need to know more about the mechanisms underlying political and economic institutions in order to know whether this explanation holds.

Finally, Acemoglu and Robinson do not explain why inclusive institutions decisive for economic growth were able to come into being only in the past 300 years of human history. Why was a critical juncture such as the Glorious Revolution more decisive for this than, say, the fall of the Roman Empire? This suggests that there is more going on here than simply the development of inclusive institutions. In my view, the authors would have done better to keep to the compelling story of colonial extraction of their previous work instead of pretending to provide an all-encompassing theory that allegedly accounts for all economic growth throughout history, as it is clearly not a "one-size-fits-all" explanation.

Elise van Nederveen Meerkerk

Department of Rural and Environmental History, Wageningen University,
PO Box 8130, 6700 EW Wageningen, The Netherlands
E-mail: elise.vannederveenmeerkerk@wur.nl

Natural Experiments of History. Ed. by Jared Diamond [and] James A. Robinson. Harvard University Press, Cambridge [etc.] 2010. 278 pp. Maps. £22.95; \$29.95; € 27.00. doi:10.1017/S0020859013000035

The controlled and replicated laboratory experiment is widely conceived as the hallmark of modern scientific method. The laboratory environment allows the experimenter to explore causal relationships by manipulating the variables of interest, while keeping all others constant. Whereas social scientists can only assume ceteris paribus conditions in order to make their theories flow, natural scientists can impose such conditions on their subject. Natural Experiments opens with the observation that "the cruel reality is that manipulative experiments are impossible in many fields widely admitted to be sciences". Whether one studies historical geology, evolutionary biology, or social history, the past cannot be directly observed, let alone manipulated. The key message of Natural Experiments is that the comparative historical method offers a valuable alternative to the laboratory experiment, one that should not be looked down upon as "unscientific", but rather as a creative framework for exploring causes and consequences in history on the basis of falsifiable hypotheses. The comparative method offers an escape from the verdict of historians arguing that any attempt to establish causality in history is doomed to fail because of the impermeable complexity of historical processes. Indeed, this book is methodologically well positioned. It takes a stance against both the scholarly arrogance of many a natural scientist, as well as the uncompromising nihilism of the postmodern turn in the humanities.

The editors, Jared Diamond and James Robinson, need no introduction. Both scholars are driven by the big question of the historical roots of global inequality, Diamond with one foot in natural sciences, Robinson with one in social sciences. The editors have assembled seven chapters covering a spectrum of comparative approaches, ranging from non-quantitative narratives with a small number of units to rigorous statistical analyses based on large quantitative datasets. Readers familiar with the work of scholars such as

Patrick Kirch (on the Pacific Islands), Daron Acemoglu and his co-authors (on the economic impact of the French Revolution), Nathan Nunn (on the long-term effects of the African slave trades), and Abhijit Banerjee and Lakshmi Iyer (on colonial land tenure in British India) will find that this book replicates a number of chapters and journal articles previously published by those authors, and for that reason it might not be a priority purchase.

However, for educational purposes it can be highly recommended, as it has more to offer than just a collection of interesting comparative historical studies. This book shows how the comparative method can be adapted to historical questions of various kinds, how the comparative method can be positioned in the full spectrum of scientific method, and why it is more rewarding to at least try to explore cause and effect in history than a priori confine oneself to the descriptive tradition. *Natural Experiments* offers a balanced mix of studies; all the chapters are skilfully written and deal with important themes that should appeal to students in a range of disciplines within the humanities and social science; and the book as a whole is pleasantly concise.

Of course the various applications of the comparative method in *Natural Experiments* are open to criticism. They should be. Let me highlight Nathan Nunn's chapter, "Shackled to the Past", on the long-term effects of the African slave trades. The core of Nunn's argument is that the African slave trades play an important role in explaining current African poverty. This claim is empirically underpinned by historical cross-country regressions of African slave export intensity (slaves exported between 1400 and 1900) on present-day African income levels (GDP per capita in the year 2000). The regression analyses reveal a significant and robust negative correlation, leading Nunn to conclude that the African slave trades have had a negative long-term impact on African income levels. The question is, of course, whether the correlation established in the formal comparative analysis really points to historical causation.

