JEL Book Review: The Dawn of Everything: A New History of Humanity by David Graeber and David Wengrow

The Dawn of Everything: A New History of Humanity. By David Graeber and David Wengrow. New York: Farrar, Straus and Giroux, 2021. Pp. xii, 692. \$35.00. ISBN 978–0–374–15735–7, cloth. (*JEL* D63, D70, J15, N30, N50, Q10, Z13)

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1. Introduction and Overview

The Dawn of Everything by Graeber and Wengrow seeks to refute and propose alternatives to what they term "the drab abstractions of evolutionary theory" (p. 109). By this they mean the paradigm (now for the most part superseded among practicing archaeologists and anthropologists) featuring transitions from ideal-type hunter-gatherer bands to tribes ruled by chiefs and eventually to autocratic states. Graeber and Wengrow provide a valuable, if not entirely representative, compendium of research over the past few decades documenting such paradigm-disrupting phenomena as slave-owning hunter gatherers, egalitarian Neolithic farmers, ancient "cities without kings," "republics, even democracies" in Mesoamerica at the time of Spanish contact, and farmers returning to hunting and gathering.

But the Graeber–Wengrow evidence against "evolutionism" is not new, and the proposed alternative never materializes, in part due to their dismissal of economic and ecological influences on the evolution of human institutions. Modern stochastic evolutionary game theory and mechanism design, jointly with agent-based modeling and behavioral ecology, may offer a framework that could capture long-term societal dynamics based on individual agency, collective action, and cultural group selection without the teleological inevitabilities to which Graeber and Wengrow object. Their political project—to "create ... a system in which

wealth cannot be freely transformed into power" (p. 8)—could have been more convincing were they to have drawn on these tools of modern evolutionary theory.

## 2. Evolutionary Universals Overturned<sup>1</sup>

Some social institutions—private property, markets, states, worship of supernatural beings, social ranking, and sharing the necessities of life among non-kin, for example—have emerged independently and been ubiquitous over long periods of the human experience. Others—polyandry or central economic planning, for example—have been of passing importance, and generally have occupied limited ecological niches. Talcott Parsons termed the former evolutionary universals, by which he meant those ways of ordering society that crop up, persist, and are adopted with sufficient frequency in a variety of circumstances to suggest their general evolutionary viability (Parsons 1964). He offered the convergent evolution of vision in many species as a biological analogy; another would be flight. For society, Parsons identified (among others) money, markets, bureaucracy, social stratification, and liberal democracy as a set of modern social arrangements toward which independent societal trajectories would tend (he predicted the demise of Communist Party rule and central planning in the Soviet Union.) Friedrich Hayek referred to the nexus of markets and private property—his "extended order"—in a similar vein (Hayek 1988).

Hernan Cortés's long letters to King Charles of Castile suggest a striking case of Parsons's convergent social evolution. Cortés describes the exotic and unusual customs he and his armed band encountered as they advanced toward Tenochtitlan in 1519. But in light of the thirteen or more millennia that had passed since there had been any sustained contact between people of the Old World and the New, what is striking about his account of Aztec society is how familiar it all was. Upon reaching Tenochtitlan (modern day Mexico City), Cortés wrote:

The city has many squares where trading is done and markets are held continuously. There is one square twice as big as that of Salamanca with arcades all around, where more than sixty thousand people come each day to buy and sell, and every kind of merchandise...found...It seems like the silk market at Granada, except that there is a much greater quantity...there is in this

great square a very large building like a courthouse where ten or twelve persons sit as judges... (Cortés 1986, pp. 103–05).

The Aztec class structure held no surprises: "There are many chiefs, all of whom reside in this city, and the country towns contain peasants who are vassals of these lords and each of whom holds his land independently; some have more than others...And there are many poor people who beg from the rich in the streets as the poor do in Spain and in other civilized places" (p. 68). Cortés continues, describing the "...many temples or houses for their idols," and comments that "the orderly manner which, until now, these people have been governed is almost like that of the states of Venice or Genoa or Pisa" (p. 105). Cortés's record of convergent social evolution nicely illustrates Parsons's idea of evolutionary universals.

