PREFACE

The Great Divergence began as an introductory chapter for a different book, intended to synthesize the literature on the advantages that western Europe already enjoyed in the emerging world economy of the seventeenth and eighteenth centuries. Like most other people in the field, I believed that these were advantages that had emerged over centuries of gradual growth across much of the region and were manifested in slightly higher productivity, slightly more efficient markets, and other homegrown benefits. Taken together, they made it logical both that industrialization had begun in Europe and that Europe had been able to project its political power around the globe, reinforcing these economic rewards.

But as I reviewed the literature—both recent works and ones I had read over a decade earlier, as a graduate student who had not yet shifted my focus toward Chinese history—I found myself becoming less and less convinced of this summary. Instead, Europe as a whole seemed no more prosperous than east Asia before 1800 and its richest regions no more so than the richest parts of east and perhaps south Asia. Equally important, there was no clear evidence of improvement in the living standards of ordinary Europeans over the long haul.

There were also signs—rarely emphasized in older works, but clearly present—that in the more densely populated parts of Europe (including some of its richest areas), early modern growth was hobbled by environmental problems and resource constraints; while those regions achieved some relief by trading handicraft manufactures for land-intensive goods from elsewhere, that trade was not growing fast enough to offer a permanent solution, especially since population growth was accelerating. All of this made even England and Holland look more like China's Yangzi Delta, and a few other wealthy places in Asia, than had been previously recognized. Those similarities called out for replacing, or at least complementing, the old historical chestnut—"Why didn't China (the Yangzi Delta) wind up like Europe (England)?"—with the rarely asked question of why England hadn't wound up like the Yangzi Delta: a relatively wealthy, heavily marketized agro-commercial economy with lots of handicraft industry but no breakthrough to rapid, energy-intensive, sustained growth, and, in the absence of such a breakthrough, a system that was facing increasingly serious population and environmental pressures. That question also suggested that the answers would need to explain a fairly late and sudden divergence, rather than one that had been developing inexorably for hundreds of years. Finally, it pointed toward explanations that highlighted Europe's access to vastly expanded amounts of land-intensive products from the Americas, and to a partly fortuitous set of circumstances that led to a massive expansion of

coal mining (which, among other things, greatly eased pressure on western Europe's dwindling forests). By arguing that divergence was late and contingent, that it was not wholly produced within Europe, and that it was best understood by noting not only the ways in which European regions held advantages but also the manner in which they had resembled other places (or underperformed them, as in agricultural yields), the book challenged received wisdom in several ways and attracted far more attention than I had expected.

Twenty years of debate and new research have now piled up, which go far beyond what I can discuss here.[1] Some of it, of course, would have happened without *The Great Divergence*. The spectacular growth of China's economy stimulated interest in its earlier history and in possible links to the early modern dynamics I discussed. Meanwhile, our mounting environmental problems—linked to our gargantuan energy consumption—helped attract attention to an argument in which both environmental constraints on growth and the significance of new energy sources loomed large. Though the book itself was not the only catalyst of the "great divergence debate," it seems appropriate for this Princeton Classics edition preface to reflect on some of this still-burgeoning literature.

I would divide this literature into three clusters. A heavily quantitative cluster has focused on the "what" and "when" of divergence: trying to specify and compare trends and levels in per capita income and real wages across numerous early modern locales. The second cluster, larger and mostly qualitative, has focused on the "how" and "why" of divergence. Sometimes these works have

