and over 27,000 men; in their visits to varied regions and countries, the ships collected tribute, exchanged goods, and displayed Chinese supremacy. No European country could have mounted so massive an enterprise at this time; had the Ming emperors desired, such power might have been applied to achieve political and economic domination over broad areas of the world, gaining new knowledge along the way. But the potential to do so would never be pursued (at least before the twenty-first century). The expeditions were undertaken by the newly seated Emperor Yongle, who had come to power through making war against his own relatives, and who sought to bolster his standing through forceful actions to demonstrate his power and prestige. But his plans were undercut by Mongol aggression on the Empire's northern border, against which Yongle led several defensive campaigns, dying in one of them in 1424. Confucian court factions whom he had sidelined in order to pursue his policy, and who rejected such ventures as costly and destabilizing, quickly regained their influence. Even while the voyages lasted

they were not oriented toward finding new routes, much less new lands, seeking instead to reaffirm Chinese sway in places where it had been recognized earlier; thus the project never had the potential to alter attitudes toward knowledge, or stimulate a new notion of discovery, as would occur half a century after in the West. And its dependence on imperial authority meant that no alternative locus of ambition could provide a springboard for such ventures.[7]

It was precisely the existence of such alternatives – not just political in the system of competing monarchies and city-states, but cultural and intellectual too – that marked Europe off from China, and the interplay between separate sources of initiative would be an essential element in the scientific revolution. This interplay took place in a society still steeply hierarchical: top-down authority was mandated in religion, politics, social life, guild organization, and academic inquiry and teaching. But in the situation formed by Europe's ingrained fragmentation and division, these hierarchies were often separate and independent of each other, with no central authority to integrate them. Thus there could develop tension and competition that allowed people to play off one structure of authority against another, subverting the general spirit of top-down direction they shared. As these situations developed, public exchanges and debates helped to nurture the existence of an emerging public, drawn into intellectual discussions by curiosity or a sense that inherited forms of understanding and belief were losing their footing. The possibility of appealing over the heads of cultural guardians to this new public gave further impetus to the undermining of hierarchical authority structures, creating a situation in which the vertical social relations they presupposed could be counteracted or evaded by the spread of horizontal connections that constituted new forms of organization for cultural and intellectual life. Galileo sensed the importance of these new social relations and sought support through them, and bringing such a public into the domain of scientific inquiry would be an integral and self-conscious part of the program by which Newtonian science achieved its triumph in England. It is by placing these successive moments of intellectual innovation within the frame of this turn from vertical to horizontal linkages that we can grasp the cosmological revolution as a shift from teleocratic to autonomous regulation of the sphere of knowledge.

* * *

To understand both Copernicus's work and the way it was received, we need to begin with the ladder of disciplines as it was conceived within universities. Theology occupied the top rung because it gave access to the highest truths. Philosophy stood below it, but enjoyed an exalted status because it provided valued knowledge of nature and morals, at least as long as it did not call the

verities of religion into question. Law and medicine had eminent places too, dealing with subjects of high status both socially and intellectually. Below them were ranged the subjects taught in the arts faculty, often grouped as the "seven liberal arts": grammar, rhetoric, dialectic, arithmetic, geometry, music, and astronomy. Of them the first three (the "trivium," from which our adjective "trivial") were commonly regarded as preliminary to higher study, while the latter were largely seen as belonging to practical life rather than the high reaches of intellectual understanding. Scholarly incomes in arts faculties were generally lower than in theology, philosophy, medicine, or law.

The intellectual movements associated with the Renaissance brought challenges to these assumptions. Humanists devoted to Greek and Roman literary culture gave new luster to grammar and rhetoric, and closer attention to classical culture inspired attempts to raise the status of mathematics too. The campaign on behalf of mathematics (carried on for instance by Luther's humanist disciple Philip Melanchthon) sometimes extended to astronomy, which both relied on and exemplified the utility of numerical calculation. But for the most part astronomy remained in the inferior position of a mere practical or instrumental pursuit. The knowledge it provided was useful for such tasks as refining and improving the calendar, which depended on establishing the length of the solar year and the lunar month, thereby determining the proper times for ceremonies and holidays; it also served to predict eclipses, and to determine the relations between stars and planets on which astrological calculations, widely valued for both advice and prophecies (save in the eyes of a few determined skeptics, such as the Italian philosopher Giovanni Pico della Mirandola) were based. Important as these services were, however, before Copernicus proposed to locate the sun at the center of the universe practically no one regarded astronomy as able to advance knowledge about the structure or nature of the cosmos, a realm of understanding reserved to philosophy and theology. Whereas the kind of thinking done in the higher disciplines was regarded as devoted to the pursuit of truth, to knowing how things really were in the universe, astronomical observations and calculations were regarded primarily as aids to computation, based on the way celestial objects appeared to human observers, and yielding merely hypothetical notions about reality. Deciding whether or not they were true did not belong to astronomy as a discipline, whose practitioners were not expected to involve themselves with deep questions about the nature of things.[8]

Among the elements of astronomy that were given this status of mere hypothesis were the modifications that had been devised over many centuries to resolve the puzzling and disturbing discrepancies careful observers discerned between the celestial motions that could be predicted on the basis of a universe assumed to be centered on the earth, and the actual phenomena observed in the heavens. Since the time of Newton people (at least in the West) have understood this discord as stemming from two mistaken beliefs: first that

the sun and planets all revolved around the earth and, second, that their motions had to be circular, since the circle is a perfect form (its circumference eternally at the same distance from its center), rather than elliptical, as Johannes Kepler was the first to propose in 1609. Having no access to these solutions, ancient and medieval astronomers proposed ingenious fixes for the model from which practically all of them began, the one constructed by the Graeco-Roman Egyptian Ptolemy, on Aristotelian premises, in the first century CE. Ptolemy himself was the first to suggest such alterations, positing that the planets did not directly orbit the earth, but moved around it along epicycles, secondary circles superimposed at points along the primary ones. This correction had the advantage of maintaining the presumption that all planetary motions were circular, while yielding calculations closer to the observed phenomena; if one epicycle was not sufficient, additional ones could be added. Since this modification still did not make theory jibe with observed data, others were piled on top of them, notably equants (alternative centers for planetary motions). During the Middle Ages some astronomers (including notable Arab ones to whom we will come later), responded to the discomfort engendered by such inelegant artifices by doing away with equants and epicycles (or most of them), and bringing the model into closer conformity with the observed phenomena by attributing motion to the earth – not however either the daily rotation or yearly revolution envisioned by Copernicus, but shifts or oscillations in the globe's position at the center of the universe. In all these ways the appearances were saved without calling into doubt the geocentric premise generated by everyday experience, required by Aristotelian physics (which explained why heavy bodies fell to the earth on the grounds that they were seeking their "natural place" below water, air, and the more spiritual substances of the heavens), and confirmed by biblical statements. The assumption that astronomy was not expected to provide genuine knowledge about the universe – the task reserved to theology and philosophy – helped to make these models acceptable, since people did not actually have to believe that epicycles or quadrants really existed (none were mentioned in Scripture) in order to make calculations based on them. The importance of such modesty was increased by one particular barrier to thinking them real, namely the widely shared notion that celestial bodies did not move freely through empty space on their own, but were carried around on crystalline spheres, whose integrity would have been violated if epicycles were material entities. It is hard for us today to recapture the mindset of people who could think in this way, but it had the virtue of preserving certain cherished beliefs and assumptions, and it may have appealed to people infused with a strong sense that the miracle of divine creation lay outside the limits of human understanding.[9]

This conception of astronomy had much to do with a number of features of Copernicus's career likely to seem surprising to us, involving both his own relationship to his work and the way it was regarded by others. Although Copernicus himself clearly believed in the truth of the heliocentric theory,

holding to it from as early as 1515, he was very hesitant to make it public, disclosing his thinking only in a brief, privately circulated compendium, and putting off the publication of *De revolutionibus*, probably finished early in the 1530s, until soon before his death in 1543. His hesitation may have had something to do with his awareness that he had no way to demonstrate the truth of what he believed, and this same consideration may have encouraged some of his early defenders to locate him closer to those who saw his heliocentrism as a mere aid to calculation than he did himself. In an anonymous preface attached to the first publication of the *De revolutionibus*, his supporter Andreas Osiander defended its author by stressing the limitations of human knowledge, as a consequence of which "different hypotheses are sometimes offered for the same [astronomical] motion," and adding that "these hypotheses need not be true or even probable. If they provide a calculus consistent with the observations, that alone is enough."[10]

Viewing Copernicus's work in this way appears also to be the reason why almost no one in Europe seems to have been troubled by its radical implications when it appeared. Not seeing any danger in it may have been a condition for the enthusiasm it evoked in Pope Clement VII, when he was told about Copernicus's ideas in 1533. A second and striking indication that the book was read in this way is that it seems never to have come to the attention of the Catholic Church's Council of Trent, whose meetings began in 1545, two years after the book's publication, and continued until 1563, and one of whose aims was to shore up the authority of Rome in the face of Protestant challenges to it. Had high Church officials seen such a threat in Copernicus it is hard to imagine they would have remained silent about it. Until the last years of the sixteenth century, as Robert Westman observes, many people knew and made use of Copernicus's model, but practically no one believed in its truth. "The Copernicans simply did not constitute a coherent movement. There was no precedent for an astronomical hypothesis being used as the foundation of a new philosophy of nature – let alone a hypothesis whose main premises contradicted the evidence of uncorrected and unchallenged sensory experience." Until early in the seventeenth century there was nothing that properly deserves to be called "Copernicanism," despite widening interest in the Copernican model.[11]

As for Copernicus himself, although it seems impossible to say exactly how or when he came to regard heliocentrism as a true account of the universe, several things combined to draw him to it. It allowed for better calculations and predictions, removed the jumble of equants and epicycles (not altogether, however, since with his continued adherence to circular motion, he needed to retain a few epicycles in order to make his system jibe with observed celestial motions), and made it possible to resolve certain long-debated puzzles about the order and size of the planets. These advantages helped to justify his near reverence for the sun as an exalted entity, the source of light and warmth, an

attitude at least partly rooted in his reading in Platonic and Pythagorean texts, with which he came into contact during his years as a student in Italy, first in Bologna, then Padua, between 1496 and 1503. These ancient writings also encouraged him to assign a higher position to astronomy than the traditional organization of disciplines accorded it.[12]

Although he eventually received degrees in canon law and medicine, both of which became important in his career after he returned to his native Poland, his involvement with humanist groups in Italy, where enthusiasm for Latin and Greek culture had spread from the original emphasis on the *studia humanitatis* to include Platonic philosophy and mathematics, drew him in new directions. It appears that he learned about Aristarchus of Samos's heliocentric thinking and about the Pythagoreans (who saw the universe as structured by mathematical models) from reading the humanist philologist and polemicist Lorenzo Valla. Both in his book and in letters written in connection with it, he presented mathematics and astronomy as sources of genuine knowledge, not merely as aids to calculation, and he added, in language with a clear debt to humanist classicism, that mathematics was "the summit of the liberal arts and most worthy of a free man."[13] Such a view was much in the spirit of the earlier campaigns against the traditional hierarchy of subjects undertaken by literary humanists such as Petrarch, Poggio Bracciolini, and Valla, and that had helped inspire Vasari's championing of the independence of artistic practice from the restrictions imposed by Christian anxieties.

Such connections would continue to operate as new reasons to consider Copernicus's model as something more than an aid to calculation began to proliferate in the decades after his death. These reasons stemmed from the appearance of a series of striking celestial phenomena beginning in the 1570s, which both heightened interest in astronomical observation and called into question basic principles and premises of the Aristotelian-Ptolemaic world picture. A core notion of that way of thinking was that the universe was divided into two contrasting parts, a lower one extending from the earth to the moon, which was grossly material and thus subject to change, and the higher regions above the lunar orbit, the home of spiritual forces whose superior order of being endowed them with various forms of perfection, demonstrated by their immutability. This whole conception was called into question by the appearance of an extremely bright and easily visible new star in 1572, and a comet in 1577. Such things had occurred before, of course, but they attracted greater notice now for two reasons. The first was that the outbreak of the Reformation, with its critiques of Roman corruption and the renewed attention to the Bible and its prophecies that accompanied them, fostered heightened expectations that the predicted end of the world might be near, a prospect for which changes in the heavens had long been regarded as signs. What made the new phenomena of the 1570s significant to most people was the possibility that this was what they portended. But the second reason they made a difference was that

recently worked-out techniques for measuring the distance of celestial events from the earth showed that these happenings (and later similar ones, such as another new star in 1604) had to be assigned to the supralunary region, undermining the notion that whatever existed in the space above the moon had to partake of the changeless perfection that marked higher forms of being.[14]

To be sure not everyone was convinced by the new calculations (which were based on comparing the angle of parallax of the object with the corresponding angle made by the moon, obtained by geometrical operations too complex to approach here). But for people interested in these questions and not committed to Aristotelian philosophy, the newly observed phenomena could serve as a kind of second act in the play of undermining traditional notions of cosmic architecture that had begun with the inference many drew from the discovery of large land masses at "the antipodes," that earth, water, and air did not occupy separate places in the universe but were part of a single terraqueous globe. That implication, as we have seen, was significant for Copernicus himself, since as long as earth and water were assigned separate places in the cosmos it was difficult to imagine the earth with its seas and oceans either revolving on its axis or following a steady orbit around the sun. Copernicus did not live to learn about the new celestial phenomena, but it would not be unreasonable to suppose he would have regarded them as continuous with the earlier evidence against Aristotle and Ptolemy.

Two people would play the main roles in highlighting the incompatibility between the new knowledge about the supralunary world and the old cosmology: first the Danish astronomer Tycho Brahe, then the Italian physicist and astronomer Galileo Galilei. Brahe was the chief publicizer of the new stars and comets in the 1570s, and he clearly saw them as rendering the Aristotelian-Ptolemaic cosmology unbelievable. He did not take the new sightings as evidence for a purely heliocentric universe, however, because like many others at the time, he could not bring himself to believe in a moving earth. What stood in the way was, first, its discord with common sense and Scripture and, second, its elimination of the only available explanation for why heavy objects fall – because they seek to return to their "natural place." But because the new stars made other elements of the Aristotelian-Ptolemaic universe untenable, and calculations based on Copernicus's alternative produced a better fit with the observed movements of the planets, Brahe proposed a compromise model that left our planet at the center, with the moon and sun revolving around it, while all the planets turned in circles around the moving sun. Unwieldy as such a solution may seem to us, it appealed to large numbers of people at the time who, like Brahe, felt caught between declining faith in ancient and medieval speculation about the universe and an inability to overcome intellectual, religious, and common-sense objections to heliocentrism.

In another respect, however, he hewed closer to Copernicus's path, namely by sharing the Pole's strong commitment to the dignity of astronomy as a discipline and furthering his challenge to its inferior place in the cultural hierarchies of the time. He manifested this devotion in the extreme care and accuracy with which he made his observations and calculations, conducting them at what was probably the highest level possible before the advent of telescopes. This determination to make his calculations as accurate as possible was partly responsible for much of his writing remaining unpublished until after his death, but his campaign against Aristotelianism began with his widely influential book about the new star, *De nova stella*, published in the year it appeared, 1572. By the 1580s he was widely known in Europe and was conducting correspondence with people in several countries. His care stoked his confidence that astronomy, not metaphysics, provided the ground for understanding how the universe was constructed, and he followed Copernicus (whose connections to classical humanism he shared in a number of respects) in asserting that mathematical astronomers were the true natural philosophers. Had Aristotle had the chance "to know what we know, namely that comets exist above the Moon, he would surely have revised his views not only about comets but about the nature of the heavens," notably in regard to the radical distinction between the sub- and supralunary realms. Reasoning from astronomical knowledge instead of philosophical assumptions also led him to do away with the long-held belief that the planets and stars were carried around the earth on crystalline spheres, composed of real, albeit light and ethereal, matter; such spheres could not exist in a universe where the orbits of sun, moon, and planets intersected with each other as they had to do in Brahe's complex model. He thus concluded that the heavenly bodies simply moved in space, adding to the growing appeal of understanding celestial motions by way of mathematical calculations alone, as Kepler and Newton would go on to do.[15]

Brahe sought to overcome the lowly place assigned to astronomy in the reigning hierarchy of disciplines in a second way, namely by pursuing his work almost wholly outside of universities, thus removing himself from control by the existing organization of intellectual life. In this his career would be very different from Galileo's, but we will see that the Italian too sought protection against the hierarchical authorities who oversaw the mind's life by appealing outside them to other sources of support. Brahe was in a way born into this possibility (as Galileo was not), since he was the scion of a substantial noble family in Denmark, which provided him with both material support and connections to still better-placed patrons, including the king. Although he attended several universities, he never took a formal degree, apparently looking on his studies as preparation for pursuing his interests in his own way. After publishing his report on the supernova of 1572 he continued his astronomical work, but also went on missions for King Frederick II; it was in recognition of both that the monarch offered him an estate on Hven, an island

off the Danish coast, along with funding to continue his research and writing there. The growing reputation he gained from both his astronomical reports and his diplomatic activity sustained him when Frederick died, to be replaced by a monarch less favorable to Brahe's aims: in response he accepted an offer to become the official court astronomer of the Bohemian king and Holy Roman Emperor Rudolf II in Prague – a kind of move unavailable to astronomers in China or the Ottoman Empire – working there until his death in 1601. In the Bohemian capital one of his assistants was the young Johannes Kepler, still relatively unknown and some years away from upending traditional cosmology by showing that data and theory could best be reconciled by positing that planetary orbits were ellipses, not circles. In a treatise defending Brahe, Kepler described the latter's aims (which had become his own) very well by first insisting that the task of astronomers was to make the most accurate possible observations and calculations, and then adding that the discipline's vocation was best fulfilled by those who advance "true opinions about the form of the universe." Such a view echoed Copernicus, but Brahe's combination of aristocratic status and movable royal patronage offered a more solid footing for operating outside the traditional hierarchy of disciplines.[16]

Because the same question will arise in a moment when we come to Galileo, we need to make clear that these social supports were never independent of the intellectual advances they helped to sustain: it was Brahe's work (and the widespread knowledge of it created by printing) that drew patrons to him. Even in 1576, when Frederick II granted him the island of Hven as a site for his work, Brahe's reputation was already substantial enough for him to accept the offer on terms that preserved his independence as a researcher; his intellectual advances and the backing he found for them fed on each other.[17] We shall see that this would also be the case with Galileo, but before we come to that point, we need to look more broadly at his career, and at the contexts in which he pursued it.

Born in Pisa (then a dependency of Florence) in 1564, Galileo came from an old Florentine family with an orientation toward intellectual or cultural careers: a fifteenth-century ancestor had been a noted physician and professor, and the future scientist's father was a musician and composer, from whom he may have derived his early interest in mathematics. He studied math and natural philosophy at the University of Pisa, where – in the atmosphere created by growing skepticism about Aristotle and Ptolemy fed in good part by Brahe – he first encountered Copernicus's heliocentrism. His attraction to it seems to have begun in his student days, although the first clear evidence of his support appears in a letter of 1597 (by which time he had become a professor of mathematics at the University of Padua, after having held a similar post at Pisa), where he called it "more probable" than the Ptolemaic alternative. But he would not become a public proponent of Copernicus until around 1610, at the time of his well-known turn to observing the heavens through telescopes,

discovering "new stars" orbiting Jupiter (they are now known as moons) and the irregularities of our moon's surface; later he would also discover that Venus had phases, like the moon, indicating that it received its light from the sun. These famous observations would later mark Galileo as the most powerful and influential critic of the older of what he would later call "the two great world systems."

In his years at Pisa, however, it seems that what drew him to the *De revolutionibus* was less questions about astronomy as such than an interest in the physics of motion and of falling bodies. Whether the story of his dropping balls of different weights from the Leaning Tower is true or not (most but not all scholars today doubt it), doing so would have fit in very well with his interests. Copernicus had included discussions of gravity and motion in *De revolutionibus*, and one recent close student of Galileo's thinking concludes that these were the parts of the book that he "would have been most likely to focus on." Debates between Aristotelians and their critics over whether the elements of earth, water, and air were essentially heavy or light and had a "natural place" were part of Pisan intellectual life while he was there. Thus his encounter with Copernicus had a different quality from those for whom the chief interest of heliocentric theory inhered in the improved astronomical calculations it made possible. What drew the young Florentine was a concern about the "true causes" of motion and acceleration; astronomical observations were still crucial in establishing whether there existed different species of matter that followed the laws of their separate natures, but what drew him to observation of planets and moons was not the practical uses of heliocentrism as a hypothesis for calculation, it was a passion for understanding the inner structure and workings of the universe.[18]

This distinction explains why Copernicus's book of 1543 was not seen as a threat to orthodoxy, but Galileo's writings after he became an advocate of Copernicanism were. As the Cardinal Inquisitor Robert Bellarmine wrote in 1616, there was no theological objection to holding that "the assumption that the Earth moves and the Sun stands still saves all the appearances better than do eccentrics and epicycles." What the Church could not allow was asserting that "the Sun is really located in the center of the world and revolves only on itself without moving," since such a notion contradicted a long tradition of theological commentary that rested on biblical descriptions of the earth and the sun. Thus, as Robert Westman concludes, "within a relatively short period, Copernicus's hypothesis was transformed from a resource of prognostication and a matter of philosophical debate into a question of uniformity and obedience."[19]

In this way the ground was laid for the great encounter between Galileo and the Church, which would condemn and humiliate him in 1633. This moment, and the model of heroic resistance to powerful and oppressive power holders it provides, have echoed in many accounts since, and to be sure with much

justification. But portraying the clash between Galileo and the papacy in this way casts a veil over many features of the context in which it occurred, without which any view of this moment and its historical significance remains one-sided and misleading. In order to focus clearly on these features of the situation in which Galileo operated and understand how his relations with the Church actually developed, we need to digress a bit from the story of his intellectual development, in order to consider some features of intellectual and religious life in Italy in his time. They involve the relations between orthodoxy, heresy, and religious authority, first as they appear in the mirror provided by events in Padua at the time Galileo was teaching there, and then in his move to become the official court philosopher of the Medici in 1610.

During his time at Padua, Galileo was intellectually and personally close to a then celebrated Aristotelian philosopher called Cesare Cremonini. Cremonini was a philosophical materialist, finding in Aristotle some of the same grounds to deny the existence of a separate spiritual realm (and thus the immortality of the soul) that troubled those who stood behind the condemnation of propositions dangerous to Christian orthodoxy in 1277. Always remaining as a possible way of reading Aristotle, such thinking had been brought back to prominence by Cremonini's famous predecessor as professor of philosophy in Padua, Pietro Pomponazzi. But Pomponazzi explicitly argued that one could deny immortality when operating as an explicator of Aristotle and believe in it as a Christian. Cremonini did not take refuge in this equivocation, and his great popularity as a teacher made him a worrisome figure to orthodox theologians. During the 1590s he was investigated by the Roman Inquisition, bringing his friend Galileo under suspicion too. But neither was harshly dealt with. The inquisitor, a Franciscan, seems to have sought to protect Galileo (as several prominent Church figures would do later), and Cremonini was shielded by the Venetian Senate (Padua was then under the control of nearby Venice), who regarded the attack on one of its professors as an affair of state and intervened to urge that the matter be dropped.

Close as they were in some ways, however, Galileo and Cremonini were intellectually distant in others. When Galileo began to turn to public support of Copernicus, Cremonini's loyalty to Aristotle set them at odds. He disputed the idea that a new star sighted in 1604 could lie in the region of the immutable heavens, and refused on principle to look through Galileo's telescope, convinced that mere sensory evidence could not disprove correctly drawn deductions from valid premises. Cremonini's radicalism thus had a largely different and less "modern" character than the Copernicanism that would later bring Galileo to grief; their relations point to the range and diversity of heterodox thinking in circulation at the time, and which helped constitute the atmosphere in which debates over the new cosmology took place. That the Church was forced to allow such ideas to be expressed (with some figures in it, as we will see more clearly in a moment, very much in favor of them) allowed

heterodox notions to gain footholds that would be difficult to dislodge, contributing to the frustration that eventually pushed the Curia to adopt such an ultimately self-defeating measure as the humiliation of Galileo in 1633.

One important element of these situations was the often tense relations between Rome and other centers of loyalty, such as the Venice that protected Cremonini. In the first years of the seventeenth century the Roman Church and the Adriatic Republic were engaged in a fierce dispute, stemming from a conflict over the jurisdictions of ecclesiastical and secular courts. Disputes over which of the two had the right to try clerics had long marked relations between religious and lay authorities all over Europe, but in Italy the battle took on special sharpness in the context of the political struggles that often led Italian states and cities to experience the papacy more as a secular rival than as the head and heart of the Church. When Venice refused to accede to Rome's demands, Pope Paul V sought to impose his authority by putting the city under an interdict, forbidding its priests to perform the sacraments. But the Venetian clergy largely ignored it, continuing to serve their parishioners. A related conflict was underway in Padua, setting the largely secular University against the *Collegio* the Jesuit Order had established there, with the aim of giving a more orthodox formation to students than teachers like Cremonini offered. The conflict was often raucous and sometimes violent, and it became "a battle of European significance ... because of the prestige of the University and the large numbers of foreign students in attendance there."[20]

Although the debate had wide political and cultural implications it was largely mounted in pedagogical terms, as illustrated by the anti-Jesuit arguments of the eminent Venetian historian, lawyer, and statesman Paolo Sarpi. Himself a graduate of the University, Sarpi saw his alma mater as providing a form of education appropriate to people with multiple loyalties – fiercely devoted to Venice, Sarpi was himself a Servite friar – as opposed to the exclusive spirit the Jesuits sought to impose. "The Jesuit Schools," he wrote, "have never graduated a son obedient to his father, devoted to his fatherland, and loyal to his prince." So widespread were such sentiments that in 1612 the Venetian Senate prohibited any of its subjects from sending children or relatives to study at a Jesuit college outside its territory. For Sarpi the issue was political: "education is relative to government. Therefore youth is educated in such a way that what is good and useful for one government is harmful for another, and education varies with the character of governments. What is useful for a military state, which is maintained and increased with violence, is pernicious to a peaceful one, which is conserved through the observance of laws."

Whether or not Sarpi here meant to associate the papacy with the military alternative to civilian government, he certainly saw it as an entity whose claims to hierarchical authority made it inimical to the independence he pursued in his own life. A staunch supporter of Galileo both before and after his

condemnation, he maintained correspondence with important scientific figures such as Francis Bacon and William Harvey. He was also close to Cremonini and was thought by some who knew him to be some kind of atheist at heart. Of the various causes he supported, opposition to papal monarchy may have been the one about which he cared most, and he supported it by putting out an edition of the anti-Roman writings of the fifteenth-century chancellor of the University of Paris Jean Gerson, a key figure in the movement to institute government of the Church by councils instead of the papacy.[21]

The lengths to which opposition to churchly hegemony over culture could go in the Venice of Sarpi's time are suggested by the radically anticlerical figure Ferrante Pallavicino, in one of whose books, The Heavenly Divorce (Il Divorzio Celeste), Christ asks his Father to free him from his ties to his faithless bride the Church, and in another, The Whores' Rhetoric (La Retorica delle Puttane), the tricks taught to young women for success in the oldest profession are modeled on principles found in a Jesuit handbook for novices entering the Order. Harsh as Pallavicino's indictment was, it was not unprecedented; even the antipapal pronouncements of Dante and Erasmus already had some of this spirit. Pallavicino's works were condemned by the Holy See of course, and in the end he was beheaded by papal authorities in Avignon (to whom a pretended friend had betrayed him), but his works were published and widely circulated, and the intellectual libertinism he and Cremonini represented could not be suppressed. It spread into France, partly through the influence of Cremonini's student Gabriel Naudé, who may have been responsible for reports that the region south of the Alps was "full of libertines, atheists, and people who do not believe in anything." The notion that atheism was somehow culturally impossible in this period, long repeated in homage to the subtle and learned arguments made for it by the great historian Lucien Febvre, has been shown to be simply false by the work of recent scholars.[22]

To these indications about how far authority was from being able to enforce limits in the world outside the Church, we need to add the openness of people inside it to notions that would eventually be condemned as heretical. The Jesuit Order was founded to defend orthodoxy and Roman authority and appeared in just this guise in the conflict between its Paduan college and the university there. But until the very moment of Galileo's condemnation in 1633, not only the Society of Jesus but the papacy itself remained capable of standing on both sides of these issues. The very devotion to education illustrated by the colleges it founded was one thing that attracted intellectuals to the new Order, and among these were excellent mathematicians who did not hide their appreciation for the elegant simplicity and mathematical power of Copernicus's system. Galileo is known to have relied on materials from the Jesuit College in Rome while he was teaching in Pisa, and his connection to the Order remained in his later life. Members of the Roman Collegio treated him with admiration and respect, some of them explicitly accepting the evidence for

celestial mutability provided by his telescopes. In 1611 the College mounted a celebration in his honor, with its most famous astronomer, Christoph Clavius (by the way a teacher of the missionary to China Matteo Ricci), delivering an oration in his praise.[23]

But the most important high Church official who supported Galileo in the period between his emergence as a public advocate of Copernicanism and his condemnation was Cardinal Maffeo Barberini, who became Pope Urban VIII in 1623. Having met Galileo in Florence (where his family had many connections), the future pontiff conceived an admiration and friendship for the physicist and astronomer that led him to oppose those within the Church who first mounted a campaign against him around 1613; the cardinal also encouraged him not to write things that would give ammunition to his enemies. As the lines between orthodoxy and heresy came to be more sharply drawn in the next years, it became more difficult to defend Galileo from within the Church; but it was only after the Florentine, sharpening the polemical edge his writings often carried, insulted the pope by putting some of Barberini's own words in the mouth of the dullard Simplicio, who represented the supporters of Aristotle and Ptolemy in his 1632 *Dialogues on the Two Great World Systems*, that Galileo's former friend turned against him and initiated the procedures that led to his trial and condemnation in the following year. Until that moment relations between the two men provided an excellent illustration of the countercurrents that were part of the still fluid atmosphere in which interest in the Copernican system could develop and spread.[24]

It is in this larger context that we need to consider Galileo's relations to the various authorities and publics with whom he interacted once he became an announced Copernican, beginning with the patronage and support he received over a number of years from the Medici. In 1610 the Grand Duke of Tuscany, Cosimo II, appointed him as his official court philosopher. That Galileo accepted this position just as *The Starry Messenger* was making him a much better-known, but also more vulnerable, figure, has led some recent scholars to regard patronage as the determining element in this part of his career, making the possibility of intellectual independence into a kind of appanage of power relations. In such an account what cemented the Medici support for him was his contribution to the ideological justification of their power, participating in the cultural institutions they established to burnish their image and naming the moons of Jupiter as the "Medici planets." In turn the Medici provided him with the resources to escape the limitations imposed on astronomy as a discipline within universities, without which he would never have become the Galileo of history.[25]

But Medici support was not more significant than many of his other connections. Fear of running afoul of Church authority seems unlikely to have been what stood in the way of his supporting Copernicus publicly before 1610, since as a professor in Padua he could still count on the kind of

protection afforded both him and his friend Cremonini by Venice a few years earlier. By contrast, the Medici were not able to shield him from condemnation by Church officials, neither the injunction Bellarmine issued that he not teach Copernicus's views publicly in 1616, nor the later condemnation of 1633. It was while still in Padua that he began to make the telescopic observations that firmed up his commitment to heliocentrism, publishing them (as *The Starry Messenger*) with a Venetian printer. In the early years of his appointment by Cosmio II he also still retained the support of important figures in the Church, including both the intellectually sophisticated Jesuits who put on the afore-mentioned academic festival in his honor at the *Collegio Romano* in 1611, and Barberini, who remained friendly to him for years after he became Pope Urban VIII in 1623. The features of Galileo's work that drew these supporters to him were operative in Florence too, contributing to the Medici decision to invite him there. Patronage was an important dimension in Galileo's career, but just as with Tycho Brahe, benefitting from it was a result of the work he had already done, at least as much as his ability to continue that work was reliant on his patrons' support. Between patronage and the achievements it supported the relationship was symbiotic.[26]

But there is no doubt that appealing to one fount of authority as a shield against another was an important way to keep heterodox ideas from being suppressed, or that Galileo practiced just such a strategy. In the period when he was becoming a public advocate of Copernicanism he began to seek support beyond ruling powers such as Venice or the Medici, turning increasingly to the kind of general public that had given Tycho Brahe both access to and some influence over his patrons. Galileo's sense that he could take this path seems to have owed much to the warm reception accorded *The Starry Messenger*, which made its author famous over much of Europe (and just for that reason more dangerous in the eyes of his enemies). It was partly in order to expand and strengthen this following that he decided to write his subsequent books in Italian, limiting the academic audience for them north of the Alps (until they were translated into Latin), but giving him access to a broader and less clearly defined kind of public in Italy and elsewhere.

His interest in such readers, and his own understanding of his capacity for appealing to them, were evident also in the lively and sometimes comedic style he adopted, notably in his two treatises in dialog form, *The Great World Systems* and *Two New Sciences*. When the first of these was published in 1632, Galileo sent several dozen copies to people he hoped would be interested in it, among them patricians and officials in various Italian cities as well as Church officials, friends, and intellectual figures in both Italy and France. Some of the thank-you letters he received in response have survived, praising the work for the pleasure the recipients took in reading it, and one of them expressed particular satisfaction for the evidence the book provided "that there are still gentlemen everywhere in Italy who understand and value the

proper conduct of science." Robert Westman finds in these reactions support for regarding the first of Galileo's two dialogues "not only as a book with new arguments" but as "a new *kind* of book [for an academic researcher], aimed directly at a constituency of men whose concerns were not academic disputations but cultivated and polite learning," to whom Galileo sought to appeal by lacing his conclusions with "light humor and a bit of sarcasm" toward his opponents.[27] The social profile of this readership was very close to that of the people being designated at this time as *virtuosi*, individuals curious about phenomena of all kinds that did not accord with traditional philosophical assumptions, and whose role in creating a new public for art as well we noted in Chapter 6.

The possibility of appealing to such readers in Galileo's manner testifies to the degree to which interest in questions about cosmology was spreading beyond both universities and the circles of princely patrons. One place where the effects of this evolution can be seen is the papacy's very limited success – in some regards it was simply a failure – in impeding the diffusion of heliocentric ideas by condemning Galileo's *Dialogue on the Two Great World Systems*. There is no doubt that the Church sought to suppress the book; the decree condemning it, prohibiting its sale, and ordering the confiscation of existing copies was read out in a large number of university faculties of philosophy and mathematics, and communicated to individuals as well. But the effect of Rome's efforts was considerably less than officials hoped – and than some later critics of ecclesiastical power have thought.[28] By the time the decree was issued in the summer of 1633, the work was already in the hands of prominent figures both within and outside universities, and one effect of the papal strategy may even have been (as Robert Westman suggests) to publicize the book's existence among people who might otherwise not have heard of it, or at least not so soon. Thus public controversy heightened awareness of the new ideas in the very process of seeking to repress them. Indeed, the condemnation seems to have been a spur to the book's appearing in Latin translation as early as 1635, since news of it jogged the translator to complete the work, after having put it aside in the face of what he called "various cares and troubles." Both he and the publisher were Protestants, but they belonged to circles of correspondence that included Catholic intellectuals in Paris, Lyons, and Aix-en-Provence, and copies of the Latin version have survived in the libraries of religious orders over large parts of Europe, including still Catholic ones. Readers in such places would have had to get special permission to consult it, but it seems likely some of them did, and even those who did not had access to Galileo's ideas through excerpts or summaries attached to works that were not on the Index. "In short," Westman concludes, "Rome's efforts to block the circulation of Galileo's attractive defense of the Copernican side in the world systems debate were variously, and often ingeniously, circumvented."[29]

To be sure, not all those who came into contact with the book or its contents became Copernicans. But evidence especially from France suggests that the papal attempt to repress the new cosmology had only a limited impact even on faithful Catholics. By the time Galileo wrote his *Dialogue on the Two Great World Systems* many prominent French writers were engaged with the debate, and news of the book's publication heightened their interest even before they could obtain copies. Some of these shared Tycho Brahe's reasons for not accepting heliocentrism, but others, including Descartes, Marin Mersenne (who was at the center of a wide network of correspondents), Pierre Gassendi, and the *savant* Nicole-Claude Fabri de Peiresc, had become Copernicans, even without accepting all of Galileo's arguments (in particular, his unconvincing attempt to prove that the earth rotated by attributing tidal movements to the jostling of the seas the motion caused). To be sure the papal condemnation made some reconsider their positions, either out of respect for the Church itself, or because they feared persecution, and this second consideration led some to keep their views to themselves or advise others to do so.[30] But among such people Aristotelian and Ptolemaic thinking had been too deeply discredited by both evidence and public argument to keep many of them from holding on to the possibility that Copernicus and Galileo were right. Resistance to papal pressure was also fed by the widespread support in France, not least at the royal court, for "Gallican" independence from Roman claims to full supremacy in the Church (France had been a center of the anti-Roman Conciliar movement earlier, as Sarpi's republication of Jean Gerson's antipapal treatise reminded people in the time). A recent survey of French thinking in the 1630s and 1640s makes clear that commitment to deciding the question on the basis of reason and evidence was not canceled out by the papal decree; if anything, the exchanges it encouraged, coupled with the efforts made to bring Galileo's thinking to a wider readership through translations, summaries, and commentaries, caused the issues to be posed squarely in those terms: "Convincing evidence would have drawn enthusiastic adherents. But it didn't come."[31]

* * *

What did finally convince most thinking Europeans that Copernicus's theory was a true description of the universe was Isaac Newton's development of a new physics that fitted it. Positing that the same measurable force of gravity operated on every entity in the universe, and that both rest and motion were natural states, so that some force was needed to overcome the inertia of either, Newton developed laws of motion and formulas that were able to account for and predict the movements of objects both on earth and in the skies. His work was a capital intellectual achievement, allowing people who had hesitated to embrace heliocentrism before to accept it now. But few people could understand the

mathematics on which it was based, so that the power and elegance of his reasoning was not sufficient in itself to bring about the triumph of his theory. At least as important was the continuing transformation of the relationship between science as a domain of activity and the broad range of people outside it to whom scientific questions mattered because of their potential implications for culture, politics, and practical life. Galileo sensed the importance of this relationship when he decided to publish in Italian instead of Latin, and adopted a style calculated to appeal to a broad readership. In the years after his condemnation, a number of circumstances testify that such a new audience was rapidly developing.

A striking example of this development was the founding of a new series of public lectures in Paris in 1633, the very year in which Galileo was condemned in Rome. The project was set in motion by a fascinating but mostly forgotten figure called Théophraste Renaudot, a physician and publicist who was a protegé of Cardinal Richelieu. A few years earlier (and with the cardinal's support) Renaudot had established the first weekly newspaper in France, *La Gazette* (later renamed *La Gazette de France*), a sheet that served as a medium of information and as propaganda for the monarchy. Although the idea that major issues of politics and general concern ought to be submitted to the judgment of "public opinion" only became widespread during the eighteenth century (in connection with the developments we considered in Chapter 3), Renaudot's paper was an early sign of the felt need to cultivate it. So was the lecture series he founded under the auspices of an agency he set up in the previous year, called the *Bureau d'adresse et de reconcontre*, designed as a general point of contact for people in Paris (especially new arrivals), where such matters as employment and marriages could be arranged. The lecture series jibed with the *Bureau*'s role as a center for exchanging information, and it was probably Renaudot's training in medicine (he had been the court physician of Louis XIII) that led him to give a central place in it to scientific subjects.

The discussions and debates, organized on a weekly basis, involved figures of a certain intellectual stature, including the eminent mathematician and scientist Marin Mersenne, whose position as the nodal point in a well-developed network of correspondents we noted a moment ago; but here such people came together with a broad and anonymous public. Explicitly excluded from the subjects taken up were both religion and matters of state policy, the first because of the passions it stoked, the second because its "mysteries" had to be reserved to those qualified to be party to them. In earlier centuries topics in "natural philosophy" had often been treated as "mysteries" too, but here they were made available to a growing public. One sign of the interest they provoked is that the *Bureau*'s proceedings were quickly translated into English, and an early number of the English version described the subjects considered as "all sorts of questions of philosophy and natural knowledge," among them

causes and effects, the four elements, happiness, melancholy, winds, tides, dreams, and whether the earth was stationary or mobile. Only one session on the last topic was held, focusing on the conflict between the Aristotelian-Ptolemaic and Copernican systems; arguments were given for and against each, but the second was accorded the last word. That session was held after the papal condemnation of Galileo was issued but before news of it reached Paris; once the official Church view was known, the topic of terrestrial motion disappeared from the agenda, although surely not from people's minds.[32]

Other subjects remained, however, including some no less offensive to anxious defenders of orthodoxy (and perhaps close to Renaudot's heart), notably ideas drawn from ancient hermetic traditions that some moderate figures saw as a possible basis for peace and reconciliation between Protestants and Catholics, but out of which Giordano Bruno had drawn some of the heretical notions for which he was burnt at the stake in Rome in 1600. At the *Bureau* these ideas had a personal representative in the utopian writer and prophet Tomasso Campanella, who participated in some of the meetings, and by late in the 1630s Renaudot's creation was coming under attack on these grounds. But the presence of such thinking in the lecture series alongside the scientific subjects mentioned a moment ago, testifies to the broad public interest in science and its implications the meetings represented, as well as to the ease with which scientific questions shaded off into larger cultural ones. The editor of the published English translations referred to the participants in the sessions as "the *virtuosi* of France," identifying them with those in his own country whose role in widening the public for both art and science we have already noted.[33]

In 1641 Samuel Hartlib, a polymath devoted to spreading knowledge of nature and its practical applications, proposed to establish a counterpart to Renaudot's *Bureau d'adresse* in England, but more exclusively devoted to natural philosophy. Although never realized in that form, Hartlib's proposal had a direct impact on the formation of what became the Royal Society of London, organized first in 1645 and given its charter in 1662. The Society's *Philosophical Transactions* would become a – even the – central institution of early modern scientific inquiry, the clearing house by which researchers in many countries learned about, commented on, drew from, and criticized each other's work. Both the Royal Society itself and its *Transactions* were crucial in creating the cultural and social relations in which Newton's theories were formulated and diffused. As this process proceeded, the public character of science in England would receive added emphasis, in ways we will come to in a moment. First, however, we need to recall some aspects of Newton's career that were not scientific in the usual sense, but that help us to understand how he saw the relations between natural philosophy and other spheres of culture.

Newton has long been celebrated for his achievements as a mathematician and physicist, but we now know that he was no less preoccupied with other

questions. He was passionately involved with theological issues, and recent scholarship has shown that he saw his work as restoring a form of ancient wisdom closely connected to the hermetic and often mystical notions that inspired Giordano Bruno, and that surfaced in some of Renaudot's public meetings. Parts of his thinking and experimenting were carried out along lines derived from alchemy, which he understood as attempting to call on astral influences, so that it linked celestial forces to effects visible on earth, much as his own physics did. The full import of this side of Newton's personality and career, and its precise relations to the project of cosmological understanding undertaken in his *Mathematical Principles of Natural Philosophy* remains a subject of debate and research, partly because much work on the emergence of modern science has assumed that excluding such ancient and occult concerns was a necessary condition for its development, and partly because the manuscripts and papers in which Newton pursued these interests are still in process of being published. This situation creates opportunities for skeptics about science to enlist Newton in their cause, locating him in a cultural space where the boundary dissolves between a form of knowledge that limits itself to what can be empirically and analytically demonstrated and one willing to step outside it.

But compelling reasons for not seeing Newton in such a light emerge as soon as we consider what lay at the core of his theological interests – namely, a rejection of the orthodox Christian notion of the Trinity. Nothing drew his opposition and ire so much as the notion that God was not a homogeneous and unified spirit but a multiform being whose nature invited complex metaphysical explications. A devoted reader of the Bible, Newton concluded early in his life that no evidence for such a notion could be found in it, and he filled pages in his notebooks with scorn for those who had imposed such a "massive fraud" (the phrase is not Newton's own but come from one of the best students of his work) on the faith revealed by Scripture. Newton's Unitarianism, marking him (and as we will see in a moment, many of his followers too) as a heretic in the eyes of Anglican orthodoxy, was a way of insisting that a single and seamless spiritual force operated throughout the cosmos, a power to which the universal force of gravity gave one kind of expression. The moral history recounted in the Scriptures and the elements of the material world encountered in physics and cosmology were each features of the universe God created, and one goal of Sir Isaac's work was to establish their kinship. What allowed alchemy to be part of this project is that it focused on the possibility that the action at a distance effected by gravity, and which we can measure but not see, might take other forms, in particular that of astral forces of the kind posited by the ancient hermetic sources to which he, like other figures in his time, was drawn. But these theological and alchemical interests ran parallel to Newton's other inquiries, they did not determine his scientific path. Far from impeding the elaboration of science as a sphere of purely rational inquiry, Newton's

"nonscientific" passions, including the theology at their core, supported and broadened it.[34]

It was in this spirit that he and his followers developed their own version of Galileo's intuition that a public outside universities could provide an alternative court of appeal against the traditional authorities represented within them. This they did by setting up public lectures and demonstrations not unlike those Renaudot had overseen in Paris. Often employed on these occasions were both models of the solar system (orreries) intended to illustrate how the movements of stars and planets in a heliocentric universe produced the phenomena humans observe on earth, and experimental apparatus such as pumps, condensers, and electrical devices that exhibited otherwise hidden but not inexplicable properties of air, water, metals, and animal bodies (including human ones). So striking and dramatic were some of the phenomena presented on these occasions that both contemporary observers and later historians have adopted the terms "theater" and "spectacle" to describe them, pointing to the power to draw people into an unknown world that they shared with stage plays and novels, but with the difference that the realm they opened up was regarded not as fictional but as real.

This difference was responsible for much of the enthusiasm such lectures and demonstrations called forth, but also for certain problems they created. One was that since audiences were willing to pay to attend the performances, their popularity inspired a penumbra of imposters, charlatans, and con men, seeking to profit from the broad interest in the subject. The ground this opened up for spreading false notions and possibly discrediting those who were devoted to genuine knowledge bred considerable anxiety in those who saw themselves as honestly devoted to it. To these worries the Newtonians developed several responses, but the one most revealing of how they saw the difference between their form of science and the one they sought to replace centered on the idea of replication: repeating an experiment or demonstration in order to discover whether or not it would give the same results if carried out by other people and under other conditions. Outcomes that could not be reproduced were suspected of having been obtained by imperfectly conducted or reported procedures, undertaken for dubious reasons, or unintentionally shaped by subjective desires or outside pressures. Such empirical demonstration was especially important for Newton and his followers because it accorded with their emphasis on the view of science advanced by Copernicus, Tycho Brahe, Kepler, and Galileo, namely that it should not proceed by a priori reasoning from first principles, but rather from empirical observation of natural phenomena. As Newton wrote in *Mathematical Principles of Natural Philosophy*, scientific understanding had always to begin from specific observations, which were "afterwards rendered general by induction."

It was such broad "confirmation through experience," and not simply the popularization of Newton's work, that his followers (his first Oxford disciple

John Keill, and the early lecturers John Conduitt and Henry Pemberton) were seeking when they engaged in enlarging the circle of those who could testify to the truth of his hypotheses. As Larry Stewart shows, both in the Royal Society's early, pre-Newtonian period, and later when Newton's followers became prominent in it, there were repeated declarations that what validated experimental evidence was its generalization, effected by widening the community of those who witnessed it. The point was made as early as 1667 by the Society's first prominent defender, Thomas Sprat, who in his *History of the Royal Society* distinguished his camp from those still drawn to metaphysical principles by declaring that "they must pardon us, if we still prefer the joynt force of many men." Newtonian science regarded itself as "a form of knowledge that would obtain wider consent than the limits of the laboratory could easily allow." In place of the deductive certainty claimed by syllogistic reasoning, it sought confirmation through the public nature of its demonstrations. "Experimental natural philosophy required an audience . . . the lists of experiments to be done were fundamentally extensions of experiments already completed. It was not merely the replications that mattered, but the expansion of the audience as well . . . The establishment of a new set of attitudes did not arise out of what was self-evident or readily apparent by demonstration." Rather, the very fact that experiments could be repeated publicly meant that acceptable knowledge was increasingly dependent on general consensus. The deeper aim behind presenting scientific ideas and the procedures that validated them to people assembled in multiple public spaces was to establish "an epistemology of common experience."[35]

The importance the Newtonians attached to this broadening of the public is difficult to reconcile with a perspective on the history of early modern science that has become highly influential, and which claims to reveal a very different landscape. Whereas we have sought to show that science effected its advances partly by replacing the vertical social and cultural relations that had long characterized it with horizontal ones, writers in this other vein have argued that scientific practice was still caught up in hierarchical social distinctions, its judgments about just what experience showed dependent on the quality of the people making them. What validated scientific ideas then (and to some degree now as well) was not objective demonstration but personal influence, acquired by social standing. Steven Shapin and Simon Schaffer proposed this view in an account of the debates surrounding Robert Boyle's well-known public experiments about the properties of air, aimed at finding ways to improve the pump recently invented by Otto von Guericke, and theoretically important as part of the general turn away from the Aristotelian metaphysics that classified air (and other gasses) as essentially "light" and therefore unable to exert pressure (a point of importance for the steam engines that came into use in the eighteenth century, as we will see). But Thomas Hobbes and others rejected Boyle's results, on the correct

grounds that the apparatus he used was not able to create a complete vacuum. Hobbes, these historians argue, thus had just as much reason to reject Boyle's work as the latter's supporters had to credit it. What moved them to support him was the trust they afforded him, and which he claimed for himself, by virtue of his status as a "gentleman," in particular one whose conduct was shaped by his religious commitments (Boyle was a pious Anglican and referred to himself as a "Christian virtuoso"), and whose already solid social position relieved him of any need to achieve fame or profit materially from his work.[36]

That some people decided whether to line up with Boyle or Hobbes on such grounds may well be the case, but there is little reason to take this as a model for the way questions at issue in scientific research were decided either in Boyle's time or ours. It certainly does not fit the situation in which Galileo's account of what he saw through his telescope sent legions of ordinary people to check his report for themselves (although a different, aprioristic prejudgment determined Cremonini's refusal to be one of them). Robert Westman, while recognizing the importance of Tycho Brahe's wealth and noble status in freeing him from the restrictions on astronomy legislated within universities, explicitly rejects the image of early modern science as consisting "of gentlemen trusting uncritically in the testimonies of other gentlemen (just because they were gentlemen)." Instead, the environment in which Galileo operated was one in which "gentlemen and aristocrats, ecclesiastics, and modernizing professors" all engaged in "a surprisingly open, learned, and critical intercourse," even in the absence of the more elaborated institutions for such exchange that were in operation a few decades after his death.[37]

In Boyle's and Newton's England, moreover, the notion that "facts" had to be established on the basis of critical confrontation, involving socially diverse people all seeking to validate their claims in the minds of others, spread through society from one particular point of origin: the law courts. In them there already existed, as Barbara Shapiro demonstrates, a "culture of fact": "Lawyers and virtuosi shared an emphasis on truth, an insistence on fact over fiction and imagination, a preference for firsthand and credible witnessing, and a rhetoric of impartiality. The Courtroom and the rooms of the Royal Society shared a great deal, and whatever the courtroom was, it was certainly not a place of shared, gentlemanly trust." When Francis Bacon wrote that "the facts of nature" would "give light to the discovery of causes" he was drawing on this language, and the epistemology it presumed, based on a commitment to shrinking the power of partiality by bringing various expressions of it into collision with each other. For him as for others (including Boyle, despite Shapin's attempt to show the opposite), evidence of reliability based on an individual's personal history and character, and on the quality of the evidence and argument each person offered, mattered more than social status.[38]

One context in which engaging in such interchanges led people to experience both the power of social and personal formation to impress itself on individual ways of thinking, and the potential those same interactions possess to counter such power, was the informal but influential "Republic of Letters" that flourished in the seventeenth and eighteenth centuries. Within it, as Lorraine Daston observes, an impartial commitment to what Pierre Bayle called "the empire of truth and reason" was prized even above talent and insight, and it was premised on detachment from things that might make judgment partial. Recognized as barriers to impartiality were both religious and aristocratic authority and the nested circles of personal connection that began with family and friendship and led on to local, regional, and national loyalties; but such prejudgments could be countered by engagement with people unlike oneself. The putative "citizens" of this Republic developed a kind of "yearning for distance . . . Proximity in time and space were perceived to be in inverse relation to . . . impartiality, and for this reason the good opinion of posterity and of foreigners was particularly sought after." This attitude was more evident among scientific figures than literary ones, since the audience of the latter was circumscribed by linguistic boundaries (although even some of them sought escape from the jumble of local dialects by establishing an overarching national idiom). In science some figures saw internalizing the judgments of remote and impersonal interlocutors as a vehicle for distancing themselves from their own errors and prejudices, thus approaching what would later be prized (perhaps too confidently) as objectivity. Within the Republic of Letters it was neither expected nor desired that these experiences would ever fully cleanse its citizens of their prior and local attachments; on the contrary these had always to survive in some degree in order for them to serve as abrasives against those of others. Impartiality and objectivity were not wholly separate from their opposites but were sought within a situation of interaction between them. In this way both autonomous science and the Republic of Letters kept open paths to subsequent advances in understanding.[39]

The revolution in cosmology made the awareness that such a situation could exist and that it had important consequences for extending "the empire of truth and reason" a characteristically European phenomenon. To be sure, rich intellectual traditions, within which scientific inquiry of a high order was pursued, flourished outside Europe too, as we will acknowledge with the appropriate respect in the next chapter. But nowhere else did an internally generated shift of this kind take place, remaking a fundamental order of knowledge governed by teleocratic principles into an autonomous one regulated by norms derived from its own practice. Because the revolution in cosmology and physics effected such a shift, it provided one of the most significant and consequential examples of the kind of escape from past constraints that Marx would describe as showing "what human activity can bring about."

8

Teleocratic Sciences

To argue that European science achieved such autonomy during the seventeenth century is not to say that it became the only valid or useful form of inquiry into nature. Much precious knowledge and understanding can be – and has been – acquired by research guided by what we are calling teleocratic principles. But such achievements differ in one crucial respect from those of Copernicus, Galileo, and Newton – namely, that they presume or affirm their culture's established convictions about the world rather than opening them to scrutiny.

This contrast remained in place until the nineteenth century, and the object of the current chapter is to consider why this was so. We pursue this question in regard to two rightfully celebrated traditions of scientific practice outside Europe, Islamic astronomy, and Chinese science across a wider range of disciplines. In each case we need to confront a question to which much work has been devoted. For the first the issue is how close Muslim astronomers and cosmologists came to anticipating Copernicus, and whether their work served as an important basis for his. For the second it is why Chinese science, despite its remarkable achievements in many fields, did not engender the kind of leap into new ways of understanding nature and the cosmos that emerged in Europe.

Arab and Muslim astronomy in the Middle Ages was a highly developed and vibrant enterprise, relied on for the same purposes as its Western counterpart: establishing important dates, predicting eclipses, and providing data for astrological prognostication. It was supported by large, organized observatories of great sophistication, set up several centuries before such institutions appeared in Europe, and it nurtured bold and imaginative thinkers. Like their European counterparts, medieval Islamic astronomers all worked within the basic assumptions of the Aristotelian-Ptolemaic cosmology, and like them too they were faced with discrepancies between the calculations these assumptions yielded and the positions of the heavenly bodies observed by their highly sophisticated (pre-telescopic) instruments. To resolve these conflicts and improve their predictions, they mostly devised improvements to the system of epicycles and equants, as Ptolemy had done himself. But some realized that certain of the observed motions of heavenly bodies could be just as well

accounted for by positing that the earth turned on its axis as by assuming that planets and stars revolved around it. And others, dissatisfied with the excessively complex structures that adding variations to the Ptolemaic system produced, sought ways to reduce all the observed motions to combinations of more purely circular ones.[1]

Among the distinguished mathematicians and astronomers who took this path were Nasir al-Din al-Tusi, the leading figure in the most impressive of the Muslim observatories, built in the city of Maragaha (now in Iran) in the twelfth century, and the fourteenth-century astronomer and instrument maker (he was the official timekeeper in the main mosque of Damascus) Ibn al-Shatir. Both were excellent observers who produced still highly regarded tables of stellar and planetary motions, and their attempts to eliminate eccentrics and equants led them to devise ingenious solutions with clear resemblances to some of the diagrams and calculations later employed by Copernicus. Al-Shatir in particular was willing to countenance the radical notion that the earth itself might be in motion, not around any other object as its center, but shifting its position in some way that could account for the deviations in planetary positions he and others recorded.[2]

These similarities have made the connection between Copernicus and Islamic astronomy a hotly contested issue, its temperature raised even further by the circumstance that al-Shatir's writings were only discovered in the 1950s, so that knowledge about them was relatively fresh at the time when anti-Eurocentric criticism was on the rise. In the debates that have grown up around these resemblances, very strong claims have been advanced for Copernicus's debts to his Arab predecessors. Some critics have not hesitated to introduce such terms as "plagiarism and looting." These debates may never be fully put to rest, given their bearing on high-stakes issues about the achievements of and relations between different cultures. But certain observations can be made with confidence. The first is that Copernicus indeed made use of Arabic astronomy in constructing his model of the universe. His writings contain upwards of twenty-five citations of various Arabic astronomical writings (he sought help in order to make use of them, since he did not know Arabic), and some features of his new model, notably setting the orbits of planets around their exact center, and thus eliminating the Ptolemaic displacement by eccentrics and equants, are indeed very close to the one devised by al-Shatir (who, like Copernicus, still retained some epicycles). There seems no doubt therefore that this Arabic legacy contributed to the new start he gave to cosmology. But al-Shatir himself never appears in Copernicus's work and, given the frank and unembarrassed way the Polish astronomer cites other Arabic sources, there seems little reason to believe he would have hidden his knowledge of the Damascene official's work, had he known of it. Above all, the similarities scholars have found between the calculations and diagrams the two made do not in any way cancel out the essential and crucial difference between

them, the one that would make Copernicus significant in ways al-Shatir can never be – namely, that the latter's thinking remained rigidly geocentric whereas Copernicus took the radical step of placing the sun at the center of the world.[3]

The Islamic historian George Saliba would have us believe that "[a]ll that someone like Copernicus had to do was to take any of Ibn al-Shatir's models, hold the sun fixed and then allow the Earth's sphere, together with all the other planetary spheres that were centered on it, to revolve around the sun instead." But even had he known of those models, this was a much larger step than such a pronouncement pretends, first because, as we have seen, in order to account for the existence of habitable land in the Aristotelian-Ptolemaic universe, part of the earth had to be conceived as somehow sticking up out of the higher sphere of water, which rendered imagining it either as turning on its axis or in motion around the sun extremely difficult at best. In Europe the voyages of discovery generalized the understanding that the earth was a terraqueous globe, with land and water moving together, but the new geography had no similar impact in the Islamic world. Second, the difference between Copernicus's readiness to conceive of a heliocentric universe and al-Shatir's distance from it had much to do with who they each were. The Arab astronomer was the official timekeeper of a major mosque, charged with establishing the starting and ending times for Islamic holy days and prayers. His search for more reliable and accurate calculations, combined with his innate curiosity and evident intelligence, led him to remarkable speculations on just how the solar and planetary orbits were determined. But as an astronomer who was also a religious official, the possibility of considering this question in a way directly counter to Quranic texts (Suras 21 and 36 both refer to the sun and moon as each "traveling in its own orbit with its own motion") can hardly have been part of his mental universe. Copernicus by contrast was a figure formed in European universities, both in the North and in Italy, where thinking and teaching developed in the intellectually mobile world of the Renaissance, and when many long-standing assumptions were being put into question. And he had a reverence for the sun that many Muslims would have shunned as idolatrous.[4]

Muslim resistance to such a step is also demonstrated by how long it took Islamic figures to accept heliocentrism. Copernicus's work seems to have remained unknown in the Ottoman Empire until 1660, when a treatise by the French astronomer Noel Duret, containing some of the astronomical tables Copernicus drew up based on heliocentric assumptions, was translated into Arabic. The Chief Astronomer of the Sultan at first dismissed it as a "European Vanity," but came to recognize the value of the observations Copernicus provided. Like other Muslim figures, however, he continued to regard the heliocentric hypothesis as a mere basis for calculation, not as a possible description of how the universe is structured. This attitude seems to have remained in place for nearly two centuries afterwards: Ottoman writers and

philosophers continued to make use of Western astronomical data, as they did with Western technology, but within their traditional political and cultural framework. The most open-minded and sympathetic early nineteenth-century Egyptian visitor to the West, Rifa al-Tahtawi, sent to France by the Egyptian ruler Mehmet Ali in 1826 to gather information useful for his country's modernization, and responsible for translating French works into Arabic as well as establishing schools of Western languages back home, was struck by the difference between Muslim scholars, educated only in the texts of their religion, and French ones who, with "their perfect command of many subjects, distinguish themselves in addition in some special branch, multiplying discoveries and bringing unprecedented contributions to it." But he twice shied away from giving his readers knowledge about Copernicanism. Before publishing his first report on French culture he cut from it a reference to Galileo as interpreting the biblical description of God making the sun stand still as only a metaphor, so that the passage might not reveal the Italian astronomer's conviction that the sun did not have to be told to stop moving. And he assured readers of a later translation of a geographical text that he only retained its account of the new cosmology as testimony to his good faith as a translator, countenancing it only "from a practical point of view and for the mathematics that it brings to bear, and not at all from the viewpoint of faith" – which is to say truth. Only in the course of the so-called Tanzimat reforms of the later nineteenth century did movement toward recognizing the reality of heliocentrism really begin.[5]

The deep-rooted and enduring character of this resistance makes clear that the whole debate about whether or not Copernicus was beholden to Arabic astronomy is beside the point. The significant question is not whether Copernicus drew on Arabic sources; clearly he did (as on classical and medieval European ones as well) and acknowledged as much. But Arabic writings could not have helped him to become the central figure he remains, the person who initiated the shift to heliocentrism, since nowhere in them was the notion countenanced. What needs to be focused on is what kept people outside the West both from taking the step he did, and from following his lead for two centuries or more afterwards. It has been suggested that Arab thinkers were restrained from accepting heliocentrism for a reason that also impeded its reception in the West – namely, that until Newton formulated his laws of motion no alternative physics existed that was capable of replacing the Aristotelian understanding of motion, rest, and the acceleration of falling bodies. But this difficulty did not keep interest in Copernicanism from spreading rapidly in the West, especially as new stars and comets provided further evidence against central tenets of the Aristotelian metaphysics on which the Ptolemaic cosmology rested, so that Newton's system came as a climactic moment in an already accelerating departure from Aristotle and Ptolemy; it was not a necessary condition for it. Thus the question is not, as we noted at the

start of the previous chapter, just one about the history of particular branches of science; it is about the ability or willingness of people to conceive of the world as other than it appears, both in ordinary experience and in generally sanctioned ways of understanding it. This is a crucial point both now, in relation to Islamic astronomy, and later, when we come to the question of Chinese science.

It should be remembered as well that the contrast between Europe and Islam in this regard did not emerge only in the time of Copernicus, but manifested itself long before, in the two cultures' different ways of handling the fears that arose in both about the threat Greek rationalism posed to revealed truth. In the regions of Islamic faith these anxieties fed the rise of the antirationalist Asharites. In Europe they provoked the condemnation of a number of Aristotelian notions by the Bishop of Paris in 1277, but here the parallel ended: theoretical speculation continued, even becoming more radical, because the philosophical faculties in the largely self-governing European universities provided institutional continuity and protection that elite patronage in Islamic courts, and support of *madrasas* by increasingly conservative charitable foundations (*waqf*) did not. By the eleventh century, philosophical thinking in the Islamic world was being pushed toward the margins of intellectual life, with influential figures concluding that since only God's will holds the world together, cause-and-effect reasoning was useless as a way of understanding either events or observed phenomena. In this way Islamic intellectual life moved toward the condition described by Patricia Crone and Michael Cook, that its intellectual resources were "heavily concentrated in a single and specifically religious tradition" (a situation to which al-Tahtawi also bore witness). It is worth noting that the period in which the post-1277 speculations were being pursued in Europe was precisely the lifetime of al-Shatir (1304–75), corresponding almost exactly with that of one of the most prominent of these thinkers, Nicolas d'Oresme (1320–82). The Damascus timekeeper was devoting himself to refining the Ptolemaic world picture (however brilliantly) at the exact moment when European scholastics were imagining a plurality of possible worlds and meditating on the non-Aristotelian physical laws that might operate within them. Even then, although not yet so well-developed as in the time of Copernicus, the intellectual and institutional foundations for such a philosophical reimagination of the world existed only in Europe.

It seems impossible to know whether any of the participants in these earlier speculations harbored a greater degree of skepticism about the truth of orthodox cosmology and physics than they admitted, but such doubts could easily have sheltered behind the official designation of their inquiries as merely hypothetical, undertaken as illustrations of God's limitless power. In a similar way, it is possible that two centuries later some of Copernicus's followers who claimed to take his cosmology only as a tool for calculation believed it to be closer to the truth than they chose to admit. In introducing

Copernicus's book, his disciple Andreas Osiander declared only that the model "need not be true," not that it could not be (the position asserted by the Church in face of Galileo's assault on the old world system). It may seem paradoxical, but for such philosophers or astronomers to insist in public that their work only operated within such limits, perhaps in Oresme's time as well as in Copernicus's, effectively gave them autonomy even without their asking for it, freeing them from restrictions imposed from some theology or metaphysics. Once the new stars and comets began to undermine belief in the Aristotelian cosmology, the stage was already set for a science based on empirical observation and conclusions drawn from it, a situation against which barriers remain in Islamic intellectual life even today.[6]

* * *

The contrast between the European evolution toward making science an autonomous sphere and the persisting conditions that headed off such a shift in Islamic culture reappears in the other chief instance where scholars have sought to highlight a potential for giving birth to modern science outside the West: China. Here the question that has stirred up discussion is not whether Western science was somehow dependent on Eastern sources, but why a society in many ways more advanced than Europe's did not produce a turn to modern ways of understanding nature comparable to the sequence that ran from Copernicus to Newton.