In *The Dawn of Everything*, the late David Graeber and David Wengrow take aim at the overtones of teleological inevitability in accounts of this type. As you will see, they are not short on epithets, and had they directed their barbs at Parsons, I bet they would come up with "Harvard Square as the end of history" (Parsons taught at Harvard). But their real target is what they term the "evolutionist" (sometimes "neo-evolutionist") approach in anthropology and archaeology that posits a progression among ideal-type social orders, from hunting gathering bands, to tribes, to chiefdoms, and eventually to states (Sahlins and Service 1960).

Graeber and Wengrow propose a "more accurate, and hopeful (p. 8)... new history of humanity" based on a "new science of history" (p. 24) with an arresting take-home message: "We could have been living under radically different conceptions of what human society is actually about...mass enslavement, genocide, prison camps, even patriarchy or wage labor never had to happen" (p. 524). "There is nothing inevitable about any of this" (p. 20) "...[and]...even now the possibilities for human intervention are far greater than we're inclined to think" (p. 524).

In this vein, the book opens (chapter 2) with a fascinating exploration of the impact on Jean-Jacques Rousseau and other Enlightenment thinkers of accounts of the "democratic governance" (p. 45) of Iroquoian and other Native American societies brought back to Europe by Jesuit missionaries and travelers. These included what the authors term the

"indigenous critique of European society"—directed particularly at the lack of personal freedom—made by Native American intellectuals. Graeber and Wengrow make the case that Enlightenment thinking about social evolution (including by economists Turgot and Adam Smith) sought to explain why the freedoms enjoyed in an egalitarian state of nature could not be realized by modern peoples due to the necessity of private property and other requirements of "progress" and "civilization."

Graeber and Wengrow wish to overturn the ideas "that 'civilization' and 'complexity' always come at the price of human freedoms," (p. 526) and that our ancestral egalitarian hunter-gatherer ways of living were irredeemably shattered by the emergence of agriculture (along with private property) and cities (along with states, slavery, and other forms of domination). Graeber and Wengrow (respectively, an anthropologist and an archaeologist) draw on research attesting to farming populations without ranks or hierarchies (chapters 6 and 7), "cities without kings" in ancient Mesopotamia (chapter 8) and "republics, or even democracies" (p. 345) in ancient Mesoamerica at the time of Spanish contact (chapter 9). They note that "while agriculture allowed for the *possibility* of more unequal concentrations of wealth, in most cases this only began to happen millennia after its inception" (248).

They also dispatch the idea that equality was the natural default option prior to farming, cities, and states by reference to the vast literature on hunting and gathering societies with extraordinary political and economic disparities, including slavery (chapters 2–5). The authors are not averse to offering strawman versions of authors they wish to criticize, but their target here—the "image of a world made up of tiny egalitarian forager bands" (p. 85)—is not invented. A leading text in evolutionary psychology informs the reader that "our forebearers lived in small nomadic bands of a few dozen individuals...each of our ancestors was, in effect, on a camping trip that lasted an entire lifetime, and this way of life endured for most of the last 10 million years' (Cosmides and Tooby 1997, p. 11). The reference that Graeber and Wengrow make to cosmopolitan rather than insular hunter-gathers—"far flung networks of societies" (p. 516)—is an important corrective.

The scope and ambition of their work resembles Francis Fukuyama's *The Origin of Political Order*, Jared Diamond's *Guns Germs and Steel*, Walter Scheidel's, *The Great Leveler: Violence and the History of Inequality from the Stone Age to the Twentieth Century*, and Kent Flannery and Joyce Marcus's *The Creation of Inequality*—all of which they take to task for offering, they say, "prejudices dressed up as facts, or even as laws of history...an endless repetition of a story first told by Rousseau in 1754" (p. 11).<sup>2</sup> Steven Pinker's sprawling *The* 

Better Angels of our Nature: Why Violence has Declined (Pinker 2011) and his later works come in for similarly harsh assessment. Pinker, the authors say, is retelling the equally untrue story about our past foreshadowed by Thomas Hobbes a century before Rousseau: "a modern psychologist making it up as he goes along" (p. 13).