[1] Ten years after its publication, a useful forum on *The Great Divergence* appeared in *Historically Speaking* 12:4 (September 2011): 10–25, with contributions by Peter Coclanis, Jan DeVries, Philip Hoffmann, R. Bin Wong, and myself. A more recent retrospective is Prasannan Parthasarathi and Kenneth Pomeranz, "The Great Divergence Debate," in Giorgio Riello and Tirthankar Roy, eds., *Global Economic History* (London: Bloomsbury Academic, 2019), 19–37. Here, as in those essays, I have limited myself to reflections on discussions in English. For my reaction to the debate as it has played out in east Asia, see my introduction to the Japanese translation of *The Great Divergence*: *Daibunki: Chugoku, Yoroppa, soshite Kindai Sekai Keizai no Keisei* (Nagoya: Nagoya University Press, 2015), 1–16. The lengthiest criticism of *The Great Divergence* was probably Philip Huang's "Development of 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*," *Journal of Asian Studies* 61:2 (May 2002): 501–38; followed by my response, "Beyond the East-West Binary: Resituating Development Paths in the Eighteenth-Century World," *Journal of Asian Studies* 61:2 (May 2002): 539–90; and Philip Huang, "Further Thoughts on Eighteenth-Century Britain and China: Rejoinder to Pomeranz's Response to My Critique," *Journal of Asian Studies* 62:1 (February 2003): 157–67; and Kenneth Pomeranz, "Facts Are Stubborn Things: A Response to Philip Huang," 167–81. Huang did identify one genuine error, which concerns how I allocated labor time (and thus imputed earnings) between weavers and spinners of cotton cloth. The error—which makes no difference to the book's argument but could mislead somebody wanting to use this data for other purposes—is corrected in this edition, affecting the last full paragraph on p. 102 and the section of appendix E running from the bottom of p. 320 to the top of p. 323.

centered on issues that I emphasize in this book—particularly matters of resources, energy supplies, and environmental conditions, taking varying stances on their importance. My third grouping covers ways in which *The Great Divergence* has been brought to bear on issues beyond its own scope, and could itself be divided into three groups. There are works that deal with other early modern divergences, looking at both comparisons and interregional connections to reframe "the rise of the West" and acknowledge that it was probably more contingent than most scholars once thought; given the diversity of those works, I can do no more than note a few of them here.[2] There are works that deal with more contemporary issues directly related to the main topics of my book, including problems of economic development, environmental sustainability, and legacies of empire today. Finally, there are works that have been influenced by the methodology of *The Great Divergence*, particularly its strategies of comparison.

The quantitative, "when and what" literature is the easiest to address. Works published in the past decade have changed our estimates of the historical GDP figures for various European countries from roughly 1300 to 1850; others have tried (based on much slimmer evidence) to do the same for China, India, Japan, and elsewhere.[3] Crucially, much of the literature about China

[2] On other regional divergences, see, e.g., Prasannan Parthasarathi, *Why Europe Grew Rich and Asia Did Not: Global Economic Divergence 1600–1850* (Cambridge: Cambridge University Press, 2011); and Timur Kuran, *The Long Divergence: How Islamic Law Held Back the Middle East* (Princeton, NJ: Princeton University Press, 2011). For analyses of military power that draw on *The Great Divergence*, see Philip Hoffman, *Why Did Europe Conquer the World?* (Princeton, NJ: Princeton University Press, 2015); and Tonio Andrade, *The Gunpowder Age: China, Military Innovation, and the Rise of the West in World History* (Princeton, NJ: Princeton University Press, 2016).

[3] On GDP, see particularly Stephen Broadberry, Hanhui Guan, and David Daokui Li, "China, Europe, and the Great Divergence: A Study in Historical National Accounting, 980–1850," *Journal of Economic History* 78:4 (December 2018): 955–1000; Jan Luiten Van Zanden and Bas van Leeuwen, "Persistent but Not Consistent: The Growth of National Income in Holland, 1347–1807," *Explorations in Economic History* 49 (2012): 119–30; Stephen Broadberry, Johann Custodis, and Bishnupriya Gupta, "India and the Great Divergence: An Anglo-Indian Comparison of GDP per Capita, 1600–1871," *Explorations in Economic History* 55 (January 2015): 58–75; Paolo Malanima, "The Long Decline of a Leading Economy: GDP in Central and Northern Italy, 1300–1913," *European Review of Economic History* 15 (2010): 169–219; Erik Buyst, "Towards Estimates of Long-Term Growth in the Southern Low Countries, ca. 1500–1846," slide presentation, https://warwick.ac.uk/fac/soc/economics/seminars/seminars/conferences/venice3/programme/buyst.pdf; Bozhong Li and Jan Luiten Van Zanden, "Before the Great Divergence? Comparing the Yangzi Delta and the Netherlands at the Beginning of the Nineteenth Century," *Journal of Economic History* 72:4 (December 2012): 956–89; Mikolaj Malinowski and Jan Luiten van Zanden, "Income and Its Distribution in Pre-Industrial Poland," *Cliometrica* 11 (2017): 375–404; and Debin Ma, "Modern Economic Growth in the Lower Yangzi Region of China: A Quantitative and Historical Perspective," Foundation for Advanced Studies on International Development (FASID) Discussion Series Paper, 2004-06-002. The literature on real wages is also voluminous and important but bears less directly on the divergence debate, so I

treats the Yangzi Delta as a distinctive region, estimating its per capita GDP at 50–75% above that of the entire empire—and facilitating the kind of comparisons that I argue were often more revealing than comparisons between China and European states a fraction of its size.