   Much of the debate about this question has taken place around the mammoth work of Joseph Needham, *Science and Civilization in China*, whose seven volumes, some subdivided into separate parts, contain careful and exhaustive accounts of myriad topics in Chinese science.[7] Needham's project was inspired by the apparent paradox of a dearth of "modern" scientific achievements in what was in many ways the most sophisticated and powerful of human societies over many centuries: particularly advanced in technology, the inventor of (among other things) the compass, gunpowder, printing, and paper money, its cities dwarfing European ones in size, and its development pushed forward by public works projects (canals and fleets in particular) on a scale unimaginable anywhere else. Needham shows that in many ways and in many fields Chinese science was equal or superior to its European counterpart– in the care and accuracy of its observations and in the understanding of basic natural processes it contained. What it did not achieve was an energizing revolution in understanding of the sort that made European science a harbinger of the manifold transformations that followed. Needham's work and the discussion provoked by it have generated an exhaustive list of factors that played a significant role in this absence: the influence exercised by the state and its bureaucracy; the Empire's discouragement – at least at some moments – of independent economic development (and thus of the spirit of innovation it

might have spawned) in the name of social stability and to deter the rise of rivals to its power; the high social preeminence given to the class of officials and the overwhelming prestige attached to the classical learning required for entry into it (by means of the state examination system), stunting the development of other organized forms of intellectual endeavor; and connected to this, the dominance of cultural traditions that enshrined an organic, moralized, and unquantifiable metaphysics of nature and society, at once in the minds of educated people and in the beliefs of the popular classes (in whose traditions many of these notions were rooted, and who became the target of official efforts to reenforce them).[8]

This list bears the marks of having been produced before the relatively recent turn (on which we drew in Chapter 4) toward recognizing that China was hospitable to many forms of freedom not compatible with a state both determined to keep power in its own hands and possessed of the resources to do so. But some components of it have much in common with the features of Chinese life we noted earlier, in connection with the absence there of both any European-style preoccupation with liberty and the possibility of an autonomous aesthetic sphere, and it is not my intention to critique, refine, or revise it (although I will return to some elements of it). Its very breadth, combined with the interconnectedness between many of its components, should tell us that Needham's work and the discussion it has provoked are both inspired by a misconceived assumption, responses to a pseudo-problem generated by approaching its question from the wrong end. Ferreting out all the achievements of Chinese science that "should" have prepared it to take a different path and then detailing the factors that kept it from doing so misidentifies what the conditions for such a mutation are. Individuals with the intellectual potential to analyze difficult problems and accomplish significant innovations exist in any human population, and even societies less sophisticated than China have achieved broad and efficacious knowledge about plants, animals, and minerals in their environment; learned to predict celestial movements and eclipses; and applied such knowledge to agriculture, treating illnesses, and instituting social practices that encourage and sustain such achievements. But the passage from being able to generate and refine such knowledge to establishing science as a sphere able to overturn and renovate the intellectual bases of its own practice is not an additive process. Proceeding further along lines already laid down is not a path to radical innovation.

The question about the relative readiness of Europe and China to initiate such a revolution should not be posed in terms of the relative extent or quality of the knowledge about nature each possessed, but in regard to the forms and institutions of intellectual life operative within each. What Europe possessed and China lacked were settings for intellectual inquiry over which cultural authorities were unable to exercise effective control, institutions and social relations within which openness to new forms of understanding and novel

ways of conceiving the world could survive and develop. The very features of Chinese life that provided the foundation for its many achievements were ones that stood against such openness. Of all world societies, China was the one where political and cultural control from the center, even when it was far from complete, was most firmly supported by the diffusion of officially sanctioned values. As R. Bin Wong observes, no Western state before the age of mass primary education combined the task of establishing political order with the spiritual and ethical formation of its subjects in the way the Chinese Empire did. "There is no early modern European government equivalent to the late imperial Chinese state's efforts at dictating moral and intellectual orthodoxy . . . Early modern European states did not share the Chinese state's view that shaping society's moral sensibilities was basic to the logic of rule."[9] (We considered some of the intellectual grounds for this difference in Chapter 4.) Nor was the emperor's role in this sphere only educative, since the "son of heaven" was the agent of cosmic power on earth, charged with performing ritual ceremonies and sacrifices on which the well-being of his realm depended. This combination created a tissue of interlocking barriers against the release of unwelcome potentials, not least the capacity to develop new ways of conceiving the world. Rather than seeing Chinese science as a preparation for a breakthrough that somehow failed to occur, we should recognize it from the start as the elaboration of a regime of knowledge that could become empirically very rich, but without ever creating any effective openings for the revision of its own basic assumptions and premises. Placing this contrast with the West at the center of our understanding, there is good reason to regard China not as the most likely candidate to take a path similar to Europe's, but as among the least. The very features of Chinese life usually cited as indicating such a potential operated in a context that tied them deeply to established institutions and assumptions.

To approach these matters we begin by recalling the contrast made in Chapter 7, between the new meaning and multiplying uses the word discovery acquired in Europe in response to the diffusion of knowledge about the New World, and the absence of any similar impact, or potential for it, in the much larger seafaring enterprise led by the Chinese admiral Zheng He. Despite their massive scale, these voyages were not aimed at finding new routes or establishing new diplomatic or commercial relations, but at reasserting Chinese dominance in areas where it had previously been recognized. Once the voyages ended, the outward orientation they might be taken to exhibit disappeared from Chinese life. "Except in respect of islands close to China, the state's hostility to maritime expansion never abated for as long as the empire lasted." There was even an attempt to ban all overseas trade between 1433 and 1567 (accompanied in later years by regulations against individuals traveling to other countries), and although the prohibition was widely evaded, its existence

bears witness to an inward-looking turn that would mark much of the country's later history.[10]

This inwardness was closely tied up with the imperial ideology that saw China as the center of all civilization and the emperor as ruler of "all under heaven" (*Tianxia*). The resistance such a notion presented to the redefined European understanding of "discovery" was manifested in 1602, when Matteo Ricci, leader of the Jesuit mission to introduce Christianity into China, displayed a world map that showed, almost certainly for the first time there, the new continents Europeans had been exploring for over a century. People came to see Ricci's map, clearly interested in the new information about the world it provided. But the viewers were unhappy because the representation of the continents failed to place China properly at the center of the world. Ricci's response was not to resist these objections (his chief strategy as a missionary – as we will see in the following chapter – was to look for elements of Chinese thinking similar enough to Christian ones to let him draw his hosts toward his beliefs by way of theirs, not to expose defects or errors), but simply to shift the perspective, putting China where his audience thought it should be. That he did not hesitate to do so reflected the way European maps by the end of the sixteenth century had generally abandoned the medieval practice of locating Jerusalem at the center of the universe (even then, neither Rome nor Paris nor London was given such a position), instead placing the Eastern and Western hemispheres side by side. The center of the Eastern one, which included Europe, Asia, and Africa, was somewhere close to the Indian Ocean.[11]

In this form Ricci's maps were widely diffused in China and published in popular encyclopedias; the compiler of one noted approvingly that having access to them meant that "you don't have to leave your house and yet you can have complete knowledge of the world." But as Timothy Brook points out, this knowledge was very much second hand, and Europeans had acquired it precisely by leaving home. Ricci's geographical information came from a mix of learned writing and practical exploration by mariners, whose reports cartographers relied on to create increasingly accurate representations of distances and coastlines. In China, partly because of the resistance noted earlier, there were no sailors or merchants "circumnavigating the earth and finding" new lands, "the only people bringing this information were foreigners, who were not always to be trusted." Ricci's hosts were interested in the new knowledge about the world he brought, but they were not prepared to use it in ways that Francis Bacon called up in 1620 with his pictorial metaphor of a ship sailing through the Pillars of Hercules. Indeed, the Chinese commitment to traditional forms of knowledge and understanding was nowhere more marked than in geography and cosmology.[12]

This commitment was intimately tied to the special position of astronomy as a discipline sponsored, supported, and overseen by the emperor, and dedicated to enhancing his power by showing and solidifying his connection to heaven

and its powers. Whereas astronomy in Europe developed in relation to myriad contacts and connections, sometimes serving the aims of secular and religious authorities and sometimes in conflict with them, Chinese imperial astronomers were always, as Needham acknowledged, "intimately connected with the sovereign pontificate of the Son of Heaven, part of an official government service, and ritually accommodated within the very walls of the imperial place." These ties reached back to an ancient Chinese state religion that established the sovereign as the conduit for celestial forces, which he was expected to direct in beneficial ways through rituals and ceremonies, a role he maintained to the end of the Empire in 1911. "Owing to the close association between the calendar and State power, any imperial bureaucracy was likely to view with alarm the activities of independent investigators of the stars, or writers about them, since thy might secretly be engaged upon calendrical calculations which could be of use to rebels interested in setting up a new dynasty. New dynasties always overhauled the calendar."[13]

This intimate connection between astronomy and official power in no way limited the quality of astronomical observation, which remained at a high level over centuries, monitoring and recording a remarkable range of celestial phenomena, including eclipses, novae, and comets (some of this data was borrowed from Muslim sources). But these qualities of Chinese astronomy provide an excellent illustration of the way that activities with a seeming potential to generate a "modern" interest in natural phenomena can actually contribute to the persistence of traditional ones: these observations were preserved much less in any separate body of astronomical literature than in the chronicles and records of the successive reigns and dynasties. They were testimonies to the connections the sovereign maintained with the cosmic powers he represented. Celestial phenomena were closely followed because of their status as prophetic signs and portents, indications of beneficent or threatening future events, not as material for reflection and inquiry about nature itself. To be sure this was the interest they held for many people in the West too, but alongside them there existed a smaller but still highly significant group whose professional identities as astronomers, mathematicians, or natural philosophers, their often conflicting views shaped by exposure to contrasting intellectual traditions, made them pay a different kind of attention to new stars and comets.[14]

Chinese views about the cosmos were by no means monolithic. One tradition envisaged the heavens as a bowl-shaped dome covering a flat earth, a second pictured stars and planets as revolving around the terrestrial center in a series of concentric spheres, not unlike Ptolemy's model but probably derived from pre-Socratic Greek ones, while a third conceived a universe of empty space, bounded or infinite, within which the various celestial bodies moved. All three were geocentric, which made it easy to imagine astrological influences raining down on a stable earth, and thus the emperor's ability to

draw on or defend against them. But Chinese astronomy was not premised on a physical theory that required the earth be at the universe's center in the manner of the Aristotelian notion of "natural place," as Ptolemy's was, which means that one powerful impediment to a heliocentric alternative was absent there. Both Needham and a second distinguished scholar of Chinese science, Nathan Sivin, have pointed to this absence as indicating that Chinese astronomy possessed a potential openness to heliocentric thinking greater than the West's. Both have associated the failure of sun-centered thinking to take root there with the refusal of the Jesuit missionaries who brought knowledge of Western astronomy to China to tell their hosts about Copernicus or Galileo. To be sure, once news about the papal condemnation of Galileo's *Two World Systems* in 1633 reached the Far East, the earlier Jesuit interest in heliocentrism, at least as a hypothetical basis for astronomical calculation – not to mention the honors given Galileo by the Jesuit college in Rome in 1611 and the friendliness toward him maintained by Maffeo Barberini both before and after he became Pope Urban VIII in 1623 – were no longer to be openly discussed. As a result, as Sivin in particular has demonstrated, the accounts of modern astronomy provided to the Chinese through most of the seventeenth century were fragmentary and confusing; not until the middle of the eighteenth century did it become possible for interested Chinese to know that Copernicanism, modified by Kepler's calculation of elliptical orbits and capped by the new Newtonian physics, had become generally accepted in Europe.[15]

Despite the papal condemnation, however, there were Jesuits in China in the mid-seventeenth century (Michael Boim and Joannes Smegolecki, to name two of them) who still recommended using Copernicus's tables and his method of calculating them, maintaining the old distinction between using heliocentric principles as a basis for predicting celestial movements and taking them as a real description of the universe. Had the absence of commitment to an Aristotelian physics really provided an opening for Chinese astronomers to take heliocentrism seriously, the materials for doing so were not absent. In any case, acceptance of a sun-centered universe in China was held back at least as much by astronomy's importance in the ideology and practice of imperial rule – affirming the physical location of China and the son of heaven at the center of the universe – as by any hesitancy about it on the Jesuit side. Sivin implicitly recognizes that it was this impediment, rather than any Jesuit failure to keep the Chinese informed, that kept the latter from considering Copernicanism, when he suggests that the Jesuits refrained from introducing it because they understood that a "sudden rupture with the traditional philosophy and science of China by substituting the heliocentric system for it would have encountered a violent resistance, and might have caused additional difficulties in spreading Christianity." In 1713 Emperor Kangxi eliminated questions about astronomical portents and the calendar from the civil examination for entry into government service "because they pertained to Qing

dynastic legitimacy," reiterating "imperial control over the public uses of European learning" that had been instituted earlier by the Ming. When, later in the eighteenth century, Chinese commentators encountered Copernicus's model of the universe, they condemned it for reversing "the positions of above and below" (i.e., no longer maintaining the earth at the center) and for upsetting "the relations of the moving and the static" (i.e., of the planets and stars as opposed to the earth). This was contrasted with "the perennial flawlessness of the traditional [Chinese] analysis of irregularities in the celestial motions, which only describes them without accounting for them."[16]

Given all these grounds of resistance to abandoning geocentrism, there is little reason to credit the notion that freedom from commitment to Aristotelian metaphysics made the path to a sun-centered universe more open in China than in the West. On the contrary, it was precisely the link between the earth-centered worldview and Aristotelian theory that made the Ptolemaic system vulnerable to refutation by observed phenomena in Europe in a way it was not in the East. The new stars and comets, and the unexpected features of the solar system revealed by Galileo's telescope, posed a direct challenge to the image of the universe as divided into a changeable, imperfect realm of material things below the sphere of the moon, and an immutable region of perfect spiritual substances above it. If that picture fell, so did both the metaphysical necessity that the earth be located at the center of the universe, and the account of terrestrial motion based the desire of objects to seek their "natural place" and return to their normal state of rest. Those devoted to understanding the nature of the universe needed both a new cosmology and a new physics.

Because these issues were not raised in China, there were no observations of celestial events that could call the geocentric universe into question. As we saw in regard to Chinese aesthetics, nature and the cosmos were understood in terms of forces that could never be captured by any stable set of rules or laws. The universe had an order to be sure, but it was an "ever-moving pattern and harmony," built up out of the fluid and unquantifiable interactions of *yin* and *yang*, *qi* and *li*, and the various groupings of correlated elements or principles whose interactions causal reasoning could not grasp. As Mark Elvin points out in regard to a notable seventeenth-century Chinese thinker, Fang Yizhi, such ways of understanding operated on a metaphysical level so high that they easily provided an explanation of "anything puzzling which came up ... It was unlikely that any anomaly would irritate enough for an old framework of reference to be discarded in favor of a better one."[17]

Even if some person had been moved to conceive such a shift, and had the courage to propose it in public, there are reasons to doubt that it could have spread and become established. Beyond the obvious problem of overcoming state opposition, China lacked the networks of formal and informal connections between people with a shared interest that were the pathways along

which new ideas spread in Europe, and by virtue of which nuclei of people who were drawn to them could coalesce. Mark Elvin has called particular attention to this contrast, naming what China lacked as a "density of interest" in science. Noting the bourgeoning concern for facts in Europe (in the British case flourishing in law courts, as Barbara Shapiro shows), he defines a fact as "an observable aspect of the world, set in the context of a systematic evaluation of the evidence that yields an approximate probability of its being true, and subject to a continuing, and public, scrutiny and re-evaluation." The growing power of such facts in Europe was dependent on

> the publication of reports through books and journals, and the exchange of ideas through learned societies, universities, museums and other such institutions. China had books, but the rest of this complex network was largely missing ... Although there were intermittent collaborations and occasional communications, the Chinese, in science, seem to have been loners in comparison with the Europeans.[18]

One consequence of this absence was a phenomenon to which other writers, including Needham, have called attention, but of which Elvin gives particularly telling examples, namely the repeated vulnerability of new ideas to being forgotten. One of these is a seventeenth-century treatise that sought to understand how sounds are transmitted by positing waves in the ether, comparing them to the widening circles produced by a stone thrown into water; the text was ignored and disappeared from view soon after its publication. But perhaps the most interesting instances come from medicine. During Sung and Yuan times, economic expansion and the new environments and occupations into which it thrust workers (wetter rice fields and high-temperature settings for metal production) confronted physicians with previously unidentified maladies. It was a moment when knowledge about anatomy was being deepened by dissection (practiced on captured rebels), and the careful observation of details examined there also entered into accounts of disease symptoms. Two competing schools emerged, one viewing illness as coming from the action of foreign influences on the body and recommending drugs in response (books cataloging herbal remedies appeared from the tenth century); the other regarded susceptibility to these alien forces as coming from prior bodily weakness, and advised patients to moderate excitements such as eating, drinking, and sexual activity. For the most part these theories were based on traditional notions of *qi* and *li* (in this case more or less translatable as energy and form), and on six ethers, among them dampness, dryness, cold, and fire, notions whose vagueness and banality have led some historians to doubt that they added much to the observations to which they were applied. But one seventeenth-century physician, Wu Youxing, went beyond these limits, recasting the notion of ethers in a way that seems to anticipate germ theory. From studying epidemics he concluded that the number of ethers capable of causing illness had to be

many more than six, that they were "only detectable by their effects" in particular species (humans and animals), and that they spread by being "passed from one member of the species to another." But this promising suggestion joined the pool of other stillborn ideas, calling forth no further discussion or inquiry.[19]

Something of the same phenomenon appears in the history of technology, where a remarkable example is presented by the water-powered spinning machine invented sometime before 1300. It produced thread by feeding raw silk or hemp onto rollers, a number of which were assembled in a frame so that they could be attached to a single source of power. The contrivance was used in various parts of China, especially where running streams were available to drive it, and a well-known book of 1313 depicted it in a way that shows its close resemblance to the water frame that would be important in the English turn to mechanized industry over four centuries later. But compared with later European counterparts (Mark Elvin cites one pictured in Diderot and D'Alembert's *Encyclopedia*) it retained features that limited the number of spindles that could be combined (there appear to have been 32; Arkwright's device would include over 1,000). The techniques developed to overcome such problems illustrated in the French publication would have been well within the capacity of Chinese artisans, since they involved gears similar to ones the latter employed in hydraulic clocks and water mills. But in China these improvements were never made, and "perhaps in consequence, the machine gradually fell out of use and finally disappeared altogether." Elvin is surely right that what led to this outcome was not any lack of scientific or technological know-how; what was missing was the motivation to draw on it, an absence he attributes to early fourteenth-century China having already expanded economically as far as the push provided by the Sung emperors, especially the stimulus generated by massive canal building, could move it. The book in which the roller-spinning machine was described, Wang Chen's *Treatise on Agriculture*, was the most comprehensive summary of productive techniques produced up to this time in China, printed and distributed by order of a provincial educational authority. But it virtually disappeared during the following period, so that only a single copy could be found to serve as a basis for reprinting it later on. Chinese history exhibits many examples of people capable of enriching both practical and theoretical understanding, but whatever potential for fundamental scientific innovation their talents augured was stunted by the conditions in which they worked.

* * *

All the same, Chinese thinkers did eventually embrace modern scientific ideas, turning away from the forms of understanding about both nature and science itself that long kept them apart from the West, and we need to look briefly at

how this change came about. Both its context and the impetus behind it have been elucidated by Benjamin Elman in a book whose title is also a thesis: *On Their Own Terms*. In important ways the Chinese were themselves the chief authors of their own transformation. But Elman's account also makes clear that Europeans were essential to initiating it. One way they became so was by shaking Chinese confidence in the superiority of their mode of life to that of foreign barbarians by the one-sided defeat of the Empire in the first and especially the second of the two "Opium Wars" that ended in 1842 and 1860, breeding many forms of internal discontent that would feed both uprisings and reform movements for the rest of the century, culminating in the end of the imperial regime in 1911. The second way was by taking advantage of the freer access to China the Empire was forced to grant, by sending missionaries in the hope of converting the country to Christianity. Much like their predecessors two and a half centuries earlier, the Jesuits led by Matteo Ricci, these visitors sought to use the superiority of Western science as a lure, thinking that those who recognized the power of European understanding of nature would also be prepared to hear the message of the gospel. This time, however, the missionaries were Protestant, the science they brought was far more developed and wide-ranging than what their Catholic predecessors had possessed, and they were able to operate much more freely within Chinese society.[20]

The envoys came from various Protestant denominations, and many of them were medical missionaries (mostly members of the London Missionary Society), whose training provided them with general knowledge about chemistry, biology, and other disciplines. Some of them had good Chinese language skills and dedicated themselves (often with help from local collaborators) to translating and publishing Western treatises. These were not limited to scientific subjects, and as early as the 1830s some of what the presses produced provided Chinese readers with new knowledge about Europe and its component peoples and states, as well as "a new Chinese vocabulary for political institutions, economic prosperity, and national aspirations." Not all the impetus for such innovations came from abroad; already in the 1840s one Qing official proposed to include mathematics and manufacturing in the examinations for entry into state service. But "because such requests fell on deaf ears in the court in Beijing, the early introduction of modern science and technology was left to the Protestants and their converts in south China." The wide range of subjects opened up by the missionary publications included electricity, looked to in Britain at the time as a promising form of medical treatment, and an Almanac of 1851, illustrating devices for both storing and transmitting it, also provided a discussion of magnetism that "made Chinese encyclopedias obsolete." Elman emphasizes that the vocabulary used in all these publications was often chosen or modified by the foreigners' local collaborators, but the works translated were European ones, and the

"unprecedented series of modern medical works" produced in this way "remained standard in China until the late nineteenth century."[21]

Some Chinese resisted certain Western notions and practices, for instance in anatomical studies, where one physician argued that examining a dead body could not help to understand a living person. Others simply found that some European diagnoses and treatments could not be adapted to China because the climate was too different. But discussions of such things "added to native debates among practitioners," and the Chinese increasingly acknowledged the need to synthesize Eastern and Western science. For some this meant a direct critique of traditional Chinese approaches. One of the principal translators and teachers, Benjamin Hobson, who worked mostly in Hong Kong and Guangzhou (Canton), and who wrote a wide-ranging medical treatise for the use of his students, found that "by including sections on physics, chemistry, astronomy, geography, and zoology," he unexpectedly attracted the interest of dissatisfied literati, most of them unsuccessful in the state examinations. By the 1870s some of these students were voicing discontent with traditional Chinese concepts, attacking the dialectics of *li* (form) versus *qi* (principle) and *yin* versus *yang*, and the attempt to understand all bodily organs and functions in terms of the five elements, wood, metal, earth, fire, and water.[22]

These critiques would grow more forceful in the later nineteenth century as Chinese defeat by Japan in the war of 1894–95 gave a further boost to intellectual disillusionment with the country's traditional culture. Japan had earlier developed a movement called Dutch Studies, *Rangaku* (because Netherlanders and their books were for a time the chief source of Western knowledge there) to draw on European science as a counterweight to the long-dominant Chinese influence, and Chinese critics of their own inheritance now began to take elements from it too. These various strands led to a situation in which, by around 1900, reformers and radicals "increasingly demeaned their traditional sciences as incompatible with the universal findings of modern science." In the next decades the idea "of a universal and progressive science first invented in Europe replaced the Chinese notion that Western natural studies had their origins in ancient China," and advocates of a movement called New Culture "helped replace the imperial tradition of natural studies and classical medicine with modern science and medicine." As Elman shows, this result could not have been reached without the efforts of native critics and reformers (whose practical work, most of it devoted to military goals in arsenals and armories, we need to skip over here); but without the presence of the foreigners the Chinese opening to modern science would not have taken place as it did. The missionaries achieved a certain number of conversions, and some of the Christian ideas they put abroad would surface in the Taiping Rebellion that raged in the South between 1850 and 1864, but overall their attempt to use the quality of Europe's science as evidence for a similar

superiority of its religion failed, just as it had for the Jesuits. Much resistance to Western influences both intellectual and practical remained in late nineteenth-century China. But the science made its entry all the same, as the decline of confidence in traditional Chinese learning opened a space where interested people could recognize the benefits of a scientific domain regulated by principles derived from its own practice, and able to generate knowledge that retained its theoretical and practical validity outside the culture where it arose.

This story leads to one observation in conclusion. A number of historians today take as a goal to "provincialize" European science in the way others have done for social and historical theory, viewing it as simply an aspect of the way of life that gave birth to it. They portray European science as only one among many "knowledges" or "knowledge communities," each giving an account of the world in accord with its particular way of inhabiting it, and none possessing any legitimate ground to be preferred to another. As one contributor to this current claims for it, "new scholarship has convincingly shown that scientific research is not based on logical step-by-step reasoning but on pragmatic judgment, much as in the practical crafts," and that "scientific knowledge turns out on this showing to be local everywhere."[23] Certainly much knowledge of all kinds, including some rightly included under the rubric of science, is indeed local, as anthropologists have especially stressed, but there is much reason to reject such a view when extended to natural science. It is one thing to label Marxism or liberalism as locally European perspectives, whatever light they may shed on the conditions of individual and social existence elsewhere, and another to try to put the same stamp on cosmology, physics, chemistry, or biology.

One sign of the extreme partiality (in both senses) of such attempts to deny the special historical place of European science is that they have long been accompanied by a claim there would be no reason to make if the knowledge they seek to provincialize did not have some exceptional value – namely, that it already formed part of some other culture's lost wisdom. An early expression of this notion came from the late eighteenth-century Japanese reformer Sugita Genpaku, a physician whose interest in Western anatomical studies made him one of the first Asian figures to rank European medicine above his own and advocate taking over its methods and content, but who simultaneously preserved his loyalty to Confucian teaching by asserting that many of the things illuminated by Western science had been known earlier in China and forgotten. Similar views were developed by some of the students and collaborators of the Protestant missionaries who brought Western science to China from the 1850s, many of whom held to what Benjamin Elman calls "the strategic myth that all Western learning could be traced back to ancient China." At roughly the same time the Arabic language journal *Al-Muqtataf*, the chief organ of the introduction of Darwinian thinking into the Ottoman Empire, published a letter declaring evolutionary theory to be "nothing but a reformulation of

medieval Arabic ideas." The editors received so many communications in a similar vein that they finally had to issue an explicit denial that Darwin's theory had been known to earlier Arab thinkers; had this been the case it would not have been ascribed to him. All the same, claims that much earlier Arab thinkers had anticipated Darwin were still being advanced in the early twentieth century, evidence for which one writer found in an ancient text describing the emergence of a new species from the copulation of dung beetles. When the Muslim Association for the Advancement of Science was established in 1983, its founding principle was that only ideas consistent with what was written in the Quran or Islamic law codes could be regarded as true. Science can be pursued under such a constraint, but among its goals will not be giving free rein to the human capacity to understand the world better.[24]

PART III

Openness and Domination

9

Other Peoples, Other Places

One way humanity as a whole gives evidence of its potential to transcend the particular ways of life its subgroups create is by way of the multitudinous variety these forms take, bringing forth the contrasting values and practices, the often mutually unintelligible languages, and the myriad ways of ordering individual and social existence that human societies exhibit. A group having no contact with others might never have to confront the implications of this diversity, but those unblessed by such isolation must sooner or later become aware that theirs is not the only manner of being human. Perhaps the most common response is to seek protection from this revelation by casting outsiders as barbarian, savage, decadent, perverse, or radically inferior, making otherness into a bulwark against the potential challenges it poses. But other reactions are possible, notably taking the revelation of diversity as a spur to put in question the special claims made on behalf of one's own way of life. These two contrasting reactions – building walls and opening up windows within them – coexist to some degree within many human groups, creating complex mixtures of exclusion and openness toward others. In this and the following chapter we consider where Europe has fitted into the range of possibilities these alternatives generate, focusing on the period from the Middle Ages to the eighteenth century.

The first point has to be that Europeans have exemplified the more dismissive and destructive of these two responses in highly developed and especially deplorable ways. Both learned and popular voices have been prolific in conjuring up stereotypical and alienating descriptions of other groups, degrading their humanity and taking their putative vices and defects as negative mirrors against which to project some set of often imaginary European virtues. Such stereotyping and myth-making was long especially true of European attitudes toward the alien culture geographically closest to it, Islam, whose powerful armies repeatedly challenged European rule between the eighth and the seventeenth centuries, notably in Iberia and in the border regions to Europe's east. Cruelty, bestiality, deceit, lust, and dirtiness were among the labels pinned to the Muslim enemy. Even more subject to such disparaging forms of cultural projection were the "savages" encountered in the New World, and the Black Africans sometimes compared to them, the latter often given lowly status in

the Middle Ages but demeaned still more as chattel slavery became established in the Americas. Out of the need to legitimate the domination and exploitation to which both groups were subjected, there developed the special mode of asserting inferiority that became "scientific" racism, its consequences visited especially on darker-skinned people, and in Europe itself on Jews.[1]

However sordid and deplorable, this history of ethnocentric debasements and aggressions constitutes only one side of what defines Europe's place in this story. Although sometimes forgotten in the shadow of colonialism and racism, Europeans in many historical moments also displayed a singular openness to foreign peoples and places. The marks of this openness were an exceptional interest in travel and writings about it, in learning non-European languages and translating and circulating texts written in them, in correcting their own forbears' calumnies and defamations of others by exposing myths and legends for what they were, and by acknowledging the historical and cultural achievements of other peoples. All human groups are ethnocentric at their core, but they differ in the degree to which they develop ways to call their own and others' self-centeredness into question. The extent to which Europeans did so would be one reason why the contrary ways of portraying others that developed to justify imperial expansion would take on so assertive and hyperbolical a tone. Even so, the more open and self-critical consciousness was never driven from the field, recovering its place in European (and more generally Western) life since the end of the Second World War.

Two distinctive aspects of European existence helped prepare the ground for this openness, one religious and one secular. The religious one stemmed from a peculiar feature of European Christianity. Arab Muslims, Indian Hindus, and Chinese Confucians and Daoists all located the wellsprings of their central beliefs and practices in their own home regions, closely tying their culture to features of local geography and history. Not so European Christians, whose God had chosen to reveal himself in places well to their east. This gave those who absorbed the Gospel message a concern about distant locales, beginning with those mentioned in the Bible, for which no similar encouragement existed in other traditions. To be sure this concern could become aggressive, as it did in the series of Crusades that began with the papal summons to liberate the Holy Land from its infidel overlords in 1095. But that this was in no way its only expression will become clear in what follows.

The secular background of the singular European interest in others lay in the circumstance that people there lived among evidences and remnants of a civilization to which they owed much, and that both was and was not their own, since it was Roman but not Christian. The official language of the Church, Latin, was not the one in which the Christian God had revealed himself, but the idiom of an originally pagan state, and the literary texts commonly used to teach it, even in Church-related schools, kept alive many pre-Christian elements of Roman culture. Morally and theologically suspect

works by such writers as Ovid and Lucretius were commonly read as models of poetic writing, even by monks and nuns. Building a cultural ideal on the work of figures cut off from religious truth and faith in the way Dante did for Virgil and Petrarch for Cicero is nearly unimaginable in an Islamic context, and so was the practice of town and city dwellers who cast their political commitments in terms taken from Sallust or Livy. Remi Brague's observation that Europe even before the Renaissance was prone to a "consciousness of having borrowed what it could never hope to repay from a source it could neither recover nor surpass," did not apply universally to be sure, but the formula points to an important element in what drew literate Europeans outside their everyday sense of themselves.[2]

To be sure, Islam too conceived of itself as the heir of earlier and foreign traditions, acknowledging both Moses and Jesus as great prophetic forerunners of Muhammed. But these earlier conduits of divine knowledge were superseded once the third and ultimate revelation took place; respected as they were, the meaning of the Old and New Testaments had to be construed in Islamic terms, so that their place in Muslim culture cannot be compared to that of the pagan classics in Christian Europe. In addition, the Arabic of the Quran was not just the language of holiness but taken to be an unsurpassable literary model, leaving no reason to learn other tongues, as Europeans learned Hebrew or Greek, in order to understand the sacred text better. Aside from Persian, which many Muslims in India knew and used because it was both a major literary language and the official administrative idiom of the Mughal Empire, interest in foreign languages long remained restricted in all the regions to which Islam spread. Certainly, Muslim translators and philosophers demonstrated great respect for the ancient philosophical writings they preserved and passed on to Europeans, but as we saw earlier, this original enthusiasm was challenged by prominent figures whose hostility to the heretical implications of Greek rationalism inspired their largely successful effort to banish "foreign sciences" to the margins of Islamic culture. What Patricia Crone and Michael Cook call Islam's "heavy concentration of cultural resources in a single tradition" assured that when movements that sought some kind of intellectual or spiritual renewal appeared they directed their attention strictly to Muslim sources. The same contrast applies to India, where, as Tapan Raychaudhuri confirms, "traditional Hindus showed a remarkable lack of curiosity about foreigners, particularly Europeans," a situation that only altered as the British presence on the subcontinent expanded in the later eighteenth century, making possible the new interest in Western life exemplified by the two travelers we discussed in Chapter 4, and by Ram Mohan Roy's deeper involvement with Europe; in a similar way, Buddhism competed with native traditions in China, but never produced the general sense of indebtedness to an alternative culture widely diffused in Europe. Only as the felt need to catch up with European knowledge and

power grew was any significant interest in non-Asian languages generated in China or Japan.[3]

The first realm that testifies to the singular interest in other peoples and places to which these religious and secular differences contributed is travel, and the first evidence that confirms it is quantitative, provided by the statistics assembled by Daniel Roche, based on a multivolume bibliography compiled early in the nineteenth century by a French lawyer and jurist. Numbering 456 entries in the hundred years after Columbus's and Vasco da Gama's voyages in the 1490s, the catalog of publications about travel grew to 1,566 titles in the seventeenth century, and 3,540 in the eighteenth. Works in German and French were the largest component of the total, with English language writings next; Spanish and Italian texts, nearly a third before 1600, slipped to less than 10 percent in the two centuries that followed. Europe itself was the subject of more than half of these works, but no less than 2,200 of them treated Asia, the Americas, Africa, and the southern Pacific. Collections of travel accounts constituted a notable genre in itself, starting with the widely circulated compilations of Giovanni Ramusio (1550) and Richard Hakluyt (from 1582), followed by German, French, and Dutch collections in the centuries that followed.[4]

Nothing like this level of interest can be documented for any other part of the world. Medieval Arab travelers wrote about China, India, and Russia, and early modern ones about Europe, describing their experiences and reporting on the life they saw in insightful ways, displaying the abilities all human beings possess, at least potentially, to make some degree of sense of other people's ways of life. But this literature was sparse and scattered by comparison with its European counterpart. Like other literary genres, Muslim travel accounts only existed in manuscripts, since printing was largely forbidden in the Ottoman lands before the eighteenth century (only non-Muslims were allowed to engage in it) and even after the first Turkish press was set up in 1726 the number of volumes on all subjects produced by 1838 was less than 150. The authors of a study aimed at showing that interest in travel was not a strictly Western phenomenon, and who concentrate on early modern writings in Iran and India, are able to cite a few examples in Arabic and Persian, but note that "[o]utside of the narrow Indo-Persian sphere . . . the South Asian sub-continent itself is rather dismaying" in its lack of travel accounts. Literatures in "Sanskrit, Tamil, Pali and the Prakrits can between them hardly conjure up an example worthy of the name, beyond the highly stylized imaginary voyage." The single extra-European country with a highly developed travel literature was China, but for as long as the Empire survived it was largely confined to domestic journeys, often undertaken by literati banished from the imperial court, and concerned largely to depict landscapes in ways that illustrated Confucian understandings of nature.[5]

But it was the ability travel conveyed to widen experience of the world that came to matter most to awake Europeans. One famous affirmation of it was René Descartes's declaration that, having found little sustenance in the traditional scholastic education offered by his teachers, he left them behind in order to seek knowledge inside himself and in "the great book of the world," dedicating the rest of his youth to traveling, observing "courts and armies, frequenting people of various humors and conditions, [and] collecting diverse experiences in order to test myself in the encounters fortune put in my path and reflect on them in ways that would benefit me." The idea was fleshed out by later writers, one of whom identified the advantage of going abroad as effecting a change of place that could correct defects in human character, much in the way a tree could be improved by transplanting it into an environment more favorable to its growth. Testing oneself against unfamiliar places and becoming enriched by the encounters and observations they offered allowed a person to return home both less provincial and more connected to the world than before. It was an idea that owed something to ancient Stoic cosmopolitanism, and it attributed benefits to travel analogous to those aspired to by philosophical citizens of the Republic of Letters, who sought (as we saw at the end of Chapter 7) to lessen the power of internalized ideas and prejudices by bringing individuals formed in one locality into contact with others.[6]

These notions did not go uncontested. As the quantity of books exploded and claims for the benefits of travel took on a more exalted tone, people devoted to stability and tradition found many reasons to recommend staying home. Exposing oneself to foreign ideas and customs was dangerous, they thought: learning about the sexual practices of Hindu temple dancers or South Sea Islanders could corrupt morals, and interest in heathen superstitions only sowed intellectual confusion or worse; to some, even learning foreign languages seemed perilous. Such suspicion of travel was sometimes voiced by well-known figures, notably Jean-Jacques Rousseau, but even with such support the critics never gained the upper hand. In the 1780s the Academy of Lyon sponsored an essay contest on the question. Opponents of travel depicted it as a threat to whatever religious faith France had left, but submissions in favor of travel outnumbered the others (by twenty to four), and the debate produced some exalted defenses of foreign experience. One contestant argued that a traveler gives the same kind of attention to other countries as to his own, with the difference that he regards the latter "as a sick friend for whom he seeks remedies from the whole universe." No longer "French, English, German, or Indian," such a traveler becomes "a citizen of the earth," but without forgetting his home, to which he brings "a heart warmed by patriotism and the desire to dedicate his knowledge, understanding [*lumières*] and zeal to others."[7] The new significance given to travel by the bourgeoning literature about it was part of a larger cultural shift. As Felipe Fernández-Armesto puts it, 1492 marked the moment when a world "divided among sundered cultures and divergent

ecosystems" began to take form as "a single web of contact, communication, contagion, and cultural exchange." The eighteenth-century *philosophe* and editor the Abbé Raynal wrote that "It was at this moment that the men of the most remote countries became necessary to one another . . . and everywhere men communicated their opinions, laws, customs, remedies, maladies, virtues, and vices." Awareness of this transformation would eventually become global in scale, but for centuries its impact remained lopsidedly European.[8]

To be sure, this does not mean that all or most Europeans were transformed in the same way. As we have just seen, the alien ideas and practices with which travel put people in contact were not welcomed by everyone, and among those who would have been happy to see them eliminated were official or self-appointed guardians of traditional faith and morality. But under European conditions there was scant possibility that their resistance could prevail; the printing press was available in too many different places, as the statistics we reported earlier in this chapter make clear. This does not mean that censorship was never effective in early modern Europe; there were numerous situations in which books rejected by authorities could not reach the public. But, as Robert Darnton has been reminding us in a series of pathbreaking studies over the past decades, many forbidden books not only did so, but became best-sellers in France, printed abroad and finding their ways to readers along a highly organized set of clandestine routes. No such evasions of authority were possible in the Ottoman Empire, where the prohibition on printing long helped to keep foreign ideas at bay, aided by the widespread suspicion of foreign ways of thinking fostered by al-Ghazali and his followers. In China and Japan the deep attachment of literate people to classical Confucian notions had somewhat the same effect (although this situation began to change in Japan with the rise of "Dutch Studies" in the eighteenth century, and later in China), and in neither place is it possible to imagine a writer like the French one quoted in the previous paragraph, publicly characterizing his own country as "sick" in ways that might be remedied by the contact travel afforded with others, or its people as improved by distancing themselves from it. The suggestion that Indians might be among those who employed travel in this way in the eighteenth century is not out of the question, but known examples do not go beyond Taleb Khan and Mirza Sheikh I'Tessamuddin, the two Indians whose admiration for British freedoms we noted earlier. Two Turkish envoys who visited Paris in the 1790s showed themselves unable to believe that either Western science or Enlightenment writers had anything worthwhile to teach them.[9]

A second dimension of European openness to others is the energy devoted to learning languages native to other regions. Yes, religious controversy and missionary conversion were prime motives for medieval Christians to learn Arabic. But as Thomas Burman points out, even writings studied and translated in order to mount arguments against the ideas they contain can generate

a wider, if unintended interest in the language and culture they represent. "Picking up the Quran leads to reflections on whether the version in his hands is adequate for his polemical tasks; the meaning of the Arabic original must, therefore, be determined; authorities ... consulted, ... the conventions of Quranic narration ... considered, the practices of Arabic, and specifically Quranic, orthography thought through." Even the first European translator of Muhammed's work, the twelfth-century scholar and diplomat Robert of Ketton, whose version was valued almost entirely for the support it could give to anti-Islamic polemic, already foreshadowed this later development by being careful to couch his Latin rendering in the lofty style of literary prose recommended in rhetorical manuals for the most important and esteemed texts.[10] But it was in the age of Renaissance humanism, with its conviction that rediscovering the genuine Latin of Rome was a key to reviving ancient culture, that the potential Burman identifies found significant realization. In 1518 the Italian cardinal Egidio of Viterbo, himself a scholar of Hebrew and the Kabbalah, and who maintained close connections to Florentine humanist circles, commissioned a new translation of the Quran, published in an edition with parallel columns of Arabic text, Latin transliteration of it, and explanatory notes. Two years earlier there had appeared the "Complutensian Polyglot" Bible (named for the Madrid university still in existence there), which provided (depending on the Book and verse) Latin, Greek, Hebrew, and Aramaic texts in parallel columns. Additional multilingual Bibles appeared soon after in Paris and London.

This interest in Eastern languages would find one of its most remarkable expressions in the decision of the Jesuit Order to base its mission to China at the end of the sixteenth century, led by Matteo Ricci, on serious study of Chinese language and culture. To be sure, the project of converting the Chinese to Christianity had little prospect of success if its participants could not communicate with their hosts – or even if they could: many Christian doctrines made little sense to the Chinese, who were not unsurprisingly upset by the notion that the ancestors they worshiped had been consigned to the flames of Hell, and skeptical or bewildered in face of the notion that the "master of heaven" to whom the Christians did homage appeared from a local perspective as "Yesu, a man of the period of the Emperor Ai, of the Han dynasty" (a less convoluted manner of "provincializing Europe" than some more theoretically driven recent ones).[11] But Ricci and some of his associates prepared themselves by acquiring not just the language but an impressive knowledge of the classic texts written in it. As a sign of his attempt to participate in Chinese culture Ricci dressed to present himself not in the guise of a Christian priest, but as a man of letters in the lineage of the literati; he regularly wore Chinese clothing appropriate to them, and was sometimes portrayed in it (Figure 5). This was not intended as a disguise, since Ricci and his companions were easily recognizable as Europeans. Westerners had

Figure 5 Portrait of Matteo Ricci in China. (Artist Unknown, perhaps Manuel Pereira, known as You Wenhui, *c.* 1610). From Wikimedia Commons.

lived in Eastern countries before, sometimes over periods long enough to marry and have children, and thus assimilating themselves to some degree to local life. But Ricci's attempt to present himself as a foreigner whose interest in Chinese culture was deep enough to become part of his identity brought this involvement to a new level.

The desire and ability to do this was part of the many connections the Jesuits maintained with the classical humanism of the Renaissance (giving the Order an intellectual quality it has maintained ever since), whose determination to recover ancient Latin and Greek culture through serious philological study helped inspire the similar attention to Eastern languages manifested in the polyglot Bibles. One direct connection between the Jesuits and this attention was through Guillaume Postel, a French humanist who knew Ignatius Loyola as a fellow student in the Parisian *collège* both attended, considered becoming

a Jesuit himself, and remained in contact with friends who did throughout his life. Postel knew all the languages contained in the polyglot Bibles, and had some acquaintance with others. His linguistic studies and humanist sympathies with pre-Christian culture provided a basis for his conviction that all religions rested on common foundations (best developed in Christianity, to be sure) and that once these were understood many non-Christian peoples might be converted, if addressed in the proper terms.[12]

Matteo Ricci harbored similar notions, believing that a primordial monotheism had been present in the distant Chinese past, brought to the East by the descendants of Noah, who peopled the whole earth after the Flood. Proficiency in Chinese allowed him to search for confirmations of this idea, and the mix seems to have contributed at once to the mission's weaknesses and its strengths. Determined to find anticipations or remnants of ancient monotheism in classical Chinese literature and philosophy, Ricci seized on Chinese terms that could be translated as "lord of heaven" or "son of heaven" to refer to Christian conceptions of God and Jesus. This strategy may have contributed to the appeal his teaching made to some at the imperial court (where he made a number of converts), but those who resisted it were able to accuse him of misreading the texts, perhaps intentionally, to serve his ends. One denounced his claims to draw on Chinese traditions as "duplicitous," intended "to steal our way [*Dao*] in order to betray it." Another accused him of "manipulation . . . in order to deceive people and undermine the foundations of our empire," foreshadowing later critics of what would come to be called "cultural imperialism." But the Jesuits did genuinely valuable work as translators, providing their hosts with useful and welcome texts, notably Ptolemy's astronomical treatise the *Almagest*, valued for its aid in providing more accurate predictions of eclipses (a matter of great importance to the imperial regime, as noted in the previous chapter). It was Jesuit learning, both linguistic and practical (for instance in hydraulics as well as astronomy) that chiefly led the Chinese to accept the foreigners' presence in their country. As one missionary acknowledged, their hosts chiefly valued them as "useful specialists."[13]

At the same time, the Jesuits rendered numerous Chinese works into Latin, thus feeding a bourgeoning European interest in Eastern cultures in general, and the widespread admiration for China in particular that grew from the seventeenth century. Between 1500 and 1750 some 1,500 works about Asia were published in Europe. As Donald Lach and Edwin van Kley describe this outpouring of interest, "What began as a stream of information about Asia in the sixteenth century became a virtual deluge during the seventeenth . . . In addition to scores of Jesuit letterbooks, compilations, and numerous shorter or derivative descriptions, over fifty major independent accounts of China and its periphery appeared." The best-known and most celebrated result of this explosion of interest was the highly favorable view of Chinese civilization that spread throughout Europe, pushed forward by influential figures

beginning with the German philosopher G. W. Leibniz and most famously advanced by Voltaire, who called China "the wisest and best governed nation in the universe," practical, tolerant, and peaceful, all in contrast to features of his own country he deplored. China was praised for the purity and simplicity of its morality, especially by Deists who offered these qualities as evidence that revealed religion was not a prerequisite for a moral life, and Chinese styles of decoration were copied by painters such as Watteau, and in garden design. This flow was not wholly in one direction, Chinese artists adopted Western techniques too. "However, whereas in China the influence was not openly acknowledged, and indeed appears to have been expressed unconsciously, in Europe the influence was widely acknowledged."[14]

Perhaps more significant than this interest in China, because it required a reversal of existing views, was the nearly simultaneous attempt by a series of scholars and writers to wean Europeans away from the negative and demeaning image of Arab and Muslim life and culture that had developed during the Middle Ages. A chief pioneer in this reevaluation of Islamic life was an Oxford scholar who like others in his time had an interest in Jewish history as well, Edward Pococke. The first occupant of a chair in Arabic at Oxford, Pococke spent several years in Aleppo and Constantinople acquiring materials on Arab culture, which he then employed in his *Specimen historiae arabum* (*A Sample of the History of the Arabs*, published in 1650), which presented previously unavailable sources together with essays on Arab science, literature, and religion. As Alexander Bevilacqua (on whose recent work we largely rely here) concludes, Pococke "endow[ed] the history of the Arabs and of Islam with the same dignity traditionally afforded to that of the Greeks and Romans," making this intention explicit by providing extensive analogies "between the classical past and Arab and Muslim culture and history." Pococke began the process of debunking long-repeated disrespectful stories about Muhammed, pouring cold water on the idea that he trained a dove to eat from his ear and then pretended it was an emissary of the Holy Spirit. Several of his readers carried the task further, among them the Dutch scholar Adrian Reland, who derided the "silly fictions" circulated about the Prophet, adding that had they been true "one would have trouble understanding how so many diverse nations could embrace such an absurd religion, at least short of regarding all Mahometans as imbeciles." Neither Pococke nor Reland was moved by personal sympathy for Islam as a religion; their desire to clear the record began in the service of making Christian arguments against it more effective, by freeing them from errors and basing their case on what Muslims actually believed. But their insistence on having genuine knowledge generated a more neutral and respectful interest in Islamic life and culture, much in the way that the study of the Quran did for the Arabic language.[15]

One object of this shift was an appreciation of Muhammed as a political leader and lawgiver, a role recognized earlier by Machiavelli. The London

solicitor and Arabist George Sale declared that "If the religious and civil Institutions of foreign nations are worth our knowledge, those of *Muhammed*, the lawgiver of the *Arabians*, and founder of an empire which in less than a century spread itself over a greater part of the world than the *Romans* were ever masters of, must needs be so." In pursuit of this under-standing Sale in 1734 published an English translation of the Quran, the first made directly from Arabic (a version based on an earlier French text had appeared in 1649), prefacing it with a "Preliminary Discourse" praising the book's style (although he did not attempt to capture its poetic qualities, presenting the text in prose) and noting that Muslim notions often critiqued in the West had analogies in Christian and Jewish doctrines, including the notion of holy war; in effect his comparisons recognized that all religions had histories largely shaped by secular forces, even if they were based on revealed truths. Later writers extended these arguments, notably Simon Ockley, whose widely read *The Conquest of Syria, Persia, and Aegypt, by the Saracens* (1708) compared Arab expansion to that of the Romans, giving Islamic history "the status of an epic." His follower, the German historian Johan Jacob Reiske, insisted that there were more formidable figures in Islamic history even than those considered as classics in the West, not excluding Roman generals and Alexander the Great.[16]

Neither the highly favorable views of China that circulated in the seven-teenth and eighteenth centuries nor the various attempts to rehabilitate Islamic religion, history, and social life should be taken to suggest that the European image of the Orient was scrubbed clean of negative features. On the contrary, certain criticisms of the East intensified in this same period, particularly in regard to politics, where the notion of Oriental Despotism began to preoccupy thinkers and writers. But the belief that some Eastern governments were despotic did not become prominent at this point because it provided a vehicle for asserting Western superiority, or in order to justify imperial expansion. Oriental Despotism became a target of concern out of a fear that the phenomenon it described was threatening to transform Europe's own political order, depriving people of the real or potential freedom inherent in their form of life.

The notion of Oriental Despotism was first articulated by Aristotle, who located the phenomenon's home in the Persian Empire which, unlike Greece, had never experienced political freedom. The reason, in his view, was that Persians were servile by nature and fit only to be slaves. Hence the despotic kings who ruled over them were not usurpers, like the tyrants who might emerge from failed republics, but hereditary monarchs endowed with a form of power appropriate to the subjects they ruled. Elements of this notion persisted in the modern thinker who did most to give the idea new currency in the eighteenth-century, the French writer and theorist Charles Louis de Secondat, Baron de Montesquieu. But what led him to focus on it was precisely a fear that

such despotic rule could be established in a country which did possess a capacity for freedom, namely his own France. This danger arose out of Louis XIV's moves to undermine the traditional rights and privileges of his subjects, in order to extract enough revenue to pay for his expansionist wars and the much larger armies he raised to fight them. The regime toward which these policies tended threatened to become despotic because in it the king would rule "by his own will and caprice" (examples of which we saw earlier in the government's manipulation of the system of privileges), no longer restrained by established laws and customs in the way that rulers in nondespotic monarchies were expected to be.[17]

In calling this despotism Oriental, Montesquieu was harking back to Aristotle's language, but he was also building on a series of observations about Eastern life that began at the end of the sixteenth century. Probably the first Europeans to speak in such terms were Venetian ambassadors to the court of the Ottoman sultan, who in some of the reports sent back to the Republic, set aside an earlier image of the Ottoman state as powerful, well-regulated, and stable, replacing it with one that portrayed the regime as corrupt and disordered, its offices no longer filled by members of substantial and responsible families but by mercenary *parvenus* (an especially unwelcome development in the eyes of patrician Venetians), who cared less about freedom than about the benefits they could receive from corrupt rulers. Leaving aside the question of how just these accounts may have been, the regime was surely in difficulties, probably having overextended itself in its combat with the Persians and humbled at the battle of Lepanto in 1571. In 1595 the new sultan, Mehmet III, put to death fifteen of his brothers and twenty of his sisters (some of them half-siblings) to assure that none could become centers of opposition to his rule (intrafamilial murders would be cited by Western critics of the Indian Mughals over the next century too). The Venetians did not invent these critiques on their own, however. The ambassadors' reports echoed complaints being voiced by Ottoman observers themselves, from whom the envoys seem to have taken their cues. The main difference was that the Turks saw the problem as indicating that the rulers had fallen out of the circle of justice (whose centrality to Islamic political theory we noted in Chapter 4) on which loyalty and stability depended, so that the state needed to be saved by a return to its basic principles, led by a sultan who could follow the more godly models of the past. Achmed I, who came to the throne in 1603, appeared to be such a ruler, but he was dead by 1617, and his influence seems not to have lasted, since internal critics were back on the attack in the 1630s.[18]

The Venetian ambassadors, however, did not take much note of these ups and downs, maintaining the judgments developed in the years following Lepanto into the seventeenth century. Part of the reason for this may have been decreasing respect for a rival power beginning to show signs of decline (although evidence for it was far from decisive before the failed siege of Vienna

in 1683), but the scholar who has given closest attention to these developments, Lucette Valensi, suggests a different explanation, namely that the Venetians were worried about indications that such freedom as they themselves enjoyed was under pressure in Europe, and saw the situation to their east in this light. Venice itself faced a political crisis that raised fears for the Republic in 1582, the Medici domination over Florence was becoming increasingly monarchical, and absolutism was advancing in England once the Stuarts came to the throne, as it was in Bourbon France. Observers in all these places worried that the rise of more authoritarian regimes posed threats to some form of cherished freedom, and a series of influential thinkers, some with knowledge of the Venetian *Relazioni*, elaborated the idea of Oriental Despotism and gave examples of it in order to call attention to the dangers to liberty they feared closer to home.

Among there were Giovanni Botero, who wrote a famous treatise on "reason of state," Jean Bodin, the theorist of modern sovereignty, and the French physician and travel writer François Bernier, who spent a dozen years in India late in the seventeenth century. One of the themes they developed was that Eastern regimes lacked not just civic freedom but personal liberty as well. As Botero put it, the sultan was "so much the owner (*padrone*) of everything within the confines of his dominion that the inhabitants call themselves his slaves rather than his subjects and no one owns his own self or his house . . . or land . . . or is secure in his life or position except by the grace of the Great Ruler." Bodin gave a reason for this situation that heightened fears it could spread to the West, attributing the absence of both political and personal rights in the Ottoman state not to any servile nature of the population but to the effects of war and conquest, out of which slavery arose. Meanwhile Bernier described the way he believed these consequences operated in India: the combined authority of the Mughal conquerors and of the various (mostly Hindu) states that submitted to them deprived people of rights and judicial protections, making their subjects vulnerable to having their wealth expropriated. In such a situation work and initiative were discouraged, since people who feared that their gains would be taken from them had little incentive to augment them. Bernier detailed these defects in an open letter to Jean-Baptiste Colbert; the letter praises "our happy France" for being free of such abuses, but its author seems clearly to have also been warning Louis XIV's minister about the dangers of a king bent on war and conquest going down the same road.[19]

In France the first people to use the term despotism as a critique of developments in their own country were the Huguenots, forced out of it by Louis XIV's 1685 revocation of the Edict of Nantes (which had ended the country's religious wars a century earlier by granting a degree of toleration to Protestants). Other enemies of the king's increasingly authoritarian regime followed in their wake, setting the stage for Montesquieu, in his widely influential treatise *The Spirit of Laws* of 1748, to elevate despotism to one of

the three chief forms of government, alongside republicanism and monarchy, each kind of regime being based on a core principle. For republics this axis was virtue, since people could rule themselves only where a spirit of devotion to public well-being prevailed over private interest, preventing the state from sinking into corruption; for monarchies the precept was honor, the cement of political life in situations where a lawful king had to rule with the aid of powerful people who received recognition for uprightly defending or administering the country. As for despotism, its animating ethic was fear, making people shrink into submission in the face of a power that knew no limits and respected no rights.

Montesquieu took over the classical notion that the original and natural home of such a mode of political existence was the Orient, but his reasons for locating it there were closer to Bodin's than to Aristotle's, since it was not any innate servility of the population that made the East unfree, but the conditions that made war between stronger and weaker states especially common there, spawning the history of repeated conquests that subjected one people to another. Europe had so far largely escaped such a history, but the threat to liberty posed by the French monarchy's high-handed policies created a new vulnerability. The actions of the Bourbon kings in manipulating rights and privileges in order to raise ever new revenues led many of Montesquieu's countrymen to share his anxieties, making France the place where the notion of Oriental Despotism had the largest presence in public discussion. Such concerns were less prominent across the Channel, where the victory of Parliament in the "Glorious Revolution" of 1688–89 lessened the fears of authoritarian kingship that had been rife under the Stuarts. In France, by contrast, by the end of the century practically every new ploy to increase the monarchy's power was met with the cry of despotism from some targeted group.[20]

Thus what fueled the rise of the notion of Oriental Despotism was not changing power relations between Europe and the East, but developments internal to European politics. At the time Montesquieu published *L'ésprit des lois* in 1748, calling Eastern governments despotic was not a way of justifying European incursions into regions to the East; the British East India Company would not begin to take over ruling authority for another decade (and the process would not be finished before the end of the century), and the book's author was no friend of ventures that would add to royal power. In addition, the idea of Oriental Despotism became a subject of European debate, in which figures who favored royal power as a counterweight to aristocratic or churchly domination either denied that Eastern rulers were despotic or saw benefits in their being so. The two chief voices for such views were Voltaire and the theorists and reformers called the Physiocrats.

Voltaire's dealings with the concept of Oriental Despotism were shaped by his passionate opposition to the features of European life he saw as chiefly

responsible for its worst defects, namely the noble power and privilege that gave French society its rigidly hierarchical spirit, subjecting the great mass of its population to the arrogant and oppressive machinations of a tiny minority, and the Catholic Church that throve on the ignorance and superstition of a benighted populace, spreading a tone of intolerance and persecution through the land. Against these enemies he supported the monarchy in its attempts to reform the fiscal and judicial systems, exert control over the Church, and give a uniform shape to administration in the country's regions. In his eyes Louis XIV was not a despot but an agent of improvement and a patron of Enlightenment and the arts, making his reign one of the great ages of humanity, comparable to ancient Greece and Rome and Renaissance Italy. Viewed from such a standpoint, both the Ottoman Empire and China appeared as preferable to all but the best European polities, unburdened by either an established Church or a hereditary aristocracy, and able to impose a beneficial order on society. In defending them, Voltaire directly attacked Montesquieu's notion that Eastern realms were despotic, contesting what the latter claimed to be facts about them, and arguing that they were monarchies in the same sense as Western ones, sometimes tempted to abuse their power but resisted by their peoples when they did so. Powerful entities such as the Church and aristocracy could be despotic too, justifying the strong measures governments might need to take against them. Seeing the world in a similar light, the Physiocrats, who supported eliminating tariff barriers so as to give free passage to goods and eliminate impediments to economic growth, set themselves not against the state but against the local and regional privileges that kept the country fragmented. They explicitly described their program as a despotism, but a legal one (as had existed in ancient states), through which an Enlightened government would do away with restrictions hallowed by custom and tradition, subjecting people instead to the rigid and sometimes disruptive but eventually beneficial laws of an unregimented economy.[21]

All the same, the close ties between the idea of Oriental Despotism and internal European politics did not blind people to the pejorative implications of calling Eastern peoples slaves to their rulers, and other voices spoke out against it on behalf of societies and civilizations they admired. Unlike Voltaire, some of these knew Eastern languages and had actually lived in Muslim or Asian countries, operating in the spirit of scholars such as Pococke, Ockley, and Sale. This was the case with one of Montesquieu's fiercest critics, the long-neglected but now increasingly recognized figure Hyacinthe Anquetil-Duperron. A Frenchman from a modest Jansenist background, he learned Hebrew in Paris, and Arabic and Persian in the Netherlands. Back in France and still in his twenties, he decided to devote himself to the study of Eastern culture, a resolve given clearer direction when he stumbled on a copy of some passages from a Zoroastrian manuscript in a Paris library; fascinated, he determined to go to India in search of more texts and better knowledge of

their content. When he returned seven years later, he brought his translation of the Zend-Avesta, the core collection of Zoroastrian texts (in the Avestan language, known only from it) that established him as a pioneer student of Eastern religions.

Anquetil-Duperron's interest in the East seems to have begun, like that of other Europeans, as an attempt to get closer to the early history of Christian beliefs. But if his first motive was to support one version of Christianity (his own Jansenism) against others, it was soon caught up in a more general commitment to recognizing the independent value of Eastern religion and life. Believing that all faiths shared basic elements whose similarity made it likely that they derived from a common ancient source, he went on to declare "that every people, even if it differs from us, can have a real value, and reasonable laws, customs and opinions"; the only barbarians were those who behaved as such. And fired up against the greed and arrogance displayed by Europeans who went to India in order to enrich themselves at the expense of natives, he became a determined enemy of Western expansion. This hostility began with his discovery that most of the Frenchmen he met on his voyage to India showed themselves to be debased, unprincipled, even criminal fortune-seekers (a view about those who made up the front line of colonial domination also found in his contemporaries Burke and Diderot, and in some Indian writers too), but it came to focus on the territorial control being established by the British East India Company during the time he lived there, and which consolidated the defeat of French ambitions on the subcontinent marked by British victory in the Seven Years War (which ended in 1763). Expanding trade could be beneficial to both Europeans and the people they engaged with, he maintained, but political domination was bound to degrade both sides.[22]

Drawing on his knowledge of Eastern languages and his direct experience of life there, Anquetil countered the claims of Bernier and others that Eastern governments treated their subjects as serfs or slaves; to be sure some rulers acted in tyrannical ways, seizing goods and treating rivals and subordinates with violence. But others did not, and the notion that all Eastern regimes were despotic in the sense of being restrained by neither laws nor property rights was both false and slanderous. Citing laws, customs, habits, and contracts, Anquetil-Duperron showed that property rights for individuals existed, and that they were respected. Moreover, he highlighted what he thought to be a hidden motive behind assertions of the opposite, namely that they smoothed the way for those who might replace the "despots" to assume the powers attributed to them: "Despotism is the mode of government of those countries. The sovereign declares himself proprietor of all the goods of his subjects. Let us become that sovereign and *voilà* we become the masters of all the lands of Hindustan. Thus does avaricious passion argue."[23]

Later critics would point to similar logic in the way European portrayals of Eastern societies could justify the imperial domination sought or achieved over

them, but in the context in which Anquetil-Duperron offered his, the notion that the Mughals were despotic does not seem to have worked in this way. He was able to point to one official of the East India Company (EIC), Alexander Dow, who stressed the insecurity of property under the "despotic" Mughals, arguing that the country would be better off under a British rule steeped in respect for legal protections of individuals. But Dow, who had a genuine interest in Indian culture and translated works from Persian, did not argue that the Company should declare itself the proprietor of Indian lands or weaken the ownership rights of natives, even though he was writing in 1772, by which time the EIC had embarked on its new course of territorial control, abandoning the more purely commercial character it had long maintained in India. Even if he had, Anquetil-Duperron's argument about how the notion of Oriental Despotism might be used could not have applied to Montesquieu, an enemy of external expansion as a threat to internal liberty in his country, and an admirer of Britain because of the restraints put on monarchical power there. That Eastern regimes founded on warfare rode roughshod over the natural rights of their subjects was, for him, precisely why Western ones should not aspire to be like them.[24]

Anquetil-Duperron's attitude toward India was close to that of the "Orientalist" followers of Sir William Jones, a radical lawyer who spent many years on the subcontinent, became fascinated with Eastern literature, learned Sanskrit and Persian (adding them to the Arabic he had acquired in England) and translated a number of Indian and Arabic texts. (The term Orientalist at this moment had none of the overtones it has acquired since Edward Said's polemic against the field in the 1970s.) His signal achievement was the demonstration that the ancient Indian language Sanskrit shared both word elements and grammatical structures with classical Greek and Latin, and that it bore more distant but demonstrable similarities to a whole range of modern tongues, including English, French, Italian Spanish German and Russian; it is on this basis that all of them are now classed as "Indo-European" languages. For Jones himself, however, these philological consequences mattered less than what he thought to be the ethnological and religious ones. He believed (the notion would later be contested and abandoned) that peoples who spoke related languages were themselves kin – cousins or even "brothers," as his follower Friedrich Max Müller put it. This kinship affirmed the biblical account of human descent from Adam and Eve, by way of Noah and his progeny who (as others such as Matteo Ricci also believed) spread a common set of basic monotheistic notions over the earth. Jones was particularly keen to stress the kinship between Indians and Britons, locating both of them in a group he called Aryan. Originally referring to an ancient Iranian people, the term would later and famously become a racist catchword used to distinguish light-skinned Europeans from Jews, Black Africans, and other purportedly inferior groups. In Jones's usage however the word had none of

these connotations, on the contrary positing a shared cultural and biological heritage for Europeans and Indians, as well as Greeks, Egyptians, and others whose speech belonged to the Indo-European family. Only the later spread of modern racist theory and practice would alter the term's meaning.[25]

Among the aspects of Indian culture Jones and his followers championed were religion and politics. First, they understood the Indian system of deities to be closely related both to classical mythology and to Christian monotheism. Appealed to under other names in ancient Greece and Italy, the gods popularly worshiped in India formed a divine array behind which philosophers were able to discern the presence of one chief deity to whom reverence was especially due. As Thomas Trautmann notes, for Jones and his followers "Sanskrit literature was a repository of the most ancient written records of the human kind, recording not only the popular religion of ancient paganism but the philosophers' recollection of primitive monotheism, of the natural religion taught by the unsullied light of nature to the patriarchs of the Bible and bequeathed by Noah to the ancient nations." Moreover, despite the claims of some historians that such an emphasis on ancient religion had the effect (even the intent) of confining India in a changeless past of no present value, the Jonesian Orientalists saw this ancient wisdom as neither outmoded nor useless, but as one of the currents of ancient thought that had been most fruitfully taken up into modern science. Central to this stream were the Hermetic notions of universal harmony appealed to by sixteenth-century advocates of religious irenicism as providing a middle ground between Protestants and Catholics, and that came to be of great interest to Newton and his anti-Trinitarian followers for their vision of a universe pervaded and animated by a single force, which they identified as gravity.[26]

Others, more directly tied to the East India Company, extended this admiration into Indian life more generally, and in particular the fields of politics and administration. Alexander Dow, whom we mentioned earlier, found practical benefits in Hindu religion and law that he was convinced had made India before the Muslim conquest both prosperous and peaceful. He explained the decline of these qualities in modern conditions on the same ground others in his time posited for the similar waning of Arab achievements, namely despotism: what made the Hindus of his day ineffectual, submissive, and unable to develop the kind of civic virtue required for self-government was their long subjection to rule by foreign conquerors. Moreover, at least one of his colleagues, Sir Thomas Munro, a close friend of the first British governor-general of India, Warren Hastings, maintained that such oppression would have had similar effects on any people subjected to it:

> Let Britain be subjugated by a foreign power tomorrow, let the people be excluded from all share in the government, from public honours, from every office of high trust or emolument, and let them in every situation be

considered as unworthy of trust, and all their knowledge and all their literature, sacred and profane, would not save them from becoming in another generation or two, a low minded, deceitful, and dishonest race.