Given the tenor of these assessments, it is hardly necessary for Graeber and Wengrow to confess their "trace of impatience" (p. 529), which stems, I think, from their belief that these "accounts of the general course of human history...have dire political implications" (p. 3). "Stories about an original state of innocence and equality...make wistful pessimism about the human condition seem like common sense: the natural result of viewing ourselves through history's broad lens" (p. 7). Moreover, they write, these historical accounts sideline "big question[s] we should be asking," which are: "how relations based ultimately on violence and domination" become our "one form of social reality" (p. 519), how "some manage to turn their wealth into power over others" (p. 7), and "what first made possible the emergence of kings, priests, and judges" (p. 77).

They are equally clear about the questions we should *not* be asking. "Why this is not a book about the origins of inequality" is the subtitle of chapter 1.<sup>3</sup> Instead, they write, "This book is mainly about freedom" (p. 206). Their welcome attention to political dimensions of inequality and the value of individual self-determination evokes Philippe van Parijs's *Real Freedom for All* (Van Parijs 1995).

What are economists and other nonspecialist social scientists to make of this massive and erudite work? Reviews by Polly Wiesner, Gary Feinman, Michael Smith, Ian Morris, and Walter Scheidel, leading contributors on the subject matter of *Dawn of Everything* from the relevant fields of anthropology, archaeology, and ancient history, have appeared in *Cliodynamics: The Journal of Quantitative History and Cultural Evolution.* While Smith noted (correctly, in my view) that "the authors' claims to originality are overblown," none of the reviewers question the broad brush representation of the current state of research. The reviewers are appreciative of the importance of questions asked, but not much convinced of the answers offered by Graeber and Wengrow.

## 3. Economic and Ecological Explanations Dismissed

I share the views of the *Cliodynamics* reviewers. The "big questions" that Graeber and Wengrow ask are important and engaging; but the answers they propose are unconvincing and do not amount to "a new science of history." The key to both failures, I think, is that Graeber and Wengrow dismiss ecological and economic reasoning<sup>5</sup> in favor of a single-minded reliance on ideational explanations, and then do not even attempt to construct an alternative explanatory framework to replace what they term "evolutionism." Their approach is clear from this passage, a kind of one-line summary addressed to the book's fundamental question: "If something did go terribly wrong in human history…[Graeber and Wengrow do not doubt that it did] perhaps it began to go wrong precisely when people started losing the freedom to imagine and enact other forms of social existence" (p. 484).

To stress the explanatory importance of agency—intentional action by individuals trying to accomplish something—Graeber and Wengrow begin (auspiciously, in my opinion) paraphrasing Karl Marx: "Men make history; but not under circumstances of their own choosing" (p. 206). We would now say something more cumbersome, like "People develop and adopt strategies to advance their objectives and in so doing they affect the course of history, including altering the rules of the games that people will play in the future. But they do not choose the rules of the game they are playing in the present." Graeber and Wengrow adopted the "Men make history" mantra but dropped "but not under circumstances of their own choosing" proviso, and with it, the effects of economic and other institutions as well as technology and ecology on the structure of payoffs and rules of interaction.

They do not hide their dim view of economics and behavioral ecology ("ecological determinists...living out some economist's fantasy of rational calculation" [p. 204]). About economics they write, "In 10th century China or 18th century Germany aspiring civil servants had to pass proficiency in literary classics written in archaic or even dead languages, just as today they will have to pass exams on rational choice theory..." (p. 474). Behavioral ecology, they say, proposes "mechanical responses to...contrasting modes of subsistence..." (p. 177) that do not "match up to historical reality" (p. 197).