Here it is important to differentiate two meanings of "great divergence." The first one concerns comparative living standards: when did per capita incomes in Europe, or its richest parts, surpass those in China, or its richest parts? The second, which is probably more important, asks when *any* part of the world shifted from the generally slow and episodic per capita growth that had characterized many economies over many centuries to the (thus far) rapid and sustained growth in both population and per capita income that has characterized increasingly large parts of the world over the past two centuries. These two questions need not have the same answer: economic booms in Antonine Rome, the early Caliphate, Song China, and at other moments may have been world-leading, but they did not usher in modern economic development. And even significant differences in per capita GDP today (when we have less reason to doubt the underlying data) often do not indicate qualitative differences of the kind that separate the preindustrial world from ours: US per capita income is about one-third higher than Britain's or France's, but nobody doubts that they are fundamentally the same kinds of economies.

If we provisionally accept the GDP estimates, they suggest that as late as 1700, China's GDP per capita was probably roughly comparable to the European average, though below much of western Europe; the Yangzi Delta was perhaps roughly even with the Netherlands (the richest place in Europe) and slightly ahead of Britain. Moreover, non-Dutch, non-British Europe was no better off in 1800 than in 1500. However, Britain and the Netherlands soon pulled significantly ahead of the Yangzi Delta in the 1700s—not because they grew much but because China's great eighteenth-century population boom seems to have eventually pushed down per capita income in all regions.[4]

This represents an earlier divergence than I had suggested but not dramatically earlier. It is still much later than those proposed in many previous works,

omit most of it here. For one particularly important example, see Robert Allen, Jean-Pascal Bassino, Debin Ma, Christine Moll-Murata, and Jan Luiten Van Zanden, "Wages, Prices and Living Standards in China 1738–1925: In Comparison with Europe, Japan, and India," *Economic History Review* 64:1 (February 2011): 8–38. A fairly detailed version of my doubts about what wage comparisons between China and Europe tell us is "Standards of Living in Rural and Urban China: Preliminary Estimates for the Mid-18th and Early 20th Centuries," paper for panel 77, World Economic History Congress, Helsinki, 2006. For a different critique of wage comparisons, see Kent Deng and Patrick O'Brien, "Establishing Statistical Foundations of a Chronology for the Great Divergence: A Survey and Critique of the Primary Sources for the Construction of Relative Wage Levels for Ming–Qing China," *Economic History Review* 69 (November 2016): 1057–82.

[4] Broadberry et al., "China, Europe, and the Great Divergence," especially 989–90.

which generally argue that Europe had permanently surpassed Chinese income levels by the Renaissance at the latest.[5] The date itself, however, matters less than its implications for possible explanations. Even an early 1700s divergence is far too late to be consistent with some old historiographical warhorses (which also have other serious weaknesses). If this separation occurred because only Europe had sufficient freedom and property rights to incentivize growth, or because Confucianism was much more hostile to improving material welfare than Christianity, or because geography and climate determined very different futures for the two ends of Eurasia,[6] these differences would have manifested themselves sooner. Instead we are pointed toward narrower differences and specifically early modern conjunctures.

Meanwhile, these same studies suggest that the second, more fundamental, kind of divergence came later—because when Dutch and British per capita incomes surpassed the Yangzi Delta's sometime in the 1700s, they did so despite stagnating. As Jack Goldstone has noted in a recent essay, Dutch GDP per capita in 1800–1807 was only 5 percent above previous peaks in the 1590s and 1640s, and almost all of Britain's per capita growth between 1270 and 1800 came in two concentrated spurts accompanied by population decline: one in the late 1300s and one in the late 1600s.[7] Apparently, then, even the most dynamic parts of Europe still were not experiencing sustained per capita growth prior to 1800, while other parts of Europe had stagnant or falling per capita GDP;[8] they "pulled ahead" only because China's per capita GDP was falling. (This decline probably began in poorer, less commercialized regions, affecting the Yangzi Delta mostly toward the end of this period—essentially

[5] See, for instance, Angus Maddison's very influential *The World Economy: 1–2001 AD* (N.p.: OECD Publishing, 2004), vol. 1, p. 11, https://read.oecd-ilibrary.org/development/the-world-economy/the-world-economy-1-2001-ad_9789264022621-21-en#page11.