The existence of such views among the very British who effected the East India Company's transformation from a trading company to a sovereign authority is often forgotten, in the light of the Jonesian Orientalists' defeat on the question of how education was to be organized for British civil servants in India by the rival Anglicist party, whose views were epitomized by the historian Thomas Babbington Macaulay's outrageous claim that "a single shelf of a good European library" was "worth the whole native literature of India and Arabia." Like the other Anglicists, however, Macaulay was not moved by any knowledge of Indian writings, but by his evangelical Christian faith, which caused them to regard the intellectual and moral development of a people blind to Gospel truth as necessarily stunted. What made them so hostile to Jones and his followers was the latter's Enlightened respect for non-Christian religions.[27]

Many of the themes we have been developing in this chapter came together in the other of Montesquieu's major works, published two decades before *The Spirit of Laws*, his *Persian Letters* (1721). Often amusing and attracting a wide readership, it was dedicated to showing what Europe looked like from the point of view of other cultures, and to challenging readers to see themselves through the eyes of others. As in his later book, he here gave Europe high marks in one connection particularly, the high importance it attached to liberty, while still worrying about the internal threats to it. In one letter the main Persian protagonist, Usbek, contrasts the uniformity of character in his own country with the variety found in France, attributing the difference to the constraint imposed on people in the East by "that enslavement of the heart and mind" in which "you hear nothing but the voice of fear, which speaks only one language, and not the voice of nature, which expresses itself in such different ways and assumes such different forms." In another place his companion Rica notes that the universal desire for glory "increases in proportion to the liberty of the subjects, and decreases in similar fashion, it is never the companion of servitude." In France even the illusion of freedom induces people "to find pleasure and joy in doing things which your sultan can only obtain from his subjects by constantly confronting them with punishments and rewards." One of the Persians sends a correspondent at home a short history of postclassical republics in the West, a service his countrymen sorely need because they have "not the faintest concept" of what self-government might be; indeed "their imagination has not even enabled them to grasp that any form other than despotism can exist upon the earth."[28]

Despite this contrast, the threat to freedom posed by the French monarchy is made no less evident, albeit often in sly or veiled ways. A seemingly innocent

report sent from Paris to a correspondent in Smyrna begins by noting that "the king of France is old" (the letter is dated 1713, when Louis XIV was 75). When it slyly adds that "we have no examples, in our own history, of a monarch who enjoyed such a long reign," the reference is clearly to the violent ends met by several Eastern monarchs in the seventeenth and early eighteenth centuries. But the writer goes on to report that the French king "has frequently been heard to remark that of all the governments in the world, that of the Turks, or that of our august sultan, would suit him best, so high is his opinion of the oriental political system." Given the manifold references in the *Letters* to the despotic nature of that system, such a preference is a not-so-veiled warning to Montesquieu's readers about the threat of its spread to Europe, in particular to France, the same concern that would motivate his analysis in *The Spirit of Laws*.[29]

Moreover, Montesquieu's Persians voice sharp criticism of the West, sometimes the more telling for the incomplete understanding of what they see on which it is based. The visitors describe both kings and the pope as "great magicians." The secular monarch's conjuring allows him to exert "his dominion over the very minds of his subjects, for he makes them think whatever he wishes: if he has one million gold pieces in his treasury, and he needs two, he has only to persuade them that one gold piece is worth two, and they believe him ... he even goes so far as to make them believe that he can cure them of all kinds of ills simply by touching them, so great is the strength and power that he exerts over their minds." (The "royal touch" was especially effective against scrofula, a condition that often goes away by itself.) Papal legerdemain consists in sometimes making people "believe that three are only one, that the bread he eats is not bread, or that the wine he drinks is not wine and countless other things of that nature." The moral seriousness of the travelers allows them to see into the deep corruption of French life, visible not only in the lives of priests, but in poets, old soldiers, and self-centered society figures male and female. Readers are bound to feel at least some measure of sympathy with Usbek when he concludes one letter by describing France as "a country ... where infidelity, treachery, abduction, perfidy, and injustice earn respect ... where a man is esteemed because he deprives a father of his daughter, a husband of his wife, and brings trouble into the sweetest and most sacred of relationships," even though the writer simultaneously attributes forms of stability and virtue to his own land that are belied by events.[30]

What ties all these observations together is their common testimony to Montesquieu's understanding that every human culture deludes itself by its ethnocentrism, claiming universal significance for what can only be one among many ways of life. The core message of *The Persian Letters* is that, as Rica writes to Usbek in one letter,

We never judge anything without secretly considering it in relation to our own self. I am not surprised that black men depict the devil as brilliantly white, and their own gods as coal-black, that the Venus of certain peoples has breasts that hang down to her thighs, and, in short, that all idolaters have depicted their gods with human faces, and have endowed them with their own propensities. It has been quite correctly observed that if triangles were to make themselves a god, they would give him three sides . . . When I see men that creep about over an atom, the earth, which is simply a dot in the universe, propose themselves as models of Providence, I do not know how to reconcile such extravagance with such insignificance.[31]

Although we cannot pause to consider them here, it needs to be noted that Montesquieu's project of seeing European life through the eyes of others had forerunners, and it spawned imitators, alongside much commentary.[32] Long before anti-Eurocentric historians mounted their project of "provincializing Europe," Europeans themselves found stimulation in recognizing their own limitations and defects. Their ability to do so owed much to the conditions that helped breed the continent's enduring preoccupation with liberty, and it would contribute to their proclivity for providing ideas and practices that authorities would have been happy to suppress with spaces to survive, openings toward the possibility of transcending the limits of their own form of life.

10

Empire

Material Expansion and Moral Contraction

The often benign and sometimes generous way of relating to other peoples and places exhibited in the previous chapter would recede in the face of radically different attitudes as European countries became imperial powers, imposing their domination over large parts of the world. The period of formal imperialism, when this control was at its most direct and brutal, lasted for some four centuries, beginning as Columbus's incursion into the Caribbean opened the way for Spanish (and Portuguese) rule in Central and parts of South America, and ending in the decades after World War II, when new independent states emerged to replace the British, French, German, Italian, Dutch, or Belgian regimes that had ruled in India, parts of East Asia, or Africa. At its height in the half-century before World War I, this new relationship threatened to stifle the old spirit of openness, as pro-imperial figures sought to justify European actions by demeaning other peoples and putting forth theories conceived to establish their inferiority, often couched in racist terms. But this new set of attitudes never wholly replaced the older one, which dominated public discussion during the Enlightenment and retained enough vigor afterwards to assure that sharp opposition to imperial ventures was never silenced. Before we can enter into this history, however, we need to highlight a few things about European imperialism as a phenomenon in world history. The subject is far too large to receive more than sketchy treatment here, but a few observations can provide us with a frame in which to highlight some of its defining features.

The first concerns what imperialism was not. It was neither the "highest stage of capitalism," preparing the ground for a global economic and social transformation, as Lenin and his followers believed, nor would its passing usher in a new kind of global order, based on humanitarian and spiritual values abandoned by the West and preserved only by its victims, as certain anticolonial activists both outside Europe and within expected or hoped. A less portentous way to understand imperialism is simply as one particular chapter in the long history of relations between Europe and the rest of the world, ending formally in the decades after World War II, but retaining a penumbra (often called neocolonialism) still today. What made this historical moment possible was the imbalance of material power that developed as European states and societies increased and sharpened

their military capacity by way of the competition that developed between them, itself an expression of the region's absence of effective central authority, and then the large boost to that potency given by the development of modern industry and weapons. Which is to say that one way to understand imperialism is to recognize it as the other face of Europe's special role as the first world region to show "what human activity can bring about." It is one of the chief theses of the current book, already developed in Part II and to be further elaborated in Part IV, that the singular forms of liberty and autonomy on which our analysis turns were crucial to Europe acquiring this role, making possible first the release of the intellectual energies that powered the turn to modern science in the seventeenth century and the Enlightenment culture that drew on it, and then of the practical ones that enabled the rise of modern industry in the eighteenth. These connections, sensed by the three observers we cited at the start of Chapter 2, mitigate the paradox of Europe's simultaneous identification with freedom and with domination: however different in their nature and effects, they were two faces of the same distinctive evolution.

The second general observation is that imperial expansion carried within itself many of the seeds of its own overcoming. To say this is not to diminish the importance or even necessity of anti-imperialist movements among dominated peoples in putting an end to foreign rule, but it is to recognize that these movements drew considerable strength from resources provided to them by European expansion itself. The first of these was that imperial ambitions sharpened the rivalries between European states, helping to bring about the two harrowingly self-destructive wars that so disfigured the twentieth century and helped bring formal imperial control to its end. Even earlier imperial rivalries brought damaging effects to those who engaged in them; for the victors the large expenses required to pursue them may have been matched by the benefits they brought, but such gains did not accrue to the losers. The consequences of such loss are well illustrated by France, whose defeat by Britain in the Seven Years War that ended in 1763 deprived it of most of the overseas territories acquired over the preceding two centuries, effectively ejected it from the competition for influence in India, and added to the financial burdens that would bring the monarchy to crisis in 1789. (The French retained rule for a time over some of the most economically valuable of their possessions, the Caribbean "sugar islands" of St. Dominique [Haiti], Martinique, and Guadeloupe, as well as patchy control of some West African places; the Louisiana Territory, ceded to Spain in 1762, was reacquired by Napoleon in 1800, but doubts about putting resources into overseas expansion at a time of armed conflict with Britain led him to sell it to the new United States in 1803.) These losses would be compounded by those imposed after Napoleon's fall, so that when France returned to the imperial game with the invasion of Algeria in 1830, it was from a disadvantaged position that gave a peculiarly pressured and sometimes desperate quality to its ventures, as we

will see. After 1945 French attempts to retain influence in Africa as formal control was lost would have something of the same character.[1]

The second manner in which imperialism undermined itself was by giving people in other places exposure to the means by which Europe's ability to dominate them was effected, providing access to knowledge and techniques with which to counter and overcome the imbalance of power. This process was already at work earlier, in the knowledge picked up by eighteenth-century visitors or envoys to Europe from other places, and the basic pattern was recognized even before the age of high imperialism by – among others – Napoleon. Learning, during his exile on St. Helena, that some British traders in China were advocating war as a response to what they saw as disrespect shown to the kingdom's envoy Lord William Amherst during his mission there, the former emperor warned them that picking such a fight would be "the worst thing you have done for a number of years."

> You would doubtless at first succeed . . . but you would teach them their own strength. They would be compelled to adopt measures to defend themselves against you; they would consider, and say, "we must try to make ourselves equal to this nation. Why should we suffer a people, so far away, to do as they please to us? We must build ships, we must put guns into them, we must render ourselves equal to them." They would get artificers and ship builders from France and America and even from London; they would build a fleet and, in the course of time, defeat you.[2]

In fact, this did not happen in response to the "Opium War" launched by the British against China some two decades later, but (as we will see) much the same prophecy would be repeated by one of the many British opponents of that war just as it was breaking out in 1839, and both predictions describe very well the course the former Celestial Empire would follow in the twenty-first century. Japan took the same road earlier, in reaction to the crisis fed by the American admiral Matthew Perry blustering his way into Tokyo harbor in 1853, beginning to build up a modern economy almost at the same time as France and Germany, and laying the ground for the first major defeat of a European (or at least semi-European) imperial power by an Eastern country, in the Russo-Japanese war of 1904–5.

The last general observation about imperialism is closely tied to the previous one. This is that although the success of Europeans in dividing up large parts of the world between them testifies to their superior strength relative to other regions, the actual shape imperialism took was frequently determined by an accompanying weakness. So pervasive was this situation and connected to so many moments in imperial history – including some of the most reprehensible ones – that focusing on it draws us into large stretches of that history. It did not end as industrial and technological innovations began to yield weapons that gave an unmistakable advantage over earlier ones, notably accurate rifles

(based on understandings about firing projectiles achieved earlier but only effectively applied in the nineteenth century), machine guns (invented in 1884), armored motor vehicles, and air power (both used first by the Italians in Libya in 1911). The relative ease with which European conquests sometimes took place, for instance in India from the 1760s and in the already mentioned Opium War of 1839–42 (where the British employed ironclad steam-driven ships for the first time in Asia) may seem to contradict such a claim, but at the very moment when the ease of conquering coastal cities made Western forces appear invincible in China, the massacre of a retreating army of 4,500 British soldiers (only one of whom survived to tell the tale) near Kabul in Afghanistan bespoke a very different story (one which persisted into the twenty-first century). Early British expansion in India, as D. A. Washbrook reminds us, depended on the connections of the East India Company (EIC) to many of the smaller states competing for advantage as the Mughal Empire declined, and whose soldiers did much of the EIC's fighting for it. British weakness was evident in the great uprising (the "Mutiny") of 1857, not just because it happened, but also because it was the absence of sufficient resources to establish more peaceable control over the empire it had unexpectedly acquired that led the Company to impose a harsh and in the end self-defeating discipline on the native Indian troops (Sepoys) it employed to keep the lid on, until they (and others) finally rebelled against it. The harsh and bloody repression that followed was the act of a ruling group insufficiently supplied with means to keep order in more steady and civil ways (the Crown government that replaced the company's would seek to devote its larger resources to changing that).[3]

Weakness put its imprint on many imperialist actions by France and Italy. France's return to the imperial game after the loss of nearly all its colonial possessions between 1763 and 1815 meant that the invasion of Algeria in 1830 constituted an almost wholly new beginning for it. A chief motive for it was the need to overcome the fear of further decline generated by the defeats it suffered at British hands, and the limited size of its armies was a large factor behind the turn to measures intended to terrorize the population and break its will, and which led to appalling massacres, sometimes judged to have been genocidal. We will see later that French apologists admitted the barbarity of their country's actions and found ways to justify it. Weakness also marked the disastrous French intervention in Mexico in the 1860s. Although launched as a joint operation with the British to force repayment of a loan renounced by the revolutionary government of Benito Juarez (more was owed to the French than the British), it took on the aim of replacing his regime with a French-dominated one, in response to pressure on Napoleon III from conservative Mexican émigrés and their French friends in Paris. By the time the adventure ended in 1867, with the capture and execution of the "emperor" enthroned by Bonaparte – an Austrian prince who reigned briefly as Maximilian I and whose death was famously depicted by Edouard Manet (Figure 6) – it had cost several
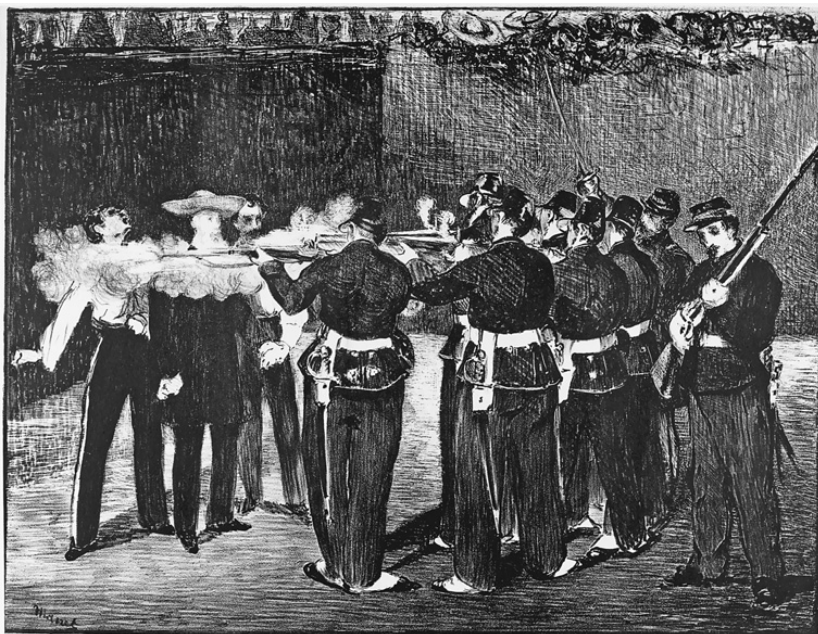
Figure 6 Edouard Manet, Execution of Emperor Maximillian, 1867. Manet did several versions of this scene, both paintings and prints. Courtesy of the Metropolitan Museum of Art, Rogers Fund, 1921.

times the amount of the debt it was at first intended to collect. The limits of France's ability to control the colonial situations it created were also made evident in 1885, when a general in Vietnam, fearful of defeat by a Chinese army (already, he reported, "trained in the European style" – as Napoleon had predicted) decided to withdraw from a recently captured city on the Tonkin peninsula, telegraphing his superiors at home that disaster loomed if the government did not quickly send significant reinforcements. The defeat was averted, but the news created a political storm in Paris, forcing the prime minister, Jules Ferry, to resign.

Italy's path to its empire was strewn with failures and disappointments, among them the two defeats it suffered in seeking control over Ethiopia, the first when its invasion of the country in 1887 ended in Italian withdrawal after suffering severe losses in a battle at Dogali, the second in the war the Italians started in 1895, but which they abandoned after the rout of their outnumbered and badly equipped forces at Adowa, where Italian deaths exceeded 4,000. This, rather than the victory of Japan over Russia in the war of 1904–5 was the actual first defeat of a European power by a non-Western one, and it did not need to be grounded in a high-speed campaign of modernization. Frustration

also marked Italy's move to annex Libya in 1911, egged on by a sense that the British and French were excluding their weaker rival from plans to divide up northern Africa after the French expansion into Morocco. The treaty that ended the war in 1912 gave the Italians control over much of the country, but while the conflict lasted a determined mix of Turkish and Arab fighters confined the Italians to coastal areas where gunboats could protect them; even the pioneering use of armored vehicles and airplanes had little effect. The irritation and ire this provoked on the invaders' part eventually found an outlet in the systematic massacre of thousands of civilians in Tripoli on a single day in October of 1911, including hundreds burned to death in a mosque, in retaliation for the slaughter of 500 Italian troops by Turks a day earlier. By the time the Italians were able to extend their control to interior regions of the country (made possible by the departure of Ottoman forces in October of 1912), they were left with little time to enjoy the conquest, since the outbreak of World War I led them to bring most of their troops home (although Italy did not enter the war until 1915), soon after which a Libyan uprising drove them back into a few defensible coastal positions. Only after the establishment of the Fascist regime in 1922 would Italian forces create a stable regime in Libya (and later in Ethiopia) but not for long, since it ended, like the rest of the Italian Empire, in 1947.[4]

The general situation to which these examples belong has been deftly described by Frederick Cooper. European colonial armies being too small to occupy and oversee extensive territories, they imposed their will by overpowering or intimidating natives at some particular point and then moving on, leaving the regimes with an "inability to routinize control and authority." Thus dominion had to be enforced by "exemplary punishments," some of them reaching genocidal proportions, along with collective sanctions and harsh penalties for minor infractions, "even when officials recognized that modern governments were not supposed to do such things." In his novels recounting the disarray into which traditional Ibo life was thrown by the British presence in Nigeria, Chinua Achebe several times refers to a moment when the white rulers destroyed a whole village and its inhabitants in retribution for the killing of a single offending missionary.[5]

Such were the cruelest consequences of imperial hubris and overreach, but less vicious yet still revealing ones accompanied them. Advocates of particular policies sometimes claimed that they had more sweeping effects than was the case, a famous instance being the British minister George Canning's claim about British ascendency in the former Iberian colonies which had secured independence: "Spanish America is free and . . . she is English." On the second count, as recent historians have pointed out, she was not: traders from other countries competed successfully with British ones throughout the nineteenth century, and "local regimes were well able to assert their own interests." The British had little success in controlling prices, and even military interventions

did not put an end to local resistance to foreign economic domination. These limits to what has been called the early nineteenth-century "imperialism of free trade" (a model only the British had the economic advantages to employ) had counterparts in places where force was used, of which one was China following the Opium Wars. Although the outcome of those combats gave Britain freer access to Chinese markets, both for such legitimate (and on the part of the Chinese, valued) goods as cotton and wool, and for the continued importation of opium, the actual benefits to British commerce were less than was, and is, sometimes supposed. Sharp-eyed Chinese responded to the resumption of the drug trade by cultivating their own poppy plants for domestic consumption, so that by the 1870s some British were being squeezed out, and many of their firms gave it up. Chinese manufacturers also put their own competitively priced textiles on the market (some turned out in modern factories set up in the newly designated "treaty ports" where the British established commercial beachheads), leading to falling sales of their Western-produced counterparts. To be sure British goods still found entry, but their distribution both in the main population centers and outside them was generally in the hands of native merchants, some of whose businesses benefitted more from the expanding economy than did their European rivals. "The treaties opened up the interior Chinese markets for Western goods but not [Martin Lynn points out], in effect, for Western merchants." Thus well before the areas subjected to imperial control began to throw it off, the self-subverting character of the incomplete domination imposed on them had begun to manifest itself.[6]

* * *

The curtain went up on the age of imperialism with Columbus's sudden incursion into the Caribbean, simultaneously the moment when what Felipe Fernández-Armesto calls the "sundered cultures and divergent ecosystems" that had long divided up the globe began to draw closer. Deeply divergent as were the manners of being human that marked the Spanish intruders and the Caribbean peoples on whom they stumbled, each idealized the other for a brief moment, the first seeing the second as innocent and pliable, the second viewing the first as some sort of gods, able to appear suddenly out of nowhere, move about on their floating islands, and wield unfamiliar tools and fearsome weapons. But as the whites' rapaciousness and cruelty became evident, and the Americans began to put up resistance to their demands for territory, gold, labor, sexual service, and conversion to the alien doctrines and rituals of Christianity, this momentary harmony dissolved. Now the superior material power of the Europeans, exercised at a distance from their own home society that at once rendered their security wholly dependent on themselves and dissolved the political and legal restraints that might have moderated their actions closer to home, turned this first encounter into a horrendous and unpardonable genocide. The Spanish critic of the conquest, Bartolomé de Las Casas,

later estimated that 100,000 Taino natives of Hispaniola died in the first years of European presence, either from the harsh conditions under which they were forced to work, from European diseases for which they had developed no immunity, or by what sometimes became a campaign of extermination. In this moment much of the later history of Europe's subsequent interaction with peoples elsewhere was prefigured, both the violence and destruction to which it often led, and the many questions it raised about how to understand the similarities and differences between human populations so unlike each other.

That Europeans could be at once slow to face up to these questions, and subject to sudden reversals in regard to them, is illustrated by the case of Las Casas. Arriving on Hispaniola with an expedition in 1502, he fought in wars to subdue the Taino and became a proprietor and slave owner. Moving on to Cuba in 1510, be acquired one of the large plantations called *encomienda*s, infamous for their harsh exploitation of native labor. His ordination as a priest at this moment does not seem to have weakened his commitment to the system, although the seeds of his later rebellion against it may have been sown by hearing the Dominican friar Antonio de Montesinos preach one of the first public condemnations of Spanish behavior in 1511, castigating the class to which Las Casas belonged for the paltry food and murderous working conditions imposed on the natives, capped by "detestable wars ... [and] unheard-of homicides and slaughters." A year earlier Montesinos and his Dominican brethren, shocked by what they saw in New Spain, had refused the rite of confession to slave owners, of whom Las Casas was one. It took several more years, punctuated by his participation in further wars against the natives, before Las Casas was drawn to Montesinos's side; but something may have been festering within him, since his change of heart came in a sudden conversion experience. In his subsequent career he sailed back and forth between Central America and Spain several times on behalf of his attempt to end the *encomienda* system and to deprive the landowners of their holdings. Becoming the designated "Protector of the Indians," and an object of hatred to the *encomienderos* themselves, he argued his case before officials including the emperor (and king of Spain) Charles V, entered the Dominican Order and became a bishop, proposed various schemes to aid native peoples in Central America, and debated against the chief intellectual defender of the system in place, Juan de Sepulveda.[7]

As a Christian and a churchman, Las Casas could not think the presence of the Europeans in the New World a total evil, since it brought the possibility of conversion and salvation to previously benighted souls. But with other members of his Dominican Order, and against the rival Franciscans, he rejected the practice of mass baptism imposed on people who had no understanding of what the ritual meant (justified on the grounds that the sacrament itself was a channel of divine grace), insisting that as human beings the Taino were rational creatures capable of grasping complex ideas, and for whom

conversion could only be genuine if based on understanding and consent. Las Casas found evidence for this rationality in the natives' ability to order their own lives by giving purposeful arrangement to their towns and villages, and in the high level of civic life he recognized as achieved within them. In one writing he insisted that the natives' "republics, places, towns, and cities" provided an environment that "did not lack anything to live politically and socially, and attain and enjoy civil happiness." Like every people, the Taino and other indigenous groups had both good and bad customs, but the first outbalanced the second, demonstrating that their capacity for civilization was not inferior to that of Greeks, Romans, English, French, or even "some of the people of our own Spain." Such a judgment implied that, in deciding how to treat weaker peoples, the innate rationality of every human group and the ability to build a civilized life on the basis of it (a point shared by other defenders of native peoples, for instance the noted jurist and theologian Francisco de Vitoria), was not less important than revealed truths.[8]

This more secular and appreciative view was developed by other critics of the imperial venture. It was chiefly Central America rather than the Caribbean islands that provided the site for such thinking, because there Spanish rule displaced the earlier imperial order established by the Aztecs, and by the end of the century some observers had become aware that the lives and behavior of indigenous groups had significantly changed for the worse under the European regime. One of these was Bernardino de Sahagun, who came to believe that natives had enjoyed a better and more civilized existence before the Spanish arrived, a difference he attributed to the Aztecs having attended more to the character and needs of their subjects. Good government, he argued, had to be attuned to the particular qualities of the people who lived under it, but the Spaniards knew or cared too little about the peoples they encountered to rule in this way. Attempting to reduce the Americans to "the Spanish way of life" they had instead driven them into an existence of "idleness and vice." A missionary, Sahagun never ceased to worry about the "idolatry" he found among native Mexicans, participating in the destruction of fetishized objects, but he recognized that the campaign against it had led to a much broader assault on the whole of what he called the native "republic," the overall form of society and government. Even without Christianity, this mode of life had been in some ways "a step ahead of many nations that presume to be civilized," allowing those who lived under it to deal better with the conditions they faced than the Spanish regime did. This approach was taken further by another missionary, Juan de Cardenas. Observing the Chichemeca of northern Mexico, he found many of their practices deplorable, but even so they had lived brave, strong, and healthy lives before the Spanish arrived. Subjected to European attempts to civilize them they "languished and declined," an outcome he ascribed to "the change of air, diet, custom and way of life, so that one can with justice say of them that change of custom is equivalent to death."[9]

Like many earlier writers both classical and medieval, both Sahagun and Cardenas attributed the differences between ways of life chiefly to dissimilar conditions of climate and environment.[10] But I know of no earlier figure who concluded that ignoring these factors in favor of some single model of civilized life risked imposing a kind of social death, as Cardenas did. The suffering and destruction visited on natives by the European intruders led a slightly earlier observer, the jurist and humanist Alonso de Zorita, to reject the common usage that categorized all non-Christians as barbarians. Neither the American Indians nor the ancient Egyptians ("a very sage people," whom the Greeks did not value highly enough) deserved such a label; if behavior was the criterion, it was the Spaniards who were barbarous. Zorita's redefinition of barbarity was in the same spirit as the better-known rejection of the notion penned by the great French essayist Michel de Montaigne at nearly the same moment. Comparing "savage" native American behavior to the violence and cruelty French Protestants and Catholics inflicted on each other during the religious wars, he concluded that "Each man calls barbarism what is not his own practice." As John Elliot observes, the encounter between Spaniards and peoples of the New World made "at least a handful of European uneasily aware that the imposition of European standards on non-European peoples subjected to their rule might not, after all, be an unmixed good. They had, in fact, made the disturbing discovery that man and European man were not necessarily identical."[11]

That discovery would be a chief ground for the broader current of negative views about imperialism that flowed through the eighteenth century. One difference between it and the critiques just considered was that it relied much more on a vocabulary with ancient roots that was given new currency and specificity by a series of seventeenth-century writers, Hugo Grotius, Thomas Hobbes, and John Locke. Their thinking was affected both by Europe's closer contacts with other parts of the world, and by the continent's long-standing internal divisions, now deepened and solidified by the religious schisms introduced by Protestantism. The idiom they developed had two registers, one directed toward social and cultural diversity and the different forms of life that human groups evolve for themselves, the second affirming the existence of natural rights borne by all human beings, famously listed in the American Declaration of Independence as "life, liberty, and the pursuit of happiness" (the third was "property" in the original draft, and it would occur in both forms in anti-imperial critiques). Although sometimes regarded as in tension with each other, these two notions of right arose alongside each other and in concert in early modern Europe. As Richard Tuck has shown, what inspired the emphasis on natural rights as a global category was not an impulse to ignore or devalue cultural difference, but a felt need to find some shared ground where people with widely disparate values, practices, and beliefs could recognize each other's humanity. Far from seeking to substitute a universal set of principles for the diverse arrangements set up by distinct peoples, the turn to

natural rights was seen as "the only means whereby in practice different cultures can negotiate a *modus vivendi* which allows their *other* values to be preserved or respected." Universal rights grounded in nature were "intended to be the basis for inter-national or inter-cultural negotiation," if not between participants equal in strength, still "providing the common ground upon which the rival and conflicting cultures could meet." Neither of the two notions provided a firm shield against claims by one group or nation to dominate another, since advocates of empire could portray "primitive" peoples as too low on the scale of development to be able to understand or establish stable protections for liberty and property, so that they needed to be guided or rescued by more advanced outsiders. Such views always remained subject to dispute, however, so that neither the notion of natural rights nor the just claim of every people to determine its own form of life for itself ever lost its ability to contest and in some degree delegitimize foreign domination.[12]

The list of figures who drew on these notions to construct a critique of imperialism in the eighteenth century was extensive and distinguished, encompassing some of the most celebrated leaders of the Enlightenment: Denis Diderot, co-editor of the great *Encyclopedia*; Immanuel Kant, the exemplary philosophical spokesman of the same movement in its German form (*Aufklärung*); Edmund Burke, powerful Whig orator and politician, supporter of the American Revolution but an early and sharp critic of the French one; Johann Gottfried Herder, theorist of history and cultural difference, and one of the progenitors of modern anthropology; Adam Smith, in many ways the founder of modern economics, and Jeremy Bentham, the utilitarianism inspirer of many reform projects. We have space to consider only three of them here, Diderot, Herder, and Bentham, but they are sufficient to give a sense of the breadth and depth of anti-imperial thinking in this period.[13]

Diderot was, alongside Burke, the person whose anti-imperial writings were most widely known at the time. In his *Supplement to Bougainville's Voyage*, he piggybacked on the French admiral's account of the lives of Pacific islanders to set up a comparison between European and "primitive" moralities, and he developed a more general case against European expansion in his contributions to the *History of the Two Indies*, a multivolume collective work published from 1770 under the name of the Abbé Guillaume Thomas Raynal, and devoted to critiques of European incursions into both the West Indian territories Columbus stumbled upon and the Eastern ones he was seeking. In both, the *philosophe* appealed at once to cultural difference and to natural rights as grounds for defending native peoples against their European aggressors.

Probably the most remarked-on moment in his critique was his vindication of Tahitian sexual *mores* against the missionaries who sought to teach the islanders Christian ones. Tahitian sexual behavior appeared dissolute to the alien visitors because they did not grasp the meanings it bore for the natives: a young woman who wants to sleep with one of the French clerics is not

motivated by pleasure-seeking but by the expectation that conceiving a child will make her equal in dignity to her older sister; moreover her contribution to populating the island fulfills a civic duty, a more important criterion of moral choice than respecting the private good of a particular individual vocation (such as priesthood).

Diderot similarly sought to protect the Tahitians against the negative consequences of a European attempt to claim universal applicability for their particular values in regard to a second issue, namely property. He accepted the basic understanding of property proposed by the English philosopher John Locke: people are justified in claiming things from the common stock of natural resources as their own if they "mix their labor" with them, and if they are necessary for survival, because the right to life is the most basic one of all. Hence taking fish from a stream, gathering fruit in a forest, or cultivating an unused piece of land is justified as long as these actions harm no one else, and such possession became legal property when confirmed by "long and peaceable enjoyment." In Europe property ownership had come to be vested more and more in individuals, and people who understood it in this way found it easy to assert that land to which no single person had title remained in "the state of nature," so that those able to put it to better use were justified in claiming it for themselves. But such appropriation became mere theft in a culture where land was owned collectively. Thus recognizing that natural rights found different expressions in different cultures undercut European claims to dominate others by applying their own principles in circumstances foreign too them.[14]

Montesquieu had derided such attempts to universalize any single culture's values or practices, but Diderot saw European expansion as unleashing still more iniquitous forms of self-centeredness. Strengthened by the effects of their competition with each other, Europeans found it not difficult to dominate weaker peoples elsewhere, and the sense of power their success gave them released a virtually limitless impulse to do so. Confined at first to the particular locales where the Spanish and Portuguese set up their empires, this pleasure in subjugation deepened as new objects were found to feed it, creating a field where violence in the service of dominion would not cease until the "sword of conquest . . . meets with no more victims to strike." This momentum was evident in the turn of imperial expansion from the New World toward sub-Saharan Africa (where the Dutch established their first colony at Cape Town in 1652), and then in the British domination of India.

But what made this geographic expansion so fateful was the moral vacuum it engendered, making the whole process a kind of negative realization of the unleashing of human powers for which (as I am arguing here) Europe provided an especially favorable environment. Diderot saw this potential at work when displacement in space caused the restraints imposed by stable social existence to lose their purchase. "The more distant we are from our native country," the less power the moderating influence of living under the eyes of

our fellows retains, and the weaker become "the sentiments of humanity" that operate as moral restraints on human actions. These decivilizing effects might be lessened where settlers become naturalized into a host country, making permanent and everyday connections with people there, but adventurers who sought no such stability, moving from place to place in a constant search for new riches and power, become like wild beasts, brooking no restrictions on the pleasure they take in dominating others.[15]

Imperialism had other injurious effects on the people who engaged in it. The need to impose harsh treatment on resistant populations dried up whatever springs of human sympathy colonial rulers might possess, and the despotic practices they learned abroad would return home with them, narrowing the scope of liberty everywhere. As for the new products obtainable in distant places, they would chiefly enhance the lives of the rich, widening their distance from the poor and feeding the disdain they felt toward others. Finally, the literal slavery to which the original inhabitants of the New World were subjected, and that was extended to the Africans transported to labor there, generated anger and the desire for revenge. "Nations that are subdued long for a deliverer, nations that are oppressed for an avenger; and they will soon find one."[16]

Conscious of imperialism's malign features as this critique was, it does not seem to have turned Diderot into a full-fledged enemy of foreign expansion; rather, he appears to have hoped that enlightening his fellow Europeans about what was being done in their name might lead at least certain instances of dominion to be exercised in more acceptable ways. As he wrote in one place, "Let us therefore no longer be imposters on our first appearance; servile, when we are received; insolent, when we think ourselves strong, and cruel, when we have become powerful." At some moments he spoke about the possibility of a "commercial" imperialism that might escape the malignities of the more conquistadorial kind. All the same his comments on the negative effects of imperial activity itself are radical enough to create doubts that he believed such changes could endure, giving reason to see him as less optimistic about the possibility of a reformed imperialism than he sometimes sought to appear.[17]

The case for seeing the German philosopher Johann Gottfried Herder as an outright foe of empire is much stronger. That he came from a country not involved in imperial ventures (no German state being in a position to pursue them in the eighteenth century) may have contributed to his ability to take such a stand, but more important was his identification with the local and small-town character of the still disunited German lands he loved. Many of his fellow-Germans did not share this affection, espousing instead the cosmopolitan universalism of the Enlightenment, and one of these, the most celebrated German thinker of the time, Immanuel Kant, had been Herder's teacher. As a professor at the University of Königsberg, Kant was a servant of the Prussian state, whose expansionist ambitions (later to be the animating force behind

German unification) posed a threat to the many smaller independent towns
and principalities where Herder felt at home. Against this centralizing univer-
salism Herder affirmed the rights of smaller and weaker entities against larger
and more potent ones, celebrating the spirit of life in his own splintered
country in opposition to the centralizing Gallic behemoth to the west. In one
of his early writings he developed a pointed comparison between a French
manner that found expression in *politesse*, gallantry, and worldliness, qualities
linked to the courtly society that valued them, and the more day-to-day
practicality and less refined but emotionally more direct quality of people in
his own land (which had no national aristocracy or court). He found these
differences embodied in the distinctive character of the two languages,
German rougher and throatier, French more graceful and nasal, features that
impressed themselves even on the physical being of the people who spoke the
two tongues. Here he was already moving toward the kind of understanding of
the organically interconnected elements of particular ways of life that made
him a forerunner of modern anthropology, a perspective he would develop by
drawing on (among other influences) his predecessor G. W. Leibniz's notion of
the world as constituted by independent "monads," each following a unique
trajectory determined by its inner kernel of being. Herder did not follow
Leibniz in viewing these individualized entities as immune to each other's
influence, however; on the contrary, he described them as drawing sustenance
not just from their general environment, but from whatever elements of other
forms of life could be beneficially absorbed into their own. "The Greek adopts
as much of the Roman, the Roman of the Greek, as he needs for himself . . . the
rest falls to the earth." Every form of being, individual or collective, became
what it was by nurturing itself on all those elements of the world it inhabited
that could be put into harmony with its inner nature.[18]

From such a premise there could be no justification for the attempt of any
culture or people to impose itself on another, since such efforts at domination
could only succeed by denaturing their object, depriving a people of its
essential way of being, and thus of its very life. On this basis Herder con-
demned not just imperialism, but, as Sonia Sikka reminds us, every situation
"in which one group of people – slaves, women, citizens – are made to serve
others to whom their own interests are sacrificed and are denied the oppor-
tunity for self-determination." This made Herder's defense of weaker groups
against powerful ones more thoroughgoing than Diderot's. Beginning from
the classical view, that each people or culture had to establish a form of
existence in accord with the conditions and circumstances it inhabited,
Herder reconceived this process as not just a matter of constructive adaptation
(the Tahitians finding ways to encourage population growth in order to make
up for the limits of their economic resources) but as creative formation, the
elaboration of a way of life all of whose elements grew out of the inner spirit
that animated them as a whole.[19]

Herder seldom used the language of rights, but his focus on universal human qualities as developing alongside particular ones makes clear that he saw no contradiction between the forms of cultural difference he theorized and defended and the respect owed to humanity as a whole, or to individuals within it, on the basis of the nature they all shared. His affirmation of this even led him to conceive Europe's particular contribution to human history in terms of it. The humanistic culture Europeans had sought to develop since the Renaissance constituted "the historical origin of an ideal that should become global," namely that education in *Humanität* and reason would with time . . . encompass the earth." From this point of view, one could hope that even Europe's move toward world domination, despite the great harm it caused, could in the end contribute to the unification of humankind. His hope on this score was no hidden justification of imperial expansion, however; on the contrary, in voicing it he was seeking to counter what he recognized as his own impulse to see only evil in his time, based on the dangers it posed to the smaller-scale forms of life and locally oriented communities he cherished. In his travel diary of 1769, he had addressed to himself the injunction to "become a preacher of the virtue of *your own age!* Oh, how much I have to do to achieve this." Without it, however, he could not be true to his own principle of recognizing that humans in every time and place create a form of life appropriate to their circumstances and expressive of themselves. Faced with the conflict between recognizing the value of every human potentiality with the capacity to find realization in the world and condemning the evil consequences that issued from some of them, he was determined to speak out against the second while retaining his commitment to the first.[20]

Finally, we need to note the case of Jeremy Bentham, the eccentric English radical whose rejection of imperialism has drawn little attention until recently, because his utilitarian disciples James and John Stuart Mill became supporters of it, but whose views Jennifer Pitts has usefully highlighted. Bentham became an enemy of empire in 1790, and three years later wrote an open letter to the French, exhorting them to *Emancipate Your Colonies!* Setting free their subject peoples would be the appropriate follow-up to having won liberty for themselves: "You choose your own government, why are not other people to choose theirs? Do you seriously mean to govern the world, and do you call that liberty? What is become of the rights of men? Are you the only men who have rights? Alas! my fellow citizens [Bentham was one of a group of foreign writers and reformers made 'honorary citizens' of France a year earlier], have you two measures?" France had foreign possessions because it had been pressured to acquire them by a cabal of self-interested profit-seekers, but to hold onto them was bound to be harmful for the country as a whole, financially, morally, and politically. As an ultra-rationalist partisan of the Enlightenment, Bentham did not doubt that Europeans were more advanced than other peoples, or more capable of self-government, but this did not qualify them to dominate those

unlike themselves. "What conception can you frame to yourselves of manners and modes of life so different from your own? When will you ever see them? . . . If they suffer, will their cries ever sound in your ears?" It was a case he might well have addressed to his own countrymen, but no event in its recent history provided as apt a rhetorical hook as did the Revolution in France; still, he hoped that if those who brought it about heeded his advice, Britain would be moved to follow. There are elements in Bentham's writings that render his anti-imperialism less pure than many people would desire today, but his was a strong and forthright stand, and we will see later that it made him a rallying point for anti-imperial critics outside Europe in search of allies there.[21]

11

Courage and Weakness

Anti-Imperialism and Its Limits in the Nineteenth Century

This broad current of anti-imperial ideas and attitudes would be checked and in part shunted aside by the rising tide of support for empire in the following century, first and especially in France and Britain, for most of the century the chief imperial powers (Germany would not join the fray until the mid-1880s). Some of the reasons for this reversal had to do with the way each country's position evolved as the century turned. France, having lost most of the foreign possessions it had acquired before 1750 in the Seven Years War that ended in 1763 and the Napoleonic Wars that concluded in 1815, made a new start with its invasion of Algeria in 1830, and the ambition to recover some of its lost glory that the invasion was partly intended to serve spurred patriotic support for empire in the decades that followed. Britain lost its thirteen North American colonies in the American Revolutionary War that ended in 1783, but it was at this same moment that its East India Company, having begun as a commercial enterprise two centuries earlier, was consolidating the political control over most of the subcontinent it had begun to acquire in the 1760s. That control passed to the Crown, however, after the Company, through its mix of rigidity and inability to establish stable rule, provoked and harshly suppressed the great uprising (demeaned as a "Mutiny") of 1857. Now India became a project in which the pride and determination of the nation as a whole were involved. In this atmosphere, majority opinion in both countries came to support foreign expansion, leading some historians to describe the nineteenth century, not unjustifiably, as characterized by a "turn to empire." But this shift was never so complete or unquestioned as it is sometimes presented. Opposition to empire in the mode of Diderot and Herder continued to find expression, and support for it was sometimes run through with significant doubts and fissures. Those who expressed anti-imperial sentiments remained a minority, but they did so with force and conviction, assuring the survival of the Enlightenment heritage and making possible its return to dominance as imperialism began to lose its footing in the era of the two World Wars.

We explore this condition by first considering two signal figures who were at once supporters of imperialism and theorists of the liberty of which it deprived its subjects, namely Alexis de Tocqueville and John Stuart Mill. Their presence

in this story is revealing for two additional reasons, first because comparing them dramatizes how different were the justifications contrived for imperialism in their respective countries, an opposition that led each to reject the case offered by the other. Secondly, each one's manner of justifying imperial expansion had a particular quality that testifies to the tensions within it, in Tocqueville's case leading him to voice heated and strained sentiments that sometimes sound more like reasons to reject empire than grounds for justifying it; in Mill's, resulting in a painful recognition that the reasons he gave for supporting his country's imperial domination were incompatible with the actual way control over foreigners operated.

Tocqueville's fervent (and to his admirers vexing and embarrassing) advocacy of French imperial expansion closely mirrored the French manner of annexing Algeria, which he repeatedly defended. To his mind, France's renewal of its imperial ambitions was justified, first, because it would lift the country out of the low position into which it had fallen with Napoleon's defeat, and back toward the preeminent place it had long occupied in European politics; and second, that the revival of national pride such a course would inspire would help to mitigate the internal conflicts that helped set the country on its path through Revolution to despotism. That lesser peoples had to suffer in consequence was regrettable, but not enough to make him doubt the project. When the invasion of Algeria took place in 1830, Tocqueville bemoaned the conduct of the French armies, which included burning crops and willfully slaughtering civilians, but he simultaneously justified those excesses as "unfortunate necessities … to which any people that wants to wage war on the Arabs is obliged to submit." Because the Algerians had not undergone a European-style evolution toward a more cultivated and refined way of life, retaining the untamed and belligerent spirt of the desert, combat against them could not avoid becoming bloody and brutal. In such circumstances his countrymen were drawn to behave like their barbarian ancestors, so that "it is on their side [the Algerians'] that one meets with civilization," not the French. He did not justify engaging in such inhumane combat by any prospect of economic payoffs for his country, at least not in the immediate future (and which he regarded as petty in comparison to the noble goal of elevating the nation in its own eyes and others'); nor did he claim that significant benefits either material or cultural would accrue to the Algerians.

In accord with these views, Tocqueville put no stock in the notion that what later proponents of empire would call its "civilizing mission" could be carried out in Algeria. What made such an errand unlikely to succeed was the long-standing and profound contrast between the Arabs' "*mores*, their habits, their social state, their passions, their antipathies" and those of the French, amplified and solidified by the violence of the conquest, which left Muslim society "much more miserable, more disordered, more ignorant, and more barbarous" than it had been before. Tocqueville stuck to these views – reprehensible to most people today – even though they made it difficult to imagine how Algeria could

ever become a land in which colonizers and colonized could live under the same laws, much less in harmony, since French people would only go there on the assumption that they would enjoy "the same rights and legal protections" they did at home, while the Algerians had to be subjected to what was essentially martial law. Later French regimes would seek to reduce this contrast in various ways, but just such a gap between the two populations would fuel the horrors of the Algerian War of the 1950s and 1960s.[1]

How can it be that the author of *Democracy in America*, a book devoted to seeking ways to preserve freedom against the dangers generated both by itself and its enemies, was willing to countenance the liberty-destroying kind of rule over another people he supported in Algeria? The first answer is that his devotion to liberty was steeped in pessimism, especially as it pertained to his own country, whose passage from violent Revolution to renewed autocracy under Bonaparte (later to be repeated after 1848 with Napoleon's nephew) made its prospects for combining liberty with the democratic pressures of the time uncertain at best. His experience in America gave him some hope that such features of political life there as participation in voluntary organizations, and the reining in of material passions through widespread adherence to religions (of a kind largely free of the hierarchical organization that gave a different character to French Catholicism) might help to provide a way out in his country too; but from the start he feared majority tyranny and social homogenization, and the hopeful tone of his book's first volume darkened considerably in the second.

This pessimism flowed together with a defining feature of Tocqueville's personal formation that gave his liberalism a peculiar character, namely his identity as a descendant of Old Regime titled nobility (his father was the Count of Tocqueville, in Normandy). Always conscious of his aristocratic status, he exhibited a more positive orientation toward military values and even violence than did middle-class liberals in his time, such as Benjamin Constant. In a letter to Mill he cited "the gradual softening of manners" as a major symptom of the disease to which democratic ages were subject. This attraction to a more heroic way of life did not conflict with his devotion to political liberty in his own mind, because he believed that what kept the possibility of self-government alive through his country's history had been the noble-dominated local institutions – councils, courts, provincial assemblies – which the monarchy of the Old Regime sought to undermine (just as it manipulated town privileges) in its drive for centralized control. Like Montesquieu, Tocqueville believed that however threatened French liberty might be, there remained at least a potential to make its old seeds grow again, and in his own political life (as a deputy both under the July Monarchy and in the Second Republic) he worked in this spirit. But a society such as Algeria had no similar history to draw on. If France, by rising up to compete internationally with its rivals, could revive some of the self-respect and energy necessary for its beleaguered spirit of liberty to rebound, then the

dire effects of such actions on a people devoid of such a potential were of little moment.[2]

This attitude became a chief point of contention between him and Mill. As the main representatives in their two countries of the attempt to reconcile liberalism with democracy (Mill supported near-universal suffrage, including for women, in contrast to other liberals in his time, and Tocqueville saw America as a kind of laboratory for finding ways to preserve liberty against the dangers of majority tyranny), the two thinkers had a long and complicated personal relationship, their moments of warm mutual admiration and respect alternating with disagreements that interrupted communication between them for years; and their opposed views about empire were a central point of friction. Like Tocqueville, Mill made a sharp distinction between Europeans and peoples he did not hesitate to call barbarians, but he rested his support for imperialism on a belief that rule by a more advanced people could help a less evolved one progress along the path toward a higher form of life. He was appalled by Tocqueville's approval of the cruel and violent treatment visited on the Algerians and his indifference to the harm it did. To justify such actions in the name of national glory stood out as the dishonorable remnant of a less civilized time, exhibiting (in Jennifer Pitts's words) "what he considered a characteristically French tendency to resort to aggressive international politics in order to shore up national pride." Tocqueville returned the compliment, characterizing Mill's belief that rule by more advanced peoples over less developed ones could bring the latter to a higher level as a delusion of English moralism, "a form of hypocrisy that would only provoke less powerful nations and subject peoples into hostility toward Europeans and ultimately into calamitous rebellion."[3]

Like Tocqueville's, Mill's support for his country's imperial position had a more personal dimension: it was one of many legacies from his father, James. The elder Mill had started out as a critic of colonies on the grounds that their economic benefits would never cover their costs, but he had simultaneously held a low view of Indian life (rooted chiefly in his hyper-rationalist disdain for religious belief) which eased his transition to a supporter of British rule there once he became an official of the East India Company (EIC). His belief that his countrymen had a moral obligation to bring the barbarous Indians to a higher level of civilization was transmitted to his son by the remarkable education to which John Stuart was subjected as a boy, intended by James and his friend Jeremy Bentham to form the younger Mill as an instrument for continuing their reform efforts in the next generation. The "mental crisis" the younger Mill suffered in his twenties (described at painful length in his *Autobiography*) led him to regard some elements of his upbringing critically, but he emerged from his years of personal struggle as a figure very close to the one his father had envisaged: an advocate of liberty, responsible government, and progress

much as those notions had been understood in the Enlightenment, but to be pursued within the frame of nineteenth-century reform currents – suffrage extension, individual autonomy, equality for women, and improved conditions for workers. We should also remember that the younger Mill followed his father in spending a large part of his life as an employee of the EIC, conducting correspondence between its headquarters in London and its agents in the East.

Mill's sense that empire could be generally beneficial was also bolstered by what Jennifer Pitts calls the "heightened civilizational and cultural confidence" fostered in nineteenth-century liberals by the overthrow of Old Regime despotism in France, the peaceful advance of democracy and reform movements elsewhere, and the spread of humanitarian measures such as the abolition of slavery (decreed for the British Empire in 1833 and put into effect the next year). Although Mill never seems to have put it this way, he appears to have understood his support for imperialism as part of the closer identity between people and their states that these liberalizing trends fostered in his time. As he put it in *On Liberty*, citizens were now coming to regard the power of their governments as "but the nation's own power, concentrated, and in a form convenient for exercise." He welcomed this more democratic sense of identity between rulers and the ruled, but he also recognized dangers in it. If the state's power was only that of the people concentrated at a certain point, then there was less reason to set up procedures for holding it in check, opening the way for a new and specifically democratic form of despotism; moreover, rising confidence in the virtue and beneficence of society as a whole (or whatever segment was taken to stand for it) enhanced the power public opinion could exercise over individuals. Together these developments raised the specter of the "tyranny of the majority" that also haunted Tocqueville, and to which Mill sought to respond in *On Liberty* by a comprehensive rejection of restraints on individual thought, expression, and life style, however discordant these might be with reigning ideas or generally accepted standards, so long as such freedom did not harm others.[4]

The mix of confidence and anxiety bred by these ideas and attitudes was both shaped and deepened by Mill's ongoing involvement in imperial questions. Just as it was only in countries whose democratic institutions created an identity between governments and peoples that threats to liberty acquired a new and modern dimension, so was it only in places that had attained a certain level of civilization that defending it would yield benefits. "Liberty, as a principle, has no application to the state of things anterior to the time when mankind has become capable of being improved by free and equal discussion." Like most people in his time, Mill did not believe that India or China (much less the Ottoman lands or Africa) had arrived at this stage. But this did not mean that colonial powers could govern in any way they wished: "Despotism is a legitimate mode of government in dealing with barbarians, provided the end be their improvement and the means justified by their

actually effecting that end." In other words, for imperial rule to be licit, the people that exercised it had to demonstrate in practice the capacity to improve others they claimed in theory. It is hard for us in the twenty-first century, when assertions about imperialism as a source of benefits for its victims have lost, at least for liberals, whatever credibility they once bore, to believe that Mill was genuinely committed to this standard. And we will see that when the crunch came he was not able to live up to it. But whatever else Mill was – stuffy, pompous, self-righteous, disdainful of others – he was not a hypocrite. Face to face with what imperialism was really like, Mill did not turn against it. But it increasingly filled him with a deep disquiet.[5]

This situation arose toward the later part of his life, spurred on by two events: first, the Indian rebellion of 1857, to which the British responded with merciless and violent suppression; and second, the bloody reaction by British authorities in Jamaica to a protest march by poverty-stricken Black peasants and freedmen in 1865. Slavery had been officially abolished there, as throughout the British Empire, in 1833, but the conditions under which formerly enslaved people lived remained miserable and degrading, and the march turned into a revolt. Declaring martial law, the governor, John Eyre, executed hundreds of people, many clearly innocent, including a mixed-race member of the Assembly who was one of the protest movement's leaders.

About India Mill had expressed worries as early as 1838, noting (as had previous critics) that the officers and employees of the East India Company were mostly narrow-minded adventurers out for material gain, and wholly unable to serve as teachers or exemplars of the higher form of life their presence was supposed to promote. Their behavior amounted to "rapacity and tyranny." At this point he hoped that better-trained officials and administrators would infuse the regime with a more benevolent spirit and point the way forward for their subjects, but that hope would suffer a rude jolt from the brutal repression of the "Mutiny" of 1857. Referring to it two years later in *On Liberty* he bewailed the "general display of the worst parts of our national character on the occasion of the Sepoy insurrection," a judgment he colored more darkly in a letter written at the time of the Eyre conflict: "My eyes were first opened to the moral condition of the English nation (I except in these matters the working classes [because of their widespread support for the North in the American Civil War]) by the atrocities perpetrated in the Indian Mutiny & the feelings which supported them at home." The Jamaican repression opened his eyes still wider. When news of the events reached England it provoked broad outrage, and a committee was formed to find and prosecute those who were responsible. Mill was one of its principal figures, working with energy and courage (in the face of many death threats) to prosecute Eyre for murder. Many luminaries of the time joined the cause (John Bright, Charles Darwin, T. H. Huxley, Herbert Spencer), but others no less eminent supported the counter-organization set up by Eyre's defenders (Thomas Carlyle, who

wrote a racist tract justifying the repression, Charles Dickens, Alfred Lord Tennyson, and John Ruskin). The sharp debate kept the events at the center of public attention for two years, but in the end two grand juries refused to indict Eyre.[6]

Mill spoke out against the racist character of the views put forward by the governor's defenders, attacking Carlyle's claim that Negroes were demonstrably inferior to whites, on the ground that comparisons between the two groups' achievements told nothing as long as they were made to live under radically different conditions, giving whites many opportunities denied to Blacks (a point he had earlier developed in regard to women). Even if Blacks could be proven inferior in some respect, nothing would justify enslaving them. In a report of the Jamaica Committee in 1868 he denounced Britain's complicity in "the oppression of subject and dependent races." Arguing that only by bringing Eyre to justice could his country demonstrate its vaunted commitment to the rule of law, he wrote that "Not only every principle I have, but the honour and character of England for generations to come, are at stake in the condign punishment of the atrocities of which, by their own not confession, but boast, the Jamaica authorities have been guilty." Taken together, all these counts against imperialism in practice – its revelation of the low moral condition of the English nation, its reliance on committing atrocities to enforce its control over "subject and dependent races," and the sentiments that supported such actions at home, plus the dangers to English liberty itself unleashed by allowing crimes committed for the sake of colonial domination to go unpunished – constitute an indictment that seriously undermined the notion that the British could run their empire in a way that would bring genuine improvement to its subjects. Tocqueville could hardly have asked for better confirmation of the delusions of English moralism and where they led.[7]

Mill's and Tocqueville's stature and influence have encouraged scholars to see their views as indicative of a general "turn to empire" on the part of nineteenth-century European intellectuals, especially liberal ones. But if they represent such a movement then they also show it to have been more complex and anguished than it has been portrayed. Neither's commitment to empire in itself was sufficient to make him accept the other's grounds for supporting it, and the evident justness of each one's critique of the other, invoking principles both men espoused in other contexts, alerts us to the presence of a destabilizing tension in the backing each gave to imperial expansion. Duncan Bell has characterized Mill's attitude toward rule over foreign peoples in the latter part of his life as a "melancholy imperialism"; the adjective applies equally to Tocqueville's acknowledgment that between the French and the Algerians it was the first who acted as barbarians. His fears for his country's future and desire to restore its lost pride made him willing to pay that price, and because he saw no prospect for improvement in Algerian society or politics, whether

from drawing on its own history or from contact with the French, the added debasement they suffered in their attempts to repel their invaders did not put his support of colonialism in question. But this combination opened up a prospect for future relations between the two peoples very far from the hoped-for reconciliation of freedom with democracy toward which he sought a path in his other writings. Thus his advocacy of imperialism both deepened his pessimism and made him more reliant on it to bridge the rift in his consciousness that this support opened up. As for Mill, it is hard to see how the stark contradiction between his criterion for justifying imperial rule – that it should actually improve the lives of its subjects – and his understanding of how far below that level the actions of his countrymen in India or Jamaica were, could be resolved, save by abandoning his support for empire altogether. That he could not bring himself to do this was part of the melancholy into which he fell.[8]

Assessing in just what way Mill and Tocqueville should be seen as representative of attitudes toward imperialism in their time requires that we remember both how forthright and determined opposition to it could be, and yet how limited were its effects. Condemnations are easily cited from both countries, although opposition was more developed and widespread in Britain than in France. Richard Cobden wrote that the world had "never yet beheld such a compound of jobbing, swindling, hypocrisy, and slaughter as goes to make up the gigantic scheme of villainy called the 'British rule in India,'" adding in 1858 that Britain's national character, like that of the Romans, was "being deteriorated, and our love of freedom in danger of being impaired" by playing "the part of despot and butcher" in India. The sociologist Herbert Spencer, a caustic opponent of empire from the 1840s to his death in 1902, said that it threatened "the rebarbarization of England," and the headmaster of Harrow, echoing a point from Diderot and others, wrote that "It seems almost like a law of Nature that civilised men, when thrown amongst uncivilised, should assimilate themselves to their surroundings, and should catch something, and at times – as in the case of the Spaniards in America and the West Indies – a double measure of their ferocity and their barbarism. Great Britain is no exception to this rule." Spencer came to doubt his own theory of human moral progress in the face of imperialism's militarism and hypocrisy, and Wilfred Scawen Blunt wrote that it was "impossible to exercise tyrannical authority abroad and retain a proper respect for the dignity of liberty at home. The two things are permanently incompatible." Blunt, an admirer of Islamic culture, lost his faith in the virtues of Western civilization on these grounds; he lived for many years in the Middle East and (despite regarding himself as a conservative at home) became friendly with radical Muslim anti-imperialists. The explorer (of Africa), translator (of the *Arabian Nights*), and Arabophile Richard Burton, although at one point a servant of the British Empire as an officer in its army, and who sometimes gave vent to racist views in regard to Blacks, expressed his

acid critique of British rule in India through the mouthpiece of invented Eastern spokesmen, one of whom (an ancient Brahman conversing from beyond the grave) compared (in verse) British imperialism with its Roman antecedent: "But SHE forgot / to plunder subjects; You do not." So palpable was the "death and doom" brought by "the ravening Saxon," leaving "India once so happy, now / In scale of nations sunk so low," that the very mention of its name in the House of Commons "Clears every bench to England's shame." (Something like this did indeed happen on some occasions in Parliament.)[9]

That wider segments of British opinion shared such views in the first half of the nineteenth century is clear in recent accounts of how the first "Opium War" with China broke out in 1839. Traditionally portrayed as an action willfully undertaken by the British to prevent the Chinese from ending the traffic in the drug that had spread addiction through the Empire, the origin of the conflict has been shown to be much more complex.[10] The widespread involvement of Chinese in the drug traffic as traders, distributors, and retailers in many parts of the country generated uncertainty among the authorities about just how to end it, compounded by the same limitations on power and resources that allowed the many forms of free activity we noted in Chapter 4 to subsist. But a turning point came when Emperor Daoguang, after much debate at court, decided to abolish it at the source, and sent an official, Lin Zexu, to Canton (the only legal entry point for foreign goods in the country) to put an immediate stop to it. As Lin undertook to do this, demanding that all the casks of the drug in the city and its harbor be turned over to him for destruction, the first impulse of British officials and traders in legitimate goods (cloth, porcelain, tea) was to cooperate. Such a course was in line with the broad opposition to the traffic that had arisen in Britain as it expanded. An MP from a borough in the industrializing North castigated the East India Company for having cultivated opium in India "for no other purpose than for smuggling it into China, against the laws and edicts of the Empire, and as has been truly said, of poisoning the health, and destroying the morals of the people of that country." Britain having decreed the abolition of slavery in 1833, some who had been involved in the campaign to end it began to speak about the opium trade as "Britain's other great crime against humanity." Evangelical fervor flowed together with commercial self-interest in the minds of two writers in 1835 who deplored the degradation visited on respectable manufacturers by "being identified with smugglers," and asserted that "Public opinion will soon, and as surely, put down all such traffic, as it has annihilated the slave trade and slavery." The foreign minister, Lord Palmerston, later to preside over the war, stood opposed to it until the final moment, at one point writing to the Crown's representative in China, Charles Elliot, that "her majesty's government [Victoria having acceded to the throne in 1837] cannot interfere for the purpose of enabling British subjects to violate the laws of the country to which they trade." Soon after, hearing the news that a group of British in Canton had

provoked a violent encounter with local people after Lin had a gallows erected to carry out death sentences against native drug traders (no similarly harsh measures were instituted against the British), but in sight of the compound where the British traders had their "factory," Palmerston responded acidly: did those involved imagine that they were "entitled to interfere with the arrangements made by the Chinese officers of justice for carrying into effect, in a Chinese town, the orders of their superior authorities?" In the same spirit the English-language Canton newspaper admonished those who provoked the riot for their role in creating bad blood between British and local people, concluding that "[t]he quicker the Foreign Community abandon the opium trade, the fewer executions may they be obliged to witness at their doors."[11]

What turned the situation into one in which Palmerston decided to go to war was the rapid, and to many on the spot surprising, deterioration of the relations between Lin Zexu and Charles Elliot. The latter had long been opposed to the opium trade on moral grounds, and he was incensed by the British who set off the riot over the gallows, castigating them for thinking themselves "exempt from the operation of all law, British or Chinese." Echoing a memo Palmerston had sent to him, he openly declared that the British government would "in no way interpose" to protect the opium traders if the Chinese decided to "seize and confiscate" their stock. But things changed when Lin decided to confine all foreign traders in their compounds while he was dealing with the opium, making no distinction between those engaged in the drug trade and those not (there was much overlap between them), and including Elliot himself. Although perhaps harsh, this was a perfectly legal measure, and no harm was done to any of those confined. But Elliott seems to have panicked, and some who observed him thought him unhinged. First promising his countrymen he would stand with them in resistance, he suddenly pivoted back toward cooperation with the Chinese. Declaring that the time had come for all British merchants to "forgo their connexion" with the drug trade, he announced that he himself would collect all the opium the merchants possessed and turn it over to Lin, promising to compensate the opium traders for their loss. But when this failed to move Lin to release Elliot himself and the others from confinement, he switched back again, sending a memo to Palmerston recounting the situation and asking the foreign secretary to send a British fleet to punish the Chinese. Palmerston was by then being lobbied by newly enfranchised Northern cotton manufacturers worried that the Chinese would restrict trade in their products too, and like other British he regarded the confinement of Elliot as an insult to the Crown, since he was the queen's official representative in China. Thus the war began.[12]

But not without protests at home. When the ministerial decision to send warships to China became known, many voices spoke out against it. The moral connection between slavery and the opium trade was commonly cited, and the

clamor against war was energized by antislavery and working-class activists, the second led by Chartists. But opponents also included establishment papers such as *The Times* of London, which condemned the coming conflict as "nothing less than an attempt, by open violence, to force upon a foreign country the purchase of a deadly poison prohibited by its laws." William Ewart Gladstone, the later Liberal prime minister, declared himself "in dread of the judgments of God upon England for its iniquity toward China." In the House of Commons a resolution to censure the government for starting the war failed, but by a mere nine votes. It was at this moment that the name "Opium War" was pinned to the conflict, conceived and popularized by its opponents, as a way of lampooning the sordid and self-interested motives of its supporters. Later, in the early twentieth century, the label would be taken up by Chinese nationalist historians, who shaped the now reigning story that the war was willfully started by the British in order to stuff the poison down Chinese throats.[13]

The revision of this story in no way diminishes the harm done by British imperialism. The war itself, prolonged by Elliot's ill-advised and unauthorized promise to compensate the British merchants for their losses, which incensed Palmerston and led him to keep the conflict going until the Chinese could be forced to agree to pay its costs and expand British access to China and its markets, allowed the trade to continue and caused much destruction and resentment, the Chinese having no effective defenses against British iron ships and their guns. But the actual way in which it came about, and the opposition mounted against it, need to be remembered as evidence that anti-imperial views and passions had to be overcome or ignored in order for the Empire to expand.