Indicative of what doesn't "match up," according to Graeber and Wengrow, is the "clumped resources hypothesis" from behavioral ecology. This is the idea that differences in the degree of reliance on defensibly concentrated resources may explain, for example, differences in reproductive inequality between leaf-eating and fruit-eating primates (Van Schaik 1989, Vehrencamp 1983). An analogous hypothesis has been proposed to explain the contrasting high levels of hierarchy and inequality (including slavery) among fishing populations in the Pacific Northwest and less stratified wild acorn harvesting populations in California. Brian Hayden and other archaeologists have documented elevated levels of inequality among Native American populations on the northern Pacific coast that relied on clumped resources such as prime fishing or mollusk-collecting sites (Ames 2009, Hayden et al. 1985, Schulting 1995). In contrast, Robert Bettinger documents the more modest levels of inequality among California hunter-gatherers exploiting more dispersed resources (Bettinger 2015).

A recent study of 89 North American, Pacific coast, hunter-gatherer populations—both fishers and acorn harvesters—explored the statistical associations between a measure of economic and political hierarchy on the one hand and, on the other, indices capturing four broad hypotheses concerning the possible 'drivers' of inequality. Controlling for geographical, linguistic, and other correlates, they find that "the ability to control dense, predictable and highly clumped resource patches" is the best predictor of hierarchy (Smith and Codding 2021).

Even before the publication of this recent study (that Graeber and Wengrow may not have seen), the ecological hypothesis seemed to "match up" pretty well. But they curiously remark that "it's...extremely difficult to find any studies that even begin to address the question of how this contrast came about" (p. 180). They go on to propose instead an explanation based on cultural identity. This is that the Californians, seeking to avoid the hierarchical social orders to their north, consciously differentiated themselves culturally, possibly even deliberately choosing to harvest acorns rather than to fish. They invoke this cultural identity-building process—called schizogenesis—as an explanation in other cases as well, with (perhaps unavoidably) equally slim evidence.

Graeber and Wengrow similarly overlook plausible and empirically supported hypotheses concerning a period they rightly call out for greater scholarly attention, the "five thousand

years in which cereal domestication did not lead to the emergence of pampered aristocracies, standing armies and debt peonage" (p. 523) and the eventual development of heightened levels of inequality among Neolithic farmers. To begin, they do entertain an interesting ecological hypothesis to the effect that early Neolithic growing conditions—farming seasonally flooded land along the Nile and in parts of Mesopotamia—"did not lend themselves to the development of private property" (p. 235) and this might have limited wealth inequality.

But their dismissal of economic and ecological reasoning leads them to miss three aspects of Neolithic farming that may have accounted for the eventual substantial increase in wealth inequality prior to the emergence of the first archaic proto-states in the region. The first is that the cereal crops that came to form a substantial portion of farmers' diets, unlike most hunted and gathered foods, could be stored. The development of private storage—stores moved from public places to the interior of homes—allowed more successful (or luckier) farmers to withdraw from food sharing and other communal forms of insurance, thus facilitating private accumulation (Kuijt and Finlayson 2009, Weide et al. 2022). Second, by dramatically increasing the productivity of land, farming converted any arable plot anywhere into a potential clumped resource worth demarcating and defending, similar to the limited number of rich fishing sites that supported high levels of wealth inequality in the Pacific Northwest. Farming generalized the conditions that made private property in land worth demarcating and defending (Bowles and Choi 2019). Third, ox-drawn ploughs were a labor-saving land-using innovation in late Neolithic and early Bronze Age western Eurasia that raised the shadow price of land and other forms of material wealth relative to labor. <sup>7</sup> The result was that what had become the most valuable inputs in the production process could now be accumulated and transmitted across generations, heightening equilibrium wealth inequality.8

These three transformations—storage, private property in land, and a labor-saving innovation—appear to have provided an economic environment in which what the archaeologist Ian Hodder called the "aggressively egalitarian community" eventually gave way to extraordinary levels of wealth inequality in the Bronze Age in western Eurasia (Hodder 2014, p. 1).