[6] David Landes, *The Wealth and Poverty of Nations: Why Some Are So Rich and Some Are So Poor* (New York: W. W. Norton, 1999); Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (London: Jonathan Cape, 1997); Deepak Lal, *Unintended Consequences: The Impact of Factor Endowments, Culture, and Politics on Long-Run Economic Performance* (Cambridge, MA: MIT Press, 1998). There are also, it should be noted, books that insist on the importance of early divergences but do not rule out the possibility of subsequent convergences and thus rough parity at some later date. See, for instance, Walter Scheidel, *Escape from Rome: The Failure of Empire and the Road to Prosperity* (Princeton, NJ: Princeton University Press, 2019); and Ian Morris, *Why the West Rules—For Now: The Patterns of History and What They Reveal about the Future* (New York: Farrar, Strauss and Giroux, 2010).

[7] Jack Goldstone, "Dating the Great Divergence," forthcoming in *Journal of Global History* (2021), with comments by Stephen Broadberry, Paolo Malanima, Jan Luiten Van Zanden, and Jutta Bolt, and a response by Goldstone.

[8] See sources in note 3, plus Leonardo Ridolfi, "The French Economy in the Longue Durée: A Study on Real Wages, Working Days, and Economic Performance from Louis IX to the Revolution (1250–1789)," *European Review of Economic History* 21 (2017): 437–38; and Ulrich Pfister, "The Timing and Pattern of Real Wage Divergence in Pre-Industrial Europe: Evidence from Germany, c. 1500–1850," *Economic History Review* 70 (2017): 701–29.

the pattern I described, though beginning in the early rather than the late eighteenth century.)[9] It is probably significant, as Stephen Broadberry writes in reply to Goldstone, that early modern Britain and the Netherlands seem to have alternated between growth and stagnation, rather than growth and regression; but that is still not sustained growth, especially because the stagnant periods lasted far longer than the growth spurts. Moreover, it still leaves open the possibility that eighteenth-century stagnation could have been regression—and/or nineteenth-century growth more halting—if the era's accelerating population growth had not been accompanied by the relief of land constraints through coal and American imports, much as I had suggested.[10]

Possibility, not certainty. Tracking the timing and magnitude of divergence has been hard enough; weighing the many possible causal factors—the "hows" and "whys"—is much harder.

Some notable recent attempts to trace the long-term roots of European growth have focused on science, technology, and increasing "human capital" (that is, education and skills)—topics I discuss only briefly.[11] This is not the place to review these works, except to note that they conflict with my arguments only if they assert both that these trends gave northwestern Europe a capacity to innovate that would have overcome any conceivable resource bottlenecks, and that distinctively European scientific practices were indispensable for developing the technologies of the first Industrial Revolution—particularly steam engines. The former claim would be empirically untestable; the latter seems dubious, especially since some crude steam engines were created prior to Newcomen and Watt.[12] Other important works shared my interest in connections between European—particularly British—growth and overseas activities but highlighted different fruits of those often-violent interactions, such as imported industrial techniques and expanded

[9] For an argument suggesting declining market integration in China, beginning in the north, see Daniel M. Bernhofen, Markus Eberhardt, Jianan Li, and Stephen L. Morgan, "Assessing Market (Dis)integration in Early Modern China and Europe," Center for Economic Policy Research discussion paper 11288, May 2016.

[10] For a very different analysis that also highlights the importance of land-saving imports to Britain's escape from a world with important Malthusian features, see Kevin O'Rourke and Jeffrey Williamson, "From Malthus to Ohlin: Trade, Industrialisation, and Distribution since 1500," *Journal of Economic Growth* 10:1 (March 2005): 5–34.