For the most part, French anti-imperial sentiment was more muffled. At no point did a significant public outcry arise against an impending imperial war, comparable to what took place in England in 1839. Vocal opposition to the invasion of Algeria in 1830 developed as the Bourbon government's intentions became clear, liberals recognizing it as a ploy to shore up domestic support for an increasingly reactionary and tottering regime. But once the "three glorious days" of revolution brought the July Monarchy to power, more open and moderate domestically but unwilling to withdraw from North Africa, the opposition largely evaporated. Only a few critical voices still spoke up, notably the (now largely forgotten) deputy Amadée Desjobert. These silences may be evidence that the need to reclaim some of France's lost national glory Tocqueville proclaimed was widely felt among others.[14]

In the 1840s and 1850s, however, one major French thinker forthrightly called on his countrymen to give Algeria up – namely, the founder of Positivism, Auguste Comte. An ardent internationalist and pacifist who saw the union of humankind he advocated as depending on the independence of its component parts, and who valued each of the major world religions as

contributing in its own way to the search for the universal "religion of humanity" of which he proclaimed himself the prophet, Comte deplored every instance of European imperialism in his time. He regarded the Algerian invasion as undertaken in order to draw France back into its warlike past, seeing the cruelty and violence visited on the North Africans as preparing a "retrograde tyranny" that could spread to France itself. Getting his country back on track therefore required "a noble restoration of Algeria to the Arabs." His overall program was no doubt naive, but it was infused with an idealistic sense of Europe's (or what he called "the West's") special vocation of leading humanity to realize its potential for taking control of its destiny, and it provoked many echoes throughout the world.[15]

On the specific matter of opposition to empire, however, Comte's French disciples were decidedly more reticent than he. Although some of them shared his views, they never mounted a concerted campaign of the sort that his ardent advocacy might have inspired. Instead, it was in England that an organized group of Comtean positivists, led by well-known Oxford figures such as Richard Congreve and Frederic Harrison, mounted a consistent and vocal chorus of opposition to empire, putting up arguments that helped make the debate fierce in the century's last decades, even if they failed to acquire sufficient clout to affect policy. That the same did not happen in France may have had to do with the erratic and eccentric cast of Comte's personality, which encouraged those in contact with him to cherry-pick his ideas, the more so after his death in 1857. We will come to some other reasons in a moment.[16]

But French opposition to foreign adventures became vocal and sharp at some later junctures. In 1875 a rear-admiral asked publicly what right the state had to "send our young men to die in Senegal or Cochin China to molest people we don't even know," and later, as his country was about to celebrate the centenary of the Revolution, condemned imperialism for oppressing weaker populations and "re-establishing slavery over peoples and races." One of the most comprehensive French indictments was the speech Georges Clemenceau gave against Jules Ferry's colonialist policy at the time of the French retreat from Tonkin in 1884. Support for imperialism, he argued, was manufactured by those who profited directly from it, putting out propaganda that veiled the ugly reality of conditions abroad from the public, and working to make sure that "the country is not consulted." Yes, France needed markets for its goods, but these could not be established by violence, which turned would-be buyers into enemies; only good-quality products at low prices could attract them. The claim that domination was justified by racial superiority was one from which the French ought especially to keep apart, since it would be turned against them by the Germans, and the notion that such great civilizations as India or China were inferior was absurd. "The Chinese, an inferior race! … Confucius, an inferior!" As for the belief that people could be civilized by

conquest, it collapsed in face of the history of "atrocious and horrible crimes carried out in the name of civilization." Finally, patriotism was a great virtue but violence against others was no way to practice it; patriots ought to focus on making their *patrie* the best it could be. Echoes of these ideas would resound in the critiques of foreign adventures put forward all across the political spectrum, from conservative monarchists to socialists and anarchists, all the way down to 1914 and beyond. And Clemenceau's point that the notion of racial superiority could be a two-edged sword was extended to the idea of civilization by some late nineteenth-century international lawyers in France who defended the rights of colonized Africans; one of them asked rhetorically: "Do we not hear certain chauvinistic spirits repeat that the civilization of this or that European country is superior to a neighboring state? Must we not admit, under that pretext, that the strongest will crush the weakest?"[17]

These citations make it clear that the anti-imperialist ideas and sentiments that found such widespread expression in the eighteenth century by no means disappeared in the nineteenth. Citing some of the same British pronouncements included here, and focusing particularly on liberals, Duncan Bell has recently questioned the overall idea of a "turn to empire," arguing that opinion in the time "was just as diverse, and contained just as much critical energy as the intellectual world of the late eighteenth century."[18] Such a judgment corresponds with much of what we have been observing in this chapter, but it also leaves out the degree to which pro-imperialist sentiment spread through society as a whole. We have already taken note of one chief reason for its power: the growing confidence Europeans felt in their own way of life. After the middle of the century colonial involvements themselves gave a new intensity to this cast of mind, as the British suppressed what they termed the Indian Mutiny, and they and other powers imposed themselves with relative ease on East and South Asia, and then Africa.

In this atmosphere, the psychic need for people who saw themselves as contributors to human progress and improvement to maintain that conviction, even in situations that led them to behave inhumanely and despotically toward others, seems often to have been met by a reassertion of the ultimately beneficial consequences of imperial expansion. Even, and perhaps especially, when attitudes toward colonized people fell into outright racism, the colonizers' sense of themselves retained this complex ambivalence. This is the conclusion reached on the basis of extensive archival research by Alice Conklin in her study of French colonial administrators. Asking "why it took a country with as strong a republican tradition as France so long to see the discrepancy between ideal and reality," between the liberatory values they genuinely cherished and actions that manifestly contravened them, it finds

a large part of the answer in "a civilizing ideology that was never *only* racist in content":

> While racism was always present between 1895 and 1930 [the date range could be extended in both directions], it came shrouded first in emancipationist rhetoric and subsequently in scientific "respect" for traditional cultures. Both claims made it difficult for many liberals to see how inconsistent the very notion of a civilizing missions was with the [Third] Republic's universalist commitments. If the empire endured as long as it did, it was in part because French racism often worked hand-in-glove with more progressive values.

Both the rhetoric and the sentiment behind it were still alive in 1930, when the French minister for colonies justified keeping the tricolor flying in the places where it had been raised earlier, on the grounds that in its folds had been carried "liberty, law, work, and the sense of human dignity. Where it found feudalism, rapine and poverty it has known how to establish prosperity and justice, often at the cost of shedding its own best blood." If there was some unconscious hypocrisy in such a claim, there was also much genuine belief.[19]

Two other features of nineteenth-century imperialism contributed to blunting the impetus of arguments against it. First, as imperial activity spread to new areas in East Asia and then Africa, and new powers – Germany and Italy – entered the game, the scale of imperial operations grew, and the temperature of competition between the powers rose. In this situation many more people developed ties to foreign ventures than in Diderot's and Herder's time, when India was just becoming the focus of British ambitions, and movements for independence in the Western hemisphere were showing empire's potential impermanence. After around 1870 practically every sphere of activity was being drawn into connections with imperial expansion: business, government employment, missionary work, military service, geographical and biological research. There were limits to how much people with such connections could be expected to recognize what they were doing as evil. And second, the larger expenses required for this expanded scale of activity meant that more public funds had to be devoted to colonial ventures, and that citizens and subjects (some newly enfranchised) would die in support of them. Such expenditures and losses had to be justified in public opinion, and campaigns of various kinds were set in motion to generate support for them. The broad reach of these efforts has been summarized by John MacKenzie: a "large number of imperial propagandist agencies were founded in the later nineteenth century . . . and their ideas and influence extended deeply into the educational system, the armed forces, uniformed youth movements, the Churches and missionary societies, and forms of public entertainment like the music hall and exhibitions."

Although some of this activity can be characterized as conscious manipulation, it was able to attach itself to broad-based sentiments of patriotism and

loyalty, not just among those middle and upper-class people who profited directly from colonies in some way, but also in large sections of the working classes. Oral histories and memoirs give evidence of widespread "chauvinism and fascination with royalty, the armed forces, and race" among workers; the socialist (and friend of Marx) H. M. Hyndman unhappily noted "the remarkably patriotic fervour of the poorest of the working-class districts of London during the Boer War. The fervent participation of vast crowds in royal ceremonial – indeed the pressure for more elaborate ritual – seemed to come from below," even at a moment when Queen Victoria was reluctant to participate in it. MacKenzie and others conclude that one source of this sentiment was imperialism's ability to give workers a sense of possessing toward foreigners some of the power that their own "betters" were able to exercise over them. The working class participated in "a vision of control that originated above them."[20]

There was in addition one more basic dimension of late nineteenth-century imperialism that made it more difficult to oppose than it had been a century earlier. By this point imperial expansion had a long history, with ups and downs to be sure, but so common and familiar a presence that it could appear to many as a simple given of contemporary life. Before 1850 it had been relatively easy to imagine that colonial powers might lose or divest themselves of their foreign possessions, as Britain had done in what became the United States, or as Jeremy Bentham recommended to the French in 1803, and Auguste Comte in the 1840s. When the eighteenth-century Dutch writer Cornelius de Pauw, noting that the evident superiority in power civilized Europeans possessed over "savages" meant that contact between the two would almost inevitably lead the first to exploit the second (whose manners and morals he in no way admired), concluded that the only moral course was to leave them alone, the still limited extent of European empire made the prospect plausible. The same sense of impermanence underlay the proposal, made in 1797 by no less eminent a French political figure than Charles Maurice de Talleyrand, that his country abandon their remaining Caribbean possessions, not in order to renounce imperial expansion, but to replace the top-down dominions based on the forced migration of enslaved Black Africans with self-governing settler colonies on what he thought was the more successful British model.[21]

But a century later the English anti-imperial liberal Robert Lowe, regretting that Britain had been saddled with empire in India by a commercial company whose actions neither the government nor the people had authorized, expressed a then common view when he added that once the EIC had seized sovereign power from the hands of the tottering Mughals, "we had a wolf by the ears," and could not let go without unleashing all-too predictable dangers. In such a situation one could only hope that the British presence would further "industry and freedom," so as to mitigate the harms it was bound to cause.

A similar vision, from a different perspective, was suggested by the celebrated French socialist Jean Juarès, who bewailed the violent and bloody means used by his country to expand into North Africa, but saw the extension of European influence as unavoidable given the realities of power in contemporary life, consoling himself with the benefits he hoped the spread of French civilization could bring, provided it was carried out in a spirit of "equity, humanity, and patience."[22]

Despite these limits to the power anticolonial thinking could acquire during the nineteenth century, Europe's place as the source of principles and practices that called for an end to domination and oppression led opponents of empire from subjugated territories to look to the West for support for their projects. During the nineteenth century it was Britain toward which such figures were drawn, but in the twentieth France would assume a similar position. Although the eighteenth-century Indian travelers to Europe we encountered in Chapter 4 had many critical things to say about life in the West, admiration for British liberty bulked large in the reports they wrote about the country, feeding a desire to have more of it at home. As a political movement in favor of Indian independence began to develop on the subcontinent, those who pushed it forward often formed ties to sympathetic reformers in London. The best example in the early nineteenth century was Ram Mohan Roy, often considered the first modern Indian intellectual. He was highly critical of many aspects of life in the West, speaking out against British and European hypocrisy in maintaining monarchical power against the principles that should have put an end to it, faulting Britain for its long denial of political rights to Catholics, and especially decrying what he saw as the shocking attempts by Christian missionaries in his own country to impose their faith on a subject people. But he allied himself with British reformers in campaigns to abolish *sati* (widow burning), child marriages, and rigid caste distinctions, and supported his reform efforts with a reading of Hindu literature that found an underlying monotheism in the Vedas and other classic texts, drawing on Sir William Jones and his followers. He saw the future improvement of Indian society as dependent on the progress of liberal reform in the West, lamenting its defeats (for instance, in the Neapolitan revolution of 1821) as setbacks for India too. At his death he was living in London, officially on a mission from the next-to-last (effectively nominal) Mughal emperor, where he was much feted, developing close relations with Unitarians and other liberal circles; he supported the movement that led to the Reform Bill of 1832 and was disappointed it did not extend the suffrage further.[23]

A number of Indians who supported independence saw London as a favorable place from which to advocate for it during the later part of the century. One of the most notable was Dadabhai Naoroji, a Parsee born near Bombay who attended a school there set up under the Anglicist principles that triumphed in 1835; instruction was in English as were all the teachers, but the

system served him well and gave him a sense of connection to English culture that persisted even after he became an advocate of independence. Arriving in London as a partner in an Indian trading company in 1855, he taught Gujurati (his native language) for a time at London University and founded an organization to encourage contacts between his native country and the English. He was also a member of the Bombay Society, the first political association set up by Indians, and in 1866 he gave a widely-remarked response to a lecture by the president of the London Ethnological society, the racist theorist John Crawfurd (the invitation to Naoroji was a sign that many members of the group did not share the views of its president), rebutting many of Crawfurd's claims about Western superiority and the defects of Indian character. On one of his visits back to India he attended the founding meeting of the Indian National Congress in 1885, and the next year was chosen by the English Liberal Party to stand for a seat in the House of Commons. Although defeated on this first attempt, he was later elected; when the Conservative Prime Minister Lord Salisbury referred to him disparagingly during the campaign as a "black man," the noble Lord was rebuked and ridiculed in the press. Naoroji had a wide circle of friends in London, one of the closest the liberal anti-imperialist William Digby; a sharp critic of the economic and social damage done to India by the British presence there, and a member of the British Committee for the Indian National Congress, he was lauded by Gandhi at his death in 1904. Naoroji and Digby cooperated on many fronts and wrote books together, and both were among those who seized on Gladstone's conversion to home rule for Ireland in 1886 as a lever to push for applying the same liberal logic to India.[24]

Similar relations existed in France, but only patchily before 1914, becoming much more substantial in the 1920s, when important anticolonial figures such as Ho Chi Minh would encounter Marxist critiques of colonialism in Paris, living together with other Vietnamese nationalists, and in touch with Korean ones as well. Almost a century before, however, the first Algerian who sought to sway French opinion toward restoring independence to his country, Hamdan bin Othman Khodja, based his case on French liberal principles, and opened his book *The Mirror* (1837) with an epigram from the liberal anti-imperialist Benjamin Constant (who never had a chance to pronounce on the Algerian war, since he died shortly before it began), and seems to have had ties with the anti-imperial deputy Amadée Desjobert. (Khodja also met and bonded with Jeremy Bentham in London, as did other reformers from outside of Europe, including Ram Mohan Roy.) It is likely that some members of the small colony of Muslims who resided in the French capital under the July Monarchy in order to study Western life on behalf of Egyptian modernizers had links to Desjobert as well. Henry Laurens points out that French scholarship was important in calling the country's colonial subjects' attention to the riches of their own past, both in Cambodia and the Middle East, with Gustave Le Bon's *La civilisation des Arabes* becoming "one of the matrices for Arab

nationalist discourse." The radical Islamic nationalist Jamal al-Din al-Afghani published an Arabic-language newspaper devoted to his cause while living in Paris in the 1880s; he developed contacts with local people interested in Muslim religion, conducted a controversy with Ernest Renan about Islam's relationship to science, and through Wilfred Scawen Blunt also had discussions with British political figures about the future of Egypt (which the British had occupied in 1882). These links did not have the same importance to al-Afghani that those of Indians like Naoroji with British liberals had for them, since as a radical Islamic nationalist he was in search of ways to build a Muslim civilization free of European connections rather than seek support from sympathetic Westerners. All the same he chose Paris as a site for his operations because it offered a free and open locale in which to publish his paper that was unavailable in the East.[25]

None of these cases alter the brute fact that Paris and London were centers of imperial regimes that denied freedom to people elsewhere. But the favorable environment both cities provided for anticolonial thinkers and activists, taken together with the other topics we have considered in this chapter, add grounds for concluding that the often generous and beneficent interest Europeans displayed toward other peoples and places which we discussed earlier, together with the principles of respect for both human rights and cultural difference that developed out of it, and the forthright criticism of empire to which these precepts contributed in the eighteenth century, all remained alive through the nineteenth.

PART IV

Making Industry Modern

12

Autonomy and Transformation

Britain

The new economic order ushered in by the transformation of production and exchange that began in the second half of the eighteenth century was, as Peer Vries emphasizes, "fundamentally different from even the most advanced" of earlier ones. Drawing on new and massive sources of energy from mineral and fossil fuels never employed to the same purpose before, it made possible a level of growth that was not only unprecedented in its scale but – in contrast to every previous economic expansion anywhere, and thanks to the "all but uninterrupted" innovations in production methods that drove it – continuous over the two centuries that followed. Whether such a record can – or should – be maintained in the future are questions that raise painful doubts today, but the new conditions of life it ushered in accomplished something no previous economic regime did or could. It put those societies that entered into the new economic regime in possession of unprecedented powers to control and subject nature, and to bring forth a level of wealth for society as a whole practically inconceivable in any previous time and place. One may question Vries's notion that this amounted to "escaping poverty," given the large numbers of people who have remained stuck in it; genuinely escaping poverty requires not just the explosive growth in productive power that has taken place, but also solutions to the more intractable dilemma of unequal distribution that remains with us. In this respect modern society still looks alarmingly like the one that built the Taj Mahal or Versailles. All the same, the emergence of a potential to provide a path out of poverty, if not for humanity as a whole then at least for a large proportions of it, marks a radical turning point in human history. One sign of the difference it made was the condition Vries correctly identifies as emerging with the new economic order, namely a new and fateful division between rich nations and poor ones.[1]

As we noted at the start, a number of historians have sought, and with much success, to trace the most important impetus behind this transformation to Europe's absence of unity, focusing especially on the multiplicity of independent states to which this condition gave rise, and the stimulus provided by the competition between them. Taking up this starting point, Walter Scheidel has recently gone on from it to construct "a much more comprehensive line of reasoning to establish once and for all a fundamental axiom: without

polycentrism no modernity." Scheidel proceeds by developing a series of comparisons, ranging all across the globe and from antiquity to the present, to show that relatively small states engaged in competition with each other constitute far a more favorable terrain for economic development than large empires that dominate whole regions. The competitive environment in which such states operate spurs them to foster the prosperity of their countries, so as to expand the material and fiscal resources they need in order to meet the challenges of their rivals. And in order to seek this increase, governments are drawn to establish cooperative and flexible relations with those elements of their population whose involvement in commerce and manufacturing makes them able to add to national wealth, favoring conditions that can make them more productive and efficient. By contrast, large empires that dominate whole regions only face such competition intermittently; what chiefly supports their continued existence is the ability to maintain stable control over vast populations, a situation put into question if any section of society develops powers that alter its relations with other ones, or with the rulers themselves. Thus empires "consistently failed to create conditions that enabled transformative development," while European states acted in ways that promoted it.[2]

The range and clarity of Scheidel's synthesis constitutes a scholarly and interpretive achievement of the first order, and provides, in the domain of economics, the most comprehensive application of the approach to European and world history that inspires this book too. But because its overall perspective is so broad and sweeping, there are important questions with which it does not engage, and which I think are better dealt with by an analysis more focused on specific points of development and interaction, of the kind we have sought to carry on here, and that recognizes the contrast between teleocratic and autonomous spheres as a determining element in the story. The most significant of these questions is why it was Britain, and not France or Germany (both of which adopted the new regime of production in the nineteenth century), that initiated this crucial upheaval. Europe's distinctive divisions were significant not only because they led to the rise of a competitive state system, but also because they allowed and even encouraged individual countries to develop in their distinct ways, engendering economic, social, and cultural relations with very different potentials for fostering fundamental economic change. I think we can quickly establish the importance of these differences by posing a counterfactual question (a procedure Scheidel uses to very good effect): Had the system of European states not included Britain, would it be possible to imagine how an industrial revolution might have begun, not just at the particular moment it did, but within a foreseeable span of time? I think it can be clearly shown (and will try to do so in Chapter 13) that the answer is no; and because of this, Scheidel's account needs to be accompanied by one that strikes a different balance between the kind of birds-eye view (however sharp and clear-sighted) of the relations between Europe and other parts of the world

cultivated in *Escape from Rome*, and a closer-up account of differences within Europe itself. Before seeking to provide such an account, we need to explain why it will take the particular form it does here.

One way in which many stories of modern industry's emergence have been constructed is in reference to the presence or absence of measurable "factors" thought to contribute to economic transformation. Taking off from some theory or hypothesis, both economists and historians close in spirit to them assess the potential for any given society to initiate economic growth on the basis of such indices as wage levels, patterns of spending, access to markets and to investment capital, modes of land usage, population growth, how families and households are structured and what work their members do. Some writers who proceed in this way hope that these analyses will lead to policy recommendations, since in principle the factors considered are presumed to be operable at any time or place.

Such matters surely exercise much influence over economic life, shaping the ways particular entities – regions, countries, provinces, cities – provide for the basic needs of their populations, and we will take account of the roles some of them played (or failed to play) in the discussion that follows. But a number of problems arise when this kind of analysis is used to understand the industrial transformation that began in the eighteenth century. The first is that no agreement has ever been reached on which of these factors actually favor industrial innovation and which do not. In his comprehensive discussion and critique of attempts to apply such models to the rise of modern industry, Peer Vries bears witness to the difficulty of deciding this question: "for any economist making a claim, one can find another one claiming the opposite." Pitting such theories against each other, as even those who proceed in this way often agree, leaves us with "no good explanation of why modern economic growth has occurred where and when it has." Does an increase in the number of laborers encourage the creation and extension of the factory system because competition between them pulls wages down, encouraging manufacturers to invest in machines that use more of them, or does the fall in the price of labor reduce the incentive for labor-saving innovations? Are high-wage economies favorable to expansion because the desire of employers to reduce costs intensifies the search for new labor-saving technologies (or, until they are in place, because the greater spending power of workers creates a larger market for goods), or are low-wage economies better because they allow for greater profits and thus encourage an expansion of employment? Both kinds of arguments have been offered to explain what happened in Britain after around 1760. China's failure to industrialize in the nineteenth century has been explained on the ground that the low level of wages there allowed employers to make high profits without going to the trouble and expense of introducing new techniques, but the remarkable Chinese adoption of modern industry since late in the twentieth century has been attributed to the same low cost of labor. Will

workers give up their traditional way of life to become disciplined industrial hands only if their poverty leaves them no choice, or will they be willing to leave their customary forms of work if factories pay better? One of the most careful and focused of recent writers on these matters, Robert Allen, believes that Britain industrialized because new technologies offered ways to reduce the high salaries paid workers (and because, while labor was expensive, coal was cheap), but the new factories were not established in high-wage parts of the country (notably London) but in the North where labor was less dear (although his subsidiary argument that the people drawn to London by high wages created a population in need of coal for heating, and that the increased demand for it spurred the expansion of mining and the turn to steam engines to pump water out of deeper shafts, has some force). A recent book by two economic historians familiar with both China and the West argues that the latter was first to industrialize because incessant warfare in Europe drove manufacturing into walled cities where labor was dear, pushing entrepreneurs to seek innovations that reduced the wage bill, but in fact until the mid-eighteenth century (and much later in France) most industrial work took place in the countryside. Is education good for innovation because it encourages the freer imagination and liberation from habit that taking new departures requires, or is it detrimental to industrial growth because it draws people away from business and toward a more cultured and leisured existence? Are higher levels of consumption a positive factor for economic growth because they make people who traditionally supplied most of their needs by themselves willing to enter the labor market so as to gain cash income, or is consuming more goods a brake on the economy because money that might flow to capital accumulation gets frittered away for immediate satisfactions? Is free competition good for innovation because it pressures people to seek new ways to produce more efficiently than their rivals, or is some degree of monopoly better because if there is no chance of enjoying some innovation, people will not go to the trouble of abandoning their tried-and-true methods?[3]

A second problem with seeking an explanation for the coming of the modern industrial economy in factors assumed to be universally applicable is that it creates a perspective on world history that makes achieving something like it appear as an implicit goal of all societies. But different peoples set diverse goals for themselves and seek to realize different values, and not all of them have been drawn to the European and American kind of development (even French businesspeople and economists tried to keep a distance from the British model for much of the nineteenth century). Allowing other societies to appear as failed players in a game that Europeans won contradicts their own self-understanding, and allows it to have no impact on how they developed. Later I will suggest that this set of problems afflicts the "California School" of historians of China led by Kenneth Pomeranz, who argue, on the basis of the kind of comparison of factors considered above, that China in the late

eighteenth century was, in most regards, in just as favorable a position to lead the way to a new economic order as Britain, had the island nation not enjoyed certain fortuitous advantages.

Finally, the approach through measurable factors is prone to confusing the kinds of economic growth that have occurred in many societies at many historical moments, but without transforming their basic regime of production, with what remains the single known instance of spontaneous transition to modern economic relations, the one that occurred in Britain from around 1760. To clarify the difference, Jack Goldstone has proposed a helpful distinction between two kinds of economic expansion, one he calls "efflorescence," a term that suggests the appearance of an increased number of blossoms on an established plant, the other a transformation or breakthrough analogous to the appearance of a new species in the garden (these are not his metaphors but I think they make the point succinctly). A similar distinction has been highlighted by historians of China, using the more familiar contrast between "quantitative" and "qualitative" growth; we will draw on their work in Chapter 14. Like Goldstone, they emphasize that factors like those discussed in the previous paragraph have often contributed to expansion within traditional economies, but without engendering a new productive order.

Given this difference, there will always be a logical gap in analyses that claim that some favorable set of measurable factors is capable of effecting such a change, since that outcome has only occurred once, and in a particular context formed by a unique mix of political, social, and cultural conditions. As Rolfe-Peter Sieferle has argued, it is only once such a transformation has taken place that any particular factor can be regarded as having some role in causing it; where no such turn occurred, no factors can be logically designated as having the power to initiate one. "If this really was a historical singularity in which several independent political, cultural, and social factors and processes came together, it seems to be impossible to reconstruct them in another way than to tell the story just in the way it happened. This, of course, is not a theoretical explanation but the narrative of an event."[4]

Such a narrative needs to focus on the particular innovations that brought this singular event about, and on the actual human agents who introduced them, relating both the springs of these actions and the effects they produced to the special qualities of their society that made it ripe for such a transformation. I agree with Erik Ringmar that in accounting for modern social and economic relations we should look not for causes but for "enabling conditions" or "permissive environments," defined as "the kinds of situations under which causal agents *of whatever kind they may be*, are most likely to become operative." In this spirit, the story told in the rest of this chapter operates on two levels, one that considers the innovations and actors that were crucial in making the advent of modern industry possible in Britain during the

eighteenth century, then a longer-term one intended to clarify what it was about the country's earlier history that prepared it to be the site for these changes.[5]

* * *

As has long been recognized, three more or less simultaneous innovations stood at the center of the metamorphosis that got underway between the 1760s and the end of the century: first, the improvements to the steam engine by James Watt that greatly enhanced its efficiency and made it usable in industry; second, the new departures in cotton spinning that raised productivity in the textile sector and gave birth to the first mechanically-powered modern factories; and third the new techniques for iron production called "puddling and rolling" that produced a purer and more malleable wrought iron, improving the quality of both tools and structures such as bridges and rails. Before considering how these three innovations came together to begin the transformation toward a modern economic order, we need to recall some basic facts about each one.

James Watt began his efforts to improve the existing form of the steam engine (introduced by Thomas Newcomen in 1712) in the mid-1760s, trying out many models in the following years, obtaining his first patent in 1768, and a second one (together with his by then partner Matthew Boulton) in 1775. At this point, however, the new device was only usable for the purpose for which Newcomen had developed his earlier one, pumping water out of mines to allow for the exploitation of deeper veins of coal. Not until the following decade was Watt able to add the mechanism that converted the vertical motion of the rising and falling piston, immediately useful only for pumping, into rotary motion able to drive machines.

The innovations in textiles consisted of the famous trio of James Hargreaves's "spinning jenny" of 1764, quickly followed by Richard Arkwright's water frame of 1769 (Arkwright also devised a new way for preparing the raw fiber to be spun, using rollers, not unlike the ones employed in fourteenth-century China we mentioned earlier), and Samuel Crompton's "mule," a hybrid of elements from both his predecessors that he developed in the following decade. The use of steam power to drive the last two devices began in the 1780s; the difficulties in applying it to the more complex task of weaving were only overcome in the first decade of the next century.

The long history of attempts to produce iron in a purer and more malleable form picked up speed in the 1750s, with a number of artisans and manufacturers introducing improved furnaces, but the mode of "puddling and rolling" that would be widely adopted and dominate iron production well into the nineteenth century was established by Henry Cort, drawing on ideas worked out by several of his predecessors, and obtaining patents for his furnaces in

1783 and 1784. So much improved was the new form of wrought iron, that it continued to be used for large structures even after the new Bessemer process for making steel made it easier and cheaper to produce in the 1860s, providing (for instance) the material for constructing the Eiffel Tower in 1887–89.

Although there was no connection between these innovations when they were introduced, the emergence of modern industry only came about through their combination. It is certainly true, as recent writers have emphasized, that steam power was the most important of the three, in that it made possible the sharp increases in productivity and national income that marked the turn to a different economic regime. Only after its use began to spread did the economy as a whole begin to take on a qualitatively, and not just quantitatively, different character; without steam power the advances represented by the new spinning machines would not have led to the larger changes that followed. But putting too much emphasis on steam's centrality hides the important connections between these two vehicles of economic change. Without the new textile machines there would have been no existing form of manufacture for steam engines to power, leaving them devoted chiefly to the task of pumping water out of mines, for which they were originally invented (and to which Watt devoted his experiments with them in the 1760s); in that case they too might have remained within the confines of an "efflorescence." We must remember also that before the new textile machines were driven by steam they were driven by water, making mostly rural areas with usable rivers the sites for the first modern factories; even if the increase in productivity these effected was substantially less than steam power provided, it was competitive enough that many factories continued to rely on water power for decades after steam became available, probably because the difference steam made was not thought to be great enough to justify the added expense of introducing it. In this period steam engines were sometimes used as accessories to water-powered manufacturing, pumping water up into a reservoir where it could be counted on to supply sufficient energy to move the water wheel quickly and consistently. Thus the steam engine contributed to an already ongoing process of innovation, it did not initiate it.[6]

A very similar pattern describes the eventual contribution to industrial change made by puddled and rolled iron: used to make traditional tools and structures until early in the nineteenth century, it took on much greater significance once steam-driven trains on metal rails revolutionized transportation – and industry too, because many branches of it were transformed by the "fallout" from railroad construction, the impetus given by the demand for other products that the railroad created. What makes the parallel with the history of spinning machines so close is that forms of rail travel had long existed. They had their origins as far back as the sixteenth century, when a "rail road" was a private pathway consisting of wooden tracks along which conveyances drawn by animals could travel. People brought their own carriages

(mostly for goods of some kind) and paid a fee to the owner of the rails, so that rail roads were simply another form of ground travel, avoiding some of the inconveniences of highways but operating within the confines of the traditional economy. The wood rails began to be replaced with cast iron in the 1790s, and then (because cast iron was too brittle) wrought iron in the 1820s; meanwhile various people had begun to experiment with steam-powered conveyances (still chiefly for goods), first on wooden rails and then on iron ones. The turn to wrought iron occurred just as George Stephenson was making the improvements that led to the opening of the first public steam-powered railroad in 1825. At that point (as we will see when we come to the introduction of modern industry on the European continent) a whole new chapter in the Industrial Revolution began.[7]

What makes these connections and continuities so significant is that they point to a defining feature of the British entry into economic modernity, one that distinguished it from every later passage – namely, that it took place on a path that led directly from what economists call "Smithian" growth, an expansion based on improvements in existing techniques, to the "Schumpeterian" kind that puts older methods into crisis (hand-spinning and eventually weaving, animal-powered conveyances) and threatens their survival. As we will see in the next chapter, only the British Industrial Revolution traveled this route, transforming an efflorescence into a metamorphosis, because in France and Germany the greater distances between markets made railroads a precondition for creating a modern industrial economy, not a consequence of its genesis. Thus the question that needs to be answered in order to place the emergence of modern industry in the overall frame of world history is what it was that allowed the kind of Smithian growth that the three innovations by themselves represented to effect a Schumpeterian transformation. To answer this question, we need to attend to two particular features of British life that had developed by the middle of the eighteenth century: first, certain special characteristics evolved by the British economy over the previous two centuries; and second, what Margaret Jacob calls "the cultural origins of the first Industrial Revolution" and Joel Mokyr "the enlightened economy," both referring to the connections that linked artisans and manufacturers to the culture of science. Both spheres, I will argue, differed from their counterparts in other places because they had, each in its way, developed a high degree of autonomy, drawing their regulating principles from their own activities and embedding their independence in networks of horizontal connections that weakened the hold of vertical, which is to say hierarchical, ones, on them. Other European countries had moved much less far in this direction, as we will see partly in this chapter and partly in the next, a contrast even greater with China and India, on which we focus in Chapter 14.

As I emphasized in an earlier book, the long-term roots of what made the British economy exceptional (along with other distinctive aspects of the

country's existence) lay in the precocious and multilayered integration that marked its history, putting regions into closer connection with each other, giving class relations a more permeable and less rigid quality than elsewhere, and drawing a higher proportion of people at various social levels into participation in matters outside their home areas. There were several reasons for this precocity, of which geography was the first. England and Scotland together are about half the size of France, and communication within their contiguous space is favored by navigable rivers (the Thames, the Humber, the Clyde, the Severn) that both link rural areas to nearby and distant markets and give inland cities such as London, Newcastle, and Glasgow easy access to each other and the world outside by water transport, before the age of railroads much the best vehicle for most commerce. Geography was reenforced by politics. When William of Normandy with his band of some 6,000 landless nights conquered England in 1066, he distributed fiefs to his followers, creating the foundation for a unified political elite with many reasons to cooperate with the monarchy. Relations between aristocrats and kings became antagonistic at certain moments to be sure, but the great moments of Magna Carta of 1215 and the "Glorious Revolution" of 1688–89 were occasions for both limiting and reaffirming central power, testifying to a degree of social and political harmony at the top in sharp contrast to what existed in France. Those underlying conditions made possible the rise and endurance of Parliament, itself an engine of national integration, where the desire of towns and districts with seats in the House of Commons to be represented by people of influence often led them to choose aristocrats or gentry as their members, creating bridges between social classes that were doubled in the other direction by the tendency of younger sons of aristocratic families, excluded from inheritance by the system of primogeniture and entail, to seek careers and marriage partners in the world of commerce. The "chain of connection" this was seen to establish stretched farther into the social body as economic conditions encouraged the commingling of merchants and upper-tier artisans.

All these linkages were reenforced by a no less potent and characteristically British vehicle of national integration, the city of London, at once a commercial hub and manufacturing center (turning raw or unfinished imported materials into products for both its own growing market and reexport abroad), and the center of government, home to both monarchical and parliamentary power. These multiple functions nourished the city's remarkable population growth. Its 200,000 people in 1600 made it only half the size of Paris, but the number had doubled and drawn equal to its rival a century later; the French capital remained (with fluctuations) at about half a million through the eighteenth century, whereas London's rapid growth took it to 900,000 by 1801 (when the first reliable census was taken), and 4.5 million by 1881, at which point it was Paris's turn to be roughly half the size of its rival. The English capital's steady and rapid growth in the seventeenth and eighteenth

centuries was chiefly responsible for the British Isles constituting the sole area of Europe to exhibit continuous and accelerating urbanization through the whole of this period, in contrast to the seesaw patterns of alternating expansion and stagnation (or even decline) that marked other regions.[8]

Of the ways London's size shaped the character of its country, the first was in the proportion of the population who lived there. Seven percent in 1650, it had reached a full 10 percent a century later; by comparison only some 2.5 percent of the French king's subjects were Parisians at both those dates. Because disease subjected early modern cities to high mortality, an expansion like London's could only be fed by immigration, most of it from British points both nearby and distant, but including contingents of Iberian Jews (after 1655), French Protestants, and Irish. Many prominent London merchants in the sixteenth century had been born outside the city and three-quarters of its Elizabethan mayors were immigrants. London's ability to draw people and goods (since the growing numbers needed to be fed and housed) from other parts of the country led some early modern Britons to view the city as a parasite, drawing the lifeblood out of provincial areas. But according to recent historians the opposite was true by the end of the seventeenth century, the stimulation provided by the London market and the funds the city provided to finance improvements elsewhere injecting energy into the economy. Only in the eighteenth century would Daniel Defoe write of the "general dependence of the whole country upon the city of London ... for the consumption of its produce," but by then the impetus the city's expansion furnished for development elsewhere had been operating for at least a century, and even earlier in close-by areas. Road links between London and other towns numbered 88 in 1681 and 180 by 1705, a growth that accelerated with the rapid pace of turnpike building in the next decades. The turnpikes are an important part of the story. Constructed by private companies founded by local initiatives and then licensed by Parliament, they invested part of the revenue from the tolls paid by users in maintaining and improving the system, to which practically every English town of any size was connected by 1750.[9]

The opportunities provided by the London market gave a strong spur to economic activity in many parts of the country. Two developments were especially important in stimulating it to move toward independence from outside standards and authorities, regulating itself instead on principles derived from its own practices: first, improvements in agricultural techniques that raised productivity and made it possible to feed a growing population with a smaller number of rural workers; and second, the retreat of guild control over making and selling goods, which weakened both the power that traditional techniques and the established groups who controlled them exercised over production and exchange, and the moral considerations these organizations put forward to justify their special position. To be sure these changes were far from wholly beneficial, bringing harm and suffering to people who depended

on the arrangements they disrupted, and generating much controversy. But the debates fostered the emergence of a new vision of how social needs could be met, reflecting an economy already in motion toward a precocious modernity, a form of productive life that was not merely anticipatory in the manner of Renaissance Italy or Golden Age Holland, but bearing an unbroken continuity with defining features of nineteenth-century life.

In agriculture, the opportunities provided by the London market led farmers to adopt many measures for increasing production, some involving bringing new land under the plow or reducing the amount of it devoted to strip farming by enclosing fields, others employing improved techniques, such as crop rotation to reduce the need to leave some fields fallow, and the introduction of new grains that yielded more bountiful crops from the same amount of seed. The fertility of fields was also raised by mixed or "high" farming, which combined grain growing with animal husbandry, obtaining wool and milk from the sheep and cows nourished with part of the harvest, and processing the manure they provided as fertilizer. The markedly enhanced output these measures produced made possible the doubling of the English population between 1600 and 1800, even while the percentage of people engaged in agriculture fell in practically the same proportion, from around 70 to 36 percent. Some of the same techniques were adopted in other European areas, so that by "1750 on the eve of the industrial Revolution, in Western and Central Europe as a whole labor productivity in agriculture was sufficiently high that the agricultural labor force fell into a range of 45–60% of the total" (Jan de Vries).[10]

These changes put in question the underlying assumption that had long sustained the principle that the economy needed to be regulated on moral grounds – namely, that nature set strict limits to what human labor could bring forth from the earth, so that the product to be divided could not expand beyond a certain point, although it was bound to contract when times turned bad. Poorer rural people who lived at or near the edge of subsistence depended on retaining access to customary ways of sustaining themselves – the often scattered strips of inferior land they farmed, rights to "glean" the remains of products in better-off people's fields after the harvest, and the opportunity to pasture a few animals on village common fields. The new measures put these means of survival in jeopardy, provoking a loud public debate. Those who justified them did so on the grounds – later to be widely adopted in other contexts – that in the end the larger product, even if achieved in ways that disrupted the livelihoods of vulnerable people with limited resources, would redound to the benefit of the community as a whole in ways that the older system could not.

This argument was put forward in quite modern terms in seventeenth-century pamphlets, examined in detail by Joyce Appleby. As one landowner (a cleric no less) put it: "The advancement of private persons will be the

advantage of the publick; if men by good husbandry, trenching, manuring their Land &c do better their Land, is not the Common wealth inriched thereby?" The author did not say how he thought those deprived of work and impoverished by enclosures would survive in the present, but his belief in the future benefits these improvements promised led him to set little store by the custom and tradition to which his opponents appealed: "Suppose it . . . hath heretofore been so, is it therefore necessary that it be so alwayes?" By the last decade of the seventeenth century those who agreed with him already envisaged a time when an economy stimulated by its own expansion would overcome the old limits imposed by nature; as Appleby summarizes their view, "it was the pervasive and universal capacity of demand to grow from the desires of ordinary men and women that made it a natural and powerful stimulant to productivity."[11]

Here we find, as early as the 1690s in England, a concise and precocious appeal to the prospect of self-sustaining growth, fed by market demand and the improvements in technique introduced to meet it, that foreshadows the modern vision of an economy no longer confined within traditional limits. To be sure the old views would long survive in many places, notably in the classical economics of David Ricardo and Thomas Malthus (earning economic theory the sobriquet "the dismal science"), and in many ways the possibility of an economy capable of overcoming the limits that had always left most people in poverty would only find practical elaboration in the last half of the nineteenth century, when agriculture would be still more deeply transformed by the introduction of chemical fertilizers, and when modern levels of productivity would be invoked to support working-class demands for higher wages and the "new liberal" social welfare programs connected to them. But in Britain the new view of how social needs could best be met was by then at least two centuries old.[12]

These rural developments were paralleled by the decline in the power of urban guilds. Guilds were associations of artisans or merchants formed for the mutual benefit of their members, which meant protecting the group's control over the products they made or sold – first, by acting to establish or preserve the guild's privileges in particular markets and, second, by exercising its right to set standards for how things were made and to control apprenticeships. Guilds were long "the principal weapons of economic restriction and regulation." The tone in which they defended their privileges was often highly moralistic, as illustrated by the tailors' guild of Leicester, which protested publicly against nonmembers "who like drone bees to the hive, paying neither scot nor lot [town taxes], lie lurking in the suburbs and other secret places in and about this town, and rob your suppliants of the work which they should do, to their great disgrace and utter undoing." Guilds were manifestations of a way of life premised on belief in a divinely ordained universe within which people were assigned specific positions and tasks.

By late in the seventeenth century, however, their regulatory power was waning in England. Reasons varied from place to place. In some towns authorities were unable to block competition from producers located beyond their legal reach, usually in the nearby countryside; in others, members of town councils turned a deaf ear to complaints by traditional masters because the officials themselves had ties to such "illegitimate" producers. Even in the Middle Ages London artisans had found ways to circumvent the guild system by setting up their shops outside the area where selling goods was a privilege reserved to people who possessed the "freedom" of the town. Suburban expansion had progressed far enough by 1700 so that urban craft companies could no longer control production, and in 1712 the same inability led the city to give up attempting to limit membership in joint-stock companies trading overseas. Economic difficulties may have been at the root of some guilds' weakness, but in general, as a classic study concludes, the waning of guild power "indicates the discrediting of the kind of commercial protectionism which they had exemplified."[13]

Nowhere else was this English story matched. Ambitious or needful people in other places had long sought to circumvent guild restrictions, and the highly moralistic terms in which they were defended are well represented by the response given to an early modern wool manufacturer in the German town of Nordlingen, who argued that the expanded production he could achieve unhindered by existing regulations would provide work for more people than was possible where they were enforced. Against him town officials invoked the duty of citizens, "who should stand by one another through thick and thin, and must partake of each other's joys and sorrows," to resist innovations that might "cause any further diminution of each other's livelihoods, which are already far too difficult to obtain."[14] Supported by both rulers and town governments, the guild regime endured in Germany until Napoleon abolished it in the regions subjected to his control early in the nineteenth century; but it was restored in many places once he was sent packing, and despite the efforts of liberal reformers who saw economic freedom as adding both to wealth and tax revenues, guilds retained their power in some of the German states until the end of the 1850s.[15]

The story was similar in France, economic regulation persisting to the end of the Old Regime. Some cities were called *villes libres* in contrast to those labeled *villes jurées*, but what made the former "free" was only that guilds in them were not sworn associations (*jurandes*), leaving regulation in the hands of city governments, rather than the syndics of the guilds; in both situations rigid restrictions governed entry into occupations. The hold over production this gave to outdated techniques and often to self-perpetuating bodies of masters provoked objections from both outsiders and journeymen, leading numbers of both urban magistrates and royal officials to take the side of liberalization. These sentiments dominated the 1614 Estates General, the last to meet before

1789, which voted to abolish *jurandes*. But aggrieved master artisans responded with a loud howl of protest, in face of which the government backed off. The same drama was replayed in 1776, when Louis XV's minister Turgot, in accord with Physiocratic theory (on which more later), outlawed all *corporations de métiers* (organized occupational groups). A campaign by guild supporters forced him to pull back too, their spokesmen (many of them solidly middle class) declaring that without a hierarchical organization of industry the "primal links that gather men together" would break, dissolving social order itself. Only the fierce wind of opposition to the whole of the Old Regime that arose in 1789 would have the strength to blow these defenses down.[16]

The waning of guild power in Britain came together with the new conditions of the countryside to undermine the power of traditional principles to shape everyday activity. Keith Wrightson locates the impetus for this downtrend in an expanding national economy that created situations (however locally distinct) "in which the livelihoods of individual households had become increasingly dependent on the markets for their products, skills and labor." Moral principles still structured individuals' understandings of themselves and the world, but people were drawn (as Richard Grassby puts it) "to accept and follow those interpretations of the normative order which best suited their purposes," adjusting their actions in response to the demands and opportunities they encountered. Such moral casuistry loosened the hold of traditional guidelines, allowing the "norms of a more competitive economic environment" to gain power through the "daily accretion ... of decisions taken and transactions concluded in the course of simply earning a living." In the terms we are developing here, this meant that the economy was becoming autonomous: choices once largely directed by principles originating outside the sphere of work and exchange were increasingly subject to being decided by notions and attitudes generated within it.[17]

One vector driving this shift was the emergence by early in the eighteenth century of a national market for consumer goods, resting on all the changes we have noted here, and fueled by the desires and purchases of people up and down the social scale, making early modern Britain what Neil McKendrick and his colleagues call "the first consumer society." Household goods were high on the list of things acquired commercially – pottery, rugs, furniture, cooking implements, cutlery, soap – but so were clothing and accessories such as coats, dresses, stockings, ribbons, and buttons. Evidence from excise tax records suggests that expenditure on such things was increasing at double the rate of population growth. The road network allowed merchants to travel widely, seeking both customers for finished goods and raw materials to produce them; meanwhile, newspaper advertisements proclaimed the virtues of products and sellers. Not all the changes this brought were looked on with favor, critics especially rising up against what they saw as the social confusion spread when new opportunities gave uppity ideas to people expected to know their place

and stick to it. One such censor moaned in 1781 that he wished "with all my heart that half the turnpike roads of the kingdom were plough'd up," since they had "depopulated the country" and spread London manners too widely: "I meet milkmaids on every road, with the dress and looks of Strand misses." Displays of goods set up in urban shop windows already sought to inspire fantasies in ways that foreshadowed later department stores. As McKendrick concludes, "a mass consumer market awaited those products of the industrial revolution which skillful sales promotion could make fashionably desirable, heavy advertisement could make widely known, and whole batteries of salesmen could make easily accessible." More recent scholars have somewhat scaled back both the extent and the novelty of these changes, but a recent and up-to-date account still retains the main lines of the story.[18]

The spreading desire to purchase goods that people could or would not produce for themselves also led to a change in popular behavior that Jan de Vries (as we noted in the Introduction) calls an "industrious revolution," helping to prepare the way for the more famous industrial one. In order to increase their spending power, urban and rural working-class people began to devote less of their time to meeting their needs with things produced at home, and more to activity that earned pay; they also sought to became more diligent and efficient, two changes that may especially have affected women, turning them into "autonomous earners." Such strategies had the additional benefit of allowing families to maintain at least a moderate level of consumption even in times when their overall income was falling. If people did not yet have reason to believe that work for the market would open the way to what Peer Vries calls "escaping poverty," they already had a sense that it offered them strategies for improving their lot. That the growing place occupied by the national market in people's lives and the vitality it gave to the economy constituted an important spur to innovation in productive techniques is suggested by Samuel Lilley's demonstration that each of the new devices for cotton spinning came at a moment when a spurt in the demand for thread provided a rationale for introducing it.[19]

These developments in Britain's domestic economy were not the only sources of the vitality that laid the ground for industrial innovation. Foreign commerce played a role too, or rather several roles, providing expanded markets, adding to the national wealth that provided both capital and demand for goods, giving access to raw materials, and providing stimulus through competition with things produced elsewhere. As Walter Scheidel notes, "Continuous expansion of demand was a driver of rising productivity at the core, and much potential demand was located overseas . . . Without growing trade, the resultant incentives for and the payoff of innovation would have been much lower." Foreign trade was expanding at a faster rate than domestic commerce in this period, aided by other opportunities created through colonial expansion, notably in North America and India. It was an important

motor for the expansion of London, and thus for the economic integration the city fostered. Other urban places relied on colonial products for the trade that sustained them too, chiefly with Europe or the East, but also, by the eighteenth century, the highly profitable dealing in slave-produced sugar on the islands Britain controlled in the Caribbean. A recent study points out that the slave economy contributed significantly more to the overall growth in capital available to finance enterprises of all sorts than has previously been thought.[20]

But writers intent on foregrounding the debt Europe owed to the less powerful places it subjugated have assigned these connections a more central role in forging the new economic regime than they can have played. Peer Vries points out that in the years between the 1720s and the 1780s when economic change was getting off the ground "exports to non-European countries only amounted to some two to three percent of total demand in Britain." More goods were sold in the domestic market than in all the foreign ones combined. Colin White, in a study comparing Britain to other places that made successful transitions to modern forms of production, concludes that in general "the external sector represents a market which is small relative to the internal" one, so that the latter played the decisive role, the former being "at best, only supportive." Vries concurs, reminding us that whatever extra push beyond the status quo international trade may have given, it was the already developed dynamism of the European economies that brought this trade into being in the first place, and it was European merchants, using European ships, who almost exclusively carried it on. The point applies to imports of raw materials, including the cotton that fed the mushrooming British textile industry. As Jack Goldstone rightfully insists, "it was not raw cotton that made the industry but innovations in British machinery and the harnessing of water power and steam power that made it worthwhile for Britain to import cotton, spin it, and weave it into fabrics." The expansion of cotton-growing in the slave-driven economy of the nineteenth-century US South "was induced by Britain's industry," not the other way around. As for such luxury goods as sugar, tea, silk, spices, porcelain, and tobacco, that they were imported at all was a consequence much more than a generator of Europe's wealth; paying for them meant "a drain of 'good' money for 'superfluous luxuries', regretted and even abhorred by many contemporaries."[21] Recent authors have pointed to the generous compensation paid to slave owners for the loss of their "property" when slavery was abolished in the British Empire in 1833 as a source of industrial capital. Some of the former slave owners may have used what they received in that way, but such investments were too late to serve as an impetus for the innovations that marked the shift to a new economic regime from around 1760. Repatriated profits from colonial activities such as growing sugar in the Caribbean were at least as likely to be invested in landholding as in industry, and until around 1820 the typical sites that introduced innovative techniques were small enterprises, requiring relatively little capital to set up. To

be sure, the wealth generated by colonial enterprise enriched many individuals and contributed mightily to expanding the overall scale of economic activity, but it was the new industrial techniques that enabled the radical rise in productivity, making what might otherwise have been simply another efflorescence into a revolutionary transformation.[22]

There was one import that played a significant role in the history of early industrial innovation, specifically the remaking of the textile industry after 1760, namely Indian cotton. That it was at once cheap and of high quality pushed British manufacturers to improve production techniques in order to compete with it, and we will need to focus on what part it played when we come (in Chapter 14) to the claims recently made for India as a candidate for pioneering modern economic development. But we can anticipate one main conclusion here, since it is the one Vries points up in regard to the whole subject of foreign trade: many countries were faced with the need to contend with products from beyond the seas, but among them only one, Britain, responded with the innovations that put economic activity on a new path. Whatever the best explanation for Britain's singular trajectory (and to be sure I think it lies in the differences we are pursuing here), competition with goods produced outside Europe was a stimulus to it but not a root cause.[23]

* * *

One feature of British life that did play a major role in fostering innovation was science, or rather, to use Margaret Jacob's formulation, "the culture of science." Reversing an earlier tendency among historians to downplay the role of scientific knowledge in the Industrial Revolution (based on the correct observation that the main innovations were technological and did not require any application of new scientific understanding), Jacob has convincingly argued that science was all the same a significant force behind the changes that took place. The reason is that many of the artisans, entrepreneurs, and engineers who worked to introduce new techniques or improve old ones were moved by a lively interest in natural philosophy, and some of them possessed an impressive level of knowledge about it. One thing that drew them to the new science was the promise of practical improvements it bore, affirmed by its advocates from Francis Bacon to Newton's disciples and publicists, and fulfilled more and more as time went on. The interest in theory and the expectation of practical improvement came together to create often close connections between headworkers and handworkers, and no figure better illustrates these ties than James Watt. Looking for a moment at his background and early development will prepare us to understand how his pathbreaking reinvention of the steam engine fits into the overall story we are trying to piece together here.[24]

Watt's occupation has been described in a number of different ways, both in his own time and since, as an artisan metalworker, an engineer, and a scientist, a sign of how permeable were the boundaries between those designations in his time. But his core identity, bordering on all the ones just listed, was as an instrument maker. Like so many people in his time, his vocation ran in his family. Both his father James and his paternal uncle John Watt were instrument makers and shipwrights, especially involved in navigation (John and another uncle, Thomas, seem to have devised the method for measuring how far a ship traveled in a given time that impressed the Indian traveler Taleb Khan whom we encountered in Chapter 4). John Watt advertised his accomplishments as a mathematician, offering to instruct others in "square and cube roots, trigonometry, navigation, sailing by the arch of a great circle . . . astronomy, surveying of land," all of which he would teach "either arithmetically, geometrically, or instrumentally." His notebooks contain references to ideas put forward by Kepler, Copernicus, and Tycho Brahe, and he was able to make calculations based on Newton's mechanics, including the weight of both air and smoke. Protestant Dissenters from the Established Church, the Watt family was like other members of the solid, striving, but down-to-earth British middle class in harboring no ambitions to higher status (in contrast to James's later partner Matthew Boulton, an Anglican who displayed his aristocratic yearnings in his somewhat dandyish dress and behavior). They may have been drawn to Newtonianism by its reconfiguration of the universe in nonhierarchical terms, permeated by a divine force (gravity) that operated in the same way everywhere.[25]

After grammar school, where he took especially to mathematics, the younger James Watt worked in his father's firm as an apprentice instrument maker. Following his mother's death, he moved from the smaller town where his family lived to Glasgow, perhaps intending to apprentice as a merchant, but he soon reverted to the familial vocation of instrument maker. From early in his time there (and again after he returned from a short stint in London), he became involved with people connected to the University, frequenting circles of professors and students with whom he engaged in discussions on topics, literary, philosophical, and scientific. Out of these ties there developed his official connection to the Glasgow Old College (part of the University), where he was charged with maintaining and repairing instruments used in teaching and research. One of these was an ailing Newcomen engine used for lectures and demonstrations. Interest in steam engines was widespread in the College at this time, some associates even anticipating that they might be used to power vehicles (but not, so far as I know, factory machines). One person who shared this interest and with whom Watt began a lifelong friendship at this time, John Robison, later recalled that at their first meeting he "saw a workman, and expected no more, but was surprised to find a philosopher, as young as myself, and always ready to instruct me." Robison also remembered Watt as being at

the center of "all the young lads … [in] any way remarkable for scientific predilection," eager to learn and discuss whatever subjects came up. Watt also became close to the well-known chemist and physician Joseph Black (the first person to separate carbon dioxide, which he called "fixed air," from other constituents of the atmosphere, and a good friend of Adam Smith), with whom he engaged in both intellectual interchange and various commercial projects, and who conceived a strong admiration for the younger man, both as a "projector" and as a "philosopher." Watt never seems to have thought of a more academic or cerebral career for himself, pursuing his interest in natural philosophy as a ground for making his way as an instrument maker and engineer, but this formative period in his life already shows how close together these features of his identity lay, both in his mind and others'.[26]

In this way the reinventor of the steam engine was an excellent example of the "scientific culture" that lay behind the Industrial Revolution, maintaining relations with people more involved in theory and science than he, sharing their fascination with new ideas and discoveries, and pursuing his attempts to improve steam engines and other instruments in a milieu permeated by their spirit. Figures who resembled Watt in these ways were legion in Britain in this period, some still remembered others not. They people the pages of Joel Mokyr's *The Industrial Enlightenment*, a book that considers their achievements as effecting combinations not just of social identities, but also of different forms of knowledge, tacit and explicit, propositional and practical, a mix on which the kinds of material progress and improvement that began in Watt's generation would continue to draw in the centuries that followed (and on which the task humanity now faces of saving ourselves from the unforeseen darker consequences of fossil-fuel technology must continue to rely today). A major inspiration behind the hopes for continuing advance in both the scientific and technical fields that this culture encompassed was the recent and revolutionary recasting of cosmology and physics. Groups of young people like those with whom Watt met to discuss ideas and projects at the University of Glasgow were surely aware that the path they were trying to chart was akin to the one followed out by the line of figures from Copernicus through Galileo and Boyle to Newton, and it seems reasonable to think that people in search of practical improvements were energized by the prospect that their work might provide a second act of that drama.

Watt's participation in this scientific culture provides a background against which the several dimensions of his signal achievement, the reinvention of the steam engine, stand out with particular clarity. The engine designed and used by Thomas Newcomen in 1712 functioned by injecting hot steam into a cylinder capped by a piston, and then suddenly cooling the container down by feeding cold water into it; the contraction of the steam created a partial vacuum, causing the piston to fall. The cylinder was then heated up again and the sequence repeated. The machine performed well enough for the task for

which it was conceived, pumping water out of mines, but it was hugely inefficient because of the need to cool down and then reheat the cylinder for every stroke. Recognizing the wasted energy this involved, Watt saw a way to reduce it, by giving the engine two chambers instead of one. The piston still capped the cylinder where the power was generated, but instead of condensing the steam there by an injection of water, Watt transferred that step to a second enclosure, the "separate condenser," insulated from the first and kept always cool. Once sufficient steam had been introduced into the power cylinder to push the piston up, a valve on the cylinder wall was automatically opened, allowing steam to escape into the condenser, where its contraction drew more steam after it, so that, as with Newcomen's device, a partial vacuum in the power cylinder caused the piston to fall; from this point the process began again. Hot steam pushed the piston up and its condensation made it fall in Watt's engine as in Newcomen's, but since the separate condenser eliminated the need for repeatedly heating and cooling the main cylinder, the only energy required was what it took to boil the water into steam; the resultant saving in fuel was reported to have been in the area of 75 percent. Getting to this figure depended on other improvements as well, as recent writers have emphasized, but we need not pause over them, nor over the further alterations that were required before the engine could be usable in textile factories, a point reached only in the 1780s.[27]

Once Watt had conceived the idea of adding the separate condenser, the abilities on which he chiefly drew to effect his improvements were those of a skilled metal worker and instrument maker; he used them to build successive models of his engine, improving the fit between cylinder, valves, and piston, and thus producing more energy with the same fuel. Many skilled artisans could have done this work, and recognizing that they could has led some historians to doubt that science had much to do with Watt's innovation. But "scientific culture" did, in at least two ways. First, both Newcomen's original engine and Watt's improved version rested on the presumption that air was not a "light" element always seeking a natural place above earth and water, as the old physics held, but had weight and behaved like other gases, occupying more or less space depending on the temperature and pressure to which it was subjected. Both conclusions were established by Robert Boyle in the 1660s, taking up notions and experiments pursued by earlier anti-Aristotelians such as Evangelista Torricelli (a student of Galileo who constructed the first barometer) in Italy, and Otto von Guericke in Germany.

To be sure, it was not necessary to understand the connection between Newtonian physics and the way steam engines operated in order to build one, and it is possible that Newcomen, an ironmonger and Baptist lay preacher less educated and sophisticated than Watt, may not have had much concern about theory. That was the opinion held by one of the most active of the Newtonian popularizers, J. T. Desaguliers, who disparaged Newcomen and his coworkers

as having succeeded "luckily by accident," "not being either philosophers . . . or mathematicians enough to calculate the powers." That Newcomen could not do such calculations may well have been true, but he had connections to people who could, namely a family of engineers called Hornblower, who like him were active in Baptist church life and one of whose occupations became installing Watt's engines in mines. Nor was his success so accidental as Desaguliers asserted, since it required a willingness to engage in successive experiments, a state of mind nourished in the milieu of engineers like the Hornblowers. With Watt, however, there can be little doubt of his awareness of the basic science on which his work depended, given what we know about his family background – his uncle knew how to calculate the weight of air and smoke – and his contacts at the University of Glasgow.[28]

The second reason for not looking on Watt's achievement as based only on craftsmanship is that conceiving of the separate condenser was an act of imagination much like ones that lie behind many advances of scientific understanding, and it is hardly possible to think he did not make the connection himself, given the personal history we have recounted. Late in his life he would give an account of how the idea for the separate condenser came to him: all at once, while walking on Glasgow Green, much as Newton's intuition of universal gravitation was said to have popped up under an apple tree. The story may have been invented in order to shore up his status at a time when others were claiming to have arrived at his innovation before he did (one of many controversies about the priority of discovery given wing in Europe by the redefinition of the term in the sixteenth century), but it illustrates his justified sense of himself as not just an artisan but a person of imagination and intellect, in short a natural philosopher too – a term people in his time applied to him.[29]

The pattern followed by the early history of the steam engine, in which a first invention based on only a small degree of technical understanding was succeeded by improvements that required more, reappeared elsewhere in the British Industrial Revolution. One example is the development of textile-spinning machines. The first of the new devices, Hargreaves's jenny, was so simple that many people familiar with traditional ways of spinning thread from raw fiber might have come to it. It consisted simply of an assemblage of traditional spindles and rovings (bundles of unspun cotton), originally eight, arranged and connected on a table or frame so that a single worker could operate them all at once, turning a wheel with one hand and guiding the spun thread onto spindles with the other. But Arkwright's water frame and Crompton's "mule" were much more sophisticated. Arkwright's frame came to comprise 96 spindles and Crompton's mule 1,320; drawings and photos (since some of the devices were still in use when photography became available) show them to have been carefully and finely constructed. In addition, Arkwright was not only an inventor but a visionary entrepreneur, as well known in his time for what one contemporary called the "system, order and

cleanliness" he introduced into large assemblages of workers as for his mechanical innovations. He designed factory buildings "carefully planned to house a sequence of semi-automatic machines, arranged in series so that the raw material, admitted at the top of the building, flowed from one process to the next." His establishments, first at Cromford and then in a number of other places whose population grew rapidly because of them, practiced the strict factory discipline that imposed burdensome rhythms of life and work on their employees, but he also built decent housing for them.

Among the people to use the new machines and follow Arkwright's model of factory organization on a large scale was a family who became leaders in textile production during the eighteenth century, the Peels. Started by the senior Robert in the 1760s, their business provided the wealth to support the career of the son named after him, a key figure in mid-nineteenth-century politics who became prime minister in the 1840s. Cotton spinning (and later printing) was at the core of their business, and in setting it up they took counsel from Hargreaves and Arkwright, while assembling "their own team of talented artisans, conducting experiments and building their own machinery. Locksmiths and copper founders were recruited to make the principal components and clockmakers to make the iron gear wheels." The machines were so complex, a contemporary observer noted, and so large were the "numbers of each part of every machine to be made [that] it becomes, in the same manner as with the clockmaker, worth the machine maker's trouble to construct complicated tools and engines to expedite the manufacture of the parts [such as] cutting engines for forming the teeth of the numerous wheels." Such attention to precision and mechanical connections did not necessarily involve ties to "natural philosophers," but it is not unlikely that some such links were made.[30]

The case of puddling and rolling did not quite follow this pattern, but here too links between artisans, businessmen, and scientists were part of the story. Not much is known about Henry Cort, who patented the process in 1784, but he came to his interest in iron through being employed as a pay agent, and then a supply buyer for the Royal Navy, among whose needs were metal staves for barrels. He was enterprising enough to obtain a large loan to set up a factory to make them, which led him into a world where people had long been trying to find ways to remove impurities from pig iron. Most of those attempts proceeded by trial and error, but Cort decided to consult a scientist for help, who was none other than Joseph Black, the chemist and friend of James Watt in Glasgow who first succeeded in separating carbon dioxide ("fixed air") from other components of the atmosphere. Whether other people of his sort sought similar help I do not know, but here too their doing so seems more than possible.[31]

One reason for expecting the existence of such ties is that Cort, like the kinds of people involved in setting up the Peels's factory, as well as the Watts, and Newcomen's friends the Hornblowers, was very much the sort of person that

Newton's followers envisioned as a member of the public whose testimony at their demonstrations would give science independence from traditional authority. As we noted in Chapter 7, the purpose of presenting ideas and conclusions worked out in the *Principia Mathematica* to audiences not capable of dealing with the book's complex mathematical analyses was not merely popularization. No less important was the aim of obtaining for the new science "wider consent than the limits of the laboratory could easily allow," developing "an epistemology of common experience," in which claims to truth were based not on logical deduction but on what Thomas Sprat called "the joynt force of many men." As we saw, these lectures and demonstrations were intended to foster a community of people whose aroused interest in the new science, and exposure to evidence for the value of its concepts and demonstrations, would provide an alternative to its subordination to "higher" spheres, sustaining its right to establish its regulating principles in accord with its own practice.

I cannot claim to determine just how this reaching outward from the side of natural philosophy was related to the motion in the other direction, generated by interest in ideas about nature and its workings on the part of artisans and businesspeople. But the autonomy achieved by science and the "culture of science" in eighteenth-century Britain depended on these horizontal relations between people at different social levels and in different parts of the land, just as did the independence of action and the impetus for improvement within the economy. There remain, to be sure, many ways to understand the momentous innovations in production and exchange that began in the 1760s, but the close interaction between the two spheres, based on the autonomy each had developed, was at the heart of them. How other places differed from Britain in this regard will be the subject of the next two chapters.