Gareth Austin has criticized Nunn for his use of historical cross-country regression analysis. In his view the applied method leads to a "compression of history". By lumping together slave export data over a period of five centuries, Nunn equalizes the hypothesized impact on late twentieth-century income levels of a slave exported in the fifteenth century to one exported in the nineteenth century. Moreover, by linking historical slave export intensity to present-day GDP estimates, he ignores a number of centuries without considering the possibility of changes in the proposed long-term effects. Nunn has suggested that the slave trade promoted ethnic fractionalization, leading to higher levels of distrust, social conflict, and political instability in the post-slave-trade era, a hypothesis he went on to elaborate in a study with Leonard Wantchekon. However, even if we take this claim for granted, one has to realize that the "ethnic fractionalization" of present-day African countries (note that the units of analysis are anachronistically defined because present-day African countries did not exist two centuries ago) has been

^{1.} This chapter is drawn largely from Nathan Nunn, "The Long-Term Effects of Africa's Slave Trades", *Quarterly Journal of Economics*, 123 (2008), pp. 139–176.

^{2.} Gareth Austin, "The 'Reversal of Fortune' Thesis and the Compression of History: Perspectives from African and Comparative Economic History", *Journal of International Development*, 20 (2008), pp. 996–1027.

^{3.} Nathan Nunn and Leonard Wantchekon, "The Slave Trade and the Origins of Mistrust in Africa", *American Economic Review*, 101 (2011), pp. 3221–3252.

caused primarily by the colonial borders designed on the European drawing board in the late nineteenth century. Colonial rule is thus endogenous to the explanation of why historical slave trades have affected present-day African income distribution. By applying a method focusing on the *isolation* of supposed causal variables rather than on a method that explores their *interaction* with processes of long-term historical change, important insights are lost.

Frankema and Van Waijenburg have argued that explaining *changes* in the slave trade–income relationship is crucial by showing that Nunn's regression results fail to hold for African income levels in earlier postwar decades. Supplementing Nunn's chosen measure, log GDP per capita in 2000, with the same measure for 1950, 1960, 1970, 1980, and 1990, reveals that up to 1970 there is no evidence of a negative effect of the slave trade on the economic performance of African countries. Only since 1980, a period that followed the collapse of many African economies in the mid-1970s, does the effect approach its estimated magnitude in 2000 and become statistically significant.⁴ The results of these regression analyses do not refute Nunn's argument that the slave trades are important in understanding current African poverty, but they do suggest that we are missing an important layer of complexity. If slave trades have had a *persistent* long-term effect on African income levels, this should presumably be discernable at various points in the past. If that is not the case, we need to consider more carefully how and why these effects could lay dormant and then resurface at a later date. How can we be sure that the supposed long-term effects of the slave trades are not confined to a rather brief and very specific era in African economic history?

Nunn's use of the comparative method invokes a misleading conception of "historical persistence" that is exemplary for a much broader literature in historical economics relying on historical regressions of a similar kind. Accepting the idea that long-term effects are by definition upheld by their interaction with changing historical conditions, the results of these studies will bear much more fruit. Yet, the critique one may have on the application of specific forms of the comparative method to specific historical questions does not discredit the quest for natural historical experiments as such. By making explicit hypotheses on the causes and consequences of historical development, the comparative method allows scholars to probe deeper. It offers a framework for raising new questions that we would not otherwise have thought of. It also offers a methodological framework for successful interdisciplinary cooperation, as this book nicely shows. Indeed, if we want to help our students to develop their intuition for selecting appropriate methodologies and teach them the strengths and weaknesses of various applications of the comparative method, this is one of the best books available.

Ewout Frankema

Department of Rural and Environmental History, Wageningen University, PO Box 8130, 6700 EW Wageningen, The Netherlands E-mail: ewout.frankema@wur.nl

4. For the replicated regressions see Ewout Frankema and Marlous van Waijenburg, "Structural Impediments to African Growth? New Evidence from Real Wages in British Africa, 1880–1965", CGEH Working Paper No. 24 (Utrecht, 2011). See also their article "Structural Impediments to African Growth? New Evidence from Real Wages in British Africa, 1880–1965", Journal of Economic History, 72 (2012), pp. 895–926.