[11] See particularly Joel Mokyr, *A Culture of Growth: The Origins of the Modern Economy* (Princeton, NJ: Princeton University Press, 2016). For papers on various aspects of knowledge, technology, and the great divergence debate, see the discussion papers of the Project on Useful and Reliable Knowledge in Global Histories of Material Progress in the East and West (URKEW) of the London School of Economics.

[12] See, for instance, Neville Morley, "Trajan's Engines," *Greece and Rome* 47:2 (October 2000): 197–210; Joseph Needham (with assistance from Wang Ling), *Physics and Physical Technologies*, vol. 4, pt. 2 of Needham et al., *Science and Civilization in China* (Cambridge: Cambridge University Press, 1965), 135–36, 225–26, 255, 369–70, 387.

markets;[13] however, our arguments seem more complementary than necessarily conflicting.

Other discussions have focused less on the creation of new technologies than on their diffusion, and more on how the problems that innovators addressed varied across time and space. While it is easy for modern people to assume that important technological innovations will be labor-saving, and generally capital and resource-absorbing, this was not always the case. As late as 1720, English patent applications were penalized if the invention would reduce labor demand—even though England had more expensive labor than most of the world. [14] Jean-Laurent Rosenthal and R. Bin Wong have hypothesized that Europe's political fragmentation and frequent wars—surely disadvantageous in the short run—may have made its premodern industry particularly likely to locate within city walls; and since cities had cheaper capital than rural settings (concentration making it cheaper for lenders and borrowers to find partners), and more expensive labor (given higher rents and food costs), Europeans may have been more prone than others to seek labor-saving, capital-using (and often, I would add, energy-using) production techniques. This did not immediately make European industries superior, but it may have pushed them along paths that ultimately led toward modern industry. [15]

In a more empirical vein, Robert Allen's work on "why the Industrial Revolution was British" emphasizes a combination of high nominal wages and easily accessible coal. This made early steam engines, which were extraordinarily wasteful of fuel, economical for pumping water out of British mines, and virtually nothing else; but once a market existed for steam engines, it was worth tinkering to improve them along any possible axis, eventually making them sufficiently fuel-efficient (and safe) to be adopted in many, many set-

[13] Parthasarathi, *Why Europe Grew Rich and Asia Did Not*; Joseph Inikori, *Africans and the Industrial Revolution in England: A Study in International Trade and Economic Development* (Cambridge: Cambridge University Press, 2002). It is worth noting, as Inikori has, that pre-1945 historiography often emphasized external factors in British industrialization. It is also worth noting that emphasizing foreign links does not have to go along with emphasizing violence. Kevin O'Rourke and Jeffrey Williamson, for instance, have consistently highlighted the centrality of trade and globalization in both starting and sustaining British/European growth but have not emphasized the role of coercion.

[14] Margaret Jacob, *The Cultural Meaning of the Scientific Revolution* (New York: Alfred A. Knopf, 1988), 92–93. See also Christine McLeod, *Inventing the Industrial Revolution: The English Patent System, 1660–1800* (Cambridge: Cambridge University Press, 1988), 158–81, noting that only 3.7 percent of patent applications during the Industrial Revolution cited labor-saving as a goal.

[15] Jean Laurent Rosenthal and R. Bin Wong, *Before and beyond Divergence: The Politics of Economic Change in China and Europe* (Cambridge, MA: Harvard University Press, 2011), 99–128.

tings.[16] This story requires very little knowledge of abstract science (awareness that air has weight, which existed beyond Europe). Instead, economics and geography decisively differentiate England from both France and Jiangnan.

Moreover, agriculture plays only a secondary role in this story. Growing demand for labor, largely driven by booming overseas trade, drew people out of the English countryside, forcing farmers to adopt capital-intensive, labor-saving innovations; this reverses many historical arguments that begin with an agricultural transformation "releasing" labor and generating capital for commercial and industrial expansion.[17] This de-centering of agriculture is confirmed by evidence that agricultural labor productivity in the Yangzi Delta was still within 10 percent of English levels even near 1820, while its land productivity was several times higher—so that its total factor productivity in agriculture far exceeded that of any European locale.[18] Thus, explanations for divergence that rely on the supposed backwardness of "peasant agriculture" or the necessity of "agrarian capitalism" will not fly, and eliminating explanations that emphasize the sector employing over half of all workers until about 1985 is no small step forward.