13

Transformation and Autonomy

France and Germany

The advantage Britain enjoyed by virtue of its early turn to industrial innovation waned during the nineteenth century, as its continental neighbors found their ways into the new economy. The initial contrast was sufficient to make Benjamin Disraeli's characterization of the island nation as "the workshop of the world" apt when he voiced it in 1838, but it no longer applied half a century later. The paths followed by France and Germany, however (as well as other countries to which we cannot attend here), were signally different from Britain's, and from each other too, even though the places at which they arrived had much in common. The first part of this chapter is devoted to understanding why neither country was in a position to enter onto those paths, either on its own or by following Britain's lead, before the mid-century, and much of the explanation will focus on the smaller degree to which their economies had achieved autonomy in the sense that Britain's did. For France and Germany such autonomy only became possible as large-scale railroad construction drew formerly disconnected parts of each land into closer contact, integrating not just markets but many activities carried on through other kinds of distant connections as well.

But it did become possible in these new conditions, and the second part of this chapter is dedicated to identifying its presence. Production and exchange were one main locus of it, transformed by the closer and more numerous relations individuals were able to establish with trading partners, suppliers, and consumers as effective distances were radically shortened by the new means of transport. Individuals now acquired far more ready access to what the contemporary German sociologist Georg Simmel called extended "chains of purposive action," linkages that allow people to draw resources from distant places and focus them on some goal or task, lessening their dependence on locally based conditions and authorities and widening their scope of activity. But a second and no less important site of autonomy was the reorganization of professional life that took place in the same years, extending across the whole spectrum of activities that constituted it. This reorganization took the form of self-governing national and international organizations of doctors, lawyers,

architects, and engineers, as well as practitioners of research disciplines in both universities and industry. Many such groups conducted regular meetings and conferences and published periodicals, all of which served to share information and discuss matters of common interest; chief among them were measures to improve control over their own lines of work. This transformation too rested on the advances in transport and communication – rail travel, accompanied by the electric telegraph, later telephones and after the turn of the century airplanes and radio – that were essential in making the industrialization of the continent possible.[1]

Not only did changes in industrial production and professional life proceed in parallel; they were also closely interdependent, because relations between science and industry now became noticeably closer than they had been before. Science was far from irrelevant to the British industrial innovations that began around 1760, as we have seen, but its importance for industry grew deeper and more direct in the sectors that constituted the "Second Industrial Revolution" of the later nineteenth century: metallurgy, chemistry (including drugs and medicines), electricity, optics, as well as new developments in engine technology and transport. Physicians, who did not contribute directly to industrial advance, heightened their ability to improve the everyday well-being of society's inhabitants by virtue of relying more than before on laboratory research of a kind similar to that carried out by industrial chemists and academic biologists. Thus the autonomy of spheres, whose greater degree of development in Britain fostered that country's role as the pioneer of industrial innovation in the eighteenth century, appeared as an important feature of French and German life as a consequence of the same closer integration of their national spaces that laid the ground for their entry into the modern economy.

* * *

Neither in science nor the economy was France either backward or lethargic in the mid-eighteenth century, but both spheres exhibited structural features that impeded the kind of turn Britain took then. French science was blessed with such figures as Antoine Lavoisier, Pierre-Simon Laplace, Gaspard Monge, Pierre-Louis Maupertuis, François Magendie, and, like Britain, France had a "culture of science" that included attempts to bring it to a wider public. The chief presenter was Jean-Antoine Nollet, an ordained priest with a lively interest in physics, chemistry, and biology. Nollet became a Newtonian at a time when Cartesian physics still had many followers in his country (the number dropped after the expulsion of the Jesuits in 1762), and it was on the model of Dutch and British advocates of Newton that he conceived what became the most popular series of scientific lectures ever given on the continent, starting in Paris and moving to the French provinces as well as the Low

Countries and Italy. Like his models, he sought to present the new science by way of experimental demonstrations, sparing his audiences the off-putting encounter with complex mathematics. Like them too, he stressed the practical contributions the new physics could make to society and the economy, discussing pumps, levers, pulleys, and navigational devices.

But even as he invoked the power of improved machines to ease or replace human labor, he insisted that the applications had to be worked out by true mechanical philosophers rather than mere "machinists." To be sure J. T. Desaguliers (as we saw) had expressed similar attitudes in Britain, but this is the moment to point out that he was French by birth, his family among those Huguenots (French Protestants) who fled to England after Louis XIV revoked the toleration accorded by Henry IV's Edict of Nantes. Nollet's examples of practical applications looked more sideways than forward, including windmills for grinding grain and pumps to supply water "for our use or for the decoration of our gardens," but paying little heed even to existing uses of machines in mining or manufacturing.[2]

Nollet's way of popularizing Newtonianism had something in common with the more aristocratic tone that marked scientific culture in France, less hospitable than Britain's to milieux like the one Watt frequented at the University of Glasgow. The English Royal Society and its *Proceedings* had fostered a mix of socially diverse scientific practitioners; by contrast, the official French scientific schools and academies, where to be sure much innovative and original work went on, were largely dominated by aristocrats. One reason for this was that the tentacles of the monarchy reached into French intellectual life more deeply than was the case in Britain. Controlling education in engineering, the government saw to it that the schools would be overwhelming populated by the sons of noblemen, and Margaret Jacob notes that "the most scientifically literate" of engineers were those who pursued their profession as military officers. In such a situation, new mechanical knowledge was chiefly put to use "in the service of state-run projects," aimed at improving methods in warfare and (aristocratically dominated) large-scale agriculture. The social consequences of organizing scientific education and practice in these ways, drawing it into the Old Regime's system of class and status distinctions and reducing the possibility for fruitful interactions between artisans, scientists, and businesspeople, would be evident in the need French officials felt (as we will see in a moment) to promote significant innovations themselves, by importing technology and people to run it from across the Channel, and to make the state itself the vehicle for such initiatives.[3]

A similar pattern of lively activity directed toward already established ends characterized the French economy. Far from being weak or languid, economic activity in eighteenth-century France was in many ways no less vibrant than across the Channel. Its dynamism owed much to the impressive expansion of the country's foreign trade, which may have quadrupled in volume over the

eighteenth century. France's chief trading partners were its colonies, especially the Caribbean sugar islands of St. Dominque [Haiti], Martinique, and Guadeloupe, as well as Italy, Spain, Northern Europe, and the Levant. Among its beneficiaries were the major port cities, Bordeaux, Marseilles, and Nantes, all of which experienced an urban construction boom that adorned them with new buildings, streets, and squares. Bordeaux's rebuilding was especially impressive, evoking the admiration of visitors and leaving a legacy still visible today. Mushrooming trade also stimulated manufacturing, notably in the important sectors of textiles and iron. Overall French industrial output may well have been larger than Britain's and growing at a faster rate too; even output per capita (the French population being much larger) seems to have exceeded its neighbor's. Most production of goods (with the exception of luxury items requiring a high degree of skill) was carried on in the countryside, where merchants based in nearby towns put the materials out to rural workers, female and male, needful of work at times when farm employment was slack or conditions unfavorable, or simply seeking to supplement their income. Some of the traders who organized this kind of production began to gather their workers together in "factories," mostly using traditional techniques but sometimes adopting British innovations, such as the spinning jenny.[4]

But this vigor should not be confused with a potential for productive transformation of the kind effected in Britain. Successes of the sort just listed were well within the reach of the traditional European economy (and that of other regions and countries too, as we will see): production expanded and contracted with changing conditions, new trade routes and new commodities enriched people able to take advantage of them, and many medieval cities, such as Florence, Milan, Brussels, Louvain, engaged in building new streets and squares as their growing wealth – derived from traditional commerce, handicraft production, or other urban activities such as administration and banking – drew more people into them. Even the fledgling "factories" belong inside this frame, since large agglomerations of workers were not a feature only of modern economies: consider the Venetian Arsenal, which may have employed 15,000 people at its peak in the sixteenth century and could produce a whole ship in a day. Collections of textile workers sometimes served as platforms for the turn to mechanized production, but often they did not, many regions rich in them failing to make an early transition to the new methods; the same is true of the putting-out system, as critiques of the claim that it constituted the source of modern industry ("proto-industry") have shown. In the helpful language suggested by Jack Goldstone, what France exhibited in the eighteenth century was an "efflorescence," not the beginnings of a metamorphosis.[5]

Of the various things that kept France within these limits, probably the most important was the absence of a countrywide system of transport, which impeded the development of a national market. What kept France from developing the extensive kind of internal transportation network Britain

achieved by the middle of the eighteenth century was, first of all, the country's larger size, together with the limited help in overcoming it offered by the river system. Navigation on French rivers, including the Seine, the Loire, and the Rhone (especially north of Lyons), was hindered by rocks and currents. Paris could never become a major ocean port, as London did early on, nor did the French capital ever enjoy easy water communication with regional centers at a distance from it, or with the main ports of Bordeaux and Marseilles. Until well into the nineteenth century, France remained a congeries of local economies, their independence firmed up by the tax privileges and tariff protections the monarchy had to accord when new provinces were incorporated into it. The state had an interest in improving internal communication, but chiefly for the sake of its own administrative functions, so that good roads mainly connected provincial capitals to Paris, but not to each other. Even these links were of poor quality, as the government recognized in the eighteenth century by having its department of *ponts et chausées* (bridges and roadways) mount a vast effort to improve it. The project produced some 12,000 miles of new canals and highways (chiefly the latter), but however admirable the effort the results it achieved were limited. In his pathbreaking book on urban life in France from 1740 to 1840, Bernard Lepetit concludes that one chief reason for the narrowness of what was achieved lay in the traditional priorities under which the government operated, favoring "towns whose pre-eminence rested on exercise of administrative responsibilities and extraction of agricultural rent," reproducing existing urban hierarchies and molding new investment to "the pattern of the past."[6]

To be sure, the vigor displayed by the economy in the last century of the Old Regime stimulated a number of new connections. The quantity of grain exported through Bordeaux to the New World from Montauban, some 200 kilometers to the southeast, tripled during the first half of the eighteenth century. But many evidences of the old limits remained. As one historian has recently observed, anyone who journeyed from Bordeaux to the *massif central* at this time "would have found himself moving from a maritime to a mule-pack economy in the space of a few days." Both the state's persistence in seeking to address the problem and the limits of its ability to do so are illustrated by the project the minister Anne-Robert Jacques Turgot sponsored in the 1770s, to speed up road travel by employing faster coaches (called *diligences*) that cut the travel time between Paris and other cities. His efforts were widely praised, but here too the new state initiative was primarily aimed at serving its own ends, chief among them improved communication between central and regional officials. Too expensive for ordinary people to use, the service remained spotty and irregular. As late as the 1830s, Lepetit concludes, only the North possessed a relatively well-developed road network, largely called into being by the magnet of Paris. The South remained an assemblage of local societies largely closed in on themselves. François Caron points similarly

to "a structure split up into regional networks, between which relations remained difficult."[7]

Just as the state was central in efforts to improve communication and transport, so was it the source of the most significant attempts to introduce new energies into the economy, intervening much more actively than its British counterpart. The mid-century minister Daniel Trudaine, a friend of Turgot and an active proponent of canal- and road-building, set up government-sponsored hubs of textile production in poorer agricultural regions, seeking to provide at once new sources of employment and a home market for the raw cotton that was then a chief product of the country's colonies. His enterprises were exempted from guild control and other restrictions, exemplifying the way that, as Paul Butel puts it, "monarchical interventionism and liberal policy were closely allied" in France, a connection that would long remain important in Germany too. Trudaine's projects were carried on by his son and successor, who brought an English businessman, John Holker, to run factories for both spinning and weaving cotton in Rouen, making use of imported British machines and workers. The government was also the chief force behind efforts to modernize cast-iron production. Recognizing its possible military importance, state officials recruited another prominent Englishman, John Wilkinson, as director of a coke-fired foundry at Le Creusot, in Burgundy, in 1785. Later the town would become an important center for the French metal industry, but these first efforts petered out, "too dependent on the subventions of an impecunious state, and suffering from the lack of skilled workers and above all from the narrowness of the market." Nor was it only the demand for iron that was constricted in France. As Butel observes, the proportion of the active population employed in industrial production in Great Britain was more than double the French, 43 percent against only 19 percent, and the "essential differences" between the two economies "were those having to do with the structures of production and of the market, more than the rhythms of growth."[8]

Like Britain, France in the eighteenth century developed an expanded market for consumer goods, people turning increasingly to commerce for such everyday items as plates, cutlery, furniture, more colorful skirts and shirts, and underwear. Over the course of the century the value of clothing owned by Parisians at their deaths (based on the inventories that had to be drawn up when property was passed on) tripled for middle-class people and quadrupled for domestic servants (often the recipients of their employers' cast-offs). Even urban working-class families were drawn into the world of commercial consumption for the first time. The resulting breaches in the walls of social distinction, effacing the visible signs of class and status, were deplored by critics, probably even more than in Britain. A bourgeois writer in Montpellier lamented what he saw as efforts by "the most vile artisans" to clothe themselves

like their betters, seeing such aping as threatening both morals and the social order.[9]

But important features distinguished this French world of consumption from the British one. First it was far less integrated. Fashions and tastes spread outward from Paris, and from other cities to their countrysides, but slowly. Daniel Roche reckons that the turn to brighter clothing and the adoption of underwear in Limoges was fifty years behind Paris, with Alsace and Brittany trailing still farther in the rear. The role played by connections between regional road networks in this rhythm, and therefore the importance of their absence, is suggested by the case of Le Mans, where upper-class women were not customers for Paris fashions of the season until the opening of a new *grande route*, built by the forward-thinking *ponts et chausées* officials, made them so. Moreover, even though people at many social levels participated in the new world of consumption, the wealth that supported it was skewed more toward society's upper reaches than was the case across the Channel, and the monarchy retained a larger role in providing it. In Paris, as Roche notes, only a third of the income flowing to the capital's population (as calculated by Antoine Lavoisier in 1791) derived from mercantile and agricultural pursuits; 20 percent came from urban property rental, while the largest source, fully half, consisted of payments by the royal treasury – administrative and official salaries, interest on bonds and loans, and disbursals for other royal expenses. Comparable figures for other cities are difficult to come by, but there are reasons to think their situations similar. Caen, Dijon, and Montpellier all recorded significant population growth in the eighteenth century, and each benefitted from one or another form of traditional industry, but in all three cases the rise owed more to an expansion in the number of state officials employed in royal courts and administrative offices, as the government sought to intervene more in local life, than to commerce or manufacturing.[10]

A final testimony to the traditional quality of the French economy, and to the relative absence within it of potential for fundamental transformation, comes from economic theory. The most celebrated eighteenth-century discussion of how economies function and grow is Adam Smith's *The Wealth of Nations*, published in 1776. Smith believed that market competition was the source of increasing well-being, because it stimulated better organization of work – in particular the division of tasks within industry – and innovation in how it was done. Thus competition, industry, and the division of labor were the central elements of prosperity for him; the well-being of any population depended on the degree to which industry and productivity had developed within it. Very different was the most prominent way of thinking about wealth and poverty in France, the school of thought known as Physiocracy, led by François Quesnay and Pierre Samuel du Pont de Nemours, whose influence on officials such as Turgot and Trudaine gave them considerable practical importance. In their view the key to heightened productivity and thus the path to

national prosperity lay not through the advance of industry, but in the proper organization of agriculture, to their eyes the sole productive activity that had the capacity to create new wealth. It did so by drawing on the power of nature to bring forth a product greater than the materials and labor invested in it, making seed grow into grain (or fruits and vegetables) and thus yielding more value than was put into it. Manufacturing, by contrast, merely turned raw materials into finished goods, labor simply transferring the value of wages to the commodities it produced, and commerce moving goods from one place to another. If all the same economic improvement required freeing up trade, the reasons were, first, because things that had little value in places where they were abundant could have more where they were scarce, satisfying the needs of people who would otherwise remain in want; and second, because the payments made to the farmers able to produce a surplus would allow them to make new investments in improvements that further increased yields. It was the Physiocrats who invented the celebrated (and much decried) slogan *laissez-faire, laissez passer*, but the purpose of such free trade was not to stimulate competition, encourage the division of labor, and thus the productivity of manufacturing, it was to organize agriculture so as best to draw on and expand nature's power to create new value. The literal meaning of Physiocracy was "government by nature."[11]

These legacies would be felt well into the nineteenth century, as is especially clear from the hesitations the country displayed in regard to railroad construction, despite the fact that – but also in part because – its potential importance for eliminating the conditions that held back French economic development was quicky understood. A writer of 1832 insisted that new industrial techniques alone would never give France the means to catch up with England: what the country chiefly needed was better transport. As a publicist in Bordeaux put it a few years later, progress required means that would "throw men, ideas, and capital into the whirlwind of rapid circulation." Only if people "from one end of the country to the other" were put into close contact could the country's intellectual and material resources be put fully to use.[12] But the very potential envisioned in such new ties made others wary of the ways they might upset society and politics, in particular by giving too much power to an oppressive state or to greedy plutocrats. As François Caron summarizes the arguments, "If this power fell into the hands of the administration, it could only increase its power immeasurably, to the detriment of individual liberty; if it fell into the hands of capitalists, it threatened to deliver the whole nation to the will of the money powers, to destroy the balance of fortunes."[13]

These anxieties were compounded by the greater distances that had to be covered in France compared with Britain, which meant that sizable investments had to come from somewhere. Building was slow to begin and patchy in its progress. The rhythm picked up in the second triennium of the 1840s, financed by both public and private investment, but things turned sour as poor

harvests stoked the economic crisis of 1846–47, leading lenders to call in their funds, putting a halt to the work, and leaving many investors badly burned – as well as setting the scene for revolution in 1848. The scars all this left, combined with the earlier fears about both state and private power, kept things from starting up again before Louis-Napoleon put an end to the Second Republic and constituted himself Napoleon III in 1852, so that only his imperial *dirigisme* was able to get things really under way. Resolving an earlier argument about where the lines should go, in which the Saint-Simonians advocated using rail construction to insert France into worldwide commerce by beginning with two major arteries, one north–south route from Le Havre to Marseilles and one east–west one from Nantes to Strasbourg, while intellectual successors of the earlier *ponts et chausées* officials favored constructing the network in lines radiating out from Paris, he chose the second course. He succeeded in getting private companies (backed by big investors such as the Rothschilds) to provide track and equipment by giving them long-term concessions to operate the trains, thus assuring their profits. From less than 2,000 miles of rail lines in France in 1850, the number exploded to over 10,000 in 1869. But the state kept control over the overall network, regulating relations between the companies (only in 1938 would it take them all over) and deciding where new lines would go. Before his fall in 1870, Napoleon III effected considerable consolidation among the private companies, and the Third Republic that replaced him extended the web, inserting links to localities left out of the original plans, supplemented after 1879 by a vigorous program of new road construction, promoted both to improve the economic infrastructure and to make it easier for politicians (now elected by universal male suffrage) to reach voters at election time.[14]

The conditions of economic life (and of much else) in France were radically altered by these measures, as Eugen Weber illuminatingly stressed. The roads and railroads were at least as important as new machines in bringing industrial society into being because they "created [as the contemporaries we quoted above already understood they would] a truly national market in which the wares that the machines turned out could be bought and sold," so that the investments necessary to put them in service made economic sense.[15] The congeries of separate and loosely linked economies described by Bernard Lepetit, many of them producing and consuming most of the goods that sustained their inhabitants, now became a much more integrated national space where people's needs could be served by firms able to distribute goods – often of far higher quality, although at the cost of greater standardization and the undermining of local forms of life – over a wide area and at lower prices. Added to the impetus given to construction and employment by the infrastructural projects, these developments marked the entry of France into the modern

industrial economy. Raw cotton consumption increased by nearly 60 percent between 1850 and 1869, and pig iron production more than trebled.[16]

The new lines and roads were not the state's only contribution to this transformation. Napoleon III imposed free trade with Britain on reluctant textile manufacturers in Normandy and Alsace in 1860, pressuring them to adopt modern technologies and reviving the old mix of liberalism and *dirigisme* familiar from the Old Regime. The state's role in the transition to a modern economic order formed a sharp contrast with Britain. To be sure government played a role there too, protecting domestic manufacturers with tariffs and using the power of the Navy to pursue their interests abroad; but behind these shields it was private initiative that pushed economic transformation forward, stimulated by opportunities and conditions that had yet to develop in France. It would require a considerable effort of imagination to envisage how France might have made the transition without the traction the state provided, so that Jean-Pierre Daviet is right to conclude that "Everything happened as if the state . . . prepared the conditions for the passage to a more sustained kind of economic growth."[17]

* * *

If anything, Germany's economy was even farther from being able to develop the kind of autonomy Britain's did before the onset of industrialization, since the local and fragmented character of markets there was solidified by the country's political divisions. Paradoxically or not, as we will see in a moment, this fragmentation contributed to giving scientific research greater autonomy (and railroad building an easier path) than in the centralized monarchy west of the Rhine, but before 1850 this contrast made little difference for economic development. Overall, the rhythm of Germany's entry into the modern economy was close to France's, but in other ways the two stories were very different.

Germany's breakthrough also began in the 1850s. Following the first Napoleon's fall the economy had expanded and contracted by turns, as scattered efforts to inject more energy into it by ending guild control over production and introducing British innovations in textile and iron production had positive effects; but the splintering of the country and its markets kept a lid on them. Widespread poverty in the countryside (including among part-time putting-out workers) generated a sizable literature on *Pauperismus*, and the conditions to which it referred fed social tensions and unrest. But as the political excitement of the years 1848–50 cooled down, economic development began to advance at a clip that, as David Blackbourn notes, fully justifies calling it a revolution. In this transformation the railway was "at the center of everything," stimulating not just metal production but other sectors too; the new tracks and trains "spread the market culture into previously virgin land,"

bringing new opportunities to places still wanting in them, and imparting a new mobility to people of many kinds, beginning with the thousands of workers required to construct it. Metals themselves exhibited the most striking upswing: "The use of coke in iron smelting was virtually unknown in the 1830s, and in 1850 it still accounted for only 25 percent of iron output. By 1853, in just three years, the figure had risen to 63 percent." The famous Krupp metals firm employed 60 men in 1836, over 1,000 in 1858, 8,000 in 1865 and twice that number by 1873. Similarly remarkable expansion took place in the building industry. "Over a million new buildings went up in Prussia alone during the years 1852–67, the fastest growth coming in factory plant and public buildings." There was a "mushroom-like appearance of new factories, gasworks, waterworks and railway workshops." Recent scholars are skeptical that the famous Prussian Customs Union, the *Zollverein*, established in 1818 and opened to other states from 1834, had the animating effect on economic development long claimed for it, but railroads encouraged more states to join after 1850, deepening the mutual stimulation between previously separate economies. These "fallout" effects were the railroad's most significant feature, but its centrality is evident in other ways. Nearly half the capital invested in German joint stock enterprises in 1870 belonged to railroad companies, at which point the total worth of the latter's shares amounted to four times the market value of mines and foundries, or forty times that of firms involved in machine-making. One reason the share prices soared so much was the elevated rate of return they provided, averaging around 6.25 percent per year, but with some yielding three or four times that much. Only government bonds had a comparable attraction for investors. In the years before 1914 the Prussian state railway would be the largest employer in the world.[18]

If the centrality of railroad construction was the common feature tying French and German economic advance together, the far more rapid and thoroughgoing quality of the latter set it apart. No other country (before China at the end of the twentieth century) was so quickly transformed by industrial modernity as Germany. The testimony to this provided by the figures for industrial production itself and the growth in such firms as Krupp we gave a moment ago is only part of the story. The country's population in 1900 was 2.5 times what it had been a century earlier (France's expanded by a factor of only 1.5, a difference within which the loss of Alsace accounted for only a small part). Berlin grew by a factor of ten over the same period, twice the rate of Paris. The pre-1850 poverty in the countryside faded away as people were drawn to cities (and some to foreign lands made accessible by the new steamships), reducing the pressure on wages, and agricultural prices rose in response to the demand urban growth generated. "The countryside had never been so wealthy and stable."[19]

What sparked the rapidity of the transformation was in good part the disunity and backwardness from which it began. The Prussian monarchy

was not the only German regime in the eighteenth century who saw the
retarded condition of their country as a call to modernize on Western lines
(although it was the most sharp-eyed in seeing the opportunities this situation
offered for an ambitious ruling house to expand its territories). A number of
states undertook programs of economic development before and after 1815,
improving roads, canals, and harbor facilities, and once the new transport
technology came on the scene it appeared as a way to continue and expand
these efforts. Because of their smaller size, few of the German states suffered
the kinds of tensions between government and society that both lay behind and
were intensified by the French Revolution, so that similar fears that the new
technology might add dangerously to the power of a potentially intrusive state
did not slow things down. (Prussia, although already the most militaristic of
the states, had drawn many liberals to regard it as progressive by virtue of the
reform program it began in response to its defeat by Napoleon in 1806.) Thus
a number of railroad-building projects were set in motion at roughly the same
time. Governments provided capital, sometimes in cooperation with private
firms, but sometimes constructing and even running the lines themselves.
Some of the routes put in service in the 1840s were short but others were
more substantial, including one from Aachen in the west to Breslau (now
Wroclaw) in the east, and one from Kiel in the north to Munich in the south
(although political divisions meant that people and freight had to change trains
along the way). Prussia set up a Railway Fund in 1842, purchasing shares in
companies, making loans and guaranteeing some investments, and the state
itself constructed a line in the Saar coalfield in 1847, a prelude to its post-1848
policy of more direct government ownership. By 1850 Germany's 3,600 kilo-
meters of track were twice the French total. Napoleon III's encouragement of
railroad building eliminated that gap, both countries boasting just less than
11,000 kilometers of lines by the end of the 1860s, but the German network was
more efficient in uniting the country's many regions because it never took on
the hierarchical shape of the French one, with the chief lines centered on Paris.
The country benefitted militarily from all this too; when war broke out in 1870,
moving troops by rail aided the German victory.[20]

* * *

At the same time that these contrasts between France and Germany emerged,
the two countries – and Britain as well – participated in a European-wide
development of great importance for the sustainability of industrial society,
especially as sectors relying on higher levels of scientific knowledge – metal-
lurgy, electricity, optics, chemistry – became more important within it. This
common element was the emergence and consolidation of more systematically
organized forms of professional life, giving doctors, lawyers, and architects, as
well as academics in such varied fields as chemistry, biology, economics, and

history, a significantly greater degree of control over their collective pursuits. The powers to which these organizations aspired, and which they gained to varying degrees, included both regulating entry to their fields and setting standards for working within them, and they used their collective strength both to protect the interests of their members and to establish criteria for the proper practice of their occupations. How far these efforts succeeded, and what impact they had, varied greatly according to the field involved and the situation of its practitioners in particular places, but what made them all possible were the closer ties established by modern means of transport and communication – railroads, better highways, the telegraph, large-circulation newspapers, after the 1880s the telephone – both within countries and between them. These instruments, lowering what Joel Mokyr designates as the "access costs" of establishing contacts with people at a distance and of tapping into the growing body of information produced by researchers, constituted the foundation on which professional associations, like modern political parties, could emerge and thrive.[21]

The formation and development of these professional groups has inspired a large literature, which we cannot hope to summarize here. To keep the discussion in bounds, we focus on two areas of the larger terrain, first medicine and second academic and research professions. All evolved in a similar direction, turning what had been a largely fluid concern for the common interest of its practitioners toward concerted efforts to create instruments that could influence government and public opinion in their favor. These attempts were contested and sometimes impeded by pushback from other interested factions (such as patients and insurance companies in the case of doctors, and industrialists in the case of researchers in scientific fields), as well as by competition between subsections of each group, who sought to impose their standpoint on the field as a whole (a feature that the development of professions shared with social and political movements that announced themselves in terms of larger class identities).

In medicine the achievement of control over practice by physicians themselves only emerged over the course of the nineteenth century, following somewhat different paths in different countries, but by around 1900 the whole terrain of medical practice was being altered in the way described by George Weisz: direction over professional life was coming to be assumed by "national elites whose power derived from the control of key institutions–notably medical schools, hospitals, licensing bodies, public health agencies, and national academies or their equivalents." In France itself this evolution took place in a series of stages, all tied together by the role the state played at each one. The first of these was a law of 1803 that, in the spirit of the abolition of *ancien régime* corporate groups, "promoted a uniform system of state control that granted licenses to individuals, rather than privileges to exclusive bodies." In fact, however, the statute was little enforced outside large cities, in

part because the doctors with most influence over government policy were the elite physicians who owed their position to high-level social connections that also recommended them to wealthy patients, and who cared little about who was allowed to treat less well-off people. However, as medical knowledge and practice became more sophisticated (a French doctor, R. H. T. Laennec, invented the stethoscope in 1816, and much new information about diseases and treatments was generated by the rapid spread of mostly state-run hospitals where multiple cases could be observed simultaneously), educated and trained doctors of a less elite kind began to press for the exclusion of those they regarded as quacks or mere empirics.[22]

A group of such physicians succeeded in convoking a one-time Congress in 1845 to demand enforcement of the 1803 law's elimination of unlicensed practitioners, but four decades passed before they were able to form a national movement with enough support and continuity to have an impact on policy. Their pressure was partly responsible for moving the reformist politicians of the Third Republic to set up a new medical regime, intended to bring French practice into the modern world. Given form in two laws of 1892 and 1893, the system provided for stricter measures against illegal practice as well as the gradual elimination of the inadequately trained *officiers de santé* (health officers) created in the early nineteenth century to replace the chaos of quacks and charlatans that had developed in the Old Regime, and familiar to readers of Flaubert's novel *Madame Bovary* (whose title character's husband Charles was one). Restraints were also imposed on untrained midwives, and the *syndicats* of local physicians were given a role in enforcing all these measures. The laws also gave the same bodies a role in providing and administering medical assistance to poor people throughout the country, placing such care within a more centralized framework. Because the eliminated *officiers de santé* had actually provided what limited medical treatment the great mass of French people could receive, and because the restrictions on midwives are now easy to recognize as a self-interested assertion of male supremacy, recent writers have subjected the laws to considerable and not unjustified criticism. But the care provided by the old forms of assistance was inconsistent at best, and the new regime pointed toward a nationally organized health system with uniform and enforceable standards, making possible the diffusion of up-to-date methods of treatment (some issuing from the contemporary laboratories of such figures as Lister, Pasteur, and Koch) with benefits that would grow over time. However one strikes a balance between these considerations, the new laws marked the real coming of medical professionalization to France, as well as firming up the positions (and raising the incomes) of provincial doctors, whose traditional competitors were thrust aside, giving those with professional training access to new patients of whom some – the indigents – were paid for by the state.[23]

The pattern in Britain was similar in a number of ways, but the role played by state action was considerably less. As in France, the chief issue was the differentiation of qualified from unqualified clinicians, made central by demands of the former to determine who had the right to give treatment. Because Britain never conducted a revolution against its old regime, leaving many long-established privileges and liberties as determinants of individual and group relations, numerous corporate bodies retained the right to license medical practice well into the nineteenth century. These included the London colleges of physicians, surgeons, and apothecaries; the universities of Oxford and Cambridge; various privileged groups in localities outside the capital; and, after its founding in 1836, the University of London, its freedom from past baggage making it the site of the most professionally self-conscious and up-to-date medical education available in Britain at the time. The lack of central direction in the system was reflected in the absence of any national listing of doctors before 1799, and of any organ of communication between them on a national scale until *The Lancet* began publication in 1823.

As the number of educated physicians grew, however, they began to envisage some kind of national legislation as a way of restricting old-style empirical practitioners; the Royal College in London called for a higher standard of qualification (while resisting state enforcement of it), and from 1832 a Provincial Medical and Surgical Association, consisting of mostly academically trained local doctors in many parts of the country, similarly demanded that medical practice be limited to those who could demonstrate up-to-date competence. In 1856 this group dubbed itself the British Medical Association, and the next year rebaptized the journal it had published under various titles since 1840 as the *British Medical Journal*, the name it still bears today. Tension developed between this group and the Londoners, however, in particular over fears of the latter that a single national system of medical licensing would deprive long-established corporate bodies such as the colleges of their power (similar divisions existed between provincial and metropolitan doctors in France, as we saw, and elsewhere too). But the mounting evidence that new forms of treatment and hygiene had a real potential to improve health, together with the pressure new-style practitioners were able to develop by organizing nationally, finally convinced Parliament (after over a dozen failed attempts) to pass the Medical Act of 1858, which served as the basic charter of the profession through the rest of the century.

As such, however, it accomplished little of the program of the organized doctors, not prohibiting unqualified people from offering treatment or medication, but only from calling themselves physicians, surgeons, or apothecaries in public. Despite certain further efforts to standardize qualifications, the Act left British medicine at best incompletely transformed, "a hybrid agglomeration" of aspiring quasi-scientists (the academically trained doctors) and modernized craftsmen and remedy-sellers (the barber-surgeons and

apothecaries). The law pointed the way toward a structure based on uniform general principles while carefully leaving old powers in place, a solution that shared much with the more famous electoral Reform Bill of 1832. Only in 1884, with the establishment of a Conjoint Board of Examination, collectively controlled by the Colleges of Physicians and Surgeons, was a single "portal of entry" into the profession established. By relegating the apothecaries to an inferior status and setting the requirements at a level determined by academically trained doctors, this new arrangement gave much greater unity to the profession. But it failed to resolve disputes between the old corporate medical colleges and the University of London, which by then was offering medical training in conjunction with research in laboratories and hospitals, a combination also spreading on the continent. Only in the twentieth century would this more modern configuration prevail in Britain as a whole.[24]

National organization was slower to develop in Germany than elsewhere, since it could not be undertaken before the unification of 1870–71; until then attempts to form one would have been regarded as suspect or illegal in the separate states. Only in 1873 were doctors able to form a countrywide German Physicians Association, and by then the new Reich had already adopted legislation concerning entry into their ranks. This Occupational Law (*Gewerbeordnung*) was originally written for the North German Confederation, the league of states established by Bismarck in 1866 before the war against France gave him his opening to bring the southern part of the country into the new state, but it remained operative in the Empire too. The measure's provisions for physicians (it also dealt with other groups) had much in common with the British Act of 1858: it set up a national system of licensing that vested the right to certify doctors in certain local authorities, namely those in component states (*Länder*) that possessed universities, and it banned anyone who had not passed the examinations (which were more uniform in their expectations, and seem to have enforced a generally higher standard, than in Britain) from taking the title of doctor; but it left unlicensed practitioners free to offer treatment, so long as they did not claim a qualification they did not possess (they were, however, as in Britain, legally responsible for any harm they did, and could be prosecuted for murder if they appeared to be responsible for a patient's death). This concern for protecting titles rather than keeping unqualified people from offering treatment seems to have been intended to satisfy high-status doctors in large cities, some with university positions (who were the people the government consulted in drawing up the law) and able to command high fees from elite patients. Like their counterparts elsewhere, doctors at this level showed little concern about the problems faced by the much larger number of physicians with less advanced training and a less exalted clientele. These lesser doctors were in turn concerned to protect their place, against the practitioners of traditional folk medicine with its remedies handed down from the past, to which many rural people were still powerfully attached, and whom the 1866 law still allowed to offer treatment.

Had doctors at this level possessed a national organization in the 1860s they might have lobbied against the law, but such a course, as we saw, was not open in Germany before the unification.[25]

These issues, however, came to be overshadowed by others near the end of the century, after doctors at both levels came together to form the Physicians Association, founded in 1873. Its membership grew impressively, from around 6,000 in the early years to over 16,000 by 1900; a separate grouping, founded in that year and specifically devoted to improving the doctors' economic position, enlisted another 12,000 by 1903, when it was incorporated into the first one. By then around three out of four practitioners belonged to the consolidated group. Two issues in particular spurred this advance in organization: first, the freeing of physicians from a mare's nest of regulation about fees and conduct imposed by the various states (and still operative in the new Empire) and, second, a struggle with the insurance companies who provided the benefits established under Bismarck's national health program of 1883 (largely motivated by his determination to sap the power of both socialists and liberals by tying popular well-being to the state). The doctors' largely successful action on the first issue was carried out through local "chambers" of physicians elected by their colleagues in the various states (in Prussia after 1887 all the licensed physicians in its provinces belonged to these *Kämmern*), where discussions and efforts to influence state policy were carried on. Out of them there developed a campaign to transfer authority over doctors from the state bureaucracies to these bodies of physicians themselves, and after a long and sometimes bitter struggle a law of 1899 designated the chambers as "honor courts" with disciplinary power over doctors in their areas. Providing "collegial enforcement of a professional code of ethics," this measure marked what a recent historian calls "a critical step in the professionalization of physicians."[26]

Dealing with the insurance companies required even more determination, and the doctors were not entirely successful in the conflict that developed between the two. The companies' ability to challenge doctors for control over medical practice derived from the power Bismarck's system gave them to determine which practitioners could receive payment for insured services, and to set fee schedules. Since doctors were required to participate in the program, these provisions constituted a threat both to the livelihoods of those not willing to accept the fees the companies offered, and to the ability of the profession to set standards for entry and practice. The Physicians Association sought to meet these challenges first by conducting publicity campaigns against the insurers, stressing the importance of proper training and insisting on the right of patients freely to choose doctors on the basis of competence, and then by direct action campaigns, including strikes against both the companies and those doctors willing to accept the insurers as medical traffic directors. We cannot pause over the details of either the struggle or its

outcome, but in the end the doctors "succeeded in shifting the balance of power between physicians and insurance companies in their favor"; the companies retained a voice in setting fees, but they had to exercise it by negotiating with the organized physicians. There is some evidence that using strikes, a tactic borrowed from working-class organizations, tarnished the image of the medical profession, whose self-interest was easily visible behind their trumpeted devotion to competence and the well-being of their patients, but the growing evidence that modern treatments and hygienic practices could effect real benefits to public health compensated in some degree for this. Physicians had not become fully autonomous but their actions showed that organization on a national scale, made possible by the new conditions of the second half of the nineteenth century, had the capacity to push things in that direction.[27]

Professional medicine is a crucial element in the everyday life of modern industrial civilization, but economic development itself depends more on certain branches of academic research – chemistry, physics, engineering – whose advances have been crucial to transforming manufacturing and communication. They too (as well as less practically useful pursuits such as history and philosophy) underwent professionalization in the second half of the nineteenth century, with different countries following separate trajectories. Whereas Britain had been the pioneer in industry itself, it was a laggard in academic research, partly because the country's two major intellectual centers, Oxford and Cambridge, long retained their ancient organization and character in the absence of a French-style attack on Old Regime institutions, and partly because the early innovations that launched industrial change did not rely on the direct application of scientific knowledge in the way that would become more common in the "Second Industrial Revolution." In this regard Germany was at the other end of the spectrum, both because its industrialization largely took place in this later moment, and because its universities exhibited a very un-British turn toward research and specialization from early in the nineteenth century.

What led German universities to become research centers earlier than elsewhere was first of all their quantity, and the internecine competition it fostered. That the German-speaking lands had more universities than any other region was a consequence of the coexistence of a number of independent states large enough to establish them, and in need of facilities to train both clergy, whether Protestant or Catholic, and the important class of officials (*Beamte*) necessary to staff their administrations, whose numbers grew larger as the eighteenth century went along. In that period, appointments to faculties were often controlled by the local elites who held power in towns and cities, and who favored choosing candidates from among their own ranks or those who had close ties to them. Thus patronage and particularism had more influence over the spirit of university life than did concerns about professional

quality. But the same political divisions that reenforced this situation also began to work against it by early in the nineteenth century, as rivalries developed between the universities themselves, largely driven by rulers and officials who saw the aura of academic excellence as a means to raise the prestige of their states. Prussia, in particular, sought to make the University of Berlin a showplace for government support of intellect and culture during the 1820s and 1830s. Although appointments were sometimes based on political considerations, exemplified by the conservative philosopher Schelling being called in to counteract Hegel's influence as some of the latter's disciples grew more radical in the 1830s, this new orientation diminished the social and status considerations that operated when local notables retained more control over hiring, in favor of either bringing in people with already established national reputations or attracting young scholars from elsewhere whose early publications gave promise of future eminence. This shift had the effect of giving an impetus to specialization, since then as now it was by working in some as-yet undeveloped area of a discipline that discoveries and reputations could most easily be made.[28]

One reason the German states were drawn to see improving universities as a possible way of enhancing their prestige is that already in the eighteenth century German writers and intellectuals began to look to culture as a way of giving some kind of unity to their fragmented land, some hoping it would serve as a foundation for the country coming together politically. Their efforts involved creating a common literary language for a large region that already possessed a sense of cultural unity, but within which many people could not understand each other's dialects, and some of the activists who sought to overcome linguistic divisions also advocated better roads and postal service in order to foster ties between states and localities. Local associations devoted to these aims sought contacts with their counterparts elsewhere through periodicals and correspondence, and many of their members were officials for whom this orientation toward creating a national culture encouraged making university faculties recognizable centers of academic and intellectual progress.

Similar connections grew up in scientific fields. German science had by no means been backward during the eighteenth century, and a sense that researchers around the country formed a community was nurtured by publications set up to inform interested people about new work in chemistry and mathematics. By 1830 an association of scientists and physicians was holding meetings in various German cities, bringing together people who had published scientific papers and a few interested laymen. Many of their members served on university faculties, but whereas before the 1830s these had chiefly been people in practical fields such as medicine, the numbers devoted to more basic inquiry grew significantly from that point, fed by the spread of university research laboratories, of which the first was established by the chemist Justus

Liebig at Giessen (in the state of Hesse) in 1825. Based on the then novel idea that advanced students should enter a field by conducting research under the direction of a professor, Liebig's example was quickly taken up elsewhere, so that by the time of the unification, the new state could boast a "costly and highly influential series of laboratories, seminars, and institutes."[29]

On this foundation German science rose to impressive achievements in the later nineteenth century, perhaps nowhere better exemplified than in the career of Robert Koch. Koch's advances in developing the germ theory of disease built on the work of earlier pioneers, notably the Hungarian Ignaz Semmelweiss, who – working at the hospital of the University of Vienna in 1847 – established that the high rates of mortality suffered by women in childbirth fell sharply when they were attended by doctors who washed their hands before examining patients. The connection was disputed and Semmelweiss vilified by the medical establishment in his time, but it was becoming accepted by the 1860s. To this was added the work of the French biologist and chemist Louis Pasteur, who first discovered the existence of microorganisms in the atmosphere and their connections to disease. Drawing on these predecessors, Koch developed principles for establishing such linkages, as well as methods for growing and studying pathogens in laboratory conditions. This allowed him to identify the causative agents for several maladies, notably tuberculosis and cholera, making possible enormous strides in public health. Koch's career suggests that, because professionalization of academic research had begun before 1850 in Germany, the kinds of struggles necessary to further the autonomy of practicing physicians were less requisite for their more theoretically oriented colleagues. A figure such as Koch found that support by the state and its university provided him with the conditions he needed to pursue his projects, so that he did not have to struggle against its influence. Lesser people did, however, and reducing state control was an issue for the professional associations set up by such groups as chemists and engineers in the last part of the century, just as it was for doctors who clashed with the insurance companies.[30]

The early development of professional specialization (in humanistic as well as scientific research) in Germany gave its history a different rhythm from the one we have seen in regard to practicing physicians, both there and in France. But the alternatives that structured this evolution were fundamentally the same in both places, each shifting from a world dominated by local and vertical connections to one organized around national and horizontal ones. Like the academics who populated university faculties in Germany before the 1830s, the typical French researcher in the early nineteenth century belonged to an elite of *notables* – a term that designated people of special significance in any domain of life – at once small and multifaceted, within which connections to influential figures in any given discipline also provided ties both to people in other areas of cultural and intellectual activity and to those with political influence. But the

more centralized character of French national life meant that the chief site where these ties were knit was Paris, and it was there that early nineteenth-century scientists sought recognition, building connections that, as Robin Fox shows, were "secured by strong personal ties based on family, friendship, and indebtedness for past favors." By the end of the century these kinds of ties had been replaced by others: now "the scientist in academic life was part of a much larger community, with its numerical strength located firmly in the hugely expanded network of faculties of science and medicine scattered throughout the country" (the Pasteur Institute, established in 1887, was part of this grid), and knit together through the multiple linkages provided by journals, meetings, and learned societies. In a move with some echoes of the way Galileo, Newton, and their partisans had found autonomy from the powers that sought to hem them in, the members of this expanded and reconfigured community sought "new patrons and a more serious public to replace the cultivated dilettantes to whom professors in the faculties of science had traditionally ministered."[31]

The institutional settings within which these new-style careers were pursued were largely provided by the state (which then as now oversaw the process by which appointments were made to university faculties and research centers), a feature of the history of research professions that recalls the French state's importance both in transforming medical practice and in creating the conditions in which modern industry could establish itself in the country. But just as people feared that building railroads would add to the state's power to impose itself on society and individuals, so did the new style researchers worry that working for state-controlled institutions would give administrators too much purchase on their lives. Already in the 1830s and 1840s eminent figures such as Pierre-Simon Laplace and Georges Cuvier were disturbed that scientists were increasingly coming under the control of bureaucrats, and by the 1860s (when the Bonapartist regime sometimes exploited researchers' needs for material support to exert political pressure on them) chemists and physicists chafing under such restraints began to take increasing interest in opportunities to pursue their work outside government, which were becoming available as expanding industries sought to develop new knowledge, first in textiles (where chemistry was called on to produce dyes) and then in metals, optics, and electricity. After 1870 such cooperation between science and industry was encouraged as part of the patriotic competition with Germany. When the French Association for the Advancement of Science was founded in 1872, one of its aims (like that of its British counterpart) was to encourage support for science by demonstrating its practical utility. To this end it held meetings and set up connections between academics on the one hand and manufacturers and politicians throughout the country on the other. "The modernization

of French industry in the 1880s created the conditions in which the Association could prosper"; as the numbers of research workers grew so did the membership in the Association, and – as in other countries – science achieved new respect and support from society at large.

It soon became apparent, however, that the interests of researchers did not always accord with those of entrepreneurs. The latter were above all in search of advances that could be put to quick practical use, and they were not always able to see the virtues of basic inquiry whose possible payoff lay some way down the road, a situation still often confronted in many places today. It is possible to see this relationship in dark terms, as Fox does: "It could even be argued, in fact, that one tyranny – that of the ministry – had been replaced by another – that of the local *industriels* and politicians"; far from having gained autonomy by seeking new social relations within which to pursue their work, the *savants* remained subordinate to "a public outside [their] profession." In the years before World War I some researchers deplored their dependency on their commercial employers in terms closely akin to those their predecessors half a century earlier had employed toward the state.[32]

That these worries were real and that they generated much discontent cannot be denied. But there are good reasons for not regarding them as signs of a "new tyranny." Like the artists, collectors, and critics in the emerging realm of "art as such," like Galileo when he reached out to a wider audience and Newton and his followers when they sought to make science more public, the professional groups who sought autonomy in the second half of the nineteenth century pursued it by shifting away from vertical forms of interaction toward horizontal ones, creating new ties both with their confrères and with a wider public that could provide substitutes for and escapes from the local connections that had long made their members' positions dependent on relationships with *notables*. But they did it in a radically transformed historical context, one in which the practical resources available to form such horizontal links had become both more powerful and more easily available, for all the reasons we have considered in this chapter. In this situation it was not merely unavoidable that multiple agents with claims to regulate activity in the same domains – such as doctors and insurance companies, or researchers and the people who provided the material support for their work (industrialists at this moment were also setting up organizations to defend their interests) – would clash over whose material aims and principles should prevail. Such competition was the sign that the potential for autonomy that was generated by expanding horizontal ties had become sufficiently diffused to allow many players to seek access to it. Had any single entity succeeded in obtaining complete control over the outcome of such disputes, it would have had to deprive the others of access to what Simmel called the "long

chains of purposive action" on which all of them drew in order to pursue it; and that would indeed have been tyranny. Thus the failure of professional groups fully to achieve the autonomy they sought provides one more example of the ways that the failure of any central directing authority to establish itself in Europe left pathways open for the realization of diverse, often discordant and conflicting, human aims and goals. As with freedom, the condition on which autonomy could be realized was that it be restrained from becoming domination.

Ready or Not?

China and India

Although debate has long raged about how to understand the emergence of modern industrial society, one point has generally been agreed on until recently – namely, that Europe's (and especially Britain's) pioneering role was enabled by certain distinctive features of its history, economy, or society. Many nineteenth-century Europeans attributed their primacy to some special virtue – Anglo-Saxon inventiveness, a distinctive commitment to rationality and practicality, racial superiority, or divine favor. Marx located it in the special history of the European bourgeoisie, while many anticolonial intellectuals associated it with the West's materialist disregard for the more humane and spiritual elements of traditional life. Academic historians have sought more testable explanations, based on some mix of theoretical assumptions and evidence.

Recently, however, writers convinced that Eurocentric accounts have exaggerated the differences between Western and Eastern capacities for engendering modern attitudes and practices have offered reasons to believe that the contrasts between Europe and the societies to its East were not so great after all, at least until the moment when industrial innovation itself began to sharpen them. These writers argue that in the eighteenth century other peoples too exhibited levels of development from which they might have pioneered the turn to a modern economic order, and that Britain's becoming the first was made possible by certain incidental advantages, or the need to respond to challenges that other societies did not face, rather than being rooted in any distinctive quality of European life.[28]

China and India have been the chief focuses of these claims, and the work done on behalf of them deserves respect for raising illuminating questions and stimulating new discussion and research. We alluded to some of these studies in Chapter 12; here we confront them more directly, partly to critique both their premises and conclusions, but no less because doing so provides a frame within which to bring the comparison between Europe and other world regions we have been carrying out in this book into the realm of economic and industrial history. I will argue that the same fundamental differences between Europe and other places we have stressed in other contexts – in particular, the greater persistence elsewhere of teleocratic modes of regulating

collective activities, differently grounded in each case but closely akin to each other in their effects – kept both areas oriented toward the reproduction of existing economic and social relations, holding at bay whatever potential for transformation they contained.

Before Britain began to introduce mechanized industry from the middle of the eighteenth century, the country that best showed what human activity can accomplish in the realm of economics was surely China. The Celestial Empire's special status among world civilizations derives not just from the beauty of its visual art, the excellence of its pottery and fabrics, and the refined and sophisticated form of life that drew admiration from foreign observers, but also in the size and density of its population and the range of technical innovations it introduced, from the famous trio of the compass, printing, and gunpowder to high-temperature iron production and high-yield agriculture. The immense scale of its cities that astounded Marco Polo made premodern China the most highly urbanized region on earth.[1]

China's signal capacity for economic growth is evident all through its history, but critical moments occurred first in what has been called the Tang-Song transition (roughly from 750 to 1250) and then in the period of the last two imperial regimes, the Ming (1368–1644) and Qing (1644–1911). The first period saw two large-scale developments that remained of central importance for the whole of the imperial era and beyond: improvements to the Grand Canal (begun earlier, under the Sui), and the introduction and spread of wet-field rice culture in the South, accompanied by improvements in the largely wheat-based farming that predominated in the dryer North. The Canal connected the country's two major natural water systems, the Yangzi and Yellow Rivers, giving an area roughly the size of Western Europe or the United States (all three measure around 10 million square kilometers, something less than 4 million square miles), a transport and communication system unmatched anywhere else in the world. Although the potential for economic integration the Canal created was never fully realized, long-distance trade was common in some commodities, so that local forms of production and exchange were stimulated by their access to both goods and buyers from elsewhere. But these effects remained limited, so that even into the early twentieth century "the Chinese sub-continent generally remained an aggregate (or juxtaposition) of weakly coordinated regional markets, much more than a coherent and integrated economic whole" (Pierre-Étienne Will).[2]

The improvements that greatly raised production in the rice fields – chiefly "the dam, the sluice-gate, the noria (peripheral pot-wheel) and the treadle water-pump" – may not seem momentous from a modern point of view, but they gave China the most sophisticated agriculture in the world at the time (the only other contender being India, to which we will come), offering a higher level of existence to the peasants and small farmers who constituted most of the country's population. Because the opportunities these innovations afforded

were largely concentrated in the South, people drawn by them became part of a large-scale migration in that direction, spurred also by war and devastation in the North. The result was (in Richard von Glahn's summary),

> a series of profound transformations in agricultural productivity, technology, industrial growth, transport, finance, and international trade. Sustained economic growth fueled unprecedented demographic expansion. By 1100 the empire's population reached 100 million, far surpassing the peak levels (roughly 60 million) of the Han [206 BCE to 9 CE] and Tang [618 to 907 CE].

Together with changes in the imperial taxation system and the end of an earlier state effort to keep landowners from becoming too powerful by limiting both ownership and the size of holdings (the "equal field system"), the economic transformation of China in this period constituted "the crucial watershed in the economic history" of the country, at least until it reached a second one toward the end of the twentieth century.[3]

This transformation was not just quantitative but qualitative, putting economic life on new foundations, not with the rapidity of the onset of modern industry centuries later, to be sure, but effecting a profound shift all the same. By contrast the growth that ensued in the Ming and Qing, although remarkable in many ways, was – as several writers have noted – quantitative, developing potentials already in place by the end of the Song (and drawn on in the intervening period of Mongol domination). This growth suffered interruption between the end of the sixteenth century and the end of the seventeenth, due in large part to changes in climate that induced a series of poor harvests, followed by popular uprisings that weakened Ming rule, preparing the way for the Manchu takeover that became the Qing regime. But despite these stumbles, the period of the Ming and Qing saw the economy as a whole palpably altered by two closely related processes – namely, expansion and specialization. The expansion owed much to burgeoning international trade, in particular with Europeans who provided the silver – largely from the New World – necessary to meet China's need for hard currency (experiments with paper money having ended in inflationary crises and a return to coin), and who bought manifold Chinese products in return. This commerce contributed to a rise in the volume and tempo of exchange, heightening the importance of commercial relations and fostering the development of new forms for them (such as partnerships and other business associations), expanding opportunities for economic and social ascension, and supporting a further large growth in population (which may have doubled under the Ming, and accelerated during the Qing). Specialization contributed to all these changes, leading numerous villages, towns, and regions to concentrate on producing particular commodities, notably cotton, silk (sometimes in large state-sponsored manufacturing centers), and porcelain, with individual locales devoting themselves to subspecialties, such as rice for wine

and distinct grades or types of fabrics. One result of this division of labor was that some areas no longer produced enough agricultural produce to feed themselves, relying instead on imports from other regions. This dependency developed far enough to make imperial officials worry that some locales could face food shortages and hunger (which might stir up disorder) if conditions worsened; in response they encouraged rural people to make the best use of their land and resources, instructing them in new crops and techniques. But Richard von Glahn's recent comprehensive economic history of China concludes that such dangers were largely avoided because "population pressure on the food supply was mitigated by the flow of grain through long-distance trade networks."[4]

Thus China developed a vigorous commercial economy, in which a number of scholars have seen the potential for movement toward a more fully modern productive regime. Chinese writers schooled in Marxist thinking have spoken about "sprouts of capitalism." But to affirm such a potential in the Chinese economy is not the same as to argue that it existed at the same level as the capacity Britain demonstrated by actually setting the transition to modern industry in motion. It is this claim that distinguishes Kenneth Pomeranz's argument in *The Great Divergence* from previous ways of approaching the subject. To be sure he does not deny that the two economies were unlike in certain ways. But these were "small" differences; only with the onset of industrialization itself did the distinction become "great."

Before we can assess this claim we must first take note of how its rhetoric sustains it. There is no doubt that the contrast between Western and most other world economies grew exponentially from late in the eighteenth century (the major exception being Japan, which began to develop modern industry roughly at the same time that France and Germany did); this is one reason why the phrase "the great divergence" has spread so easily, becoming common usage in discussions of world economic history even when the particular claims Pomeranz advances are contested. But it does not follow from this that the search for better understanding is well served by calling the earlier differences "small"; much depends on just what comparisons we undertake, and what we understand their significance to be. I will argue for the rest of this chapter that the contrasts that were already in place before the turn to modern industry were too consequential to be labeled "small." They were deeply significant in much the same way as the ones we have drawn in other connections in the earlier parts of this book. What kept China from possessing the potential Britain realized to lead the way into the modern economic regime was that neither the economy nor science had become autonomous spheres in the sense we have used the term here.

For Pomeranz and those who follow him, the comparison between East and West is best pursued by focusing on a series of measurable factors, all to be sure relevant to what gives particular economies their character. These include the

general level of well-being of the populations, the prevalence of market exchange, marriage age and family structure, life expectancy, consumption of luxuries, and – on the negative side – the constraints imposed on population growth by limited quantities of good agricultural land. In contrast to the long-standing supposition that such a comparison would show Britain and China to have been in palpably different situations in the mid-eighteenth century, Pomeranz finds in every case "surprising resemblances": the Chinese economy was, in general, as well off and developed as was Britain's and therefore in no less favorable a position to take the leap into a more modern economic regime. What allowed Britain and not China actually to make this move were two supplementary circumstances: first, the lucky accident that its industries had access to close-by and cheap supplies of coal, making possible the widespread introduction of steam technology without fuel costs eating up economic resources needed to support other sectors of the economy; and, second, the colonial expansion that provided access to vast acres of New World land, whose products the island nation could obtain on favorable terms. China had coal supplies, but they lay in the country's North, far enough away from the artisan industries largely concentrated in the South (and specifically in the region of the lower Yangzi valley) that the difficulties and expense of tapping into them gave the path to steam power a steeper slope there. In addition, the "ghost acres" across the sea allowed Britain, but not China, to shift economic resources from its agricultural sector to manufacturing without undermining its ability to feed its population. Absent this windfall, a Malthusian crisis might have ensued, stopping the turn toward mechanization in its tracks. It was the easing of these "resource constraints" that allowed "the smaller divergences visible earlier [to] became a 'great divergence.'" Without them, the writer concludes, the introduction of new methods of production "could have been the basis for a later catastrophe; or it could have been stopped by rising primary product prices in the nineteenth century; or it could have been severely constrained by a need for much more labor-intensive approaches to exploiting and conserving a limited land base."[5]

Thus Pomeranz's claim has two dimensions. One asserts that China possessed economic resources similar enough to Britain's to put the two counties' chances for developing modern industry on the same level, had it not been for the latter's incidental advantages, and the other that the island nation was no less subject than the Celestial Empire to vulnerabilities that might have put an end to its progress, had it not been favored with these same gifts. In considering this claim we need to note first of all that the statistics Pomeranz has compiled from the many (mostly secondary) sources on which he draws have been subjected to vigorous criticism, calling into question whether Chinese peasant incomes or the productivity of labor stood at anything like the British level, whether Chinese peasants participated in something like what Jan de Vries called an "industrious revolution," shifting to work paid for in cash in

order to acquire household goods in the market, whether rural industry had the same potential to pass from being a mere supplement to family incomes to a source of higher ones, and so on.[6] I admit that I believe most of these doubts are justified, and I will take note of some of them in what follows. But for the most part these questions are too technical to be addressed here, and in any case I think the argument should turn on a different set of issues. Even if the statistics were unimpeachable they would not establish the conclusion Pomeranz seeks to draw from them.

As we noted in Chapter 12, in regard to similar attempts to use measurable "factors" to explain why Britain was the first country to embark on the path of modern industry, this turn has only occurred once in history; the notion that finding a particular combination of factors identifiable in the British case elsewhere means that an equal potential for transformation was present rests on an error in reasoning. The impact such factors have will always depend on the particular contexts within which they operate, the conditions and relationships – historical, cultural, social, political – that make any country the specific place it is. Hypothetical assertions about how things might have gone wrong, such as the string of them quoted a moment ago, may bring to light aspects of a situation otherwise not considered, but the "could haves" are purely speculative: there is no way to know what the outcome might have been had any of these issues supervened. People might have found ways to forestall such negative outcomes by measures that would only have become part of the story once the need for them emerged, a likely turn in Britain because of the widespread devotion to "improvement" there, as illustrated by the contexts in which Watt, Arkwright, and Cort all worked. Thus the whole project of claiming either that specific Chinese similarities with Britain – assuming they actually existed – are grounds for believing the former could have taken a path that only the latter did, or that the latter might have been blocked from continuing it had certain other conditions not obtained, is ill-conceived and draws attention away from what really mattered in setting the two societies on their different trajectories, namely the large-scale differences in social organization, cultural attitudes, and political experiences that made each the distinctive place it was.

