

BOOKS *et al.*

ANTHROPOLOGY

Cultivating human culture

Did food and fuel help shape our value systems?

By Peter Turchin

Ian Morris is a very unusual historian. Instead of tunneling into archives or digging up artifacts to answer narrow questions, he approaches history with a much wider lens. Looking at the big picture, he told Marc Parry of *The Chronicle of Higher Education*, “reveals patterns that play out over millennia, without historical actors really knowing what’s going on” (1).

His first and wildly popular book, *Why the West Rules—for Now* (2), traced the development of the western and eastern regions of Eurasia over the past 15,000 years. The scope of *Foragers, Farmers, and Fossil Fuels* is similarly grand. In it, Morris asks why human values—including our attitudes toward equality, hierarchy, and violence—have changed so dramatically, and not always linearly, during the past 20,000 years.

Morris’s explanation is unabashedly materialistic. Unlike Karl Marx and Friedrich Engels, however, he doesn’t think that moral systems are superstructures over the forces of production. Instead, following anthropologist Leslie White, he argues that values are determined by technological systems—most importantly, those that enable the harvest of energy.

Morris argues that “foraging values”—fierce egalitarianism, rejection of hierarchy, tolerance for high levels of violence—characterize societies that subsist by gathering and hunting. Farming societies, however, value hierarchy and are less tolerant of violence because these traits promote social stability, which is needed to cultivate fields. He argues that fossil-fuel-driven societies see political and gender hierarchy as a bad thing because hierarchy stifles creativity and innovation, important attributes in these societies.

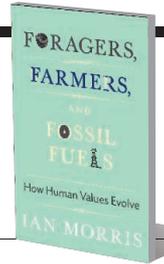
Such grand macrohistory is bound to raise the hackles of most historians. In an interesting approach, the book includes four critical chapters by three eminent hu-

Foragers, Farmers, and Fossil Fuels

How Human Values Evolve

Ian Morris

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manities scholars and a fiction writer. One of them, the classicist Richard Seaford, predictably takes Morris to task for being too much “in the grip of deterministic quantification.” This is not a criticism that I would level at this book. I have argued elsewhere that history needs to become an analytical and predictive science (3). To do that, we need precisely these kinds of grand theories. [Morris defends his quan-



Which came first—farming or a shift in values?

titative, big picture approach to history (1) by stating, “there are people much weirder than me out there.” I am cited in the very next line as “one of the most prominent” of these types of people.]

Grand theories, however, are just a first step. The critical part of history-as-science is determining the empirical adequacy of the theories—in plain language, testing them against data. Here’s where, in my judgment, the book largely fails.

Yes, in taking a coarse-grained view of human evolution over the past 20,000 years, we do observe a correlation between human values and technological modes of production. But does the causal arrow operate from technology to morality? In my view, the evidence supports an alternative hypothesis—that shifting moral values

lead to the development and adoption of new technologies (or that, perhaps, there is a dynamical feedback between the two).

Consider the transition from foraging to farming: Farming requires private ownership of land and crops, yet everything we know about foragers suggests that they rejected the idea that land and plants could be owned. Morris assumes that once humans understood how to grow crops, the families that switched to this mode of production inevitably outcompeted those that didn’t. The rest—moral systems, large-scale societies, hierarchy, and inequality—“bubbled up” rather automatically. But a shift to agriculture meant long hours of backbreaking labor and poor health (as evidenced by declining stature). It also required abandonment of cherished values, such as egalitarianism and equal sharing. Furthermore, in a society where sharing is the norm, any forager passing by a crop field would feel completely entitled to harvest plants growing there. The institution of private property would have had to precede or coevolve with agriculture, not follow it (4).

There is also evidence that the transition to fossil-fuel economies was preceded, not followed, by a shift in social norms (5). Morris himself acknowledges that the Age of Enlightenment preceded the Industrial Revolution, for example. Furthermore, fossil-fuel economies were imposed on many societies in Africa and Asia during the 19th century, yet most have failed to develop “fossil-fuel values.”

In the last chapter, responding to his critics, Morris writes, “in academia, criticism is the sincerest form of flattery.” My critique is offered in the same spirit. I may disagree with some (or even many) ideas in it, but I have thoroughly enjoyed reading this excellent and thought-provoking book. More important, by putting forth a bold, clearly formulated hypothesis, Ian Morris has done a great service to the budding field of scientific history. We now need to test it against theoretical alternatives, something that we should be able to do on a massive scale very soon (6).

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The reviewer is at the Department of Ecology and Environmental Biology, University of Connecticut, Storrs, CT 06269, USA. E-mail: peter.turchin@uconn.edu