In some sense, the potential compatibility of sustained economic growth and small-scale, family-based agriculture should have been clear already from various real-world examples, particularly in societies growing irrigated rice (which can generate extremely high per acre yields and has few economies of scale). Kaoru Sugihara, in particular, has outlined an "east Asian path" to modern prosperity that fits well with my basic picture of leading early modern regions.[19] Both of us describe a "resource-intensive" Western development path and a more labor-intensive pattern of east Asian growth while insisting that the latter need not be a dead end. Sugihara further argues that—despite significant convergence over the past several decades—the east Asian path remains distinctive and sufficiently less resource-intensive and more labor-absorbing to be a preferable model for poor countries today.[20]

[16] Robert Allen, *The British Industrial Revolution in Global Perspective* (Cambridge: Cambridge University Press 2009), 2–3, 135–81.

[17] Allen, *The British Industrial Revolution*, 25–79.

[18] Robert Allen, "Agricultural Productivity and Rural Incomes in England and the Yangtze Delta, c. 1620–c. 1820," *Economic History Review* 62:3 (August 2009): 541; and Li and Van Zanden, "Before the Great Divergence?," 975.

[19] Sugihara and I developed these ideas independently until we met at a conference in 1998, when I had already submitted the manuscript for *The Great Divergence* and he had already drafted what became his seminal article "The East Asian Path of Economic Development: A Long-Term Perspective," in Giovanni Arrighi, Hamashita Takeshi, and Mark Selden, eds., *The Resurgence of East Asia: 500, 150, and 50 Years Perspectives* (London: Routledge, 2003), 78–123.

[20] For doubts about the environmental sustainability of worldwide industrialization, even along the east Asian path, and questions about how well recent Chinese growth fits that model, see Kenneth Pomeranz, "Is There an East Asian Development Path? Long-Term Comparisons,

This takes us beyond "the great divergence debate" to major questions concerning the future of economic growth, particularly in connection with the environment. With the growth of comparative, global, and east Asian environmental history there have been valuable attempts to explore this book's hypotheses about early modern environmental problems and the importance of extra-European resources to Europe, to track changes in energy use and their relationship to growth in different places and periods, and to look at adaptations to resource pressure in east Asia specifically.[21] Among other things, taking economic dynamism outside the North Atlantic seriously seems important for understanding, rather than assuming, the environmental implications of capitalism and the implications of twentieth- and twenty-first-century "developmental states" (whether "capitalist" or not) for contemporary dangers and possibilities.[22] I am skeptical of arguments that suggest that modern east Asian developmentalism is much more sustainable than Western-style growth has been, or less exploitative;[23] understanding non-Western "developmentalisms" includes recognizing that they have many of the same implications as Western varieties. But it is important to continue historically informed conversations about this. It is also worth noting that the more we see the onset of sustained per capita growth in *any* place as a contingent outcome, dependent on multiple transregional processes, the more doubt is cast on various still-popular tales in which prosperity, science, and democracy have all unfolded as expressions of a single, European, essence. That the fruits of conquest, mass death, and slavery in the Americas may have been crucial to the early stages of this transition further undermines any simple story of progress. Moving beyond the academic social sciences, while keeping in mind these

Constraints, and Continuities," *Journal of the Economic and Social History of the Orient* 44:3 (2001): 322–62; and Pomeranz, "Water, Energy, and Politics: Chinese Industrial Revolutions in Global Environmental Perspective," in Gareth Austin, ed., *Economic Development and Environmental History in the Anthropocene* (London: Bloomsbury Academic, 2017), 271–90.

[21] Klas Rönnbäck, "New and Old Peripheries: Britain, the Baltic, and the Americas in the Great Divergence," *Journal of Global History* 5:3 (November 2010): 373–94; Saito Osamu, "Forest History and the Great Divergence: China, Japan, and the West Compared," *Journal of Global History* 4:3 (November 2009): 379–404; and John Richards, *The Unending Frontier: An Environmental History of the Early Modern World* (Berkeley: University of California Press, 2003).

[22] Kenneth Pomeranz, "World History and Environmental History: Introducing an Agenda," in Edmund Burke III and Kenneth Pomeranz, eds., *Environmental History and World History* (Berkeley: University of California Press, 2009), 3–32. For one milestone in the huge literature on modern developmental states, see Meredith Woo-Cumings, ed., *The Developmental State* (Ithaca, NY: Cornell University Press, 1999). For a stimulating account of how energy intensification in Asia (and the environmental impact thereof) does and does not differ from North Atlantic experiences, see Elizabeth Chatterjee, "The Asian Anthropocene: Electricity and Fossil Developmentalism," *Journal of Asian Studies* 79:1 (2020): 3–24.