In turning to such large-scale differences, we begin with two concrete and specifically economic ones, the first having to do with agricultural conditions in each country, the second with rural industry. We can approach the agricultural side by looking more closely at Pomeranz's notion that without the privileged access to the "ghost acres" across the Atlantic that Britain obtained through colonial expansion, the country might have faced a Malthusian crisis, an inability to feed its growing population as it shifted resources of both capital and labor from farming to industry. Such a danger might indeed have loomed had the productivity of British agriculture by the eighteenth century remained at or near the level of 200 years earlier, as Chinese farming did. But in fact it

had risen remarkably over that period, as we noted in Chapter 12. The program of enclosures and improvements whose game-changing impact was foreseen and justified by the people Joyce Appleby brought to the fore in the study we cited there allowed for rapid population growth even as the proportion people engaged in agriculture fell from nearly three-quarters to just over one-third. Britain later became a net importer of foodstuffs to be sure (a role sealed by the end of protective duties on grain in the 1840s), but the reason it could afford to do so was that its agriculture was productive enough to support such a move, so that shifting labor to urban activities did not raise the danger it once might have.[7]

Behind this development lay the special features of British history we cited earlier, all based on the precocious integration made possible by the country's small size and serviceable internal river system, the special role played by London, and the push these things gave to the development of a national market. We saw above that expanding commerce had a comparable effect on agriculture in early modern China, as growing markets encouraged farmers to improve and expand land under cultivation, invest in better kinds of fertilizer, and in some cases switch to cotton or silk growing so as to obtain a higher income. But Evelyn Rawski has pointed out that the places which exhibited these effects were neither typical of the country as a whole nor able to alter the overall nature of the rural economy, as they did in England. Before the coming of railroads in the twentieth century, the Empire lacked the kind of integration England had long enjoyed; "the decisive hindrance to increased marketing activity" was the limited scope of the transportation network. "Under the technological conditions of Ming and Qing China, most commercial centers in the interior were earthbound, in the most literal sense. The result was little or no change in basic economic conditions, and a stagnancy which was noted by Western observers in the nineteenth century."[8]

Thus even though the pickup in commercial exchange led farmers in some places to improve their plots and seek better returns from them, no reorientation of agriculture on the scale of Britain's took place. Especially in the South, the region where the uptick in commerce produced new and enlarged demand for agricultural goods, that demand was chiefly met by higher and higher inputs of labor, applied to relatively small plots, increasingly located on land hitherto regarded as marginal. Some years ago, Mark Elvin suggested that the Chinese economy had worked itself into what he calls "a high level equilibrium trap." The snare developed as expanding numbers of people put increasing pressure on the supply of arable land, forcing a turn to less fertile soils that required greater quantities of labor to produce any given yield of grain. Because population growth made the labor available, productivity per acre could be kept high enough to preserve peasant society on an even keel a large part of the time, but in per capita terms productivity was quite low, and with it the income of most households. As time went on "the pressure of population

on land led to a serious problem of mere subsistence. New land brought under the plough was of a sharply declining quality, and the potentialities of better practice for increasing output per acre of permanent farmland were virtually exhausted." Philip Huang refers to the same situation as "involution," the decreasing returns on rising investment that ensued as capital and labor came to be directed toward less and less productive acreage.[9]

Pomeranz has contested these notions, claiming that Chinese peasants were better off than earlier scholars have thought. So they may have been in some places, including those that had turned to commercial products such as cotton and silk; here as elsewhere there is scope to argue over the accuracy of the numbers and their meaning. But work by the French Sinologist Pierre-Étienne Will makes clear that government officials in the Ming and Qing saw the situation in a light closer to Rawski's, Huang's, or Elvin's than to Pomeranz's. Worried that population growth and the long history of clearing new land for growing food to feed it had led the country into an impasse (recognized in imperial decrees acknowledging fear that a continued rise in numbers might lead to widespread starvation and crisis), national and local officials instituted programs to meet the challenge. The measures they recommended revolved around "finding means to increase production by extracting the maximum yield from the available factors of production: the natural environment, the quantity of arable land, and labor power." Farmers were encouraged to grow the plant varieties most likely to thrive in their soils, irrigation and drainage projects were set in motion where they seemed appropriate, and regions that lagged behind in rural cotton and silk production were encouraged to expand it. Where particular regions faced shortages of food, shipments from better-supplied ones were arranged. The government was particularly well prepared to undertake such relief efforts because it maintained an extensive network of rice storage granaries, stocked in times of good harvests and drawn on to forestall hunger and unrest in less favorable ones. Western governments (notably the French) engaged in similar practices, but the Chinese ones far outdid them in scale, employing a highly developed system of transport and storage. The system saved many people from starvation when floods devastated parts of the country in 1733–34, but it was working less well by the end of the century, as rapid population growth met a diminishing surplus of grains.[10]

Thus the expansion of Chinese agriculture stimulated by the commercial expansion during the Ming and Qing eras brought new wealth and a more variegated range of products, but it left the basic framework of rural life laid down centuries earlier mostly unaltered, and some of its consequences led observers and officials to worry about the country's future. Why did China not move toward a qualitatively different agricultural regime, as Britain did? Although we cannot attempt to provide a general answer to this question, two considerations would be important in formulating one. The first is the persisting sense that small-scale farming organized around households and

villages was in accord with Confucian principles, fostering loyalty to family and community and discouraging ambitions to rise above one's assigned place in the social order. We will see in a moment that such views shaped the thinking and action of the officials who sought to respond to the danger of overpopulation. The same ideas lay close to the heart of the first Ming emperor, Hongwu, who looked to traditional village life as a model on which to draw the country back to its own way of life, following the unfortunate domination by the alien Mongols. Believing "that closed rural communities ruled by a small elite would restore order to a troubled realm and bring a lasting stability to his dynasty," the emperor imagined an ideal society in which "[e]very family was self-sufficient, with a house to live in, land to cultivate, hills from which to cut firewood, and gardens in which to grow vegetables . . . Women spun and wove and men tended the crops." This vision was in no way opposed to economic betterment; on the contrary, it was expected to foster it, and conditions did improve in Hongwu's reign, aided by the beginnings of the already mentioned commercial expansion. But his fears about the moral and social consequences of such growth found expression in a policy aimed at "immobilizing the realm" by keeping people within their own villages, lest the geographical and social displacements pursuant to commercial development put order at risk. His successors (as we noted in Chapter 4) pulled back from this policy, allowing people scope to pursue what they took to be their interests without official hindrance. The government also fostered economic development, albeit by means not intended to do so, by investing in improved transport and communication; although aimed at facilitating the work of officials and bureaucrats, these measures smoothed the paths of trade and commerce too (more, it seems, than was the case for the similar efforts of the French *Ponts et Chausées* department in the eighteenth century). But such policies envisioned economic expansion within the existing forms of social organization; where threats to it were perceived, criticism and resistance quickly arose.[11]

A second impediment to more basic change in the rural economy came from certain features of the system of landholding, and the preferences of the gentry who dominated it. Peasant cultivators had various rights depending on local custom, but even where these included some degree of ownership of the surface they worked (so that they could rent it out to others if they wished), the ultimate proprietors were gentry to whom peasant households paid rents. Both the nature of the rents (whether fixed or proportional, in money or in kind) and the degree to which the proprietors who received them participated in production varied with place, but nowhere did these arrangements or the use the upper classes made of them favor a turn to large-scale consolidation and increased productivity. In the South, expanding commerce and urban growth provided encouragement to farmers to improve their holdings, with better dams and drainage, and larger quantities of fertilizer both for food crops and for cotton or mulberry bushes. But the scale and effect of these measures

was limited overall because it was peasants, with their generally small and scattered holdings, who undertook them. Their landlords, whose possessions and resources were much more extensive, did not follow suit – first, because the rents they received were fixed, so that increasing production had no attraction for them; and second, because many were absentees, living in towns or cities and sometimes so ignorant of the countryside that if some peasant household decided to pull up stakes and go elsewhere, the landlord often did not even know where the vacated plot lay. Returns on rural investment were lower than for many commercial enterprises, which led most upper-class people with money to invest to put it in the latter; those who bought land did so for the stability and prestige it promised, not in the hope of making significant profits. "The common factor in all the situations of absentee ownership in Fukien was the landlord's decision to settle for a stable fixed income with fairly low risk, rather than to invest capital with the tenant and participate in the increased yields which might result."[12]

Things were somewhat different in the North. There, rents were set as a proportion of the harvest, leading landowners to participate in the production process by providing their tenants with seeds and tools, and encouraging greater efficiency since they too could profit from it. But the effect of this orientation on the agricultural economy as a whole was limited, because "[w]ater routes were lacking in the largely unurbanized north China plain." Thus the region of China whose fiscal arrangements were most favorable to developing large-scale commercialized agriculture was not drawn to introduce it because the markets where farmers could sell their produce remained limited or difficult of access.[13]

These conditions had a counterpart in textile manufacturing. At the center of European rural industry, organized on the "putting-out system," were merchant entrepreneurs who distributed raw materials (and in some cases tools) to workers and then collected and sold the product (e.g., spun thread or woven cloth) in a market. This gave the merchants who managed the process a strong practical interest in increasing the quantity of goods produced from a given amount of raw material and labor time; thus they favored more efficient techniques, better organization, or stricter discipline (all goals that early factories took over in a different setting). In China people with capital to invest were involved in rural industry too, but not in the same way: in many situations their chief role was to lend workers money with which to subsist and buy supplies. The moneymen profited from interest on the loans they made, but they had no direct interest in improving the production process, since it was the peasants who owned and sold the goods. There were branches of the industry in which it was merchants who took products to market (chiefly dyeing and cloth-finishing), but production in them was organized in such a way that not the merchants but contractors employed by them gathered the products and paid the peasant families; in these cases both the wages meted out

to the workers and the amounts the merchants gave the contractors for the goods were set in advance, on an officially established scale that kept wages low. In neither instance did the people who advanced capital have an interest in making the system more efficient or raising the level of worker productivity, so that, in Mark Elvin's formulation, commerce rather than management kept things going, and "an industry enormous in the aggregate was created not by expanding the size of the units of production but by coordinating a growing multitude of small producers through a market mechanism."[14]

In such a system, as Timothy Brook observes, merchants who provided the capital that kept household textile production in motion profited from it "by extracting their profits from outside the production process: that is, by buying cheap and selling dear, by monopolizing the local markets in which spinners and weavers could exchange their products, and by binding producers to them through usury." As a result, "[w]hat was taking form within the commercial economy of the late Ming was unlike the subsistence economy of the early Ming, to be sure, and different from the large-scale redistribution of surplus going on in the mid-Ming; but it was even more unlike what was emerging at this time in Europe." Save in a few places, "most local economies were only weakly linked into national markets," so that pressures to respond to competition by introducing new techniques were weak. As Harriert Zurndorfer remarks, rural industry was not subject to the "involution" that Philip Huang discerns in agriculture, but nor did it represent "a preliminary stage leading to some kind of agricultural/commercial revolution. Rather, what we see is an industry that reached the maximum extent to which an agrarian economy could produce and generate a valuable commodity."[15]

Although he does not assign the contrast between these general features of the two economies the weight that these other scholars' work suggests it deserves, Kenneth Pomeranz gives it some recognition in his book. Commenting that following out his analysis makes it "tempting to imagine" someone in China making "the enormous effort" to link the coal deposits of the Northwest to the commercial and artisan districts of the Yangzi valley, and thus bring together elements that in his view might have set off industrial innovation, he admits that "it is not clear what that [effort] could have been," adding that the coal producers "were not particularly likely to learn about technical developments elsewhere" in the country. That it is so difficult even to imagine how connections could have been made that might have realized China's presumed potential to move toward modern forms of industry, whereas they were realized almost without effort in the society in which Watt and Arkwright flourished, brings us much closer to assessing the transformative potential of the two economies than does Pomeranz's catalogue of "surprising similarities."[16]

To these doubts about the Chinese economy's potential for initiating a turn toward industrial innovation we need to add one more, involving what people

at the time thought economic activity should be for. In a recent study, Pierre-Étienne Will has examined how the officials whose anxieties about the threats posed to national well-being by population growth we mentioned a moment ago sought to deal with the challenges they faced. In recommending various improvements to ward off the dangers of hunger and crisis – more suitable plant varieties, improved drainage and irrigation, importing food from other regions – the administrators made clear that these efforts had to be guided by a set of moral concerns. Realizing the full potential of agriculture required the elimination of "wastefulness," an impediment brought on not just by leaving land uncultivated or irrigation systems undeveloped, but also by devoting "labor power . . . to unproductive or superfluous activities . . . and spending thought to be luxurious or lavish." The officials encouraged rural industry as a means of supplying the needs of the regions where it was located, but if the aim of those who engaged in it was to earn cash in order to buy items regarded as superfluous (a category that would have included many of the things that drew British workers to put in motion what Jan de Vries calls the "industrious revolution"), then even giving land to cotton was discouraged in favor of food grains. In official eyes a "good" or "proper" rural economy was one in which localities focused on meeting their own needs; the aim was a kind of autarchy reminiscent of Emperor Hongwu, in which, as one official put it, "peasants will have a surplus of grain, women will have a surplus of cloth, each villager will be satisfied with his lot, and their morals will be pure."[17]

To be sure, the market was not rejected as such; its utility was recognized and even proclaimed "as long as it was a matter of moving essential products toward regions that lacked them; but it was no less regarded with extreme suspicion, and not as an engine of development and change." The notion of a market economy in Adam Smith's sense, as a system of interaction best able to enhance the well-being of its participants when regulated by policies intended to realize its potential to become more productive, rather than by higher precepts of social and moral order, was alien to Smith's Chinese contemporaries. As Richard von Glahn concludes (in concert with Pierre-Étienne Will), "the idea of continuous growth in output and productivity [was] inconceivable within the intellectual milieu of Qing political economy."[18]

This brings us to the general question that lies behind the analysis we have been trying to develop – namely, the degree to which the sphere of production and exchange during the last two Chinese imperial dynasties can be regarded as autonomous. In one sense it very largely was. Buying and selling were free, both for goods and labor, and the Qing state "gave a wide berth to the entrepreneurial impulses of its people." Max Weber's often repeated notion that development was held back by administrative restrictions has been abandoned by scholars today, for one reason because "by the Qing over 95% of Chinese urban places were free of any . . . permanent bureaucratic presence as reflected in the location of a government office there." Merchants moved about

easily, pursuing their interests where they led. Timothy Brook has shown that not only common people on the way up but gentry families aiming to preserve or improve their position showed good entrepreneurial sense, reaching out for new opportunities and not hesitating to pursue profit in brash and not always gentlemanly ways. If these are measures of autonomy then the Chinese economy had it.[19]

But in the sense we are using the term here it did not. As we saw a moment ago, officials and writers knew much about markets, but they seem to have had no conception of the market as a general system of exchange, and surely not one that would perform its role best if regulated by principles derived from its own practice. As Madeleine Zelin concludes, the reason the state ceased efforts to control economic activities, leaving people free to buy, sell, and move about as they wished, was not out of belief that such a policy would contribute to national wealth, but (as was the case for the other kinds of freedoms we considered in Chapter 4) because the government was too weak to enforce the moral principles on which social well-being was thought to rest. The same weakness led it to allow certain territories added to the state in the eighteenth century (including ones inhabited by Muslims) to retain their existing laws and customs. Agitation from below, as in the opposition to guild regulations and monopolies that often figured in the West (where it was effective before 1789 only in Britain), played little part in the move toward economic freedom in China. Nor was there any counterpart there to the practical efforts by private individuals and groups in Britain to improve the transportation system through turnpike and canal building, thus providing the material foundation for freer exchange.[20]

But the contrast between the generic kind of autonomy the Chinese economy exhibited and the species of it in which spheres of activity are regulated by principles derived from their own practice is clearest in a domain that was essential to Britain's ability to initiate industrial transformation – namely, science. As we saw in Chapter 12, what Margaret Jacob calls "the culture of science" provided much of the energy, practical knowledge, and inspiration for the major innovations that set the Industrial Revolution in motion. That China lacked such a culture of science, and with it the kinds of social locations where the British innovations were prepared, provides a far more comprehensive and illuminating comparison of the two countries' readiness to initiate an Industrial Revolution than one based on measurable "factors." Like their Western counterparts, Chinese artisans and businesspeople had many cultural interests, literacy was widespread, and both gentry and merchant families sought to secure their status by providing one or more of their sons with education in subjects thought to be at once noble and practical. Both Timothy Brook in his study of elites in the city and region of Ningbo and William Rowe in his work on Hangkow emphasize the close relations between merchants and literati that such strategies helped to solidify, and the way they spread interest

in literature, art, and other forms of high culture beyond the confines of state officials. But the substance of this education consisted of the classics of Chinese statecraft and morality that prepared people for the state examinations, sometimes with the aim of securing the prized official positions, and sometimes only for the honor it brought. A preeminent activity for those drawn to such cultural pursuits was poetry, and societies in which both merchants and literati came together to read and praise each other's verse were important locales for their relations.[21]

This kind of culture was practical in the sense that it might open the way to an official career or bring prestige to families seeking to raise their status. But it did not provide any opening onto the kinds of scientific questions that bore directly or indirectly on the possibility of improving productive techniques. The understanding of nature and the cosmos fostered within it was, as we have seen, shaped by the metaphysical notions that infused knowledge of the physical world with moral and aesthetic significance. Even at the end of the eighteenth century, as we saw in Chapter 8, Chinese thinkers regarded their tradition's lack of interest in the physics of falling bodies as a sign of their superiority to its Western counterpart, preserving them from speculations that might upset the proper order of the universe. These orientations and preferences constituted a large reason why traditional Chinese discussions of scientific issues had little bearing on practical questions, and seem never to have taken place in groups comparable to the ones Watt frequented in Glasgow. Things changed after the middle of the nineteenth century, as the Protestant missionaries we encountered earlier introduced modern studies of chemistry, physics, electricity, and other subjects. It was then that modern Western science became a recognized part of Chinese culture, and many of the uses to which it was put were practical. But these applications were chiefly military, pursued in arsenals and armories; later they would spread to industry as well, but that was a century or more after Britain's turn toward modern mechanized industry had begun to transform the world. At that earlier moment China was far from being in a condition to take on the same role.

* * *

A similar conclusion awaits us when we turn to the arguments recently made for regarding India as possessed of a potential to generate economic transformation comparable to Europe's. The Indian and Chinese economies shared certain features. Both possessed an ancient and highly productive agricultural sector in which wheat and rice occupied large places, improved over centuries by sophisticated systems of irrigation and (for the time) advanced tools such as seed drills and dams, together with artisan industries that produced large quantities of highly desirable goods, especially in textiles and metals. In some ways India's economy might even be regarded as having greater potential for

development than China's, since it had long included merchants openly engaged in lively foreign trade, exporting cloth and spices in the regions around the Indian Ocean. Out of this maritime activity there grew up a shipbuilding industry whose products may have been the best in the world. Like the Chinese Empire, the Mughals at their height made impressive contributions to economic improvement, establishing a uniform system of weights and measures and a common currency (which, however, operated alongside local ones, rather than fully displacing them), encouraging economic unity through sophisticated instruments of finance and improvements in transport, and providing effective support for the development of both agriculture and industry.[22]

Just as the two economies resembled and differed from each other, so do the arguments put forward on behalf of their capacity to rival Europe as potential sites of economic innovation. The most comprehensive case for India, made through an imaginative rereading of the historical record by Prasannan Parthasarathi, rests on two main arguments. First, the Indian economy was not less dynamic than Britain's or Europe's. Highly monetized and possessed of sophisticated instruments for banking and finance, it was the world leader in the single most important sector of international trade, cotton textiles. Although the income of workers was low compared with their Western counterparts, it was enough to sustain them given the generally modest prices of food and other necessary goods, and low-interest loans helped tide them over at difficult moments. Doubt has been cast on this optimistic picture by other scholars, who point out that the vigor of the Indian economy was constrained by poor transport and still highly segmented markets, and that the agricultural system was "primarily oriented toward subsistence farming and [maintaining the] customary distribution of the product." British economic historians using sophisticated statistical analyses have especially questioned the notion that workers and peasants were anything like as well-off as British ones.[23]

Even if we assume that Parthasarathi's picture of the health of the Indian economy is generally credible, however, his answer to the question of why it was Britain and not India that actually embarked on a new path cannot withstand scrutiny. In his view what made Britain different is that it was pushed to innovate by two challenges India did not have to face: first the depleted supply of wood fuel, to which it responded by turning to coal, and second the need to compete with India's widely recognized superiority in cotton textiles. Each of these challenges lay behind one of the central innovations of the Industrial Revolution, the turn to coal spurring the development of steam power, and the need to compete with high-quality Indian cotton calling forth the new machines around which the factory system was created. Had India been faced with similar challenges it would presumably have responded in some comparably transformative way. "Britain diverged

from Asia, as well as other parts of Europe, not because it possessed rationality, science, markets, capitalism or anything else in greater abundance, but because the pressures and needs it faced – in combination with state policies – produced a revolutionary response." Any of the "dynamic and diverse economies of Europe and Asia" would have been capable of taking the same path, had it faced challenges resembling Britain's. Such an opportunity never arose for India, however, because the East India Company's political domination ended indigenous control over the country's economy, subjecting the native cotton industry to devastation by competition with mechanically produced and much cheaper British products.[24]

Of these claims, the first is much the weaker, but both rest on the same unexamined premise – namely, that any traditional economy developed enough to display certain features at a sufficient level – "rationality, science, markets, capitalism" – possesses an equal capacity to transform itself in the way Britain did after 1760. In this light, the particular ways different societies put their stamp on these general features – the orientation of the rationality, the content of the science, the particular kinds of social relations within which each of these elements found expression – have little importance in charting the historical trajectories they follow. But challenges do not automatically evoke responses, and there are strong reasons for believing both that it was precisely the particular forms these features took in Britain that made it possible for it to respond as it did, and that equally characteristic features of Indian society make it highly unlikely that it could have reacted in a comparable way.

These contrasts are immediately evident in the realm of steam technology. Merely noting that Indian (or Chinese) culture was less inimical to the development of rationality than Max Weber or Adam Smith, believed, or that India had skilled artisans widely admired for their ability to develop traditional craft techniques in new directions, does not even begin to show an equivalent there for the relations between enterprise, artisanship, and scientific culture that were so important in Britain. However advanced Indian science may have been in those fields where it was well developed in the eighteenth century – botany, animal husbandry, astronomy, mathematics – there was no equivalent there, as there was none in China, for what Margaret Jacob calls the culture of science and Joel Mokyr, "the enlightened economy." All these things provided the foundation on which not just Watt, but many others devoted themselves to realizing possibilities brought into view by simultaneous involvement in theory and practice. Only a narrative and analysis that takes account of the role these specific features of British society played in the emergence of steam technology and suggests how they might have been matched in India could give sufficient substance to what otherwise remains an abstract and vague relationship between capitalism, rationality, and industrial innovation.

Parthasarathi's argument about the relations between Indian textiles and the development of the new British machines for spinning cotton thread is much better grounded and needs to be taken more seriously. He deserves gratitude for showing that recent accounts of the Industrial Revolution have forgotten what many people in the eighteenth century knew and acknowledged – namely, that the rise of the cotton spinning industry in Lancashire owed a substantial debt to the recognized need to compete with Indian fabrics, in particular to produce machine-made cotton yarn of sufficiently high quality that cloth could be woven from it without any admixture of other materials. Cloth made partly from wool is harder to dye and does not hold colors as well as vegetable fibers do. Only pure cotton fabric could be printed with colors and designs attractive and durable enough to stand up against Indian calicoes in domestic and foreign markets. Hand-spun cotton of sufficient quality could be produced in Britain to be sure, but cloth made from it was too expensive to compete with Indian products. Moreover, weaving had been made much more productive in Britain by John Kay's invention of the "flying shuttle," patented in 1733, which allowed a single weaver, rather than two (or more, in the case of wider fabrics) to operate a loom, speeding up productivity, reducing costs, and creating a greater demand for yarn. Thus the problem that needed to be resolved if the industry was to expand was at once one of quality and quantity: the yarn had to be good enough to compete with its Indian rival, but it had to be produced in quantities large enough to supply the more efficient British weaving industry at an acceptable price.

One reason why the three separate spinning machines long regarded as central to the Industrial Revolution were required to mechanize the production of thread was that only with the third was this problem solved. Parthasarathi rightly highlights the differences between them, but we will see there is little reason to believe either that the inventors of the first two were in search of the solution that only Samuel Crompton found, or that Indian production by itself was the challenge that spurred them to introduce their improvements. Hargreaves's spinning jenny was devised in order to take advantage of the higher demand for thread created by Kay's shuttle. But it did not go far in meeting that demand because the yarn it produced was only strong enough for smaller looms, such as those used to weave stockings; this was Hargreaves's own chief activity, and it is unlikely that the limitation troubled him. He seems to have been illiterate and motivated more by the chance he saw to increase his own modest income than by any wider aim. His advance, as we noted earlier, was a very simple one, consisting of eight traditional spindles mounted together and connected so that they could all be operated by a single worker.

Arkwright was a far more sophisticated person, not just an inventor of new devices (both rollers to prepare the raw cotton for spinning and the water frame that operated a large number of spindles at the same time), but

a visionary entrepreneur, as we saw in Chapter 12. His spinning machines, however, although a significant advance on Hargreaves', turning out much more thread in a given time and improving its quality, did not solve the problem of producing yarn strong enough to meet the needs of machine production. The quality and strength of yarn was and is determined by the amount of raw cotton (then measured in hanks of fiber per pound of thread) incorporated into it. Arkwright's machines yielded a product three or more times as dense as Hargreaves' jenny could turn out, and sturdy enough to be used for the warp of large looms. But it was still not suitable for the weft, which meant that wholly cotton fabric still had partly to be produced out of expensive hand-spun thread. Only with Samuel Crompton's "mule," which could turn out yarn five times as dense as Arkwright's by the 1780s, was the problem solved. But Crompton, who like Hargreaves (in the words of the two chief historians of cotton printing) "lacked entrepreneurial sense," seems to have remained unaware of the commercial value of his device. Jealous of his independence but careless of allowing possible rivals to see and copy his improvements, he never obtained a patent, nor did he accept offers to become partners with people (in particular the Peels, whose importance we noted in Chapter 12) who could have assured him of substantial profits.[25]

Thus the relationship between the appearance of the famous spinning machines and the need to compete with Indian yarn was far from being as direct as Parthasarathi makes it out to be. Hargreaves seems never to have been concerned either about India or about the quality of the yarn his jenny could produce. Countering Indian competition may have been one motive behind Arkwright's efforts to improve cotton spinning, but his larger project was to put factory production on a more efficient and more profitable basis, and his devices achieved their fame and usefulness even though the yarn they produced was not good enough to produce the desired quality of cloth by itself. Crompton, although he later expressed pride that his success allowed his countrymen to displace the "Bengal muslins" that dominated the market before, seems to have been moved initially by being, as he said, "grieved at the bad yarn I had to weave," and "inflamed with a strong desire to rectify the evils of our then process of preparing and spinning cotton." Competition with India seems to have been less of a spur for this passion than the desire of an inventive but economically naive artisan for better tools and materials, the typically British zest for improvement often manifested along the permeable line between artisans and entrepreneurs where Watt and many others lived and worked.[26]

But there is a still deeper problem with Parthasarathi's case: when Crompton spoke about the muslins and calicoes that dominated the market before his invention displaced them, he noted, quite accurately, that they were supplied not by Indian merchants or traders, but by "the East India Company" (EIC). Although Indians had been producing cotton products, both high-quality and

cheaper ones, for centuries, and small quantities of them had long reached the West, only as European traders – British, French, and Dutch – expanded their presence in India in the seventeenth century did they become a significant item on European markets. A mere sideline for the EIC at first, Indian cotton grew in importance as demand for brightly printed calicoes rose in the later seventeenth century (with England emerging from the disruptions of the Civil War), and the Company expanded its operations in India to meet it. There spinning and weaving, of silk as well as cotton, took place largely in the countryside, as in both China and Europe. When the Europeans arrived they inserted themselves into the system, either contracting with the local merchants for cloth or taking over their role. As British dominion over the country spread, the Company also excluded other foreigners from areas where it had competed with them before, and took advantage of its own predominance to put pressure on the weavers to work for less pay. It also (like the Dutch) set up large factories, employing several hundred workers in a single place, in order to gain greater control over the process (more in silk, it seems, than cotton); there had been some examples of such aggregations before, but these seem to have been relatively rare.[27]

It was this reorganization of the Indian textile industry that created the competition between imported and domestic cotton that Parthasarathi regards as the challenge that led to the famous innovations. That it constituted a challenge is surely correct, but although the yarn and cloth was Indian, the actual competition was an internal one between British manufacturers and British importers. By late in the seventeenth century the EIC's expanding sales of Indian cotton in Britain began to provoke loud opposition from domestic producers and dealers in wool and silk, who felt their livelihood threatened by it. They petitioned Parliament, organized demonstrations, even raised mobs to protest at the Company's offices. The agitation was successful, in good part because of fear that the impoverishment of English workers caused by the import of cheap foreign cloth would breed still more violent protests. A series of acts passed between 1685 and 1721 first taxed and then banned the import of most Indian textiles and even forbid the sale of printed textiles in England altogether, a blow to London cotton printers but one they survived by selling their goods abroad (especially in West Africa and North America). Representatives of the still fledgling cotton spinning industry were not the people behind this campaign at first, but it was they who eventually profited most from it, and the tariffs and exclusions have rightly been seen as an early example of the kind of protection of infant industries that the British later opposed, once their lead over other countries had been established. But in this case what British industry had to be protected against was British merchants and traders, the two brought into conflict by the quickening tempo of British economic activity both at home and abroad.[28]

Not only was it this vigor that made Indian textiles a significant presence in that market, the activity of the Company and its agents also spurred economic expansion in India itself, giving a boost not solely to the textile industry, but to Indian shipbuilding too. Recognizing the high quality of both Indian hardwoods and the craftsmen who turned them into naval vessels that were both cheaper and tougher than their European counterparts, the Company established a shipyard in Bombay (today Mumbai), originally overseen by one of its agents but after his death headed by a native carpenter, Lowji Nuserwanji Wadia and then by his son. Thirty-six ships were constructed under their supervision, and by 1821 the total produced in the Company's Bombay yard reached over 200, many of them over a 100 tons and a few over 1,000. To be sure the benefits to Indians themselves of all such activities were sharply curtailed once the Company expanded its ascendency on the subcontinent, but there can be no doubt that the British presence in India contributed to an expansion of the Indian economy that historians have identified in the eighteenth century. Certainly what largely drew the British to invest in both Indian textiles and shipbuilding in this period was their recognized high quality. But it was the vigor of the British economy that drove the quickening economic relations between the two countries, causing British manufacturers to feel the pressure of competition from abroad.[29]

Moreover, while Britain responded to this interaction by devising new forms of production, India did not, and the reasons for this cast further doubt on Parthasarathi's notion that had it been challenged as Britain was it might have turned to economic innovation in response. After 1800 the dampening presence of Company rule made such a response impossible, but both before and after that date it is clear that other things made it unlikely. One of these was the already noted absence in India of the kinds of relations between artisans, entrepreneurs, and scientists so well illustrated in James Watt's career. Parthasarathi makes a case for the advanced level of Indian science in such fields as botany, animal husbandry, astronomy, and mathematics, and finds evidence that Indians were interested in theoretical knowledge with a practical payoff, but overall the scientific activity he portrays was still embedded in traditional culture and its values. It neither projected the energy and excitement that animated Western physics and cosmology (fields which remained dominated by traditional notions in India), nor evolved anything comparable to the public excitement about science that drew researchers and lecturers into close contact with an audience valued for its ability to participate in the empirical validation of new scientific ideas. Institutions comparable to the Royal Society with its publications were nowhere to be found.[30]

Other reasons for regarding an Indian breakthrough to modern industry as unlikely lie in the way textile production was organized there, and the cultural orientations of the people involved in it. The production process operated in a way that put the weavers at the center of it. They wove the cloth from thread

either spun in their households or bought from others (including farm families who supplemented their income by home spinning when they could). They then sold the product, either to other workers who bleached or finished it, or more commonly to local merchants, who in many cases had lent them money, both to obtain the yarn and to tide them over before they were paid for their work. The system, called Dadni (from a Persian word for an "advance"), differed from European putting-out in a manner similar to the Chinese one: the weavers owned the material until they sold it to the merchants, the latter gaining their income from interest on the loans, and from reselling the product to traders who took it to close-by or distant markets. Although oriented toward market production, such arrangements did not generate pressures to raise productivity. The only people who might have provided capital to invest in new techniques or devices were the merchants, but because it was the weavers who owned both the raw materials and the finished cloth until it was sold, there was no incentive for the former to do so, since they did not have any role in the work process itself and had nothing to gain from making it more efficient or productive. Thus no person comparable to an Arkwright, concerned to improve the organization of input and output or the techniques of spinning itself, was likely to emerge from their ranks (certainly none did). The economic position of the weavers might have inspired the appearance of someone comparable to Kay, since had they been able to produce more cloth in a given time they would have increased their income, and there seems no reason why the merchants could not have multiplied the number of loans and cloth purchases that financed the system. But a number of things about the weavers stood in the way of their coming to envision such a possibility.[31]

One of these was the often extreme simplicity of the tools and instruments used for all kinds of manufacturing in Mughal India. So jarring was the discord between the high quality of what Indian artisans produced and the limited nature of the implements they employed, that it is worth quoting part of Tapan Raychaudhuri's summary of it:

> In striking contrast to India's pre-eminence as an exporter of manufactured goods, her technology was remarkably backward ... Her world-famous textiles were produced without the aid of multi-spindle wheels known to China from at least the early fourteenth century and, of course, it had nothing to compare with the water-powered throwing-mills with 200 spindles of the Italian silk industry. Her seagoing vessels were devoid of virtually all modern nautical instruments with the probable exception of the astrolabe. The massive Mughal monuments were constructed without the use of even such elementary aids to human labour as the wheelbarrow ... Watermills and windmills, in use for centuries not only in China but in neighbouring Iran as well, were peripheral to the technology of the period. And despite its contact with both Europe and China and its knowledge of block-printing, this highly literary culture showed no

inclination to replace the copyist by the printing press. The overall picture was surely not one of any "distant announcement of industrial revolution."

There were exceptions in armaments and shipbuilding, where tools were of high quality, and several observers of the time remarked on the speed and ease with which weavers and tailors could adapt new patterns or designs in order to produce wares to meet the twists and turns of European fashion. But "[t]he yarn for the famous muslin was produced, not even on the spinning-wheel, but by twirling the simplest of spindles consisting of a needle and a small disc. The weaver's loom with its horizontal frame and foot-treadles was a rudimentary instrument though the more complex draw-looms were probably also in use for the production of complex colored weaves."[32]

To consider the reasons why things remained so long in this state we need to broach, briefly, a subject about which there has been acute controversy in Indian historiography, namely the degree to which life was organized around caste distinctions. The range of views on the topic vary between two extremes. The first and long dominant one regards caste as the core around which Indian society and culture cohered, enshrined in the classical Hindu texts and traditions that defined the basic relationships of life from as far back as can be discerned, and whose influence remains paramount up to the present; the second rejects this perspective as an Orientalist myth fostered by British officials and social theorists for whom caste provided both a way of justifying "enlightened" rule over a "backward" society, and a set of administrative categories able to underpin a divide-and-conquer strategy for gaining control over a country whose complexities few outsiders could understand, and whose potential for resisting foreign domination was demonstrated by the great rebellion of 1857. Neither of these polar views can be sustained, the first because it portrays caste distinctions as more pervasive and rigid than they often were in practice, and the second because it ignores or shunts aside the overwhelming evidence that large numbers of Indians both saw themselves and organized their lives and relations to others in terms of caste membership, with the different forms of status and conduct that it entailed.

Probably the best attempt to take from each what is true while guarding against the distortions on both sides is Susan Bayly's reframing of the subject not in terms of what caste distinctions imposed on Indians, but the particular uses people made of them in different situations. Caste was and has remained a deeply important feature of Indian society and a pervasive ground for social relations of many kinds, but individuals and groups have not been simply passive in the face of it. It served as an instrument of action and interaction, employed by people at all social levels to establish, defend, or advance their place within society. Most often invoked in relation to associates or rivals, caste identities have been mobilized in order to assert the independence or

prerogatives of particular groups (*jatis*), helping them to protect themselves from being misused or dominated, or allowing them to claim superiority to others.[33]

This is a particularly helpful perspective in the present context because it clarifies both Indian social relations as a whole and the lives of artisans in particular. Thus David Washbrook, writing about the perpetuation of a vast spectrum of different languages in India even up to the present, explains the hold of this diversity as reflective of a social order that was integrated in large part through tension and competition: groups sought to define themselves in terms of skills and powers that others could not possess. Such claims were justified on the basis of Hindu cosmological thought that affirmed the notion of "a continuum between the divine order, human society, and the domain of nature," within which particular groups asserted the appropriateness of their exclusive "codes of conduct" as reflective of their particular place in an organizing hierarchy, and on the basis of which they then "essayed to promote or perpetuate internal rivalries among the groups beneath them, in order to divert challenges" to their privileges. Tapan Raychaudhuri's account of the role of caste in the lives of the diverse crafts that came together to produce particular products accords with this, noting that "[t]he hold of tradition was characteristically reflected in the fact that the artisans' corporate organizations were not primarily economic in character, but simply their caste organization which automatically excluded 'outsiders'." On this basis, particular varieties of textiles came to be produced by particular subcastes. Virtually every operation connected with the production of cloth – cotton-carding, spinning, winding silk thread, unwinding and rewinding the yarn, formation of the cloth on the loom, bleaching, dyeing, printing and painting of designs – developed into distinct occupations, some as exclusive *jatis* or caste categories. To take a very different example, the mining and working of cornelian in Gujarat was divided into thirteen different operations performed by distinct groups.[34]

That these distinctions long remained highly characteristic of Indian work patterns has recently been emphasized in a different context by historians who belong to the highly influential "subaltern studies" group, as a way of understanding why the putatively universal – but originally Western – categories of Marxist analysis are insufficient for understanding working-class experience in India, or for helping to guide and encourage organization and resistance. Poverty and domination have been important elements of worker experience to be sure, but their impact was filtered through particular elements of traditional culture that gave meaning and direction to workers' actions, nowhere better exemplified than in weaving. Weavers' responses to modernizing reforms were shaped by long-standing beliefs and practices that associated work with worship, infusing every stage of production with prayers, chants, and symbolic associations between tools or materials and spiritual powers. For Dipesh Chakrabarty (drawing on work by Ranajit Guha), such "life worlds"

provided the beliefs and orientations that animated worker resistance to elite power. But if so then they no doubt also played a role in keeping weavers loyal to the traditional system of production in which their activities and identities were embedded, contributing to the unlikelihood that they would envision new techniques of production calling for the "creative destruction" that Schumpeter identified as characteristic of the modern economic order. This impediment was magnified by what C. A. Bayly has shown to be the remarkable diffusion throughout Indian society of notions and beliefs that attributed magical properties to cloth, a phenomenon that Bayly regards as limiting the power of spreading market relations to disrupt traditional relationships of all kinds in India. "What is striking" there, he notes, "is the way in which the formal apparatus of markets and a monetized economy molded themselves to and were accommodated by mentalities that still viewed the relationship between men, commodities, and other men in terms of good (pure) and evil (polluting)," so that the textile industry would have been an especially unlikely site for disruptive innovations.[35]

In light of these long-term structural features of Indian society, it becomes clear why the presence of rationality, markets, capitalist production relations, or respect for scientific knowledge – all things capable of being developed within "traditional" society, as the case of China also attests – did not put India in a position from which it might have taken the route Britain did, had it been faced with similar challenges. The reasons for the continuing power of teleocratic principles to organize economic life were different in the two instances, but that those principles retained their force in both was central to keeping both societies within the bounds that had long contained them.

15

Conclusion

Summarized in a few sentences, the argument of this book has been that Europe's role as the first region of the world to reveal "what human activity can bring about" rested on two foundations: first, the division and fragmentation that prevented any central authority from exercising effective control over thinking and action there and, second, the space this absence opened up for the development of autonomous spheres of activity, regulated by principles derived from their own practice. Where central direction operated more effectively, whether imposed by some established source of power or grounded in generalized adherence to an integrated body of notions and values, or both, the principal domains of social and cultural behavior were guided in the way we have called teleocratic: what people did within them remained subject to regulation by external principles, reining in the potential that was able to find multiple forms of release in Europe.

Splendid and impressive as were the achievements China, India, Africa, and the chiefly Muslim lands that came to be governed by the Ottomans accomplished in multiple realms of human endeavor (including, to be sure, many not touched on here), all remained what have been called "reproductive" societies. They were certainly not static, but responded to crises and challenges by birthing what Patricia Crone calls "modified versions" of themselves, returning to "the lines laid down in their respective formative periods."[1] In a way this was postclassical Europe's pattern too, as every attempt to impose dominion over at least a large part of it – Charlemagne, Charles V, Louis XIV, Napoleon, Hitler – failed (the last to be sure, with help from across the Atlantic), restoring its distinctive lack of unity. As people seized on the opportunities this situation provided for organizing their spheres of activity on autonomous principles, they created spaces whose potential to foster cultural or material transformation could be realized when circumstances grew ripe.

We have sought to consider the development of each of the modes of activity dealt with in individual chapters both in their own terms – political, religious, intellectual, aesthetic, scientific, industrial – and as examples of the widened scope given to the human power to recast established ways of thinking and acting when domains take on the character of autonomous spheres. Europe's proclivity for favoring such evolutions began to emerge in the centuries

following Charlemagne's death, as the coexistence of many and multiform independent entities fostered the widespread and diverse limitations on "higher" authority that nurtured the continent's preoccupation with liberty. The same underlying situation made the Church's escape from post-Carolingian secular domination possible, laying the foundation for the persisting separation between worldly and spiritual domains without which the autonomy later achieved across a wide spectrum of pursuits would have met much stronger resistance.

The difference this made was already evident in the contrast between the ways Aristotelian logic and metaphysics were received in the Islamic world (where the texts were first recovered and translated) and in Europe. In the first, the guardians of orthodoxy were able to push the "foreign sciences" that threatened revealed truths to the margins, whereas the similar attempt by Western Church officials to suppress dangerous materialist thinking was fended off by the protective cover provided for potentially radical forms of thought by the uniquely European institution of the university, set up in order to gain for students and teachers privileges and liberties like those that gave a significant degree of independence to towns. Islamic *madrasas* did not develop such corporate independence, being organized around individual teachers and their patrons. Although later instances in which the survival and spread of novel (and, to many people, suspect) ideas and practices – classical humanism, art validated from within itself, cosmological and physical theories at odds with both common sense and orthodoxy, the "creative destruction" effected by modern forms of production and exchange – involved significantly larger departures from dominant norms and usages, they all depended on finding ways to regulate themselves by principles derived from the activities carried on within them. People who worked in these spheres pursued ways to replace vertical social and cultural relations with horizontal ones that they themselves promoted and maintained. In Britain especially, the rise of "public science" and the expansion of market relations operated in parallel, providing social connections that served as alternatives to the traditional hierarchies which presupposed and enforced teleocratic standards.

As noted in Chapter 1, it is anything but novel to propose that the features that set Europe apart from other places were rooted in its underlying division and fragmentation. What first distinguishes the current book from others that begin from this same premise, some of them works of the first order, is its attempt to develop this basic perspective not primarily in regard to economic or material power, but as witness to a wider proclivity for giving shelter and expression to energies more successfully held in check elsewhere, thus recognizing this propensity as a core element of Europe's overall character as a civilization. This character also found expression in the openness to other cultures exhibited in travel accounts, in cultivating alien languages, gaining knowledge about distant peoples, working to correct long-standing hostile

misconceptions and myths about them, and more generally introducing both universal rights to life and liberty and the equal dignity of cultures as principles for critiquing at once Europe's own and other societies' overestimation of themselves. Although often overshadowed by the noxious claims to cultural and racial superiority put forward to justify imperial expansion and exploitation from late in the eighteenth century, this legacy was never lost, feeding opposition to imperialism even at its height, and providing alternative principles for organizing the relations between diverse peoples as it declined. In addition, we have sought to develop detailed comparisons with corresponding elements of other regions' ways of life, which show the absence anywhere else of a comparable preoccupation with liberty, of any significant sense that either aesthetic or scientific activity could or should generate valid challenges to prevailing beliefs and attitudes, and finally of the conditions within which industrial transformation could begin in the age of James Watt.

Despite this broad attention given to other world regions, some readers may still look askance at this account, since it considers Europe to have played a role in human history that no other civilization did or could. But that the perspective adopted here be "Eurocentric" is not sufficient reason to condemn it out of hand, since it does not attribute the continent's ability to play its special role to any set of innate or acquired qualities or virtues, such as rationality or individualism, or of attitudes toward acting effectively in the world, such as those Max Weber identified with the "Protestant Ethic." (That readers may find reasons to criticize particular arguments or claims made along the way is a separate matter, and the fate of every book.) Our premise is that all organized human populations in principle possess the basic capacities necessary to play a role comparable to Europe's, and that any of them might have done so, had their historical trajectories been plotted around the coordinates of division and regular, competitive interaction, so that pressures for autonomy within individual spheres could break through the many elements of resistance. Because these conditions obtained nowhere else, the elements of opposition to suspect or unwelcome ideas and innovations, which to be sure existed in Europe too, remained strong enough to keep such potentials from finding realization.

Examples of this resistance have appeared throughout the book, in connection with politics, intellectual life, aesthetics, science, and economic innovation. Confucian thinking rejected independent sites of power, exempt or immune from control by the imperial state, as threats to the order necessary for stable social life. Islamic philosophy responded to the dangers to orthodoxy presented by the Greek rationalism whose texts it was crucial in preserving by rejecting cause and effect reasoning as a form of inquiry, al-Ghazali insisting that whatever happens in the world be attributed solely to the operation of the divine will. Chinese aesthetic theory regarded beauty as at best an ornament, Laozi declaring that to focus on beauty for itself was to court ugliness and vulgarity. The persisting dominance of traditional moral concerns prevented

Chinese officials charged with improving economic conditions from develop-
ing an understanding of market relations as an independent system that might
add to national wealth if allowed to regulate itself by its own principles, and
Indian weavers experienced the actions that constituted their craft as quasi-
religious gestures, embedding their work in a web of sacred meanings resistant
to impulses to alter the process for practical ends.

Because other cultures and civilizations have in this way specifically closed
themselves off from giving autonomy to the varied spheres where human
activity takes place, thus inhibiting the capacity humans possess to refashion
them, when we pursue the just and proper goal of recognizing the equal value
of different modes of human life, we should not do so by looking to extra-
European places as sites where humanity might have taken the historical turns
that only occurred in the West. To contest every difference that might attribute
a singular status to Europe is to forget that distinct human groups set them-
selves disparate goals and seek to develop different qualities and capabilities.
Neither ancient Hindu or Confucian nor medieval Muslim sages dedicated
themselves to revising existing forms of understanding nature in the ways
Galileo or Newton or Darwin did; thus there is simply no point in asserting, as
various figures we have encountered in this book did, that the former already
possessed knowledge that only the latter were seeking. Similarly, attempts like
those of the writers discussed in Part IV to make a case for the capacity of
China or India to initiate a turn to modern industry, on the grounds that
certain discrete factors or conditions present in eighteenth-century Britain can
also be discovered in Mughal or Qing society, implicitly ask us to discount the
larger differences that make particular countries or regions be the distinct
entities they are, and within which such factors should not be expected to have
the same impact. The better way to affirm the equal value of every form of
human life is to consider each in its own terms, recognizing both what it has
and has not contributed to the stock of human attainments as expressions of its
distinct character. Only for Europe did this include being the first to reveal
"what human activity can bring about."

But the other side of this singularity is that Europe's history is the only one
(so far) for which the myth of Icarus provides a fitting – and distressing –
metaphor. The hubristic flight that ends with melting wings and a plunge to
earth can be taken to stand not only for Europe's imperial rise and fall, but also
for modern industry's other face of ecological destructiveness, for the perilous
situation generated by fossil–fuel-induced climate change, and for the out-of-
control condition produced by ever more powerful techniques of global
integration, so that an incident in a lab or market in central China can generate
a sudden and unprecedented threat to human survival everywhere. How, or
even whether, humanity can recover from these dilemmas are not questions to
which the history we have sought to understand in this book can generate
answers. But if answers are to be found, they will not be ones that, in

recognizing the West's high degree of responsibility for the pass at which humanity finds itself, reject the human power to reconceive and reorient cultural and social existence it was the first to bring into view. There is no going back to an earlier, more contained mode of being, because the effort to do so would have to employ the same powers of abstraction and reconstruction it would seek to rein in, demonstrating our reliance on them in the very act of resisting them. We should therefore remember that Icarus's ability to undertake his flight depended on the inventive genius of his father Daedalus, whose readiness to remain closer to earth saved him from the temptation that ended his son's life, allowing him to survive and confront the challenges of later days. Europe should rightfully be denounced for yielding to the Icarus-like enticements that its revelation of the human capacity to remake the world bred, but also cherished for releasing the beneficent potential this capacity still retains, if only we learn not to misuse it.

1 Introduction

1 "Manifesto of the Communist Party," in Karl Marx and Frederick Engels, *Selected Works in One Volume* (New York, 1968), 38. For one alternative to the Marxian focus on the rise and fall of social classes as a frame for history, see my earlier book, *Modernity and Bourgeois Life: Politics, Society and Culture in England, France and Germany since 1750* (Cambridge and New York, 2012).

2 Jack Goody, *The Theft of History* (Cambridge and New York, 2006), and *The Eurasian Miracle* (Cambridge and Malden, MA, 2010). On Goody's overreaching, see Jacques Revel, "Le recite du monde," in the online journal *La vie des idées*, April 26, 2011. Samir Amin, *Eurocentrism: critique d'une idéologie* (Paris, 1988), trans. Russell Moore and James Membrez as *Eurocentrism: Modernity, Religion, and Democracy, A Critique of Eurocentrism and Culturalism* (New York, 1989; 2nd ed., 2009). Arif Dirlik, "Confounding Metaphors, Inventions of the World: What Is World History For?" in *Writing World History, 1800–2000*, ed. Benedikt Stuchtey and Eckhardt Fuchs (Oxford and New York, 2003), 91–133; and "Is There History after Eurocentrism? Globalism, Postcolonialism, and the Disavowal of History," in Arif Dirlik, *Postmodernity's Histories: The Past as Legacy and Project* (London, 2000). A related work, but in a much different spirit, is Jane Burbank and Frederick Cooper, *Empires in World History: Power and the Politics of Difference* (Princeton and Oxford, 2010). I think the best direct response to this whole literature remains Joseph M. Bryant, "The West and the Rest Revisited: Debating Capitalist Origins, European Colonialism, and the Advent of Modernity," *Canadian Journal of Sociology* 31(4) (2006), 403–44.

3 Walter Scheidel, *Escape from Rome: the Failure of Empire and the Road to Prosperity* (Princeton and Oxford, 2019), 9, 14–17, 391, citing Peer Vries, *Escaping Poverty: The Origins of Modern Economic Growth* (Vienna, 2013), 434–35, 339–41. John A. Hall, *Powers and Liberties: The Causes and Consequences of the Rise of the West* (Oxford, 1985). David Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some So Poor* (New York, 1998). E. L. Jones, *The European Miracle: Environments, Economies and Geopolitics in the History of Europe and Asia* (Cambridge and New York, 1981 and later eds.). Jared M. Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York, 1997 and later eds.). Philip T. Hoffman, *Why Did Europe Conquer the World?* (Princeton and Oxford, 2015).

4 I first proposed this distinction as a way of understanding the development of what we generally call modernity, but in a more exclusively European context, in *Modernity and Bourgeois Life*, see 18–21.

5 See, for instance, Toby E. Huff, *The Rise of Early Modern Science: Islam, China, and the West* (Cambridge and New York, 1993), esp. 235, 315, and other references to autonomy and autonomous spheres in the index. The notion is also used in a general way by Harold J. Berman, *Law and Revolution: The Formation of the Western Legal Tradition* (Cambridge, MA and London, 1983), as we will note in Chapter 5, but Berman's attempt to trace too many things to the Gregorian reforms in the Church makes his account quite different in spirit from the one developed here.

6 David Motadel, "Globaliser l'Europe," *Annales. Histoire, Sciences Sociales* 76(4) (2021), 645–67. The quote is on 661. For further development of the political side of the global turn see the article of Sebastian Conrad, "Conjonctures mondiales: la nouvelle fabrique de l'histoire politique européenne," in the same number of *Annales*, 685–700. The author's declaration that "despite all the [inner] continuities [in European development], Europe has never ceased to be refashioned and remade in response to changing world contexts" (693) is true to be sure, but it leaves out the degree to which European developments brought these changes about. Both these articles are part of a general symposium on the "global turn," which gives a good entry into what it is about. All of the contributions contain bibliographical footnotes that provide an easy access to the large quantity of relevant historical literature. I refer readers to them, rather than attempting to provide a bibliography of my own. See also the literature cited in note 2 of this chapter. It should be noted however that much of this approach was anticipated by Marshall Hodgson, some of whose writings are collected in *Rethinking World History: Essays on Europe, Islam, and World History*, ed. Edmund Burke III (Cambridge and New York, 1993). His ideas are worked out more completely in *The Venture of Islam*, 3 vols. (Chicago, 1974 and later eds.) Hodgson attributes much of the eventual distinctiveness of Europe to "technicalization," but without explaining why Europe became the chief site for it.

7 For a classic statement of this view of European history, which transcends the narrowness its author developed later in his life, see François Guizot, *History of Civilization from the Fall of the Roman Empire to the French Revolution*, trans. William Hazlitt (London, 1856), I, 24–26. These were the lectures he delivered as a young professor at the Sorbonne. Although I have not found space to discuss his book's influence outside Europe here, its ideas were taken up in Japan by Fukuzawa Yukichi and in India by Rabindranath Tagore.

8 C. A. Bayly, *The Birth of the Modern World, 1780–1914: Global Connections and Comparisons* (New York and Oxford, 2004), 59–64, 80–81.

9 *Ibid.*, 71.

10 *Ibid.*, 56–59. Jan de Vries, "The Industrial Revolution and the Industrious Revolution," *Journal of Economic History* 54(2) (1994), 249–70; and *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present* (Cambridge and New York, 2008). The term "industrious revolution" was actually coined by a Japanese historian and later used by others in regard to Asian developments, but it did not refer to the kinds of changes in consumer behavior Vries emphasizes, pointing instead to the labor-intensive forms of industrialization characteristic of Asian economies. *The Industrious Revolution*, 78–81.

11 Bayly, *The Birth of the Modern World*, 78–82. For the European Republic of Letters, see Ch. 7 of this volume.

12 Raymond Grew, "On the Prospect of Global History," in *Conceptualizing Global History*, ed. Bruce Mazlish and Ralph Buultjens (Boulder, CO; San Francisco; and Oxford, 1993), 232. See also two more recent essays by David Bell, "Questioning the Global Turn: The Case of the French Revolution," *French Historical Studies* 37(1) (2014), and "A World Connecting Reviewed: Historians Overuse the Network Metaphor," *The New Republic*, October 25, 2013.

13 These issues are raised by Michel Werner, "Décentrer l'histoire européenne par les marges: visions plurielles d'une modernité fragmentée," *Annales. Histoire, Sciences Sociales* 76(4) (2021), 671–76. See also Martin W. Lewis and Kären Wigen, *The Myth of Continents: A Critique of Metageography* (Berkeley, 1997).

2   A Preoccupation with Liberty

1 Fukuzawa Yukichi, *An Outline of a Theory of Civilization*, rev. trans. David A. Dilworth and G. Cameron Hurst III; Intro. by Takenori Inoki (New York, 2009).

2 The Ottoman diplomat Sadullah's letter is translated by Bernard Lewis, *The Middle East and the West* (Bloomington, IN, 1964), 47. Michael Cook, in his study "Is Political Freedom an Islamic Value?" in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), II, 301, cites Kayr al-Din's letter, and his attempt to identify indigenous Islamic roots of these notions. On him and his book, see https://en.wikipedia.org/wiki/Hayreddin_Pasha (accessed August 7, 2016). The English version of his book, *The Surest Path*, trans. Leon Carl Brown (Cambridge, MA, 1967), contains an essay about him by Brown. One recent study looking into the early development of the related terms "democracy" and "republic" in Arabic and Turkish, concluding from the way they were employed that "the vast majority of Arabic speaking scholars remained loyal" to "sociopolitical values that maintained hierarchic order and distinguished between ruler and ruled ... and assigned scant importance to the subject of political rights in relation to individual rights," is Wael Abu-Uksa, "The Constructions of the Concepts 'Democracy' and 'Republic' in Arabic in the Eastern and Southern Mediterranean, 1798–1878," *Journal of the History of Ideas* 80(2) (2019), 270.

3 The Chinese document is translated by Mark Elvin in *The Pattern of the Chinese Past* (Stanford, 1973), 74. For discussions of slavery and freedom in Islam see Cook, "Is Political Freedom and Islamic Value?" For the later persistence of slavery, and of racist justifications of it, see Frank Dikötter, *The Discourse of Race in Modern China* (Stanford, 1992; new ed., 2015), and the work of Pamela Kyle Crossley he cites at 24. Also Dan J. Wyatt, "A Certain Whiteness of Being: Perceptions of Self by the Beginning of European Contact," in *Race and Racism in Modern East Asia: Western and Eastern Constructions*, ed. Walter Kovner and Robert Demel (Leiden, 2012), esp. 317.

4 I am extremely grateful to Pierre-Étienne Will for finding the vernacular examples referred to here and also for the more literal translation of the Chinese text of the eighth-century document cited by Mark Elvin (private communications, March 2, and December 19 and 20, 2020). For India, see Sudipta Kaviraj, "Ideas of Freedom in Modern India," in *The Idea of Freedom in Asia and Africa*, ed. Robert H. Taylor (Stanford, 2002), 103. For a careful analysis of the relations between Buddhism and freedom that agrees in substance with Kaviraj, see Ian Mabbett, "Buddhism and

Freedom," in *Asian Freedoms: the Idea of Freedom in East and Southeast Asia*, ed. David Kelly and Anthony Reid (Cambridge and New York, 1998), 19–36. See also, in the same volume, W. J. F. Jenner, "China and Freedom," esp. 67.

5 Of the many accounts of this process, the one most stimulating and relevant in the present context is Jenö Szücs, "The Three Historical Regions of Europe: An Outline," *Acta historica Academiae Scientiarum Hungaricae* 29 (1983), 131–84. The basic ideas of Szücs's article are reproduced with a bit of expansion in his book *Les trois Europes*, with a preface by Fernand Braudel (Paris, 1985).

6 For a particularly insightful discussion of some of these relations see the article of Iain Hampsher-Monk, "Liberty and Citizenship in Early Modern English Political Discourse," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), II, 126–27. The distinction is also clearly presented in Klaus Schreiner, "*Iura et libertates*: Wahrnehmungsformen und Asprägungen 'bürgerlichen Freyheiten' in Städten des Hohen und späten Mittelalters," in *Bürger in der Gesellschaft der Neuzeit: Wirtschaft–Politik–Kultur*, ed. Hans-Jürgen Puhle (Göttingen, 1991), 59–106, esp. 86–87. On liberty as a territorial designation, especially in Britain, see the Wikipedia articles "Liberty (division)" https://en.wikipedia.org/wiki/Liberty_(division) and "City and Liberty of Westminster" https://en.wikipedia.org/wiki/City_and_Liberty_of_Westminster (both accessed January 20, 2016).

7 Alan Harding, "Political Liberty in the Middle Ages," *Speculum* 55(3) (1980), 423–43.

8 Susan Reynolds, *Kingdoms and Communities in Western Europe, 900–1300*, 2nd ed. (Oxford, 1997), 131–32, 83–100. Fernand Braudel, *Civilization and Capitalism, 15th–18th Century*, I: *The Structures of Everyday Life: the Limits of the Possible*, trans. Susan Reynolds (New York, 1981; orig. French ed., 1979), 510. Harding, "Political Liberty," 427–28.

9 On customs see Reynolds, *Kingdoms and Communities*, 135–43. Gaines Post, "Quod omnes tangit omnibus tractari et approbari debet," in *Studies in Medieval Legal Thought: Public Law and the State, 1100–1322* (Princeton, 1964).

10 Schreiner, "*Iura et libertates*." Reynolds, *Kingdoms and Communities*, 137–39.

11 Jennifer Jenkins, *Provincial Modernity: Local Culture and Liberal Politics in fin-de-siècle Hamburg* (Ithaca and London, 2003), 19–20. Hampsher-Monk, "Liberty and Citizenship in Early Modern English Political Discourse," 104–6. On forms of urban citizenship see Andreas Schulz, "' . . . Tage des Wohllebens, wie sie noch nie gewesen . . . ': Das Bremer Bürgertum in der Umbruchszeit 1789–1818," in *Vom alten zum neuen Bürgertum: Die mitteleuropäische Stadt im Umbruch, 1780–1820*, ed. Lother Gall (Munich, 1991), 26–27. Chapters on other cities in the same volume describe similar arrangements. Edmund G. Burrows and Mike Wallace, *Gotham: A History of New York City to 1898* (Oxford and New York, 1999), 66–67.

12 Jenö Szücs argues that Western vassalage was especially favorable to the subordinate party in this regard; in contrast to common practice in empires to Europe's east, the ceremony did not require that the vassal prostrate himself but only kneel and place his clasped hands in those of his lord (a gesture in which some historians have found a similarity to prayer). See Szücs, *Les Trois Europes*, esp. 143 for the quote in this paragraph. On the Aragonese oath, Ralph E. Giesy, *If Not, Not: The Oath of the Aragonese and the Legendary Laws of Sobrarbe* (Princeton, 1968; new ed., 2015).

13 Walter Ullmann, *Principles of Government and Politics in the Middle Ages* (London, 1961; repr. New York and Oxford, 2010), 154–74.

14 Thomas N. Bisson, "The Crisis of the Catalonian Franchises (1165–1200)," in *La formacio i expansio del feudalisme Catalâ*, ed. Jaume Portella and I. Comas (Barcelona, 1986).

15 Geoffrey Barraclough, *The Origins of Modern Germany* (Oxford, 1957), Chs. 8 and 9.

16 See Paolao Grillo, *La falsa inimicizia: Guelfi e Ghibellini nell' Italia del Duecento* (Rome, 2018). Sergio Ravegli, *L'Italia dei guelfi e ghibellini* (Milan, 2009). And for the later survival of the opposition, Serena Ferente, *Gli ulitmi guelfi: linguaggi e identità politiche in Italia nella seconda metà dell' Quattrocento* (Rome, 2013). For a general summary and a convenient list of cities and loyalties see "Guelfs and Ghibellines," https://en .wikipedia.org/wiki/Guelphs_and_Ghibellines (accessed December 12, 2020).

17 For the contents of this paragraph, see Serena Ferente, "The Liberty of Italian City-States," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), I, 158–59. For the general context (and a number of examples of similar sentiments) see Renato Bordone, *La società cittadina del regno d'Italia: formazione e sviluppo delle caratteristiche urbane nei secoli XI e XII* (Turin, 1987), Ch. 3, where the same passage (from the *Life of Anselm of Lucca*, written in the 1090s) is quoted on 127.

18 Quentin Skinner, "Machiavelli's *Discorsi* and the Pre-Humanist Origins of Republican Ideas," in *Machiavelli and Republicanism*, ed. Gisela Bock, Quentin Skinner, and Maurizio Viroli (Cambridge and New York, 1990), 121–42. For the connection of all this to the rise of the *signori* and the debates it occasioned, see Skinner's book, *The Foundations of Modern Political Thought*, I: *The Renaissance* (Cambridge and New York, 1978), 23–28.

19 Ferente, "The Liberty of Italian City–States," 164–65

20 On Boncompagno of Signa, see Schreiner, "*Iura et libertates*," 75. For the Treaty of Constance, Ferente, "The Liberty of Italian City-States," 162–63. The Grosseto document is printed in Nunzio Federigo Faraglia, *Il comune nell' Italia meridionale, 1100–1806* (Naples, 1883; repr. 1978), 38n. The same chapter of Faraglia's book contains many other examples, mostly – but not all – concerning southern towns and cities

21 Ferente, "The Liberty of Italian City-States," 157–62.

22 Jaska Kainulainen, "Libertas ecclesiae in Post-Tridentine Debates on Church and State," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), I, 38–56. For the last point see also Ferente, "The Liberty of Italian City-States," 161.

23 See Schreiner, "*Iura et libertates*."

24 Ferente, "The Liberty of Italian City-States," 168–75. Similar doubts about the reality of liberty were expressed by Machiavelli's friend Francesco Vettori. See Felix Gilbert, *Machiavelli and Guicciardini: Politics and History in Sixteenth-Century Florence* (Princeton, 1965), 250–51.

25 Niccolò Machiavelli, *Il Principe e Discorsi sopra la prima deca di Tito Livio*, ed. Sergio Bertelli (Milan, 1960), 137 (Discorsi, I, iv).

26 *Ibid.*, 141, 143 (I, v and I, vi).

27 *Ibid.*, 284 (Discorsi II, ii). This discussion of Machiavelli is much indebted to Peter Stacey, "Free and Unfree States in Machiavelli's Political Philosophy," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), II, 176–94.

3 From Liberties to Liberty

1 A classic account is E. L. Jones, *The European Miracle: Environments, Economies, and Geopolitics in the History of Europe and Asia* (Cambridge and New York, 1982; 2nd ed., 1987). Two recent restatements of this argument are Philip T. Hoffman, Why *Did Europe Conquer the World?* (Princeton and Oxford, 2015) and Walter Scheidel, *Escape from Rome: The Failure of Empire and the Road to Prosperity* (Princeton, 2019). Both add interesting elements to the discussion but devote themselves chiefly to economic history. I return to this topic in Chapter 12.

2 J. H. Elliot, "A Europe of Composite Monarchies," *Past and Present* 137 (1992), 47–71. For a somewhat similar emphasis on the absence of real national consolidation in the early modern period, see Jack A. Goldstone, "Efflorescences and Economic Growth in World History: Rethinking the 'Rise of the West' and the Industrial Revolution," *Journal of World History* 13(2) (2002), 334–36.

3 Daniel Lee, "Roman Law, German Liberties and the Constitution of the Holy Roman Empire," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), I, 256–73. For Alciato, see Richard Tuck, *Natural Rights Theories: Their Origin and Development* (Cambridge and New York, 1979), 39.

4 Daniel Lee, "Roman Law, German Liberties and the Constitution of the Holy Roman Empire," 260, 272.

5 In addition to Lee and Tuck, see Peter Stein, *Roman Law in European History* (Cambridge and New York, 1999), 91–92.

6 Geoffrey Barraclough, *The Origins of Modern Germany* (Oxford, 1957), Chs. 8 and 9; and, more recently, Sheilagh Ogilvie, "The State in Germany: A Non-Prussian View," in *Rethinking Leviathan: The Eighteenth-Century State in Britain and Germany*, ed. John Brewer and Eckhart Hellmuth (Oxford, 1999), 167–202.

7 Mack Walker, *German Home Towns: Community, State, and General Estate, 1648–1871* (Ithaca, 1971; 2nd ed., 1998), esp. 16–21. David Blackbourn, *History of Germany, 1780–1918: The Long Nineteenth Century*, 2nd ed. (Malden, MA and Oxford, 2003), 10, 14. On the role of outside powers in aiding the independence of small states, see also Brendan Simms, "Political and Diplomatic Movements, 1800–1820: Napoleon, National Uprising, Restoration," in *Germany, 1800–1870* (Oxford, 2004), 26–27.

8 Thomasz Gromelski, "Liberty and Liberties in Early Modern Poland–Lithuania," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), I, 215–34; quotes on 227.

9 For this and the previous paragraph, Thomas Maissen, "Liberty and Liberties in Europe's Federal Republics," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), I, 235–55. The passages quoted are on 240, 235, 243.

10 *Ibid*., 241, 243–44.

11 The account of Ragusa relies on Lovkro Kunčević, "Discourses on Liberty in Early Modern Ragusa," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), I, 195–214. Charles de Secondat, Baron de Montesquieu, *The Spirit of the Laws*, trans. and ed. Ann M. Cohler, Basia C. Miller, and Harold Stone (Cambridge and New York, 1989), Bk 30, Ch. 1, 619.

12 Rachel Foxley, "John Lilburne and the Citizenship of 'Free-born Englishmen,'" *Historical Journal* 47 (2004), 849–74, 859 for the passages quoted. Foxley comments here on Peter Wende, "'Liberty' und 'Property' in der politischen Theorie der Levellers,'" *Zeitschrift für Historische Forschung* I (1974), 147–73. A further illustration is provided by the text that introduced the idea of the "Norman Yoke" into English political argument, Andrew Horn's *The Mirror of Justices*, published in 1646 but falsely purporting to be a translation of a fourteenth-century work in Old French. The book makes arguments taken up by the Levellers and even the more radical Diggers of the late 1640s, who argued for the cultivation of the soil in common. It is probably the first source of the argument that the liberties guaranteed in Magna Carta should be extended to all individuals (162). Horne's text uses rights and liberties interchangeably, but it is the second it most defends, "rights" appearing only half a dozen times or so. Liberty in the singular seldom appears and never in the sense of an attribute claimed for all free-men or as the generalization of liberties in Lilburne's manner. The text is thus a particularly clear example of the radical purposes to which the plural language could be put in England. It is available online at https://en.wikipedia.org/wiki/File:Andrew_Horn, _The_Mirrour_of_Justices_(1st_ed,_1646).pdf (accessed December 20, 2016).

13 Foxley, "John Lilburne," 862–67 for natural and common law.

14 Joseph di Corcia, "*Bourg, Bourgeois, Bourgeois de Paris* from the Eleventh to the Eighteenth Century," *Journal of Modern History* 50 (1978), 207–33.

15 David Bien, "The Secrétaires du Roi: Absolutism, Corps, and Privilege under the Ancien Régime," in *Vom Ancien Régime zur Französischen Revolution*, ed. Ernst Hinrichs, Eberhard Schmitt, and Rudolph Vierhaus (Göttingen, 1978), 153–68, esp. 159.

16 One revealing example of this sequence can be seen in the history of Toulouse. See Robert A. Schneider, "Crown and Capitoulat: Municipal Government in Toulouse, 1500-1789," in *Cities and Social Change in Early Modern France*, ed. Philip Benedict (London, 1989), and Schneider's book *Public Life in Toulouse, 1463–1789: From Municipal Republic to Cosmopolitan City* (Ithaca, 1989), 279–81. For the more general point, see Benedict's "Overview" in his edited volume just cited, 33, 39–41; and David A. Bell, *Lawyers and Citizens: The Making of a Political Elite in Old Regime France* (New York and Oxford, 1994), 12. For a finely honed account of the many ways these tensions spread through society during the eighteenth century, creating a growing sense of alienation from the state, especially in Paris, see Robert Darnton, *The Revolutionary Temper: Paris, 1748–89* (New York, 2024).

17 Gail Bossenga, *The Politics of Privilege: Old Regime and Revolution in Lille* (Cambridge and New York, 1991), 204. Schneider, *Public Life in Toulouse*, 284, 287. For similar developments in Bordeaux, see Laurent Coste, *Messieurs de Bordeaux: pouvoirs et hommes de pouvoirs à l'hôtel de ville (1548–1789)* (Bordeaux, 2006).

18 Michael Kwass, *Privilege and the Politics of Taxation in Eighteenth-Century France: Liberté, Égalité, Fiscalité* (Cambridge and New York, 2000), 170, 210. For projects that aspired to reform the state in this spirit, see esp. Ch. 9 of Darnton's *The Revolutionary Temper*, "A Big Idea Goes Bust."

19 Bell, *Lawyers and Citizens*, 158 for the point about lawyers and the right of free speech, and 142–43 for the quote from Guy Target about Frenchmen and the corporate spirit. Bossenga, *The Politics of Privilege*, 204.