[23] See, for instance, Giovanni Arrighi, *Adam Smith in Beijing: Lineages of the Twenty-First Century* (London: Verso, 2009).

questions about both origins and sustainability, I have been very gratified to see this book's arguments reflected in Amitav Ghosh's *The Great Derangement*, a work that makes deeply unsettling arguments about what coping with today's environmental emergencies requires, as well as what histories of empire and economic development do and do not imply about environmental justice.

Rather than offer brief and inadequate reflections on these enormous problems, I close with some words about theory and method. The methodological points that *The Great Divergence* emphasizes were hardly unprecedented, but apparently they had been sufficiently overlooked so that their reassertion struck a chord. That comparisons should involve areas of at least roughly comparable scale—the Yangzi Delta and Britain and/or the Netherlands, or Europe and China, rather than Britain and China—seems obvious once stated, but it has often been obscured by our tendency to take modern nation-states for granted as the units of history (and data collection). That there was enough transregional contact in early modern times (if not before) to prevent our ability to make classical comparisons of fully independent entities was also a straightforward claim with which others were also grappling in different ways, including Charles Tilly's "encompassing comparisons" (published before my book) and Michael Werner and Bénédicte Zimmermann's somewhat later "histoire croisée."[24] Perhaps most influential was this book's insistence on "reciprocal comparisons" (also stressed by my then-colleague R. Bin Wong[25]): that, in contrast to the many social science comparisons that normalized some version of a European trajectory and asked why other places did not follow it, we should treat each term of a comparison as equally "deviant," so that it was more fruitful to ask (for instance) why the Yangzi Delta was not Britain if one simultaneously asked why Britain had not become the Yangzi Delta. This seemed, then and now, a productive way to acknowledge critiques of Eurocentric social science without abandoning the immensely valuable project of comparison or the possibility of large-scale narratives.[26]

The *combination* of these strategies was perhaps unusual, and it has been taken up by people working on other world regions. Gareth Austen's sweeping essay on the potential value of reciprocal comparisons using African

[24] Charles Tilly, *Big Structures, Large Processes, Huge Comparisons* (New York: Russell Sage Foundation, 1984); Michael Werner and Bénédicte Zimmermann, "Beyond Comparison: *Histoire Croisée* and the Challenge of Reflexivity," *History and Theory* 45 (February 2006): 30–50.

[25] R. Bin Wong, *China Transformed: Historical Change and the Limits of European Experience* (Ithaca, NY: Cornell University Press, 1997).

[26] For one version of this critique that has been particularly influential among historians, see Dipesh Chakrabarty's *Provincializing Europe* (Princeton, NJ: Princeton University Press, 2000).

examples is particularly noteworthy;[27] the argument of another Africanist, Morten Jerven, that thinking with reciprocal comparisons should make us leery of global comparisons that rely heavily on GDP figures,[28] returns us to where this essay began (though historical GDP is likely less skewed for China/Europe comparisons than Africa/Europe ones). This approach has also been taken up far from this book's thematic foci: it figures, for instance, in several of the essays in *Comparative Early Modernities*, dealing with art, literature, political ideas, and other areas, and figures indirectly in Martin Powers' eye-opening recent book on how Chinese political ideas influenced debates in early modern England.[29] With luck, readers will continue finding varied uses for this this book, even as they question some of its arguments.

[27] Gareth Austin, "Reciprocal Comparisons and African History: Tackling Conceptual Eurocentrism in the Study of Africa's Economic Past," *African Studies Review* 50:3 (December 2007): 1–28.

[28] Morten Jerven, "An Unlevel Playing Field: National Income Estimates and Reciprocal Comparison in Global Economic History," *Journal of Global History* 7:1 (2012): 107–28.

[29] David Porter, ed., *Comparative Early Modernities: 1100–1800* (London: Palgrave MacMillan, 2012); Martin Powers, *China and England: The Preindustrial Struggle for Justice in Word and Image* (London: Routledge, 2018).