20 Jean-Jacques Rousseau, "Economie" or "Oeconomie," *Encyclopédie* V, 340, from the ARTFL website, https://artfl-project.uchicago.edu/ (accessed September 27, 2016).

21 Emmanuel-Joseph Sieyès, *Essai sur les privilèges et autres textes*, ed. Pierre-Yves Quiviger (Paris, 2007), 23.

22 For the Dijon privileges see Pierre Goubert, *The Ancien Regime: French Society, 1600–1750* (New York, 1974), 223–24. For the *Encylopédie*, see the articles on Assemblée, I, 767; Aventurier, I, 869; Libertés de l'Eglise Gallicane, IX, 474; Maire de Londres, IX, 887 (all easily found in an ARTFL search). For Dauphiné, Jean Egret, *The French Prerevolution, 1787–88*, trans. Wesley D. Camp (Chicago and London, 1977), 126.

23 Michael P. Fitzsimmons, *The Night the Old Regime Ended: August 4, 1789* (University Park, PA, 2003), 7–8. Dale van Kley, "From the Lessons of French History to Truths for All Times and All People: The Historical Origins of an Anti-Historical Declaration," in *The French Idea of Freedom: The Old Regime and the Declaration of Rights of 1789*, ed. van Kley (Stanford, 1994).

24 J. M. Roberts et. al., *French Revolutionary Documents* (London, 1966), 153.

25 Bossenga, *The Politics of Privilege*, 4.

26 Fitzsimmons, *The Night*, 154; Bossenga, *The Politics of Privilege*, 4. For the Constitution, see Roberts, *French Revolutionary Documents*, 348.

27 William F. Swindler, "'Rights of Englishmen' since 1776: Some Anglo-American Notes," *University of Pennsylvania Law Review* 124(5) (1976), 1083–1103. Michael Zuckert, "Rights," in *A Companion to the American Revolution*, ed. Jack P. Greene and John R. Pole (Oxford and New York, 2000) (retrieved from https://ezproxy.library.nyu.edu, December 15, 2016). On the development of the idea of human rights see Lynn Hunt, *Inventing Human Rights: A History* (New York, 2007).

28 Both Paine and Oldfield are quoted by Iain Hampsher-Monk, "Liberty and Citizenship in Early Modern English Political Discourse," in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), II, 125. For the first I have restored a few omitted words, based on Paine, *The Rights Of Man* (South Bend, IN, 2000), 113–14 (retrieved from ProQuest ebrary, December 17, 2016). T. H. B. Oldfield, An *Entire and Complete History, Political and Personal, of the Boroughs of Great Britain; Together with the Cinque Ports*, 2nd ed. (London, 1794).

29 Rosemary Sweet, "Freemen and Independence in English Borough Politics c. 1770–1820," *Past and Present* 161 (1998), 84–115; see 97, 108 for the passages quoted, but Sweet notes many other examples of the same language. On the diverse forms taken by the franchise before 1832 and the way it was set up afterwards, there is an admirably clear account in the Wikipedia article "Reform Bill of 1832."

30 See Sweet, "Freemen and Independence in English Borough Politics c. 1770–1820," and her book, *The English Town, 1680–1840: Government, Society and Culture* (London, 1999), Ch. 5. Information about both the Liberties Act of 1850 and the Local Government Act of 1888 can be found in the relevant pages in Wikipedia.

31 Walker, *German Home Towns*, 170–71.

32 For developments in German cities before, during, and after the Napoleonic occupation, see the essays collected in *Vom alten zum neuen Bürgertum: Die mitteleuropäische Stadt im Umbruch, 1780–1820*, ed. Lother Gall (Munich, 1991).

33 Gall's edited collection, just cited, provides much information. He and his colleagues argue for a large degree of internal pressure for reform, but it seems to

me that much of the content of the book fits better with the views developed by Mack Walker in *German Home Towns* (see Ch. 8 for the reform of local government; 260–61 for the quote in the text) and by Thomas Nipperdey, *Germany from Napoleon to Bismarck, 1800–1866*, trans. Daniel Nolan (Princeton, 1996), who goes so far as to declare that "In the beginning was Napoleon." I discuss some of these issues in *Modernity and Bourgeois Life: Politics, Society and Culture in England, France and Germany since 1750* (Cambridge and New York, 2012), Ch. 4.

34 The story told in this and the previous chapter makes it impossible to agree with Annelien de Dijn's thesis in her recent book *Freedom: An Unruly History* (Cambridge, MA, 2020) that a democratic idea of freedom as participation, revived from classical sources in the Italian Renaissance, dominated European thought until the era of revolutions, when it came to be replaced with an understanding of freedom based on limiting the power of governments. Such a pattern may fit a story that focuses on a series of thinkers, but it cannot comprehend the more complex history of the two notions and practices considered here.

4   Other Liberties

1 John Iliffe *Africans: The History of a Continent* (Cambridge and New York, 1995), 3.

2 For a general distinction between African societies with and without central governing institutions see M. Fortes and E. E. Evans-Prichard, eds., *African Political Systems* (Oxford and New York, 1940; 2nd ed., 1970), 5 for a summary list of some belonging to each category.

3 Jan Vansina, "A Comparison of African Kingdoms," *Africa: Journal of the International African Institute* 32(4) (1962), 324–35 (332–33 for the list of types). For a list of kingdoms and empires with outlines of their histories, see the Wikipedia entry "African Empires," https://en.wikipedia.org/wiki/African_empires (accessed March 15, 2017). For an interesting example of a composite system with strong elements of despotic control, see Iliffe's notes on the Lunda state, *Africans*, 104–5. On the kin groups, Frederick Cooper, *Africa in the World: Capitalism, Empire, Nation-State* (Cambridge, MA and London, 2014), 14. Crawford Young, "Itineraries of Ideas of Freedom in Africa: Precolonial to Postcolonial," in *The Idea of Freedom in Asia and Africa*, ed. Robert H. Taylor (Stanford, 2002), 9–39, esp. 15–19. On stigmatized groups see also Iliffe, *Africans*, 83–84.

4 Iliffe, *Africans*, 4, 75, 95. For recent testimonies to these things from writers of our time steeped in their own histories, see Chinua Achebe's famous novel *Things Fall Apart* (1958) and the less celebrated but no less informative account of a very different African culture by Sheikh Hamidou Kane, *Ambiguous Adventure* (1952). I discuss both of these texts in *Between Cultures: Europe and Its Others in Five Exemplary Lives* (Philadelphia, 2015).

5 Iliffe, *Africans*, 56–59 (for Ethiopia) and 76–79 (for West Africa). See also his interesting account of developments in East Africa in which the descendants of pioneer colonists became chiefs, 106. For a sustained and probing account of the development of society from isolated villages to *vicinages* (clusters of villages) to political organization in one part of the continent, see Jan Vansina, *How Societies Are Born: Governance in Central West Africa before 1600* (Charlottesville, VA and London, 2004), esp. Ch. 5. For a short general account of Ibo life, see Daryll Forde

and G. I. Jones, *The Ibo and Ibibio-Speaking Peoples of South-Eastern Nigeria* (Oxford and London, 1950; new ed., 2017).

6   Iliffe, *Africans*, 142–44. "Scholars of Ashanti history, such as Larry Yarak and Ivor Wilkes, disagree over the power of this sophisticated bureaucracy in comparison to the Asantehene, but agree that it was a sign of a highly developed government with a complex system of checks and balances." From the Wikipedia article "Ashanti Empire," https://en.wikipedia.org/wiki/Ashanti_Empire (accessed October 20, 2020). For similar conditions in the Kongo kingdom in the South and West, see Iliffe, *Africans*, 80.

7   Iliffe, *Africans*, 117, 74–6. Frederick Cooper, *Plantation Slavery on the East Coast of Africa* (Portsmouth, NH, 1947; 2nd ed., 1977) Rudolph T. Ware III, "Slavery in Islamic Africa, 1400–1800," in *The Cambridge World History of Slavery*, III: A D *1420–AD 1804*, ed. David Eltis and Stanley L. Engerman (Cambridge and New York, 2011), 56. For a recent general treatment of slavery in Africa, see Paul E. Lovejoy, *Transformations in Slavery: A History of Slavery in Africa* (Cambridge and New York, 1963; new eds., 2000, 2011). There is a comprehensive article with much literature cited in Wikipedia: https://en.wikipedia.org/wiki/Slavery_in_Africa (accessed May 9, 2019). On the subject of female slavery there is an informative and thoughtful chapter by Claire Robertson, "Women and Slavery: Changes and Continuities," in *Holding the World Together*, ed. Nwando Achebe and Claire Robertson (Madison, WI, 2019), emphasizing the greater vulnerability of enslaved women but also the status many were able to gain through it. Robertson notes that "assimilative slavery [a term she prefers to lineage slavery] was still slavery," and that overall slavery in Africa evolved toward something closer to chattel slavery as European influences affected it more (198 ff.). For a poignant commentary on the symbiosis between European and African involvement in the slave trade, and its persistence into the twentieth century, see Adaobi Tricia Nwaubani, "My Nigerian Great-Grandfather Sold Slaves," BBC News, July 18, 2020, www.bbc.com/news/world-africa-53444752 (accessed September 7, 2020). The indigenous African sources of the slave trade are not mentioned in Sven Beckert, *Empire of Cotton: A Global History* (Cambridge, MA, 2015), 35–36. That European merchants "paid African rulers to go on a hunt for labor" is surely true, but the hunt did not begin with these payments.

8   Iliffe, *Africans*, 3, 148–53. Iliffe refers to Bamoun as a "new state," but other accounts make it much older. The French Revolutionary government outlawed slavery in its colonies in 1794, but Napoleon reinstituted it in 1802; it was finally abolished during the revolution of 1848. On the general question of why slavery developed to so large an extent in Africa, see the interesting account by John K. Thornton, *Africa and Africans in the Making of the Atlantic World, 1400–1800* (ebook, Cambridge, 1998), https://hdl-handle-net.proxy.library.nyu.edu/2027/heb.01405 (accessed October 21, 2020), esp. Ch. 4. Thornton attributes the prominence of slavery in Africa to the absence of individual landownership there, imposed by the corporatist nature of African societies, an approach that leads him to set strict limits to the degree to which Europeans were responsible for its growth, which was determined by the condition of particular African states. He would probably not agree with everything I say here, but considering this question would take us too far afield. I am grateful to Robert L. Tignor for calling my attention to Thornton's work, and for other bibliographical and interpretive suggestions.

9 Michael Cook, "Is Political Freedom an Islamic Value?" in *Freedom and the Construction of Europe*, ed. Quentin Skinner and Martin van Gelderen (Cambridge and New York, 2012), II, 283–310. Patricia Crone, *Medieval Islamic Political Thought* (Edinburgh, 2004), 315–17. A similar account can be found in Franz Rosenthal, *The Muslim Concept of Freedom Prior to the Nineteenth Century* (Leiden, 1960), esp. 11, 17.

10 Crone, *Medieval Islamic Political Thought*, 21.

11 *Ibid.*, 146.

12 *Ibid.*, 248.

13 Ira M. Lapidus, *Islamic Societies to the Nineteenth Century: A Global History*, 2nd ed. (Cambridge and New York, 2012), 445; on the varieties of law, 442.

14 Crone, *Medieval Islamic Political Thought*, 322. Ernest Gellner, *Conditions of Liberty: Civil Society and Its Rivals* (New York and London, 1994), 21–22, 26. Lapidus, *Islamic Societies*, 294. On the beginnings of the Wahabi alliance with the Saudis, see Robert Lacey, *Inside the Kingdom: Kings, Clerics, Modernists, Terrorists, and the Struggle for Saudi Arabia* (New York, 2009), 10–11, cited in the Wikipedia article "Wahabism," https://en.wikipedia.org/wiki/Wahhabism (accessed January 12, 2016). "The two … concluded a pact. Ibn Saud would protect and propagate the stern doctrines of the Wahhabi mission, which made the Koran the basis of government. In return, Abdul Wahhab would support the ruler, supplying him with 'glory and power.' Whoever championed his message, he promised, 'will, by means of it, rule both lands and men.'" There is also an account of the two men's relations in Noah Feldman, *The Fall and Rise of the Islamic State* (Princeton and Oxford, 2008), 93–94. This early connection, reminiscent of Muhammed's original union of religious and secular power, is overlooked by C. A. Bayly in what seems to me his misguided attempt to associate Wahabism with eighteenth-century European and American reform movements, *The Birth of the Modern World, 1780–1914: Global Connections and Comparisons* (New York and Oxford, 2004), 105–6.

15 The most complete account of the idea of the circle of justice is Linda T. Darling, *A History of Social Justice and Political Power in the Middle East: The Circle of Justice from Mesopotamia to Globalization* (London and New York, 2013). Earlier discussions on which I have relied are: Lucette Valensi, *Venise et la Sublime Porte: la naissance du despote* (Paris, 1987), 105; and Edna Szendi, "Ottoman Political Thought through the Centuries," *International Relations Quarterly* 5(3) (2014). On the relation of the notion to pre-Islamic royal ideology, see Lisa Balabanlilar, *Imperial Identity in the Mughal Empire: Memory and Dynastic Politics in Early Modern South and Central Asia* (London and New York, 2012), 145. Balabanlilar gives a very good account of justice, combined with submission, as the basis of Islamic state authority. For a discussion of increasing concerns about justice in the Ottoman Empire around 1500, see also Linda T. Darling, "Political Change and Political Discourse in the Early Modern Mediterranean World," *Journal of Interdisciplinary History* 35(4) (Spring, 2008), 505–31. Ibn Kaldun, *The Muquaddimah: An Introduction to History*, trans. Franz Rosenthal, abridged and ed. N. J. Daaood (Princeton and Oxford, 1969), see esp. 109, 113.

16 Ira M. Lapidus, *Muslim Cities in the Later Middle Ages*, 2nd ed. (Cambridge and New York, 1984), 187–91.

17 Timur Kuran, *The Long Divergence: How Islamic Law Held Back the Middle East* (Princeton, 2011), 133. Gabriel Baer, "Guilds in Middle Eastern History," in *Studies in the Economic History of the Middle East, from the Rise of Islam to the Present Day*, ed. M. A. Cook (London, 1970), 18–20.

18 There is a very good general account of Sufism in Lapidus, *Islamic Societies*, 354–58.

19 Lapidus, *Islamic Societies*, 452–53. Very similar restrictions were in force in the Muslim regime of medieval Spain often proposed as evidence for a special kind of Islamic tolerance. See David Levering Lewis, *God's Crucible: Islam and the Making of Europe, 570–1215* (New York, 2008), 203.

20 David Sorkin, *Jewish Emancipation: A History across Five Centuries* (Princeton and Oxford, 2019), 263–65.

21 Cook, "Is Political Freedom an Islamic Value?" Patricia Crone, *Medieval Islamic Political Thought* (Edinburgh, 2004), 315–17. A similar account can be found in Franz Rosenthal, *The Muslim Concept of Freedom Prior to the Nineteenth Century* (Leiden, 1960), esp. 11, 17. For al-Fanjari, see Hamid Enayat, *Modern Islamic Political Thought* (Austin, TX, 1982), 131–32. The notion that Islamic concepts of justice and equity were equivalents for the Western notion of liberty seems to go back to the 1830s or 1840s; see Darling, *A History of Social Justice*, 164–65 and note. Nasser later repeated this equivalence, *ibid.*, 192–93.

22 Enayat, *Modern Islamic Political Thought*, 2–3, 12, 138. For an account of al-Fanjari and others "who deduce every conceivable right and duty from the Quran" (largely based on Enayat), and the practical barriers to the project, see John Keane, *Democracy and Violence* (Cambridge and New York, 2004), 183 ff. For a more optimistic assessment (but perhaps its author would reconsider it today), see Noah Feldman, *The Fall and Rise of the Islamic State* (Princeton and Oxford, 2008).

23 Sudipta Kaviraj, "Ideas of Freedom in Modern India," in *The Idea of Freedom in Asia and Africa*, ed. Robert H. Taylor (Stanford, 2002), 101, 103. For the argument that caste was fluid and flexible before the British period, see Nicholas B. Dirks, "Castes of Mind," *Representations* 37 (1992), 56–78; Arjun Appadurai, *Worship and Conflict under Colonial Rule: A South Indian Case* (Cambridge, 1981), Ch. 4. For a balanced and sensible summary of the question, which I take to support the view given here, see C. A. Bayly, *The New Cambridge History of India*, II(1): *Indian Society and the Making of the British Empire* (Cambridge and New York, 1988), 157 ff. The best overall account is Susan Bayly, *Caste, Society and Politics in India from the Eighteenth Century to the Modern Age: The New Cambridge of History of India* (Cambridge and New York, 1999) IV(3). The Arab travel writer al-Biruni who visited India late in the tenth century complained about the essential inequalities between people established by the caste system, although he also noted disagreements about how far caste excluded lower-ranked groups from attaining to spiritual liberation: *Alberuni's India: An Account of the Religion, Philosophy, Literature, Geography, Chronology, Astronomy, Customs, Laws and Astrology of India about A D 1030*, trans. Edward Sachau (New Delhi, 1992), 137–38.

24 On Akbar's toleration, see William Dalrymple's preface to *Visions of Mughal India: An Anthology of European Travel Writing*, ed. Michael H. Fisher (London and New York, 2007), xiv.

25 Bayly, *Indian Society and the Making of the British Empire*, 13–27, 148. David Washbrook, "'To Each a Language of His Own': Language, Culture, and Society in Colonial India," in *Language, History and Class*, ed. Penelope J. Corfield (Oxford, 1991), 184. Washbrook, "South India 1770–1840: The Colonial Transition," *Modern Asian Studies* 38(3) (2004), 503, citing Frank Perlin, "State Formation Reconsidered, Part II," *Modern Asian Studies* 19(3) (1985). See also Andrea Hintze, *The Mughal Empire and Its Decline: An Interpretation of the Sources of Social Power* (Aldershot, UK and Brookfield, VT, 1997), 69–70.

26 For the last sentence, see Dipesh Chakrabarty, *Provincializing Europe: Post-Colonial Thought and Historical Difference* (Princeton and Oxford, 2000), 77–83. The rest of the material in this and the previous paragraph is drawn from C. A. Bayly, *Rulers, Townsmen and Bazaars: North Indian Society in the Age of British Expansion*, 3rd ed. (Oxford and New York, 2012; orig. ed., 1998), 134–54. Bayly seeks to fill in and give more substance to the classic picture of Indian cities given by Max Weber, relating their features more precisely to features of Indian politics and culture, but the basic contrast with Western ones remains.

27 Kaviraj, "Ideas of Freedom," 103–4. For a careful analysis of the relations between Buddhism and freedom that agrees in substance with Kaviraj, see Ian Mabbett, "Buddhism and Freedom," in *Asian Freedoms: The Idea of Freedom in East and Southeast Asia*, ed. David Kelly and Anthony Reid (Cambridge and New York, 1998), 19–36. See also, in the same volume, W. J. F. Jenner, "China and Freedom," esp. 67; and Dennis Gilmore Dalton, *Indian Ideas of Freedom: Political Thought of Swami Vivekananda, Aurobindo Ghose, Mahatma Gandhi and Rabindranath Tagore* (Gurgaon, 1982).

28 The claim for a wider significance of Brahman claims in this regard has been put forward by C. A. Bayly in *Recovering Liberties: Indian Thought in the Age of Liberalism and Empire* (Cambridge and New York, 2012), 39–40. Bayly here bases himself on Rosalind O'Hanlon's article about seventeenth- and eighteenth-century relations between Brahmans in Benares and the Maharatha rulers of the West: "Letters Home: Banaras Pandits and the Maratha Regions in Early Modern India," *Modern Asian Studies* 44(2) (2010), 201–40. But I think it is clear from her text that the limits on Brahman claims are the ones I have stated. See esp. 229–40. On the assumed duty of pre-British Indian states to protect Brahman purity, see O'Hanlon's book, *Caste, Conflict, and Ideology: Mahatma Jotirao Phule and Low Caste Protest in Nineteenth-Century Western India* (Cambridge and New York, 1985), 39 ff.

29 Bayly, *Recovering Liberties*, 43.

30 Mirza Sheikh I'Tessamuddin, *The Wonders of Vilayet: Being the Memoir, Originally in Persian, of a Visit to France and Britain*, trans. Kaiser Haq (Leeds, 2001), 107. *Travels of Mir Abu Taleb Khan, in Asia, Africa, and Europe during the Years 1799, 11800, 1801, 1802, and 1803, Written by Himself in the Persian Language*, trans. Charles Stewart (London, 1810), I, 274–75. In citing these texts, I am very much aware of the limits imposed on my use of them by dependency on translations, most sharply in connection with the notion of liberty itself. But the extent to which both writers develop these themes gives me some degree of confidence that I am not misreading them. Tapan Raychaudhuri, "Europe in India's Xenology: the Nineteenth-Century Record," *Past and Present* 137 (1992), esp. 167–68, reprinted as Ch. 2 of his book, *Perceptions, Emotions, Sensibilities: Essays on India's Colonial and Post-colonial Experiences* (Oxford and New Delhi, 1999).

31 Lynn Zastoupil, *Rammohun Roy and the Making of Victorian Britain* (New York, 2010).

32 Bayly, *Recovering Liberties*, 18–23 and 41, and for more discussion of Roy, see Tapan Raychaudhuri, *Europe Reconsidered: Perceptions of the West in Nineteenth-Century Bengal* (Delhi, 1988), 31–32.

33 On Tagore, see Kaviraj, "Ideas of Freedom in Modern India," 104–5.

34 For a recent account of Gandhi in this respect see Anthony J. Parel's Introduction to his edited volume *Gandhi, Freedom, and Self-Rule* (Lanham, MD and Oxford, 2000), 1–24.

35 Nicolas Tackett, *The Destruction of the Medieval Chinese Aristocracy* (Cambridge, MA and London, 2014).

36 Anne Cheng, *Histoire de la pensée chinoise* (Paris, 1997), 154–55. William C. Jones, "Chinese Law and Liberty in Comparative Perspective," in *Realms of Freedom in Modern China*, ed. William C. Kirby (Stanford, 2004). Pierre-Étienne Will, "Checking Abuses of Power under the Ming Dynasty," in *China, Democracy, and Law: A Historical and Contemporary Approach*, ed. Mireille-Delmas-Marty and Pierre-Étienne Will, trans. Naomi Norberg, with an introduction by Philip Kuhn (Leiden and Boston, 2012), 117–67; and Will, "Despotism, 'Democratic China', and European Authors," in the same volume, esp. 62–65 (on Mencius, see esp. the note on 62).

37 Will, "Checking Abuses of Power," 146–61, esp. 156, 158–59.

38 Will, "Despotism, 'Democratic China', and European Authors," 62–76.

39 See Jones, "Chinese Law and Liberty in Comparative Perspective, 44–56 (esp. 51), and Madeleine Zelin, "Economic Freedom in Late Imperial China," in *Realms of Freedom in Modern China*, ed. William C. Kirby (Stanford, 2004), 57–83.

40 Timothy Brook, *The Chinese State in Ming Society* (London and New York, 2005), 8–13; and *The Confusions of Pleasure: Commerce and Culture in Ming China* (Berkeley, 1998), Ch. 1. Other works take a similar tack, in particular the essays in *Realms of Freedom in Modern China*, ed. William C. Kirby (Stanford, 2004), to which I will refer later. I am deeply grateful to Pierre-Étienne Will for helping me toward this understanding of Chinese society.

41 Joseph Bourgon, "Rights, Freedom, and Customs in the Making of Chinese Law,1900–1936," in *Realms of Freedom in Modern China*, ed. William C. Kirby (Stanford, 2004), 89. The document quoted comes from the Qing, which replaced the Ming in 1644 and endured until the Empire fell in 1911, but the former's notably rigid spirit, reflecting the felt need of the foreign Manchus who ruled it to keep a tight rein on possible opposition, makes it unlikely that the far more flexible Ming would have been less open in this regard.

42 *Ibid*. These quotes appear at 65–68. On *ziyou* see Robert H. Taylor's Introduction to his edited volume *The Idea of Freedom in Asia and Africa* (Stanford, 2002), 4. Although most commentary concurs in saying that the term did not exist in Chinese earlier, Pierre-Étienne Will informs me that an online Chinese encyclopedic dictionary does list two usages of it, "coming in fact from vernacular literature, and with a psychological (or social), not political (or philosophical), sense: feeling unconstrained, or, in one case, not feeling so because one's parents are still around ... The monumental Chinese-Japanese Morohashi dictionary, the mother of all dictionaries of the premodern Chinese language, doesn't even list ziyou as a syntagm" (Private communication, December 19, 2020).

43 Yuri Pines, *The Everlasting Empire: The Political Culture of Ancient China and Its Imperial Legacy* (Princeton and Oxford, 2012), 3.

44 Cheng, *Histoire de la pensée chinoise*, 51.

45 *Ibid*., 54 for the last quote, and 153–54 on stability and unity.

46 People in China were, to be sure, aware that local communities had different customs, some of them involving the ways local political decisions were made. But even in the early twentieth century, when officials took note of different local practices in connection with a project of establishing a law code for the republic on a Western model, they did not attribute to these usages any status that justified their preservation: like purported "rights," they were resented as sources of disharmony. Bourgon, "Rights, Freedom, and Customs," 120.

47 Will, "Checking Abuses," 135–63.

48 For these features of Mencius's thought, see the article in *The Stanford Encyclopedia of Philosophy*, online at https://plato.stanford.edu/entries/mencius/ (accessed May 17, 2021). The article is not paginated, but this discussion occurs in Section Two, where the sources are cited.

49 Cheng, *Histoire de la pensée chinoise*, 27–31. Will, "Checking Abuses," 147–48. The point about the two as *yin* and *yang* has been made before, see Pines, *The Everlasting Empire*, 5.

50 Timothy Brook, "Family Continuity and Gentry Hegemony: The Gentry of Ningbo, 1368–1911," in *Chinese Local Elites and Patterns of Dominance*, ed. Mary Backus Rankin and Joseph Esherick (Berkeley and Los Angeles, 1990), 30–32, 44, 46. William T. Rowe, *Hankow: Conflict and Community in a Chinese City, 1796–1895* (Stanford, 1989), 8, 16, 61. Bin Wong quoted in Richard von Glahn, *An Economic History of China* (Cambridge and New York, 2016), 321.

5 Spaces of Autonomy: The Church, Universities, and the Bounds of Reason

1 Several of these examples are recalled by Harold J. Berman, *Law and Revolution: The Formation of the Western Legal Tradition* (Cambridge, MA and London, 1983), 93.

2 *Ibid.*, 66 (citing Christopher Dawson).

3 It should be noted that in the larger controversy over the extent of both priestly and royal authority, one weapon employed on the royal side was a notion of sacred kingship that made kings also priests, on a biblical model. See, for instance, Norman Cantor, *Church, Kingship, and Lay Investiture in England, 1089–1135* (Princeton, 1958). The model was still invoked later on in Church–State struggles, but it never had a genuine potential to concentrate both secular and spiritual authority in one place.

4 Gabriel Le Bras, *Institutions ecclésiastiques de la chrétienté médiévale* (Paris, 1959), cited by Berman, *Law and Revolution*, 99–101. I have learned greatly from Berman's work, but I think he goes too far in speaking of the Investiture Controversy as "disembedding" religious from secular life. The boundaries between them still remained fluid and contested.

5 The letter can be found in Paul Halsall, "Medieval Sourcebook: Henry IV: Letter to Gregory VII, 24 January 1076," https://sourcebooks.fordham.edu/source/henry4-to-g7a.asp (accessed May 2, 2024).

6 *Inferno*, Ch. XIX, ll. 112–14.

7 Susan Bayly, "The Evolution of Colonial Cultures: Nineteenth-Century Asia," in *The Oxford History of the British Empire*, III: *The Nineteenth Century*, ed. Andrew Porter (Oxford and New York, 1999), 462.

8   Ira M. Lapidus, *Islamic Societies to the Nineteenth Century: A Global History*, 2nd ed. (Cambridge and New York, 2012), 445.

9   R. Bin Wong, *China Transformed: Historical Change and the Limits of European Experience* (Ithaca and London, 1997), 97.

10 For the contrast between Islam and Europe in this regard, see George Makdisi, "Madrasa and University in the Middle Ages," *Studia Islamica* 32 (1970), 255–64. For the personal nature of knowledge transmission in Islamic *madrasas*, see also Jonathan Berkey, *The Transmission of Knowledge in Medieval Cairo: A Social History of Islamic Education* (Princeton, 1993).

11 Toby E. Huff, *The Rise of Early Modern Science: Islam, China, and the West* (Cambridge and New York, 1993), 168–69. Makdisi, "Madrasa and University," 262. The question was treated by Hastings Rashdall in his monumental and classic *The Universities of Europe in the Middle Ages* (Oxford, 1895), I, 11–16.

12 Etienne Gilson, *History of Christian Philosophy in the Middle Ages* (New York 1954), 403. Edward Grant, "The Condemnation of 1277, God's Absolute Power, and Physical Thought in the Late Middle Ages," *Viator* 10 (1979), 213–14.

13 Grant, "The Condemnation," 211–15; Gilson, *History of Christian Philosophy*, 407, 455.

14 Grant, "The Condemnation," 241.

15 Dimitri Gutas, *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early ʿAbbasid Society (2nd–4th/8th–10th Centuries)* (London and New York, 1998), esp. 45 ff., 88, 61–69.

16 On al-Kindi there is a good treatment at https://en.wikipedia.org/wiki/Al-Kindi (accessed May 21, 2020). On the Mutazilites, see Huff, *The Rise of Early Modern Science*, 111–12, and the literature cited.

17 For Averroes's biography see https://en.wikipedia.org/wiki/Averroes (accessed May 25, 2020). For Avicenna's wandering life, imposed by the shifting fortunes of his patrons, see the article in the *Stanford History of Philosophy*, https://plato.stanford.edu/entries/ibn-sina and https://en.wikipedia.org/wiki/Avicenna.

18 George Makdisi, *The Rise of the Colleges: Institutions of Learning in Islam and the West* (Edinburgh, 1981), 37, 55. Also the Wikipedia articles https://en.wikipedia.org/wiki/Al-Mulk on al-Mulk, and https://en.wikipedia.org/wiki/Nezamiyeh on the Nizamite *madrasas*.

19 Oliver Leaman, *An Introduction to Classical Islamic Philosophy*, 2nd ed. (Cambridge and New York, 2002), 12–17, 25. Huff, *Rise of Early Modern Science*, 88, 111–14 (for the quotes). Al-Ghazali's evolving views are discussed by Ignaz Goldziher in "The Attitude of Orthodox Islam toward the 'Ancient Sciences'," in *Studies on Islam*, ed. Merlin L. Swartz (New York and Oxford, 1981), 185–215 (on al-Ghazali see esp. 194–95, 197–98, 202–4). Goldziher also discusses more radical rejections of logic and philosophy following al-Ghazali, 206–9.

20 On this as the moment when Sunni Islam was crystallizing as the alternative to Shia, see the discussion by Patricia Crone referenced in Chapter 4. On Nizam al-Mulk's control over the curriculum of the new *madrasas* see Makdisi, "Madrasa and University," 263. Their role in taking what al-Ghazali called "foreign sciences" out of the curriculum is recognized by A. I. Sabra, "The Appropriation and Subsequent Naturalization of Greek Science in Medieval Islam: A Preliminary Statement," *History of Science* XXV (1987), 232–33, although to different effect. I discuss his view in the next paragraph. Goldziher, "The Attitude of Orthodox Islam toward the 'Ancient Sciences',"

suggests at the end that al-Ghazali's views did not dominate orthodox Islam throughout its history and especially not in the modern period, but both Huff and Sabra give grounds for regarding it as having long-term effects all the same. It may be that some of this turn to a more defensive view of the relations between Islam and philosophy was driven by a reaction against European Crusader incursions in the East, as Gutas argues (*Greek Thought, Arabic Culture*, 170–71), but he does not actually offer any evidence for this, and the absence of the kind of institutional setting for philosophy provided by European universities remains a central point in the comparison.

21 Sabra, "The Appropriation and Subsequent Naturalization of Greek Science in Medieval Islam," 236–37, 240.

6   Classical Humanism and Aesthetics

1 The first scholar to make this distinction clear was Paul Oskar Kristeller, in his essay "Humanism and Scholasticism in the Italian Renaissance," now in his *Studies in Renaissance Thought and Letters* (Rome, 1956), I, 554–83. I drew greatly on this point in my book *Rhetoric and Philosophy in Renaissance Humanism: The Union of Eloquence and Wisdom, Petrarch to Valla* (Princeton, 1968), from which this and the next paragraph borrow, and where much of the relevant literature up until that time is cited (Ch. 7 discusses the evolution of humanism from medieval rhetorical culture). For more recent literature see the work of Anthony Grafton and Lisa Jardine cited in note 4, and for a discussion of some relevant points, see Quentin Skinner, *The Foundations of Modern Political Thought* (Cambridge, 1978), I, 35, 71. A new and most interesting perspective is developed by James Hankins, *Virtue Politics: Soulcraft and Statecraft in Renaissance Italy* (Cambridge, MA, 2020).

2 This paragraph draws on my treatment of Petrarch in *Rhetoric and Philosophy in Renaissance Humanism*.

3 Ira M. Lapidus, *Muslim Cities in the Later Middle Ages*, 2nd ed. (Cambridge and New York, 1984), 187–91. Patricia Crone, *Medieval Islamic Political Thought* (Edinburgh, 2003), 146–47.

4 See Anthony Grafton and Lisa Jardine, *From Humanism to the Humanities: The Institutionalizing of the Liberal Arts in Fifteenth- and Sixteenth-Century Europe* (Cambridge, MA, 1986).

5 See his letter to Leonardo Bruni, quoted in Anthony Grafton, *Leon Battista Alberti: Master Builder of the Italian Renaissance* (New York, 2000), 72.

6 Although Pico's involvement with the Kabbalah has long been understood, its connection to the *Oration* and the Nine Hundred Theses to which it was to serve as Introduction has recently been reemphasized and reexamined by Brian P. Copenhaver, *Magic and the Dignity of Man: Pico della Mirandola and His Oration in Modern Memory* (Cambridge, MA, 2019). There is a comprehensive and informative review of his work by Anthony Grafton in *NYRB* XVII(17) (November 5, 2020), 37–39. It should be noted that images of the human capacity to move upwards or downwards on the chain of being were common during the Middle Ages. I note some of them in *The Idea of the Self* (Cambridge and New York, 2005), Ch. 2.

7 On Landino, Ficino, and the earlier history of these notions, see E. N. Tigerstedt, "The Poet as Creator: Origins of a Metaphor," *Comparative Literature Studies* 5 (1968), 455–88.

8 For a thoughtful and informative recent treatment of Vasari, see Ingrid Rowland and Noah Charney, *The Collector of Lives: Giorgio Vasari and the Invention of Art* (New York and London, 2017).

9 I cite the preface in *Lives of the Most Eminent Painters, Sculptors, and Architects*, trans. Gaston Du C. De Vere (London, 1912–14), I, xlix, www.gutenberg.org/cache/epub/25326/pg25326-images.html (accessed May 4, 2024).

10 See Max Weber, "The Aesthetic Sphere," in "Religious Rejections of the World and Their Directions," in *From Max Weber: Essays in Sociology*, trans. and ed. H. H. Gerth and C. Wright Mills (New York, 1946), 340–43. But the quote in this paragraph is from Richard Wolin, *The Terms of Cultural Criticism: The Frankfurt School, Existentialism, Poststructuralism* (New York, 1992), 66. I have discussed some features and implications of the aesthetic sphere in *Modernity and Bourgeois Life* (Cambridge and New York, 2012), Part III.

11 Kant, *Critique of Judgment*, esp. paragraphs 13–17 and 168–72. I draw here on my discussion of these questions in *The Idea of the Self*, Ch. 9.

12 M. H. Abrams, "Art as Such: The Sociology of Modern Aesthetics," in *Doing Things with Texts: Essays in Criticism and Critical Theory*, ed. Michael Fischer (New York and London, 1989), 113–34. Francis Haskell, *Patrons and Painters: A Study in the Relations between Italian Art and Society in the Age of the Baroque* (New York, 1963; new ed., New Haven, 1980), 14. Kenneth Hudson, *A Social History of the Museum: What the Visitors Thought* (Atlantic Highlands, NJ, 1974), 14–15.

13 Walter E. Houghton, Jr., "The English Virtuoso in the Seventeenth Century," *Journal of the History Ideas* XII (1951), 51–73, 190–219.

14 This discussion of Indian art relies heavily on B. N. Goswamy, *The Spirit of Indian Painting: Close Encounters with 101 Great Works, 1100–1900* (Delhi, 2014; London, 2016). For the connection between Akbar and Krishna, see William Dalrymple, "The Beautiful, Magical World of Rajput Art" (review of two exhibitions at the Metropolitan Museum, New York, in 2016), *New York Review of Books*, (November 24, 2016), 32.

15 This evolution is described by Dalrymple in the article just cited. For a discussion of the social position of Indian artists see Goswamy, *The Spirit of Indian Painting*, 53–60.

16 Milo C. Beach, *The New Cambridge History of India*, I(3): *Mughal and Rajput Painting* (Cambridge and New York, 1992), 199. Both Dalrymple and Beach draw on the work of Goswamy, *The Spirit of Indian Painting*. Sanjay Subrahmanyam has argued that Mughal painters absorbed certain techniques from Western, notably Dutch, practice in the seventeenth century, but recognizes that it did not introduce any disruptive tension into Indian art. "What emerged was not domination by the European structures, the use of perspective remained limited and almost sequestered within certain sections of Mughal painting, and no great effort was necessarily made to reconcile the landscapes or cityscapes taken from a Dutch engraving with the other compositional features of the painting." European practice was "well received" but "it did not enter as a conquering and all-powerful visual and painterly vocabulary." Sanjay Subrahmanyam, *Courtly Encounters: Translating Courtliness and Violence in Early Modern Eurasia* (Cambridge, MA and London, 2012), 174. One should perhaps add that there was nothing in the Dutch examples

that imbued them with any attempt to "dominate" Indian practice, and that the way perspective and cityscape painting were absorbed assured that no foreign influence would put elements of native culture into question.

17 Goswamy, *The Spirit of Indian Painting*, 93–99. The quoted passage is from Wijdan Ali, "Beauty and Aesthetics in Islam," from the site "Muslim Heritage," www .muslimheritage.com/article/beauty-and-aesthetics-islam (accessed May 1, 2017).

18 There is a good brief discussion of these terms in William M. Reddy, *The Navigation of Feeling: A Framework for the History of Emotions* (Cambridge and New York, 2001), 57–59. A number of Wikipedia articles also provide good summary treatments. See the entries "Rasa" at https://en.wikipedia.org/wiki/Rasa_(aesthetics), where a number of classical texts are described, "Indian Aesthetics" https://en.wikipedia.org/wiki/ Indian_aesthetics, and the Natya Shastra (with textual citations) at https://en.wikipe dia.org/wiki/Natya_Shastra (all accessed January 20, 2020).

19 On the relations between art and calligraphy see Wen Fong, "Calligraphy and Painting as One," in *Art as History: Calligraphy and Painting as One* (Princeton, 2014).

20 Karl-Heinz Pohl, "An Intercultural Perspective on Chinese Aesthetics," www.uni-trier .de/fileadmin/fb2/SIN/Pohl_Publikation/Intercultural_perspective_on_chinese_ Aesthetics.pdf, 11, citing Lao-tzu:*Te-tao Ching: A New Translation Based on the Recently Discovered Ma-wang-tui Texts*, trans. Robert G. Henricks (New York, 1989), 54 (accessed May 10, 2017). For a more elaborated version of Pohl's views, see his book, *Geschichte der chinesischen Literatur: Ästhetik und Literaturtheorie in China. Von der Tradition bis zur Moderne* (Munich, 2007). For an excellent brief summary of the classical Chinese understanding of nature (aimed at distinguishing it from the Greek view), see H. Floris Cohen, *How Modern Science Came into the World: Four Civilizations, One 17th-Century Breakthrough* (Amsterdam, 2010), 33–49.

21 For a reference to the first museum in China, see www.oxfordbibliographies.com/view/ document/obo-9780199920082/obo-9780199920082-0081.xml (accessed December 20, 2021).

22 Jonathan Hay, "Art of the Ming Dynasty" and "Art of the Qing Dynasty," originally published in Italian in *Storia universale dell'arte: La Cina*, ed. Michèle Pirazzoli t'Serstevens (Turin, 1995), 25–27, 33, 40–41. I cite the one-volume English original, available on Academia.edu (accessed April 20, 2021). I am extremely grateful to Professor Hay for providing me with a paginated version of this text; note that the pagination of the PDF file begins with the title page. See also "The Qing Dynasty (1644–1911): Loyalists and Individualists," www.metmuseum .org/toah/hd/qing_3/hd_qing_3.htm (accessed May 4, 2024). For a more detailed account of the evolution of *wen-jen-hua* or scholar painting, see Roderick Whitfield, "Wang Hui and the Orthodox School," in *In Pursuit of Antiquity: Chinese Paintings of the Ming and Ch'ing Dynasties from the Collection of Mr. And Mrs. Earl Morse*, publication of the Princeton University Art Museum (Rutland, VT and Tokyo, 1960), 17–48, and the Catalogue that follows.

23 On Shitao, see Jonathan Hay's classic study, *Shitao: Painting and Modernity in Early Qing China* (Cambridge and New York, 2001); see 243, 250, 252–53 for the words quoted, which also appear in the Wikipedia article on Shitao, https://en.wikipedia .org/wiki/Shitao (accessed May 4, 2024). On the translation of *quishi*, see Hay, *Shitao*, xv. On the continuity between Chan Buddhism and Daoism see *ibid.*, Ch. 9, esp. 247–48. For the full quotation about Dong Qichang's two schools, 250.

24 *Philosophy of Painting by Shih-T'ao: A Translation and Exposition of his Hua-P'u (Treatise on the Philosophy of Painting)*, trans. and ed. Earle J. Coleman (Berlin, 1978), cited from the online edition at https://doi-org.proxy.library.nyu.edu/10.1515/9783110809923 (accessed April 20, 2021), 117–18. I have also consulted the more elegant and idiomatic translation by Richard E. Strassberg, *Enlightening Remarks on Painting, by Shitao* (Pasadena, 1989) but I have chosen to quote from Coleman's because the sometimes more awkward (and, I take it, more literal) formulations it contains seem to engage more with the complexities of Shitao's thinking.

25 *Ibid.*, 120–21, 118.

26 Anne Cheng, *Histoire de la pensée chinoise* (Paris, 1997), 37.

27 For Daoist uses of the "ten thousand beings," see Kristofer Schipper, *The Taoist Body*, trans. Karen C. Duval (Berkeley and Los Angeles, 1993), 4, 7, 34–35, where it appears in contexts that evoke Shitao's notion of transformation.

28 By arguing that the aesthetic sphere could not become autonomous in China in the sense used here, I do not mean to contest Jonathan Hay's view that Shitao conceived his practice as autonomous in a different sense, making painting into "a specialized tradition and project" with a universal value that lifted it from the status of "minor skill" attributed to it in earlier aesthetic theory to "a Way [*dao*] in its own right." But the principles regulating that Way were still worked out as variations on the classical notions Shitao invokes in his writing, and did not imply the kind of separation from other spheres asserted and theorized by Vasari, Kant, and the other figures discussed earlier in this chapter. That Hay uses the term in a more general way is indicated by his indexing it as "independence or autonomy," and the equivalence of the two is visible, for instance, in Hay, Shitao, xviii, 24, on 278–79. He also notes that one main dimension of Shitao's role as a painter was being "a philosophical-religious teacher," seeking to impart "the transcendence of the limits of human life through self-realization" (239 and Ch. 9). Hay acknowledges (277) the distance that separates "Shitao's world" from "the exceptional degree of autonomy that modernism has won for [art] in the twentieth century," but his project does not require him to consider the developments toward conceiving the aesthetic sphere as autonomous that took place in Europe. Since he concludes that "The sense of place that Shitao created for himself around his autonomy was, by its absolute, unrooted character, virtually an act of mourning for a lost social experience of undisturbed stability that may never, in fact, have existed" (281), I believe that we are not really in disagreement.

7   Science as a Sphere of Autonomy

1 The sixth-century Indian mathematician and astronomer Aryabhata posited a daily rotation for the earth, which gave rise to the apparent motion of the stars, but still believed that sun, moon, and the other planets circled around our planet. See the discussion (with much literature cited) at https://en.wikipedia.org/wiki/Aryabhata#Astronomy (accessed January 8, 2018).

2 The whole of the discussion in the preceding two paragraphs is an attempt to summarize parts of David Wootton, *The Invention of Science: A New History of the Scientific Revolution* (London, 2015), Ch. 4. The quote in the text is his modification

of Edward Rosen's translation, 139. For some people who did think people lived at the antipodes, see Anthony Bale, *A Travel Guide to the Middle Ages: The World through Medieval Eyes* (New York, 2023), Ch. 1.

3   *Ibid.*, 129, 136–37.

4   *Ibid.*, Ch. 3, "Inventing Discovery."

5   David A. Boruchoff, "The Three Greatest Inventions of Modern Times: An Idea and Its Public," in *Entangled Knowledge: Scientific Discourse and Cultural Difference*, ed. Klaus Hock and Gesa M. Ackenthun (Münster, New York et al., 2012), 133–63.

6   *Ibid.* The Le Roy quote is also given by Wootton, *The Invention of Science*, 62. Anthony Grafton's very learned and interesting demonstration that, all the same, many ancient texts remained as touchstones for new knowledge, seems to me to round out this picture rather than fundamentally to revise it. See Grafton (with April Shelford and Nancy Siriasi), *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge, MA and London, 1992).

7   There is a good account of this well-known episode in English in Felipe Fernández-Armesto, *1492: The Year the World Began* (New York, 2009), 223–27, 244–50. But the best brief one is now in Walter Scheidel, *Escape from Rome: The Failure of Empire and the Road to Prosperity* (Princeton and London, 2019), 435–38. Scheidel relies on Edward L. Dreyer, *Zheng He: China and the Oceans in the Early Ming Dynasty, 1405–1433* (New York, 2007).

8   Robert S. Westman, "The Astronomer's Role in the Sixteenth Century: A Preliminary Study," *History of Science* XVIII (1980), 105–47. Most of what is said about sixteenth-century astronomy in the paragraphs that follow comes from this text, as well as Westman's book, *The Copernican Question: Prognostication, Skepticism, and Celestial Order* (Berkeley, Los Angeles, and London, 2011).

9   For a well-informed discussion of medieval astronomy, see M. H. Mahoney, "Ptolemaic Astronomy in the Middle Ages," in *Dictionary of the Middle Ages*, ed. Joseph R. Strayer (New York, 1985), also online at www.archive.org/details/dictionaryofmidd0001unse_n9p8 (accessed May 10, 2024).

10 *Ibid.*, 108–9.

11 Westman, *The Copernican Question*, 425, 490.

12 Westman, "Astronomer's Role," 110–11; and *The Copernican Question*, Ch. 3. The book discusses many issues we cannot go into here.

13 Westman, "The Astronomer's Role," 109. On Copernicus and Valla see *The Copernican Question*, 55.

14 There is a clear diagram in Westman, *The Copernican Question*, 251.

15 See the accounts in Westman, *The Copernican Question*, Ch. 8; and Wootton, *The Invention of Science*, 187–94. Also Westman, "Astronomer's Role," 124.

16 This theme is developed by Westman in "The Astronomer's Role." For Tycho's education see 123; the quote from Kepler is on 126. See also Ch. 8 of *The Copernican Question*. I have not here given the same degree of emphasis to the important role played by astrology in these matters that Westman does, not because of any disagreement with the interpretation and evidence he presents, but simply because it is not directly relevant to the separate argument I am trying to develop.

17 See Westman, *Copernican Question*, esp. 243.

18 For this and the previous paragraph, see William A. Wallace, "Galileo's Pisan Studies in Science and Philosophy," in *The Cambridge Companion to Galileo*, ed. Peter Machamer (Cambridge and New York, 1998), 27–52; and Westman, *The Copernican Question*, Ch. 13, esp. 355–56; also 15–16. Olaf Pedersen, "Galileo and

the Council of Trent: The Galileo Affair Revisited," *Journal for the History of Astronomy* 14(1) (1983), 5.

19 Westman, *The Copernican Question*, 490.

20 Edward W. Muir, *The Culture Wars of the Late Renaissance: Skeptics, Libertines, and Opera* (Cambridge, MA and London, 2007), 33. I have slightly reworded the translation of the last statement.

21 On Sarpi, see David Wootton, *Paolo Sarpi: Between Renaissance and Enlightenment* (Cambridge and New York, 1983), and William J. Bouwsma, *Venice and the Defense of Republican Liberty: Renaissance Values in the Age of the Counter Reformation* (Berkeley and Los Angeles, 1968).

22 On Pallavicino, see Muir, *The Culture Wars*, 90–94; on Naudé, 56–57. On atheism see the essays in *Atheism from the Reformation to the Enlightenment*, ed. Michael Hunter and David Wootton (Oxford, 1992), particularly Nicholas Davidson, "Unbelief and Atheism in Italy, 1500–1700."

23 See Westman, *The Copernican Question*, 481–84, for a very detailed account of these relations, and, for an excellent summary of some recent work, George Coyne, "Jesuits and Galileo: Tradition and Adventure of Discovery," www .scienceonthenet.eu/content/article/george-v-coyne-sj/jesuits-and-galileo-trad ition-and-adventure-discovery/February (accessed June 8, 2020). Coyne relies on W. A. Wallace's books, *Galileo's Early Notebooks: The Physical Questions* (Notre Dame, 1977), and *Galileo and His Sources* (Princeton, 1984).

24 On Galileo's relations with Barberini see the latter's biography in the online Galileo Project, http://galileo.rice.edu/gal/urban.html (accessed October 18, 2017). Educated by Jesuits, Barberini was also the chief patron of the great sculptor and architect Bernini. In European politics too his positions were not always what one might expect from the head of the Church. Fearing the increasing power of the Habsburgs in Italy, particularly in Naples and Sicily, he gave support to the anti-Habsburg activities of the French monarchy, thus undermining the Holy Roman Emperor's attempts to repress Protestantism in Germany.

25 Mario Biagioli, *Galileo Courtier: The Practice of Science in the Culture of Absolutism* (Chicago and London, 1993).

26 See Westman's critique, *The Copernican Question*, 445–54.

27 Robert S. Westman, "The Reception of Galileo's 'Dialogue': A Partial World Census of Extant Copies," in *Novità Celesti e Crisi del Sapere (Atti del Convegno Internazionale di Studi Galileiani)*, ed. P. Galuzzi (Florence, 1984), 329–71. The point of Galileo's writing in Italian has been recognized also by others, for instance Pedersen in "Galileo and the Council of Trent." For a somewhat different approach to Galileo's addressing himself to a new audience, see Margaret C. Jacob, *Scientific Culture and the Making of the Industrial West* (New York and Oxford, 1997), Ch. 1, esp. 18–28.

28 For instance, in the popular account of the rise of modern science in Jacob Bronowski, *The Ascent of Man* (Boston, 1973).

29 This paragraph relies on Westman, "The Reception of Galileo's 'Dialogue.'" The last quote comes from *The Copernican Question*, 495.

30 A notable example was Descartes, who felt he could not publish his treatise *Du monde* because of its heliocentric premises, although he may have had other reasons for holding off, as I suggested in *The Idea of the Self* (Cambridge and New York, 2005), 64–67.

31 Armand Beaulieu, "Les réactions des savants Français au début du XVIIe siècle devant l'héliocentrisme de Galilée," in *Novità Celesti e Crisi del Sapere (Atti del Convegno Internazionale di Studi Galileiani)*, ed. P. Galuzzi (Florence, 1984), 381 for the conclusion quoted. See also the articles of Pierre Costabel and Jena-Mihel Gardair in the same volume. It should be noted however that in Spanish universities "Copernicanism either was not taught well into the eighteenth century," or was mentioned only as a hypothesis. Jacob, *Scientific Culture and the Making of the Industrial West*, 131.

32 For Renaudot's activities, see Howard M. Solomon, *Public Welfare, Science, and Propaganda in Seventeenth-Century France: The Innovations of Theophraste Renaudot* (Princeton, 1972), Ch. 3 (73–74 on Mersenne). For the content of the sessions and the article on "The Motion or Rest of the Earth" (in English), see https://quod.lib.umich.edu/cgi/t/text/text-idx?c=eebo;idno=A70920.0001.001 and https://quod.lib.umich.edu/e/eebo/A70920.0001.001/1:6.10.1?rgn=div3;view=fulltext (both accessed November 15, 2017).

33 On Campanella, Solomon, *Public Welfare, Science, and Propaganda*, 91–93. On the virtuosi, see the articles of Walter E. Houghton, Jr., "The English Virtuoso in the Seventeenth Century," *Journal of the History Ideas* XII (1951), 51–73, 190–219. And for curiosity in general being fed by a distrust of "generalizations of all kinds," see Lorraine Daston, "Curiosity in Early Modern Science," *Word and Image* 11 (1995), esp. 400; and "The Cold Light of Facts and the Facts of Cold Light: The Transformation of the Scientific Fact, 1600–1750," in *EMF: Studies in Early Modern France*, ed. D. L. Rubin (Charlottesville, VA, 1997), II, 17–45.

34 The most thorough discussion of Newton from this point of view, based on a large body of previously unknown material, is Rob Iliffe, *Priest of Nature: The Religious Worlds of Isaac Newton* (Oxford and New York, 2013). But Newton's theological concerns have long been recognized and in particular the place of anti-Trinitarianism within them. See, for instance, Richard S. Westfall, *The Life of Isaac Newton* (Cambridge and New York, 1993), Chs. 6 and 9; see esp. 121–24 on the Trinity and 140–46 on Alchemy.

35 Larry Stewart, *The Rise of Public Science: Rhetoric, Technology, and Natural Philosophy in Newtonian Britain, 1660–1750* (Cambridge and New York, 1992), 21–22 (citing *Sir Isaac Newton's Principles of Natural Philosophy*, ed. Florian Cajori [Berkeley, 1982], 104, xxi–xxiv).

36 Steven Shapin and Simon Schaffer, *Leviathan and the Air Pump: Hobbes, Boyle, and the Experimental Life* (Princeton, 1985; 2nd ed., 2011). Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago and London, 1994). For a measured account of the reactions to the first of these books, many of them skeptical, see https://en.wikipedia.org/wiki/Leviathan_and_the_Air-Pump (accessed May 5, 2024). See also the review of the second edition of Shapin and Schaffer's book by David Wootton, "Revolution in the Heavens," TLS, October 19, 2011.

37 Westman, *The Copernican Question*, 454.

38 Barbara J. Shapiro, *A Culture of Fact: England, 1550–1720* (Ithaca and London, 2000), 4–5, 109.

39 Lorraine Daston, "The Ideal and Reality of the Republic of Letters in the Enlightenment," *Science in Context* 4(2) (1991), 367–86, esp. 380, 382. Although she may be right that taking this kind of distance "estranged them from themselves as well," it also allowed them to reshape one way of being themselves by reference to another. For the very similar reliance on distance as a source of objectivity in Adam Smith's moral philosophy, see my discussion of him in *The Idea of the Self*, Ch. 5.

8   Teleocratic Sciences

1 On the observatories and much of the intellectual history of Muslim astronomy, see Aydin Sayili, *The Observatory in Islam and Its Place in the General History of the Observatory* (Ankara, 1960). Sayili emphasizes the central importance of astrology in the founding and use of the observatories. See also the Wikipedia article on "Astronomy in the Medieval Islamic World," https://en.wikipedia.org/wiki/Astronomy_in_the_medieval_Islamic_world (accessed February 28, 2020). The most comprehensive attempt to write a history of medieval Arab astronomy is George Saliba, *Islamic Science and the Making of the European Renaissance* (Cambridge, MA, 2007), but I take issue with Saliba later in this chapter.

2 For a clear summary of al-Shatir's innovations, see David King, "Ibn al-Shatir," in *The Biographical Encyclopedia of Astronomers*, ed. Thomas Hockey et al. (New York, 2007), 569–70, https://islamsci.mcgill.ca/RASI/BEA/Ibn_al-Shatir_BEA.htm (accessed May 25, 2020).

3 The best informed and most persuasive account of what is at stake is Nidhal Guessoun, "Copernicus and Ibn Al-Shatir: Does the Copernican Revolution Have Islamic Roots?" *The Observatory* 128 (2008), 231–39.

4 The quote is from Saliba, *Islamic Science and the Making of the European Renaissance*, 193. Saliba has provided a useful survey of the literature on this paragraph's overall subject, "Copernicus and Arabic Astronomy: A Review of Recent Research" (2007), www.muslimheritage.com/article/copernicus-and-arabic-astronomy-review-recent-research (accessed August 17, 2017). Saliba's book provides much information on Arab astronomy, but his determination to make Western science and Copernicus in particular dependent on developments among Muslim figures leads him to slide over most of the important interpretive questions. For Arab criticism of Ptolemy on similar grounds to al-Tusi's, but remaining within the geocentric universe, see A. I. Sabra, "The Andalusian Revolt against Ptolemaic Astronomy: Averroes and al-Bitruji," in *Transformation and Tradition in the Sciences: Essays in Honor of I. Bernard Cohen*, ed. Everett Mendelsohn (Cambridge and New York, 1989), 233–53. For the Quranic passages see "Astronomy in the Quran," www.islam-guide.com/bqs/17astronomy.htm (accessed January 5, 2018).

5 For Copernicus's reception in Arab and Muslim areas a general account is provided, but in an apologetic idiom, by Ekmelledin Ihsanoglu, "Ottoman Science: The Last Episode in Islamic Scientific Tradition and the Beginning of European Scientific Tradition," in *Science, Technology and Industry in the Ottoman World*, ed. E. Ihsanoglu et al. (Turnhout, Belgium, 2000), 26 ff. See also Osman Bakar, "Muslim Intellectual Responses to Modern Western Science and Technology: Between Ottoman Westernization and Post-Colonial Islamisation," in *The Islamic World and the West: Managing Religious and Cultural Identities in the Age of Globalisation*, ed. Christoph Marcinkowski (Kuala Lampur, 2009), esp. 144–45, but Bakar relies on Ihsanoglu. On al-Tahtawi and Galileo, see Anouar Louca, "La médiation de Tahtawi, 1801–73," in *La France et l'Égypte à l'époque des vicesrois, 1805–82*, ed. Daniel Panzac and André Raymond (Cairo, 2002), 61. On al-Tahtawi (whose efforts were resisted by Egyptian conservatives), see also Albert Hourani, *Arabic Thought in the Liberal Age, 1798–1939* (Oxford, 1962; and many later editions from Cambridge University Press), 69–83.

6 For Osiander, Robert S. Westman, "The Astronomer's Role in the Sixteenth Century: A Preliminary Study," *History of Science* XVIII (1980), 108–9. For

continued Islamic resistance to science see the discussion of Seyyid Hossain Nasr in Bakar, "Muslim Intellectual Responses," 149.

7 See the list at https://en.wikipedia.org/wiki/Science_and_Civilisation_in_China (accessed January 9, 2018).

8 For Needham's general approach, see *Science and Civilization in China*, I: *Introductory Orientations* (Cambridge, 1961), 19, and VII, Part II, *General Conclusions and Reflections* (Cambridge and New York, 2004), esp. 1–23. Needham's volumes list the various collaborators and assistants who contributed to them. For his life, see Simon Winchester, *The Man Who Loved China: The Fantastic Story of the Man Who Unlocked the Mysteries of the Middle Kingdom* (New York, 2008). For one intelligent response to Needham's work, see Toby E. Huff, *The Rise of Early Modern Science: Islam, China, and the West* (Cambridge and New York, 1993), 32–39. There is also a good discussion of some of the issues raised by his work in the Wikipedia article at https://en.wikipedia.org/wiki/Joseph_Needham (accessed May 6, 2024). For a generally sympathetic but also critical statement, see Mark Elvin's introductory "Vale atque ave" in *Science and Civilization in China*, VII, Part II, xxiv–xliii. But Elvin's own earlier work suggests a greater distance from Needham's approach than he admits in this valedictory. I rely on much of this work in this chapter.

9 R. Bin Wong, *China Transformed: Historical Change and the Limits of European Experience* (Ithaca and London, 1997), 97.

10 For the passage quoted, Felipe Fernández-Armesto, *1492: The Year the World Began* (New York, 2009), 247–48. On the voyages, see Edward L. Dreyer, *Zheng He: China and the Oceans in the Early Ming, 1405–1433* (New York, 2007). For an excellent short account, Walter Scheidel, *Escape from Rome: The Failure of Empire and the Road to Prosperity* (Princeton and London, 2019), 435–38. Also Daron Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York, 2012), 232–33, as well as Joanna Waley-Cohen, *The Sextants of Beijing: Global Currents in Chinese History* (New York and London, 1999), 47–49. I think that Sanjay Subrahmanyam's claim ("Connected Histories: Notes towards a Reconfiguration of Early Modern Eurasia," *Modern Asian Studies* 31(3) [1997], 737) that "the notion of discovery . . . applies as much to Zheng He's Indian Ocean voyages . . . as to those of Carbral or Magellan" is based on a willful forgetting of the great differences between them. Nothing that made any large difference was discovered on Zheng He's voyages, and they left no legacy that affected the way people acted on or understood the world.

11 For Ricci's account, see *China in the Sixteenth Century: The Journals of Matthew Ricci; 1583–1610*, trans. Louis J. Gallagher, with a foreword by Richard J. Cushing (New York, 1953), 7. On maps, see Marjo T. Nurminen, *The Mapmakers' World: A Cultural History of the European World Map* (London, 2015), esp. the illustrations on 17, 20–21, 258–59. The change from medieval maps was noted by Anthony Grafton (with April Shelford and Nancy Siraisi), *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge, MA and London, 1992), 53–54.

12 For the long survival of the Chinese and Japanese cartographic ideas that put China or India in the center of the world, see Masayuki Sato, "Imagined Peripheries: The World and Its Peoples in Japanese Cartographic Imagination," in *Facing Each Other: The World's Perception of Europe and Europe's Perception of the World*, ed. Anthony Pagden (vol. 31 of *An Expanding World: The European Impact on World*

History, 1450–1800, series editor A. J. R. Russell-Wood) (Aldershot and Burlington, VT, 2000), 367–93. Scheidel, *Escape from Rome*, 435–38. On the limits of Chinese practical geographical knowledge, see Timothy Brook, *Vermeer's Hat: The Seventeenth Century and the Dawn of the Global World* (New York, 2000), 80–81.

13 Needham, *Science and Civilization in China*, III, 171, 193.

14 *Ibid*., 423 ff.

15 Nathan Sivin, "Copernicus in China," *Studia Copernicana* 6 (1973), 63–122. The point has been reiterated by Benjamin A. Elman, *On Their Own Terms: Science in China, 1550–1900* (Cambridge, MA and London, 2005).

16 Boleslaw Szczesniak, "Notes on the Penetration of the Copernican Theory into China (Seventeenth–Nineteenth Centuries)," *Journal of the Royal Asiatic Society* 77 (1945), 29–39, 36 for the first passage quoted. On imperial control over the calendar and the questions on the examination see Elman, *On Their Own Terms*, 167–68. The second citation in this paragraph is from Sivin, "Copernicus in China," 102, although he offers it, unjustifiably I think, to show that it was the confusions generated by Jesuit hesitancy that led Chinese to judge European cosmology in negative terms. To be fair to Sivin, it should be noted that he is less concerned to blame the Jesuits for the Chinese delay in adopting heliocentrism than to refute the notion that Chinese astronomers on their own "were incapable of understanding modern cosmology" (95). I know of no reason to disagree on this score, but the likelihood that they might have accepted it, had it been presented to them, is a different question. Elman provides much additional information on the return to "native learning," e.g., 220–21.

17 Mark Elvin, *The Pattern of the Chinese Past* (Stanford, 1973), 233–34. For an excellent brief summary of classical Chinese thinking about nature, see H. Floris Cohen, *How Modern Science Came into the World: Four Civilizations, One 17th-Century Breakthrough* (Amsterdam, 2010), 33–49.

18 Mark Elvin, "The Man Who Saw Dragons: Science and Styles of thinking in Xie Zhaozhe's *Fivefold Miscellany*," *Journal of the Oriental Society of Australia*, 25–26 (1993–94), 22.

19 Elvin, *Pattern of the Chinese Past*, 186–91.

20 See Elman, *On Their Own Terms*.

21 Elman, *On Their Own Terms*, 285–88.

22 *Ibid*., 290–91, 296.

23 Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900* (Basingstoke and New York, 2007), 8.

24 On Sugita, Bob Tadashi Wakabayashi, *Anti-Foreignism and Western Learning in Early Modern Japan: The New Theses of 1825* (Cambridge, MA, 1986), 42–46. On China, Elman, *On Their Own Terms*, 397–98. On the Arabs and Darwin, Marwa Elshakry, *Reading Darwin in Arabic, 1860–1950* (Chicago and London, 2013), 33, 269. Elshakry is properly skeptical about these claims. Around 1844 a Chinese writer, Wei Fuan, made the nonsensical claim that "the spiritual origins of western might derived from China, for the Christian religion was based on the Confucian classics which Jesus had had translated into Latin." Stuart Woolf, "The Construction of a European World View in the Revolutionary-Napoleonic Years," *Past and Present* 137 (1992), 85, citing Jerome Ch'en, *China and the West: Society and Culture, 1815–1937* (London, 1979), 65–66.

9   Other Peoples, Other Places

1 For a recent reconsideration of European images of Muslims and Islam in the Middle Ages, showing the interaction of notions based on geography and climate with religious polemic in shaping European views, see Suzanne Conklin Akbar, *Idols in the East: European Representations of Islam and the Orient, 1100–1450* (Ithaca and London, 2009). Akbari is particularly interesting in noticing the ways in which medieval people saw bodies as affected by the climatic conditions in which they develop. Unfortunately, she takes Edward Said's understanding of Orientalism as a central point of reference.

2 Remi Brague, *Europe: la voie romaine*, 2nd ed. (Paris, 1993), 109. Brague especially discusses the contrast with Islam.

3 On the limited Arab interest in foreign languages, see Bernard Lewis, *The Muslim Discovery of Europe* (New York and London, 1982), esp. Ch. III. Patricia Crone and Michael Cook, *Hagarism: The Making of the Islamic World* (Cambridge and New York, 1977), 139. The distinction between the Muslim sense of having inherited and superseded the intellectual achievements of other peoples, so that there remained nothing of value that needed to be sought outside Islamic understanding itself, as contrasted with the persisting European sense that other cultures, beginning with pagan Antiquity, contained possible truths that had to be examined and appreciated on their own, even where they posed problems for Christian belief, is completely elided by Tarif Khalidi, "Islamic Views of the West in the Middle Ages," *Studies in Interreligious Dialogue* 5 (1996), 31–42. Khalidi presents a few interesting medieval Islamic observations about Europe, but his claim that Islamic culture exhibited an "astonishing curiosity" and a "readiness to learn from its enemies," save in practical things, is much overblown. As he notes, Islamic geographical theory regarded true culture as impossible outside the regions of the world into which the Prophet's message had come, a notion that survived until the nineteenth century. See Tapan Raychaudhuri, "Europe in India's Xenology: The Nineteenth-Century Record," *Past and Present* 137 (1992), 156–57, republished as Ch. 2 of his book, *Perceptions, Emotions, Sensibilities: Essays on India's Colonial and Post-Colonial Experiences* (Oxford and New Delhi, 1999).

4 Daniel Roche, *Humeurs vagabondes: de la circulation des hommes et de l'utilité des voyages* (Paris, 2003), 25–37.

5 For Arab travelers, see *Two Arabic Travel Books: Abu Sayd al Sirafi, Accounts of China and India, and Ibn Fadlan, Mission to the Volga*, trans. and ed. Tim Mackintosh-Smith and James E. Montgomery (New York, 2014). Also *In the Lands of the Christians: Arabic Travel Writing in the Seventeenth Century*, trans. and ed. Nabil Matar (New York and London, 2003), and Roxanne L. Euben, *Journeys to the Other Shore: Muslim and Western Travelers in Search of Knowledge* (Princeton and London, 2006). On Ottoman printing, see M. Sükrü Hanioglu, *A Brief History of the Late Ottoman Empire* (Princeton, 2008), 47–48. For Indo-Persian literature, Muzaffar Alam and Sanjay Subrahmanyam, *Indo-Persian Travels in the Age of Discoveries, 1400–1800* (Cambridge and New York, 2007), 1–15. For classical Chinese travel literature, Richard E Strassberg, *Inscribed Landscapes: Travel Writing from Imperial China* (Berkeley and Los Angeles, 1994). For evidence that the earlier attitude analyzed by Strassberg was still prevalent later, see Michael G. Chang, *A Court on Horseback: Imperial Touring & the Construction of Qing Rule, 1680–1785* (Cambridge, MA, 2007), 319. For the beginnings of official and private

travel in search of ways to respond to the Western challenge, see Ma Félix Jun, "Récits de voyage à la fin des Qing (1840–1912)," in the online *Encyclopédie des historiographies: Afriques, Amériques, Asies*, ed. Nathalie Kouamé, Éric P. Meyer, and Anne Viguier, https://books.openedition.org/pressesinalco/28911 (accessed May 10, 2020). For the earliest Chinese traveler to arrive in the West (a Nestorian Christian on a diplomatic mission to the pope and the French king, who wrote his report in Persian), see Morris Rossabi, *Voyager from Xanadu: Rabban Sauma and the First Journey from China to the West* (Tokyo, New York, and London, 1992).

6 Roche, *Humeurs vagabondes*, 61–64.

7 *Ibid*., 71–82. The negative view of travel was also supported by fears that certain climates subjected people who stayed too long in them to one or another kind of degeneracy (see Jonathan Lamb, "Metamorphosis and Settlement: The Enlightened Anthropology of Colonial Societies," in *The Anthropology of the Enlightenment*, ed. Larry Wolff and Marco Cipolloni [Stanford, 2007], 277–91), but such notions did not necessarily deny the positive effect of visiting foreign places.

8 Felipe Fernández-Armesto, *1492: The Year the World Began* (New York, 2009), 2–3. The point has often been made before, but Fernández-Armesto reformulates it in more contemporary terms. Raynal is quoted by Marco Cipolloni, "The Old World and the New Wor(l)ds: A Discursive Survey from Discovery to Early Anthropology," in *The Anthropology of the Enlightenment*, ed. Larry Wolff and Marco Cipolloni (Stanford, 2007), 327. See also Justin Stagl, "The Methodising of Travel in the 16th Century: A Tale of Three Cities," in *Facing Each Other: The World's Perception of Europe and Europe's Perception of the World*, ed. Anthony Pagden (vol. 31 of *An Expanding World: The European Impact on World History, 1450–1800*, series editor A. J. R. Russell-Wood) (Aldershot and Burlington, VT, 2000), 123–58. Also Harry Liebersohn, *The Travelers' World: Europe to the Pacific* (Cambridge, MA and London, 2006). There is a useful collection of travel accounts of India:*Visions of Mughal India: An Anthology of Travel Writing*, ed. Michael H. Fisher (London and New York, 2007) with a preface by William Dalrymple.

9 Morali Seyyid Ali Effendi and Seyyid Abdürrahim Muhibb Effendi, *Deux Ottomans à Paris sous le directoire et l'empire: relations d'ambassade*, trans. and ed. Stephane Yerasimos (Arles, 1998).

10 Thomas Burman, *Reading the Qur'an in Latin Christendom, 1140–1560* (Philadelphia, 2007), 180, 186 for the passages quoted. Learning Arabic required overcoming barriers and difficulties, but enough people made the effort to make a difference. See Robert Jones, *Learning Arabic in Renaissance Europe (1505–1624)* (Leiden, 2020).

11 Jacques Gernet, *China and the Christian Impact: A Conflict of Cultures*, trans. Janet Lloyd (Cambridge, New York, and Paris, 1985), 44.

12 On Postel and Loyola see the Wikipedia article at https://en.wikipedia.org/wiki/Guillaume_Postel (accessed May 7, 2024). For Ricci's view of the ur-monotheism, see Gernet, *China and the Christian Impact*, 29, 108. For the adoption of these views about an ur-Monotheism, by Chinese converts seeking to merge elements of Christianity with principles of Confucianism, see E. Zürcher, "A Complement to Confucianism: Christianity and Orthodoxy in Late Imperial China," in *Norms and the State in China*, ed. Chun-chieh Huan and Erik Zürcher (Leiden and New York, 1993).

13 Gernet, *China and the Christian Impact*, 44, 50, 54. Wolfgang Reinhard, "Gelenkter Kulturwandel im siebzehnten Jahrhundert: Akkulturation in den Jesuitenmissionen als universalhistorishces Problem," *Historische Zeitschrift* 223(3) (1976), 529–90, esp. 551–62.

14 D. E. Mungello, *The Great Encounter of China and the West, 1500-1800*, 4th ed. (London and New York, 2013), 117. For general information on Ricci and his mission, see, in addition to Gernet, Mungello, and Reinhard, already cited in this chapter, *China in the Sixteenth Century: The Journals of Matthew Ricci; 1583–1610*, trans. Louis J. Gallagher, with a foreword by Richard J. Cushing (New York, 1953). R. Po-chia Hisa, *Matteo Ricci and the Catholic Mission to China, 1583–1610: A Short History with Documents* (Indianapolis, 2016); Jonathan D. Spence, *The Memory Palace of Matteo Ricci* (New York, 1985).

15 Alexander Bevilacqua, *The Republic of Arabic Letters: Islam and the European Enlightenment* (Cambridge, MA and London, 2018), 26–27, 39 ff. For additional discussions of this topic, see P. J. Marshall and Glyndwr Williams, *The Great Map of Mankind: Perceptions of New Worlds in the Age of Enlightenment* (Cambridge, MA, 1982), as well as Jürgen Osterhammel, "Neue Welten in der europäischen Geschichtsschreibung der Frühen Neuzeit," in *Geschichtswissenschaft jenseits des Nationalstaats: Studie zu Beziehungsgeschichte und Zivilisationsvergleich* (Göttingen, 2001), esp. 94–98; and David Allen Harvey, *The French Enlightenment and Its Others: The Mandarin, the Savage, and the Invention of the Human Sciences* (New York, 2012), who notes the contributions of Henri de Boulainvilliers, 14–15, 19–20.

16 Bevilacqua, *The Republic of Arabic Letters*, 78–79, 80–81, 90–91. See also the online excerpt from the Dictionary of National Biography, https://en.wikisource.org/wiki/Pococke,_Edward_(DNB00) (accessed April 19, 2018).

17 Montesquieu, *The Spirit of the Laws*, Book II, Ch. 1. View the text online at https://oll.libertyfund.org/titles/montesquieu-complete-works-vol-1-the-spirit-of-laws (accessed June 9, 2020).

18 Lucette Valensi, *Venise et la Sublime Porte: la naissance du despote* (Paris, 1987).

19 The quote from Botero, *ibid.*, 121. François Bernier, *Travels in the Mogul Empire, A D 1656–1668*, trans. Archibald Constable, 2nd ed. rev. by Vincent Smith (London, 1934, repr. 1983), esp. 227–28. I cite literature on Oriental Despotism later in this chapter. For more on travelers who shared these views, see Michael Curtis, *Orientalism and Islam: European Thinkers on Oriental Despotism in the Middle East and India* (Cambridge and New York, 2009), Ch. 2.

20 Melvin Richter, "The Concept of Despotism and *l'abus des mots*," *Contributions to the History of Concepts* 3 (2007), 5–22 (17–18 for the last point). Also see the helpful survey by Rolando Minuti, "Oriental Despotism," *Ego: European History Online*, http://ieg-ego.eu/en/threads/backgrounds/european-encounters/rolando-minuti-oriental-Despotism (accessed April 30, 2018), and an earlier thoughtful study by Franco Venturi, "Oriental Despotism," *Journal of the History of Ideas* 24(1) (1963), 133–42. On Montesquieu in particular, see Melvin Richter, "Europe and The Other in Eighteenth-Century Thought," *Politisches Denken Jahrbuch* (1997), 25–47.

21 In addition to the literature already cited, see Peter Gay, *Voltaire's Politics: The Poet as Realist*, 2nd ed. (New Haven, 1988).

22 See Venturi, "Oriental Despotism," and especially Siep Stuurman, "Cosmopolitan Egalitarianism in the Enlightenment: Anquetil Duperron on India and America," *Journal of the History of Ideas* 68(3) (April, 2007), 255–78; 268 for the passage

quoted. There is a general study of Anquetil-Duperron: Jean-Luc Kieffer, *Anquetil-Duperron: l'Inde en France au XVIIIe siècle* (Paris, 1983).

23 For the last quote see Venturi, "Oriental Despotism," 139. Anquetil-Duperron was not the only defender of Eastern regimes against the notion of Despotism. A British writer, James Porter, argued that the Ottoman sultan's position as the chief religious authority in the Empire actually "led him to defend the property rights of his subjects, fearing that inroads on their rights would provoke divine retribution against him." He gave examples of cases in which sultans had refused to take their subjects' property when they might have been able too. See James Porter, *Observations on the Religion, Law, Government, and Manners of the Turks* (London, 1768), cited by Henry Laurens, *Les origines intellectuelles de l'expédition d'Égypte: l'orientalisme islamisant en France (1698–1798)* (Paris and Istanbul, 1987), 55–58, who refers to a French translation published in the same year and thinks that Anquetil-Duperron had probably read him.

24 For Dow, see Venturi, "Oriental Despotism," and especially the discussion in Bernard S. Cohn, *Colonialism and Its Forms of Knowledge: The British in India* (Princeton, 1996), 62–65.

25 Although there are numerous accounts of Jones and the Orientalist movement to which he gave encouragement, the one most relevant to the questions discussed here is Thomas R. Trautmann, *Aryans and British India* (Berkeley and Delhi, 1979). Among others, see Michael J. Franklin, *Orientalist Jones: Sir William Jones, Poet, Lawyer, and Linguist, 1746–1794* (Oxford and New York, 2011); David Kopf, *British Orientalism and the Bengali Renaissance: The Dynamics of Indian Modernization, 1773–1835* (Berkeley and Los Angeles, 1969); and John Leonard Clive, *Macaulay: The Shaping of the Historian* (Cambridge, MA, 1973; 2nd ed., 1987). On the origins of the term Aryan, see David Motadel, "Iran and the Aryan Myth," in *Perceptions of Iran: History, Myths and Nationalism from Medieval Persia to the Islamic Republic*, ed. Ali M. Ansari (London and New York, 2014). See also the article "Aryan Race" in Wikipedia, https://en.wikipedia.org/wiki/Aryan_race (accessed September 7, 2023) which cites much literature.

26 Trautmann, *Aryans and British India*, 61 for the quote in this paragraph. For Hermetic anti-Aristotelianism and irenicism, see Frances Yates, *Giordano Bruno and the Hermetic Tradition* (Chicago 1964 and later eds.), and *The Valois Tapestries* (London, 1975).

27 Often cited, Macaulay's judgment is quoted by Clive, *Macaulay*, 249. For Thomas Munro's comment, see Elmer H. Cutts, "The Background of Macaulay's Minute," *AHR* 58(4) (1953), 845. Cited also by Siep Stuurman, *The Invention of Humanity: Equality and Cultural Difference in World History* (Cambridge, MA and London, 2017), 407–8. On the Evangelicals, see Trautmann, *Aryans and British India*, 102–3 and Kopf, *British Orientalism*, 39–40. I think the sharpness of these differences between Anglicists and Orientalists, and the broader intra-European conflicts of which they were one expression, make a simplistic claim such as Thomas Metcalf's in *Ideologies of the Raj*, 14, that "the Orientalist project . . . was clearly fitted to the needs of Europe," exaggerated and unhelpful. The debate between the two camps was rather a struggle over how Europe should conceive its needs in relation to other peoples, and it did not end with the victory of the Anglicists in the EIC.

28 Quotations in this discussion of *The Persian Letters* are from the Oxford World Classics edition, trans. Margaret Mauldon, with intro. and notes by Andrew Kahn (Oxford, 2008). I have given page numbers in accord with the online edition

(accessible at) https://ebookcentral-proquest-com.proxy.library.nyu.edu/lib/nyuli brary-ebooks/reader.action?docID=415647 (accessed May 7, 2024). The translation is largely identical to the one by George Healy available in many editions, for instance the Library of Liberal Arts. For this paragraph, letter 61, letter 87, and letter 126.

29 Letter 35.

30 Letter 22 and Letter 46.

31 Letter 57.

32 On this literature see G. L. Van Roosbroeck, *Persian Letters before Montesquieu* (New York, 1932) and Gian Carlo Roscioni, *Sulle tracce dell' "Esploratore turco"* (Milan, 1933; new ed., 1992). There were also examples in Addison and Steele's London periodical, *The Spectator*. Quite close to Montesquieu in spirit is Elizabeth Hamilton, *Translation of the Letters of a Hindoo Rajah*, ed. Pamela Perkins and Shannon Russell (Ontario, 1999; orig. ed., Edinburgh, 1796). Probably the most read of the imitators was Madame de Graffigny's *Letters of a Peruvian Woman* (1747).

10   Empire: Material Expansion and Moral Contraction

1 See Paul Betts, *Ruin and Renewal: Civilizing Europe after World War II* (New York, 2020), Chs. 5, 6, and 8.

2 For Napoleon, see Stephen R. Platt, *Imperial Twilight: The Opium War and the End of China's Last Golden Age* (New York, 2018), 184–85.

3 Recently the assumption that imperialism shows that Europe was materially stronger than states in other parts of the world has been called into question in a different manner by J. C. Sharman, *Empires of the Weak: The Real Story of European Expansion and the Creation of the New World Order* (Princeton and Oxford, 2019). Sharman's book is largely devoted to questioning the notion that there occurred a "military revolution" in early modern Europe that made European armies superior to all others. As the above paragraph indicates, I think there is something to this notion, but Sharman goes much too far in it, making it hard to understand why non-European states were so determined to copy European methods both in military affairs and in industrial innovation. See also D. A. Washbrook, "South India 1770–1840: The Colonial Transition," *Modern Asian Studies* 38(3) (2004), 503, citing Frank Perlin, "State Formation Reconsidered, Part II," *Modern Asian Studies* 19(3) (1985), 504.

4 For a comprehensive and well-documented account of the war, see https://en .wikipedia.org/wiki/Italo-Turkish_War (accessed January 15, 2019).

5 Frederick Cooper, *Colonialism in Question: Theory, Knowledge, History* (Berkeley and Los Angeles, 2005), 185. I discuss Achebe's often deeply ambivalent relationship to Britain in *Between Cultures: Europe and Its Others in Five Exemplary Lives* (Philadelphia, 2015).

6 Martin Lynn, "British Policy, Trade, and Informal Empire in the Mid-Nineteenth Century," in *The Oxford History of the British Empire*, III: *The Nineteenth Century*, ed. Andrew Porter (Oxford and New York, 1999), 115–16. Jürgen Osterhammel, "Britain and China, 1842–1914," in the same volume, 161–62. On the decline of the opium trade, Platt, *Imperial Twilight*, 444.

7 The best account in English is Henry Wagner and Helen Parish, *The Life and Writings of Bartolomé de Las Casas* (Albuquerque, 1967). See also Urs Bitterli's chapter on the Spanish colonial empire in *Cultures in Conflict: Encounters between European and Non-European Cultures, 1492–1800*, trans. Ritchie Robertson (Stanford, 1989), and the literature cited in regard to particular points later in this chapter.

8 This passage from Las Casas's *Apologética historia summaria de las gentes de las Indias* is cited by Wagner and Parish, *The Life and Writings of Bartolomé de Las Casas*, 203–4. However, I take it from the Wikipedia article on Las Casas, https://en .wikipedia.org/wiki/Bartolom%C3%A9_de_las_Casas (accessed April 3, 2018). See also Anthony Pagden, *The Fall of Natural Man: The American Indian and the Origins of Comparative Ethnology* (Cambridge and New York, 1982), 135.

9 The passages from Sahagun and Cardenas are quoted by John Elliot, "The Discovery of America and the Discovery of Man," in *Facing Each Other: The World's Perception of Europe and Europe's Perception of the World*, ed. Anthony Pagden (vol. 31 of *An Expanding World: The European Impact on World History, 1450–1800*, series editor A. J. R. Russell-Wood) (Aldershot and Burlington, VT, 2000), 165, 180–81, except for the last one of Sahagun's, which is from Miquel Leon Portilla, *Bernardino da Sahagun: The First Anthropologist*, trans. Mauricio J. Mixco (Norman, OK, 2002; orig. Spanish ed., Mexico City, 1999), 264–65. Elliot discusses the comments about barbarians in *The Old World and the New, 1492–1650*, 2nd ed. (Cambridge, 1970), 45–46, as does Pagden, *Fall of Natural Man*, 123.

10 For the ancient origins of the notion that customs and institutions were determined by environment see Anthony Grafton (with April Shelford and Nancy Siraisi), *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge, MA and London, 1992), 41. On this general subject there is very good material in Bitterli, *Cultures in Conflict*, 70–86.

11 Elliot, *The Old World and the New*, 45–6. Montaigne, "On Cannibals" (many editions).

12 Richard Tuck, "Rights and Pluralism," in *Philosophy in an Age of Pluralism: The Philosophy of Charles Taylor in Question*, ed. James Tully (Cambridge and New York, 1994), 159–70. See also Tuck, *Hobbes* (Oxford and New York, 1989), Part I. By contrast, ideas of natural law in China were tied up with the patterns of conduct derived from the proper understanding of nature by the ancient sages, so that natural law was regarded as inscribed in a particular tradition, excluding the notions of law held by other peoples – e.g., Mongolians, Koreans, Malaysians or Japanese (not to mention people farther afield). See Toby E. Huff, *The Rise of Early Modern Science: Islam, China, and the West* (Cambridge and New York, 1993), 262–64. For an insightful discussion of both the philosophical issues raised by the two perspectives, and of the relations between them as conceived by a series of French thinkers, see Tzvetan Todorov, *On Human Diversity: Nationalism, Racism, and Exoticism in French Thought*, trans. Catherine Porter (Cambridge, MA and London, 1993).

13 For general accounts, see Sankar Muthu, *Enlightenment Against Empire* (Princeton and London, 2003), and Jennifer Pitts, *A Turn to Empire: The Rise of Imperial Liberalism in Britain and France* (Princeton and Oxford, 2005). I draw on both, sometimes not sharing all their views, in what follows.

14 Muthu, *Enlightenment Against Empire*, 93. Denis Diderot, *Histoire des deux Indes*, in *Oeuvres* : III, *Politique*, ed. Laurent Versini (Paris, 1995), 697. On Tahiti see *ibid.*, 631–32 and Muthu, *Enlightenment Against Empire*, 46 ff., but also Herbert Dieckmann's Introduction to the *Supplement au voyage de Bougainville* (Geneva, 1955), xxxvii–xli. Although I admire much of Muthu's account of Diderot, and I have made considerable use of his work, I think his attempt to attribute Diderot's defense of the Tahitians to his regarding them as displaying "cultural creativity" is off the mark. Diderot defends their actual practices, not their capacity to construct a system of cultural relations, and I can find no place where he supports them on such grounds, as opposed to his use of them as vehicles to oppose the universal claims of Christian morality. Muthu's tendency to see Enlightenment critiques of imperialism as supported much more by appreciations of "cultural creativity" than by natural rights has a certain plausibility in regard to Diderot, but in the end it is one-sided. The distortion is still greater in regard to Muthu's discussion of Kant, but there is no room to discuss this here.

15 Muthu, *Enlightenment Against Empire*, 92–93, 102–3.

16 *Ibid.*, 104–11 (108 for the passage quoted).

17 Quoted *ibid.*, 103.

18 For Herder's career, and for the impression that his experiences made on his theory of language and of the public, see Anthony J. LaVopa, "Herder's *Publikum*: Language, Print, and Sociability in Eighteenth-Century Germany," *Eighteenth-Century Studies* 29(1) (1996), 5–24. For the other points in this paragraph, see my discussion in *The Idea of the Self* (Cambridge and New York, 2005), Ch. 10 (338–39 for the passages quoted), where the source texts are cited.

19 For what may be the best recent general account of Herder's thinking, see Sonia Sikka, *Herder on Humanity and Cultural Difference: Enlightened Relativism* (Cambridge and New York, 2011), from which the quote in this paragraph is taken (93).

20 For Herder's defense of reason and his recognition of Europe's virtues alongside its defects, see Sikka, *Herder on Humanity and Cultural Difference*, esp. 24–25, from which the first quotes in this paragraph are taken. See also Herder's "Yet Another Philosophy of History," in *Herder on Social and Political Culture*, ed. F. M Bernard (London 1969), 216–23 and his "Travel Diary," *ibid.*, 89–90, both cited in my discussion in *The Idea of the Self*, 342–43.

21 See Pitts, *A Turn to Empire*, 104–22. The text of Bentham's pamphlet can be found at https://en.wikisource.org/wiki/Emancipate_your_colonies! (accessed March 7, 2019).

11 Courage and Weakness: Anti-Imperialism and Its Limits in the Nineteenth Century

1 Melvin Richter, "Tocqueville on Algeria," *Review of Politics* 25(3) (1963), 36–98. Jennifer Pitts, *A Turn to Empire: The Rise of Imperial Liberalism in Britain and France* (Princeton and Oxford, 2005), Ch. 7. Margaret Kohn, "Empire's Law: Alexis de Tocqueville on Colonialism and the State of Exception," *Canadian Journal of Political Science* 41(2) (2008), 255–78.

2 The letter of 1841 to Mill is quoted in Alexis de Tocqueville, *Writings on Empire and Slavery*, trans. and ed. Jennifer Pitts (Baltimore, 2001), 70–71, cited by Kohn, "Empire's Law," 260, 262.

3 Pitts, *A Turn to Empire*, 256. For Mill's direct reproof of Tocqueville for his pursuit of "national pride" see the passage Pitts quotes from their exchange of letters on 195.

4 *On Liberty*. In the Crofts Classics edition (New York, 1947), 3 for the first quote. Pitts, *A Turn to Empire*, 14–16.

5 For the quote in this paragraph, *On Liberty*, 10. For Mill's views in general see Pitts, *A Turn to Empire*, Ch. 5, although I believe she is sometimes too harsh on him, for reasons explained in note 7 of this chapter.

6 The quotes from Mill can be found in Pitts, *A Turn to Empire*, 144, 152, 256. On the Eyre controversy and Jamaica, see Bernard Semmel, *Jamaican Blood and Victorian Conscience: the Governor Eyre Controversy* (Westport, CN, 1976; orig. ed., 1962) and Thomas Holt, *The Problem of Freedom: Race, Labor, and Politics in Jamaica and Britain* (Baltimore, 1992).

7 For the passages quoted in this paragraph, see Pitts, *A Turn to Empire*, 152, 256. Although I think Mill deserves to be judged harshly (as Pitts does) for failing to acknowledge these contradictions, I am generally in agreement with the view advanced by Margaret Kohn and Daniel I. O'Neill, "A Tale of Two Indias: Burke and Mill on Empire and Slavery in the West Indies and America," *Political Theory* 34(2), 2006, 198–228, that the tensions Mill recognized between British behavior in India and Jamaica and the principles of legal equality and justice on which modern society had to be based show him to have been far from a consistent supporter of imperialism, and less so than Burke, whose refusal to call Indians barbarians was not based on a general affirmation of cultural difference, but on his view of India as a society that embodied the same affirmation of tradition, hierarchy, and religious authority he cherished in his own. Those who support the current vogue of celebrating the conservative Burke against the liberal Mill argue that cultural difference provides better grounds for criticism of imperial domination than does the idea of universal rights. I have already tried to make clear why I think that setting these two principles against each other is mistaken both theoretically and historically, and the claim that an emphasis on cultural difference led to a more critical attitude toward imperialism is belied by the case of Tocqueville, whose strong insistence on cultural difference was in the service of justifying autocratic rule over the Algerians. Although Kohn and O'Neill distinguish their view of Mill from that of Pitts, I think that she provides all the material necessary to develop the reading they propose, and that there remain good reasons to treat Mill critically, as she does. In any case the real target of Kohn's and O'Neill's critique is not Pitts but Uday Singh Mehta, *Liberalism and Empire: A Study in Nineteenth-Century British Liberal Thought* (Chicago and London, 1999), whose arguments about liberalism as inherently favorable to empire seem to me tendentious and unpersuasive.

8 Duncan Bell, "John Stuart Mill on Colonies," *Political Theory* 38(1) (2010), 34–64.

9 Save for Burton, the quotes in this paragraph are from Gregory Claeys, *Imperial Sceptics: British Critics of Empire, 1850–1920* (Cambridge and New York, 2010), 33, 39; Duncan Bell, *Reordering the World: Essays on Liberalism and Empire* (Princeton and Oxford, 2016), 263; and Mira Matikkala, *Empire and Imperial Ambition: Liberty, Englishness and Anti-Imperialism in Late-Victorian Britain* (London and New York, 2011), 104. There is a good discussion of Blunt in Pankaj Mishra, *From the Ruins of Empire: The Intellectuals Who Remade Asia* (New York, 2012). The work by Richard Burton is *Stone Talk*, see lines 953–60. I cite it from the typescript reprint issued as Occasional Paper No. 24 (supported by the Works Progress Administration) by the California State Library (San Francisco, 1940). This

edition is available in some places where the original London one of 1865 (most copies of which were destroyed by Burton's wife) is not. For the context of this work and reference to Burton's other anti-imperial pronouncements, see my discussion of him in *Between Cultures: Europe and Its Others in Five Exemplary Lives* (Philadelphia, 2015), Ch. 3.

10 The two works from which I have constructed this and the following paragraph are Stephen R. Platt, *Imperial Twilight: The Opium War and the End of China's Last Golden Age* (New York, 2018), and Hao Gao, *Creating the Opium War: British Imperial Attitudes toward China, 1792–1840* (Manchester, 2020). Platt has much more detail, especially about what was happening in Britain, and his book seems to me a major contribution to imperial history in general, but Hao Gao's judgments are sometimes more persuasive. They are based on some literature published after Platt's book came out.

11 Platt, *Imperial Twilight*, Ch. 11. For the quotations in this paragraph see 313–15, 344–47, 357–60.

12 Although Platt provides more details on these events, I have followed Hao Gao's interpretation of the events, especially where they suggest, persuasively, a greater degree of moderation on the part of Lin Zexu. See esp. *Creating the Opium War*, 146, 150–51, where he cites the work of Li Chen. Platt, *Imperial Twilight*, esp. 360–61, 375.

13 On the opposition, see Platt, *Imperial Twilight*, 392–99, and for the role of nationalist historiography, 446.

14 On Desjobert, see Jennifer Pitts, "Republicanism, Liberalism and Empire in Post-Revolutionary France," in *Empire and Modern Political Thought*, ed. Sankar Muthu (Cambridge and New York, 2012), 261–91.

15 Claeys, *Imperial Sceptics*, 52–53.

16 *Ibid.*, 47–58.

17 Charles-Robert Ageron, *L'anticolonialisme en France de 1871 á 1914* (Paris, 1973), 12; and the documents reproduced, 45–60. Michel Winock, *Clemenceau* (Paris, 2007), 136–39. For the last quote, from Gaston Jèze, see Andrew Fitzmaurice, "Liberalism and Empire in Nineteenth-Century International Law," *AHR* 117(2) (2012), 137.

18 Duncan Bell, *Reordering the World: Essays on Liberalism and Empire* (Princeton, 2016), 49.

19 Alice L. Conklin, *A Mission to Civilize; The Republican Idea of Empire in France and West Africa, 1895–1930* (Stanford, 1997). There is a good and laudatory summary of Conklin's arguments in Robert Aldrich, "Imperial mise en valeur and mise en scène: Recent Works on French Colonialism," *The Historical Journal* 45(4) (2002), 917–56. For the last quote, see Stephanie Couderc-Morandeau, *Philosophie républicaine et colonialisme: origines, contradictions et échecs sous la troisième république* (Paris, 2008), 204. For the case of a well-known French writer who condemned French actions in Algeria but still retained the sense of European cultural superiority, see Marie-Claude Schapira, "Guy de Maupassant en Algérie," in *L'idée de race dans les sciences humaines et la littérature (XVIIIe–XIXe siècles)*, Actes du colloque international de Lyon, 16–18 Novembre 2000, ed. Sarga Moussa (Paris, Budapest, and Torino, 2003), 133–36.

20 John M. MacKenzie, *Propaganda and Empire: The Manipulation of British Public Opinion, 1880–1960* (Manchester, 1984), 2–3, 154. See also MacKenzie's edited collection, *Imperialism and Popular Culture* (Manchester, 1986). For propaganda in

France, see J. L. Abrams and D. J. Miller, "Who Were the French Colonialists? A Reassessment of the *Parti colonial*, 1890–1914," *The Historical Journal* 19(3) (1976), 685–725; and Aldrich, "Imperial mise en valeur."

21 On de Pauw, David Allen Harvey, *The French Enlightenment and Its Others: The Mandarin, the Savage, and the Invention of the Human Sciences* (New York, 2012), 202; on Talleyrand, Anthony Pagden, *Lords of All the World: Ideologies of Empire in Spain, Britain and France, c. 1500–c. 1800* (New Haven and London, 1995), 126.

22 On Lowe, Matikkala, *Empire and Imperial Ambition*, 9–10; on Juares, Charles-Robert Ageron, *Anti-colonialisme en France de 1871 à 1914* (Paris, 1973), 27.

23 C. A. Bayly, *Recovering Liberties: Indian Thought in the Age of Liberalism and Empire* (Cambridge and New York, 2012), esp. 18–19, 52–56. Lynn Zastoupil, *Rammohun Roy and the Making of Victorian Britain* (New York, 2010). Tapan Raychaudhuri, "Europe in India's Xenology: The Nineteenth-Century Record," *Past and Present* 137 (1992), esp. 167–68, republished as Ch. 2 of his book, *Perceptions, Emotions, Sensibilities: Essays on India's Colonial and Post-Colonial Experiences* (Oxford and New Delhi, 1999).

24 There is a good account of Naoroji's career, and of his speech against Crawfurd, in Siep Stuurman, *The Invention of Humanity: Equality and Cultural Difference in World History* (Cambridge, MA and London, 2017), 395–404; for Naoroji and Digby, see Matikkala, *Empire and Imperial Ambition*, 4–5. There is a good brief account of Digby in Wikipedia: https://en.wikipedia.org/wiki/William_Digby_(writer) (accessed April 10, 2019).

25 For Khodja see Jennifer Pitts, "Liberalism and Empire in a Nineteenth-Century Algerian Mirror," *Modern Intellectual History* 6(2) (2009). On Ho Chi Minh in Paris, see https://en.wikipedia.org/wiki/Ho_Chi_Minh#Political_education_in_France, and the research cited in notes 23 and 24 (accessed April 8, 2019). Also Michael Goebel, *Anti-Imperial Metropolis: Interwar Paris and the Seeds of Third World Nationalism* (Cambridge, 2015). On Le Bon and the Arabs, see Henry Laurens, *L'empire et ses ennemis: la question impériale dans l'histoire* (Paris, 2009), 107. For al-Afghani in Paris, see Albert Hourani, *Arabic Thought in the Liberal Age, 1798–1939* (Oxford, 1962), 109–11; and Mishra, *From the Ruins of Empire*, 96–101.

12 Autonomy and Transformation: Britain

1 Peer Vries, *Escaping Poverty: The Origins of Modern Economic Growth* (Vienna, 2013), esp. 23–24.

2 Walter Scheidel, *Escape from Rome: The Failure of Empire and the Road to Prosperity* (Princeton and Oxford, 2019), 9, 14–17, 391. Vries, *Escaping Poverty*, 434–35, 339–41.

3 Vries, *Escaping Poverty*, 81–152. The quoted lines are in the first two pages.

4 Jack A. Goldstone, "Efflorescences and Economic Growth in World History: Rethinking the 'Rise of the West' and the Industrial Revolution," *Journal of World History* 13(2) (2002), 329–83. Pierre-Étienne Will, "Développement quantitatif et développement qualitatif en Chine à la fin de l'époque Impériale," in *Tradition et innovation en Chine et au Japon*, ed. Charles le Blanc and Alain Rocher (Montreal, 1996). As Will notes, the terminology has also been used by Mark Elvin. Rolf Peter Sieferle, "Why did Industrialization Start in Europe (and Not in China)?" in *Agriculture, Population and Economic Development in China*

and Europe, ed. Rolf Peter Sieferle and Helga Breuninger (Stuttgart, 2003), 80–81 (I have slightly altered this quotation to make it grammatical in English). Sieferle later stirred up sharp controversy when he published tracts that linked him with right-wing elements, and that have been read as stoking a kind of paranoia about German decline, focused on the large-scale immigration of 2015 that altered the face of the country, and on what he considered an overemphasis on seeking to allay guilt about the Nazi genocide of Jews. But he did not give voice to anti-Semitic views, instead comparing the denigration of Germany to its earlier treatment of its victims. The controversy that erupted around these writings (which reached a very large public) led to some of the honors he had previously received being revoked. See Christopher Caldwell, "Germany's Newest Intellectual Antihero," in *The New York Times*, July 8, 2017. Even if some of these views were already in his mind at the time he wrote the essay I cite in the text, I do not believe that the argument I take over from him in any way depends on them.

5 Erik Ringmar, *Why Europe Was First: Social Change and Economic Growth in Europe and East Asia 1500–2050* (London and New York, 2007), 25. Beyond this theoretical agreement, however, my approach to this and other questions is quite far from his.

6 For the last point see David Philip Miller, *The Life and Legend of James Watt: Collaboration, Natural Philosophy, and the Improvement of the Steam Engine* (Pittsburgh, 2019), 51.

7 For the details, see https://en.wikipedia.org/wiki/History_of_rail_transport_in_Great_Britain.

8 Jan De Vries, *European Urbanization, 1500–1800* (Cambridge, MA, 1984 and subsequent editions), 40.

9 There is much good information on the transport networks in Rick Szostak, *The Role of Transportation in the Industrial Revolution* (Montreal, 1991), esp. 74–75 on the turnpikes. For the London road connections, Roy Porter, *London: A Social History* (Cambridge, MA, 1994), 135.

10 Gordon E. Mingay, *The Agricultural Revolution: Changes in Agriculture, 1650–1880* (London, 1977). Mark Overton, *Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500–1850* (Cambridge, 1996). For good summaries, see Joseph M. Bryant, "The West and the Rest Revisited: Debating Capitalist Origins, European Colonialism, and the Advent of Modernity," *Canadian Journal of Sociology* 31(4) (2006), 429–30; Patrick Karl O'Brien, "Global Histories of Material Progress," in *Writing World History*, ed. Benedikt Stuchtey and Eckhardt Fuchs (Oxford and New York, 2003), 66–90. The last quote is from Jan de Vries, "The Great Divergence after Ten Years: Justly Celebrated Yet Hard to Believe," *Historically Speaking* 12(4) (2011), 14–15. Also Vries, *Escaping Poverty*, 182–83, 300–301.

11 Joyce Appleby, *Economic Thought and Ideology in Seventeenth-Century England* (Princeton, 1978), esp. Ch. 9 (257 for the quote).

12 I discuss these late nineteenth-century developments in *Modernity and Bourgeois Life* (Cambridge and New York, 2012), Ch. 5.

13 Peter Clark and Paul Slack, *English Towns in Transition, 1500–1700* (Oxford and New York, 1976), 108–9 on the general situation, and 79 on London merchant guilds.

14 See Christopher Friedrichs, "Capitalism, Mobility and Class Formation in the Early Modern German City," in *Towns in Societies: Essays in Economic History and*

Historical Sociology, ed. Philip Abrams and E. A. Wrigley (Cambridge, London, and New York, 1978), 187–214.

15 For the German story in a wider frame, see the essays on individual towns collected in *Vom alten zum neuen Bürgertum: Die mitteleuropäische Stadt im Umbruch, 1780–1820*, ed. Lothar Gall (Munich, 1991). Gall's emphasis on the pressures growing up in various towns for economic liberalization seems justified, but the evidence provided by his colleagues whose work is collected here shows clearly enough that only the French occupation led to effective reform. For the survival of guilds, see Thomas Nipperdey, *Germany from Napoleon to Bismarck: 1800–1866*, trans. Daniel Nolan (Princeton, 1996), 187–88.

16 Steven Laurence Kaplan, "Social Classification and Representation in the Corporate World of Eighteenth-Century France: Turgot's 'Carnival'," in *Work in France: Representations, Meaning, Organization, and Practice*, ed. Kaplan and Cynthia J. Koepp (Ithaca and London, 1986), 176–228; 194 for the quoted passage. For a broader perspective on guild history in France, see James R. Farr, *Hands of Honor: Artisans and Their World in Dijon, 1550–1650* (Ithaca and London, 1988), where the distinction between *villes libres* and *villes jurées* is explained on 16–17; and Farr's essay in Philip Benedict, ed., *Cities and Social Change in Early Modern France* (London, 1989). For useful essays on the history of guilds in various countries, see *Das Ende der Zünfte: ein europäischer Vergleich*, ed. Hans-Gerhard Haupt (Göttingen, 2002). Unfortunately, however, this volume is devoted chiefly to revising various old saws about guild history; it does not provide a comparative history of how the end of their power arrived in different places.

17 Keith Wrightson, *Earthly Necessities: Economic Lives in Early Modern Britain* (New Haven, 2000), 231, 213 (where Richard Grassby is quoted).

18 Neil McKendrick, John Brewer, and J. H. Plumb, *The Birth of a Consumer Society: The Commercialization of Eighteenth-Century England* (London, 1982), Ch. 1, *passim*; 11 for the quote from N. Forster, *An Enquiry into the Present High Price of Possessions* (1767); 29 for the excise statistics; 22–23 for McKendrick's comment. The quote about milkmaids (by John Byng) is cited by Christopher Breward, *The Culture of Fashion: A New History of Fashionable Dress* (Manchester and New York, 1995), 129. For the more recent accounts, see Sophia Rosenfeld, "Of Revolutions and the Problem of Choice," in *Rethinking the Age of Revolutions: France and the Birth of the Modern World*, ed. David A. Bell and Yair Mintzker (Oxford and New York, 2019), 236–72.

19 Jan de Vries, "The Industrial Revolution and the Industrious Revolution," *Journal of Economic History* 54(2) (1994), 249–70. McKendrick, Brewer, and Plumb, *The Birth of a Consumer Society*, 23. De Vries cites the work of Hans-Joachim Voth, *Time and Work in England, 1750–1830* (Oxford, 2001), showing that Londoners "increased their hours of annual labor by at least 40 percent in the period 1750–1830." *The Industrious Revolution: Consumer Behavior and the Household Economy, 1650 to the Present* (Cambridge and New York, 2008), 91–92. Samuel Lilley, "Technological Progress and the Industrial Revolution, 1700–1914," in *The Fontana Economic History of Europe*, III: *The Industrial Revolution*, ed. Carlo Cipolla (New York, 1976), 187–254.

20 Scheidel, *Escape from Rome*, 428. For the role of slavery in expanding the economy, Maxine Berg and Pat Hudson, *Slavery, Capitalism and the Industrial Revolution* (Cambridge, 2023).

21 Vries, *Escaping Poverty*, 269, 271, 299, where the other studies mentioned in this paragraph are cited.

22 For the claims about slave compensation, see Howard W. French, "Slavery, Empire, Memory," *New York Review of Books*, April 7, 2022, 22–23, reviewing Padraic X. Scanlan, *Slave Empire: How Slavery Built Modern Britain* (London, 2020). For a family that enriched itself greatly through colonial activity but invested practically none of its wealth in manufacturing, see Emma Rothschild, *The Inner Life of Empires: An Eighteenth-Century History* (Princeton and Oxford, 2011). The last point about the size of enterprises has long been recognized, but it has been reiterated by Francesco Boldizzoni, *Means and Ends: The Idea of Capital in the West, 1500–1970* (New York and Basingstoke, 2008), 81–83. Slavery clearly contributed significantly to the growth of European wealth in this period, but its role in the rise of modern industry was not central.

23 A fundamental critique of the emphasis on foreign trade as a spur to industrial transformation is Patrick O'Brien, "European Economic Development: The Contribution of the Periphery," *Economic History Review* 35(1) (1982), 1–18.

24 Margaret C Jacob, *Scientific Culture and the Making of the Industrial West* (New York and Oxford, 1997). Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700–1850* (New Haven and London, 2009). Seigel, *Modernity and Bourgeois Life*, Ch. 2.

25 On the Watt family, see Jacob, *Scientific Culture and the Making of the Industrial West*, 101–2.

26 For Watt's career, the best source now is Miller, *The Life and Legend of James Watt*, Ch. 1; see esp. 19–24 for the words quoted.

27 *Ibid.*, Ch. 2, esp. 49–50.

28 For Desaguliers's (often-quoted) comment see Mokyr, *The Enlightened Economy*, 116. For the Hornblowers, see https://en.wikipedia.org/wiki/Thomas_Newcomen and https://en.wikipedia.org/wiki/Jonathan_Hornblower_(1717) (accessed March 3, 2020).

29 Miller, *The Life and Legend of James Watt*, Ch. 2; for the Glasgow Green story, 48–49.

30 For this and the previous paragraph, S. D. Chapman and S. Chassagne, *European Textile Printers in the Eighteenth Century: A Study of Peel and Oberkampf* (London, 1981), 39–41.

31 Cort is mentioned in this regard by Mokyr, *The Enlightened Economy*, 58. See also https://en.wikipedia.org/wiki/Henry_Cort (accessed March 3, 2020).

13   Transformation and Autonomy: France and Germany

1 Georg Simmel, *The Philosophy of Money*, ed. David Frisby, trans. Tom Bottomore et al., 2nd enlarged ed. (London and New York, 1990). I draw greatly on Simmel's notion of money as a "social tool" in *Modernity and Bourgeois Life: Society, Politics, and Culture in England, France, and Germany since 1750* (Cambridge and New York, 2012). There I rename his "chains of purposive action" as "networks of means," distinguishing them as autonomous or teleocratic in much the same way as spheres of activity are treated here.

2 Margaret C. Jacob, *Scientific Culture and the Making of the Industrial West* (New York, 1997), 134–35.

3   *Ibid.*, 134–35, 139. For a similar judgment, see Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700–1850* (New Haven and London, 2009), 111.

4   Paul Butel, *L'économie française au XVIIIe siècle* (Paris, 1993), 61–67, 228–31. For an example of workers setting themselves up as entrepreneurs and organizing the work of their neighbors, see Liana Vardi, *The Land and the Loom: Peasants and Profit in Northern France, 1680–1800* (London, 1993).

5   For the last point, see Peer Vries, *Escaping Poverty: The Origins of Modern Economic Growth* (Vienna, 2013), 217 and the literature cited there. S. R. Epstein, *Freedom and Growth: The Rise of States and Markets in Europe, 1300–1700* (London and New York, 2000), 2–3 and Ch. 6. Jack A. Goldstone, "Efflorescences and Economic Growth in World History: Rethinking the 'Rise of the West' and the Industrial Revolution," *Journal of World History* 13(2) (2002).

6   Bernard Lepetit, *The Pre-Industrial Urban System: France, 1740–1840*, trans. Godfrey Rogers (Cambridge and New York, 1994), 440–44.

7   François Caron, *Histoire des chemins de fer en France*, I: *1740–1883* (Paris, 1997), 13–21. Lepetit, *The Pre-Industrial Urban System*, esp. 440–41.

8   Butel, *L'économie française au XVIIIe siècle*, 67, 228–31, 237–38.

9   There is a large literature on French consumption in this period, most notably the works of Daniel Roche: *La culture des apparences: une histoire du vêtement (XVIIe–XVIIIe siècle)* (Paris, 1989); *La France des lumières* (Paris, 1993); *Histoire des choses banales: naissance de la consommation, XVIIe–XIXe siècle* (Paris, 1997). But see also Cissie Fairchilds, "The Production and Marketing of Populuxe Goods in Eighteenth-Century Paris," in *Consumption and the World of Goods*, ed. John Brewer and Roy Porter (London, 1993); Annik Pardailhé-Galabrun, *La naissance de l'intime: 3000 foyers parisiens XVIIe–XVIIIe siècles* (Paris, 1988); Joan Thirsk, "Luxury Trades and Consumerism," and Gillian Lewis, "Producers, Suppliers, and Consumers: Reflections on the Luxury Trades in Paris, c. 1500–c. 1800," both in *Luxury Trades and Consumerism in Ancien Régime Paris*, ed. Robert Fox and Anthony Turner (Aldershot, Hampshire, and Brookfield, VT, 1998), 257–62, 287–98. There is a good summary of recent literature on this subject in Sarah Maza, *The Myth of the French Bourgeoisie: An Essay on the Social Imaginary* (Cambridge, MA, 2005), 41–51. For the Montpellier chronicler, Robert C. Darnton, "A Bourgeois Puts His World in Order: The City as Text," in *The Great Cat Massacre and Other Episodes in French Cultural History* (New York, 1984), 134–35.

10 Roche, *La France des lumières*, 585; and *Histoire des choses banales*, 232–34. For Caen, see Lepetit, *The Pre-Industrial Urban System*, 130, citing the work of Jean-Claude Perrot. On Montpellier, see Frederick M. Irvine, "From Renaissance City to Ancien Régime Capital: Montpellier, c. 1500–c. 1600," in *Cities and Social Change in Early Modern France*, ed. Philip Benedict (London, 1989), 105–33; and on Dijon, James R. Farr, "Consumers, Commerce, and the Craftsmen of Dijon: The Changing Social and Economic Structure of a Provincial Capital, 1450–1750," *ibid.*, 134–73.

11 For physiocratic theory, see Turgot's "Eloge de Vincent de Gournay" and other writings in Turgot, *Ecrits économiques*, preface by Bernard Cazes (Paris, 1970). Also Butel, *L'économie française au XVIIIe siècle*, 46–47. This contrast between the British emphasis on labor and the French primacy of land goes back at least to the seventeenth century. See Francesco Boldizzoni, *Means and Ends: The Idea of Capital in Western Europe, 1500–1970* (Hampshire and New York, 2008), Ch. 3.

12 All the texts are cited, with references, in Yves Leclercq, *Le réseau impossible: la résistance au système des grandes compagnies ferroviaires et la politique économique en France, 1820–52* (Geneva, 1987), 13–17.

13 François Caron, *Histoire des chemins de fer en France*, I: *1740–1883* (Paris, 1997), 95–121; the quote is on 113. Caron also draws on Leclercq, *Le réseau impossible*.

14 Caron, *Histoire des chemins de fer en France*, 166–210; Eugene Weber, *Peasants into Frenchmen: The Modernization of Rural France* (Stanford, 1976), 207–10; and Jean-Pierre Daviet, *La société industrielle en France, 1814–1914* (Paris, 1997), 184. For resistance by local bourgeois to railroad building that required the intervention of the state, see also Louis Desgraves et al., *Histoire de Bordeaux,* VI: *Bordeaux au XIXe siècle*, gen. ed. Ch. Higounet (Bordeaux, 1969), 202. For the mileage statistics, see David Landes, *The Unbound Prometheus: Technological Change and Industrial Development in Western Europe, 1750 to the Present* (Cambridge and New York, 1969), 194.

15 Weber, *Peasants into Frenchmen*, 221.

16 These statistics are also given by Landes, *The Unbound Prometheus*, 194.

17 Daviet, *Société industrielle*, 182, where he takes issue with Pierre Rosanvallon's more skeptical view of the state's role.

18 David Blackbourn, *History of Germany, 1780–1918: The Long Nineteenth Century*, 2nd ed. (Malden, MA and Oxford, 2003), 135–41, 262. Theodore Hamerow, *The Social Foundations of German Unification* (Princeton, 1969), I, 24.

19 Blackbourn, *History of Germany, 1780–1918*, 143–44, 148–49, 158–59. B. R. Mitchell, *European Historical Statistics, 1750–1970*, abridged ed. (New York, 1978), 4, 13–14.

20 Knut Borchardt, "Germany, 1700–1914," trans. George Hammerley, in *The Fontana Economic History of Europe*, IV: *The Emergence of Industrial Societies*, ed. Carlo M. Cipolla (London and New York, 1973), 142–43. W. O. Henderson, *The Industrial Revolution in Europe: Germany, France, Russia, 1815–1914* (Chicago, 1961), 19–20.

21 I treat these connections in *Modernity and Bourgeois Life*, Chs. 5, 6, and 7.

22 The quote is from George Weisz, *The Medical Mandarins: The French Academy of Medicine in the Nineteenth and Early Twentieth Centuries* (New York and Oxford, 1995), xiii. On this topic, see also Toby Gelfand, "A 'Monarchical Profession' in the Old Regime: Surgeons, Ordinary Practitioners, and Medical Professionalization in Eighteenth-Century France," in *Professions and the French State, 1700–1900*, ed. Gerald L. Geison (Philadelphia, 1984), 149–80; and Jacalyn Duffin, "Private Practice and Public Research: The Patients of R. T. H. Laennec," in the same collection. This discussion is also informed by Harvey Mitchell, "Rationality and Control in French Eighteenth-Century Medical Views of the Peasantry," *Comparative Studies in Society and History* 21(1) (1979), 82–112; and by Matthew Ramsey, "Medical Power and Popular Medicine: Illegal Healers in Nineteenth-Century France," *Journal of Social History* 10 (1977).

23 This paragraph draws extensively on Martha L. Hildreth, *Doctors, Bureaucrats, and Public Health in France, 1888–1902* (New York and London, 1987), although I do not quite accept all her conclusions. There is an excellent discussion of the whole problem of professionalization and of its history in France in the Introduction to her book, still useful despite the time that has passed since it appeared.

24 For this and the previous paragraph, see Ivan Waddington, "Medicine, the Market, and Professional Autonomy: Some Aspects of the Professionalization of

Medicine," in *Bildungsbürgertum im 19. Jahrhundert*, I: *Bildungssystem und Professionalisierung in internationalen Vergleichen*, ed. Werner Conze and Jürgen Kocka (Stuttgart, 1985), 388–416, who notes that the number of practicing doctors increased only very slowly after 1860, suggesting that the Act succeeded in restricting access, and that doctors' incomes began to rise from this date; also Matthew Ramsey, "The Politics of Professional Monopoly in Nineteenth-Century Medicine: The French Model and Its Rivals," in *Professions and the French State, 1700-1900*, ed. Gerald L. Geison (Philadelphia, 1984), 225–305; and W. J. Reader, *Professional Men: the Rise of the Professional Classes in Nineteenth-Century England* (New York, 1966), Ch. 4. Reader, however, clearly gives the Act of 1858 too much credit in creating a modern profession; a number of his views are corrected by M. Jeanne Peterson, *The Medical Profession in Mid-Victorian London* (Berkeley, Los Angeles, and London, 1978), Ch. 1, who properly emphasizes the Act's incompleteness and its hybrid character, 35–39. She also provides information on the struggles associated with the establishment of the Conjoint Medical Board and its connection to later developments, 191–92, 241–43.

25 This paragraph relies on the literature cited in the previous note. Ramsey, in particular, argues that the 1869 law would have been resisted by a national organization of doctors.

26 Claudia Huerkamp, "The Making of the Modern Medical Profession, 1800–1914: Prussian Doctors in the Nineteenth Century," in *Bildungsbürgertum im 19. Jahrhundert*, I: *Bildungssystem und Professionalisierung in internationalen Vergleichen*, ed. Werner Conze and Jürgen Kocka (Stuttgart, 1985), 56–84.

27 *Ibid.*, 73–79. Konrad Jarausch, "German Professions in History and Theory," in *German Professions, 1800–1950*, ed. Geoffrey Cocks and Konrad Jarausch (New York and Oxford, 1990), 9–24.

28 On these developments, see R. Steven Turner, "The Growth of Professorial Research in Prussia, 1818 to 1848 – Causes and Context," Historical *Studies in the Physical Sciences* 3 (1971), 137–82.

29 For the material in this paragraph, see *ibid.* There is a fine and concise account of Liebig and his followers in James J. Sheehan, *German History 1770–1866* (Oxford and New York, 1989), 808 ff. On the associations, see Everett Mendelsohn, "The Emergence of Science as a Profession in Nineteenth-Century Europe," in *The Management of Scientists*, ed. Karl Hill (Boston, 1963), 3–48.

30 See the essays by Kees Gispen on engineers, and Jeffrey A. Johnson on chemists in *German Professions, 1800–1950*, ed. Geoffrey Cocks and Konrad Jarausch (New York and Oxford, 1990).

31 Robert Fox, "Science, the University, and the State in Nineteenth-Century France," in *Professions and the French State, 1700–1900*, ed. Gerald L. Geison (Philadelphia, 1984), 66–145; for the passages just quoted, 66–67.

32 For this and the previous paragraph, see Fox, "Science, the University, and the State in Nineteenth-Century France," esp. 70–72, 117.

14   Ready or Not? China and India

1 On the whole subject, see (still) Mark Elvin, *The Pattern of the Chinese Past* (Stanford, 1973), esp. Part II, "The Medieval Economic Revolution." I cite other and more recent literature at appropriate points in this chapter.

2 Richard von Glahn, *An Economic History of China* (Cambridge and New York, 2016), 225. Pierre-Étienne Will, "Développement quantitatif et développement qualitatif en Chine à la fin de l'époque imperiale," in *Tradition et innovation en Chine et au Japon*, ed. Charles Le Blanc and Alain Rocher (Montreal and Paris, 1996; originally in *Annales: Histoire, Sciences Sociales*, XLIX(4) [1994], 863–902), 5.

3 Von Glahn, *An Economic History of China*, 208–10.

4 On all these topics, see *ibid.*, Ch. 8, "The Maturation of the Market Economy, 1550–1800," esp. 331 for his conclusion about population pressure and trade networks. On the Ming economy in particular, see Timothy Brook, *The Confusions of Pleasure: Commerce and Culture in Ming China* (Berkeley and Los Angeles, 1998). On official worries about the dangers of this situation see Will, "Développement quantitatif et développement qualitatif en Chine." The reliability of statistics for Chinese population has often been questioned, but see the excellent summary at https://en.wikipedia.org/wiki/Population_history_of_China (accessed June 2, 2021).

5 This paragraph is my attempt to summarize Kenneth Pomeranz's argument in *The Great Divergence: China, Europe, and the Making of the Modern World Economy* (Princeton and Oxfordshire, 2000) and its reiteration in "Ten Years After: Responses and Reconsiderations," *Historically Speaking* 12(4) (2011). For the quoted words see 296–97 (the book's last pages), and 25 of the article.

6 See Philip C. C. Huang, "Development or Involution in Eighteenth-Century Britain and China? A Review of Kenneth Pomeranz's 'The Great Divergence: China, Europe, and the Making of the Modern World Economy,'" *The Journal of Asian Studies* 61(2) (2002), 501–38; and Pomeranz's reply and Huang's response in *The Journal of Asian Studies* 62(1). Also the articles in *Historically Speaking* 12(4) (2011), as well as Patrick Karl O'Brien, "Global Histories of Material Progress," in *Writing World History*, ed. Benedikt Stuchtey and Eckhardt Fuchs (Oxford and New York, 2003), 66–90. For careful statistical analysis of much relevant data, see the work of Stephen Broadberry and his collaborators cited in note 23 of this chapter.

7 In addition to the literature cited in the previous note, see the works referred to in note 10 of Chapter 12.

8 Evelyn S. Rawski, *Agricultural Change and the Peasant Economy of South China* (Cambridge, MA, 2013), 98.

9 Mark Elvin, *Another History: Essays on China from a European Perspective* (Sidney, 1996), Ch. 2, esp. 58–60 for the words quoted. Huang's work is cited in note 6 of this chapter.

10 Pierre-Étienne Will, "Développement quantitatif et développement qualitatif en Chine à la fin de l'époque Impériale," in *Tradition et innovation en Chine et au Japon*, ed. Charles le Blanc and Alain Rocher (Montreal, 1996), 9, 18. R. Bin Wong, *China Transformed: Historical Change and the Limits of European Experience* (Ithaca and London, 1997). Pierre-Étienne Will, *Bureaucracy and Famine in Eighteenth-Century China* (Stanford, 1990).

11 Most of this paragraph relies on Brook, *The Confusions of Pleasure*, 30–40. For a more general account, see von Glahn, *An Economic History of China*, Ch. 8.

12 Rawski, *Agricultural Change*, esp. 29.

13 *Ibid.*, 6. Will, "Développement quantitatif et développement qualitatif," 4–19.

14 Elvin, *Another History*, 54. Pomeranz notes the existence of such arrangements (*Great Divergence*, 99–100) but does not consider this implication of them.

15 Brook, *The Confusions of Pleasure*, 173–74. Harriet T. Zurndorfer, "Cotton Textile Production in Jiangnan during the Ming-Qing Era and the Matter of Market-Driven Growth," in *The Economy of the Lower Yangzi Delta in Late Imperial China: Connecting Money, Markets, and Institutions*, ed. Billy K. L. So (Hoboken, 2012), 91.

16 *The Great Divergence*, 64.

17 Will, "Développement quantitatif et développement qualitative."

18 Von Glahn, *An Economic History of China*, 320.

19 Madeleine Zelin, "Economic Freedom in Late Imperial China," in *Realms of Freedom in Modern China*, ed. William C. Kirby (Stanford, 2004), 69, 71.

20 *Ibid.*, 80–82. Timothy Brook, "Family, Community and Cultural Hegemony: The Gentry of Ningbo, 1368–1911," in *Chinese Local Elites and Patterns of Dominance*, ed. Mary Backus Rankin and Joseph Esherick (Berkeley and Los Angeles, 1990).

21 William T. Rowe, *Hankow: Conflict and Community in a Chinese City, 1796–1895* (Stanford, 1989), 57–60. Brook, "Family, Community and Cultural Hegemony."

22 See Tapan Raychaudhuri, "The Mughal Empire," in *Cambridge Economic History of India*, ed. Tapan Raychaudhuri and Irfan Habib (Cambridge and New York, 1982) I (II), Ch. 1, 272–93; and C. A. Bayly, *The New Cambridge History of India*, II(1): *Indian Society and the Making of the British Empire* (Cambridge and New York, 1988).

23 Prasannan Parthasarathi, *Why Europe Grew Rich and Asia Did Not: Global Economic Divergence, 1600–1850* (Cambridge and New York, 2011), Chs. 2 and 3, and at 42–46 for the condition of workers. For the doubts, see Tom J. Kessinger, in his chapter on northern India in *Cambridge Economic History of India*, ed. Tapan Raychaudhuri and Irfan Habib (Cambridge and New York, 1982), II, 252; and Raychaudhuri, "Mughal Empire," 279–80. For the statistical analysis, Stephen Broadberry and Hanhui Guan, "China, Europe, and the Great Divergence: A Study in Historical National Accounting, 980–1850," *Journal of Economic History* 78(4) (2008), 955–1000; and Stephen Broadberry and Bishnupriya Gupta, "The Early Modern Great Divergence: Wages, Prices, and Economic Development in Europe and Asia, 1500–1800," *Economic History Review* 59(1) (2006), 2–31. See also the summary by Michael Magoon at https://techratchet.com/2020/03/31/article-summary-the-early-modern-great-divergence-by-broadberry-and-gupta.

24 Parthasarathi, *Why Europe Grew Rich*, 2–3.

25 Parthasarathi presents most of the material in this and the previous paragraph in *Why Europe Grew Rich*, 104–7, and I have borrowed some of it from him. But I have altered the emphasis based on accounts of the three spinning machines and their inventors in S. D. Chapman and S. Chassagne, *European Textile Printers in the Eighteenth Century* (London, 1981), 39–41, esp. 40 on Crompton, emphasizing as they do the different temperaments and profiles of the three inventors, which makes evident that competing with Indian fabrics was only one of the things that motivated them.

26 Parthasarathi, *Why Europe Grew Rich*, 104–7.

27 Orn Prakash, *European Commercial Expansion in Pre-Colonial India* (Cambridge and New York, 2008). Also his article, "From Negotiation to Coercion: Textile Manufacturing in India in the Eighteenth Century," *Modern Asian Studies* 41 (2007), reprinted in Prakash *On the Economic Encounter between Asia and Europe, 1500–1800* (Surrey, UK, 2014). For a general view of the EIC's conduct of

the textile trade, see K. N. Chaudhuri, *The Trading World of Asia and the English East India Company, 1660–1760* (Cambridge and New York, 1978; online edition, 2010), Ch. 12; and Raychaudhuri, "Mughal Empire," esp. 286–87 on European companies and the large assemblages of workers.

28 On these developments, including the storming of the EIC office, see the Wikipedia article "Calico Acts," https://en.wikipedia.org/wiki/Calico_Acts (accessed October 26, 2020). Also Natalie Rothstein, "Calico Campaigns of 1719–21," *East London Papers* 7 (1964), 3–21. There is also a good account of the British internal debates and developments in Sven Beckert, *Empire of Cotton: A Global History* (New York, 2014), Ch. 2. However, I find his discussing it under the rubric of "war capitalism" adds little of value to what is already known, especially about the rise of industrial innovation in Britain. On this, see Peter [Peer] Vries's review in *Journal of World History* 28(1) (2017), esp. 136–40.

29 David Arnold, *The New Cambridge History of India*, III(5): *Science, Technology, and Medicine in Colonial India* (Cambridge and New York, 2000), 101–2.

30 Parthasarathi, *Why Europe Grew Rich*, Ch. 7. He notes that it is not even possible to identify sites where knowledge was produced, but finds this no impediment to proposing that Indian scientific culture was no less likely to contribute to innovation than British.

31 Raychaudhuri, "Mughal Empire," 281–82. For more on the Dadni system, see the website http://en.banglapedia.org/index.php?title=Dadni_System (accessed January 7, 2020). For a fuller account of how the industry was organized, see Chaudhuri, *Trading World*, Ch. 11, esp. 256–57 on the differences between the Indian and European systems of rural production. Tom J. Kessinger, in his chapter on Northern India in the *Cambridge Economic History of India*, II, 252, notes that a Soviet historian A. I. Chicherov, has found evidence of attempts to reorganize production on lines closer to the European putting-out system toward the end of the eighteenth century. Workers were pressured by merchants to accept lower wages and poverty and indebtedness made their ownership of their own tools only nominally real. But Chicherov does not attempt to show that merchant income depended any less on interest from the loans and reselling the cloth. His main concern is to show that workers were coming into a condition where they had to "sell their labor" as well as the product of it, making the Marxist analysis of capitalist production relations as organized around the extraction of surplus value apply to early Indian history. There is nothing in the material he presents to suggest that either the weavers or the merchants were in a situation that would have encouraged technical innovation. He specifically notes that the large agglomerations of workers in this period were set up by the European companies, both the Dutch and the British. A. I. Chicherov, *India: Economic Development in the 16th–18th Centuries. Outline History of Crafts and Trade* (Moscow, 1973), 179–81, 227–28. For a more nuanced view see Chaudhuri, *Trading World*, 259–60.

32 Raychaudhuri, "Mughal Empire," 291–92. For a somewhat more optimistic view of textile technology, see Chaudhuri, *Trading World*, 274–75, but he notes that spindles were used to spin some kinds of thread and that production in general relied more on the skills of workers than the quality of the tools.

33 Susan Bayly, *The New Cambridge of History of India*, IV(3): *Caste, Society and Politics in India from the Eighteenth Century to the Modern Age* (Cambridge and New York, 1999).

34 David Washbrook, "'To Each a Language of His Own': Language, Culture, and Society in Colonial India," in *Language, History and Class*, ed. Penelope J. Corfield (Oxford, 1991), 179–204 (185–86 for the phrases quoted). Raychaudhuri, "Mughal Empire," 278, 285.

35 Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton and Oxford, 2000), Ch. 3 and esp. on 77–83 for the culture of weavers. C. A. Bayly, "The Origins of Swadeshi: Cloth and Indian Society, 1700–1930," in *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai (Cambridge and New York, 1986), 285–321, 316 for the passage quoted.

15   Conclusion

1 Patricia Crone, *Pre-Industrial Societies* (Oxford and Cambridge, MA, 1989), 171.

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