## 4. Still Waiting for "A New Science of History"

Their scant attention to these and similar economic and ecological forces shaping human social evolution disqualifies *The Dawn of Everything* as a balanced contribution to knowledge. But think of Dawn instead as a manifesto written for, as Graeber and Wengrow would put it, a world that has lost the ability to imagine other forms of social existence than the status quo.

Thanks to their engaging writing and passionate scholarship, Graeber and Wengrow have allowed their readers to almost visualize the "carnival parade of political forms" (p. 119) by which early human society was governed. In so doing, they have encouraged us "to imagine how self-conscious egalitarianism on a large scale would work" (p. 319), rather than to despairingly dismiss this aspiration as simply out of step with what we know about human history and prehistory. Also, importantly, by adopting equal freedom rather than economic equality as their fundamental value, they have provided a more appealing normative framework for discussions of alternative ways of living, consistent with the contributions of Van Parijs mentioned above and the more recent work by philosophers Elizabeth Anderson, Philip Pettit, and others (Anderson 2017, Pettit 2014).

But *The Dawn of Everything* offers disappointingly little guidance when it comes to what such a new social order might look like and how it might be brought about. They do not even provide a convincing response to Parsons's evolutionary universals; we finish the book musing that maybe all roads really do lead to Harvard Square. Graeber and Wengrow did not attempt to build their "new science of society" in ways that might address these concerns. And if they had done so, they would have been hampered by their dismissal of economic and environmental influences on social evolution.

In this, Graeber and Wengrow may be compared with the utopian thinkers and doers of the early nineteenth century. Robert Owen and Charles Fourier were deeply engaged with economics; they sought to provide worker cooperatives and other concrete alternatives to the emerging capitalist economy. Nonetheless, Marx and Friedrich Engels labeled Owen and Fourier "utopian socialists" because, like Graeber and Wengrow, they provided little reason

(other than the better angels of our nature) to think that these alternatives might emerge, persist, and be copied. Imagining them would not be enough.

The Dawn of Everything, nonetheless, is a vast treasure trove of fascinating, and as they say, "hopeful" cases. What could come of an engagement between the utopianism of Graeber and Wengrow and modern economics?

Please do not dismiss this proposal as outlandish. I think that an amalgam of mechanism design and evolutionary game could contribute substantially to the project they launched. The idea would be to design (Graeber and Wengrow would say "imagine") a new social order—a set of rules of the game—supporting socially desirable outcomes that would survive and be emulated by competing social orders (including sustaining the preferences and beliefs essential to the functioning of these institutions).

Mechanism design shares with David Hume, Adam Smith, Jeremy Bentham, and the other great classical economic thinkers the aspiration to identify ethically desirable societal outcomes and then, by the right design of the rules of the game, to reverse engineer the realization of these values as equilibrium outcomes for free individuals each pursuing their own objectives. The endogenous nature of those objectives and the beliefs associated with them—something taken for granted by Hume, Smith, and John Stuart Mill—could be modeled using evolutionary game theory.

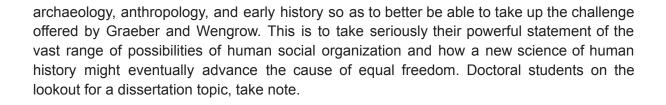
Game theorists now model the evolution of both preference and institutions as a stochastic Markov process in which individuals choose behavioral strategies, best responding to the recent distribution of play while occasionally innovating, perhaps experimenting randomly with other behaviors or trying out strategies that would improve their lot—were sufficiently many others to do the same. These models have been used, for example, to represent the dynamics of institutional change in a population of landlords and sharecroppers and have identified conditions that determine whether relatively equal or unequal shares are more likely to emerge and persist (Young and Burke 2001). Extensions take account of leadership (Acemoglu and Jackson 2015) and collective action (Bowles 2003).

Models of this type incorporate the individual agency and creativity that are central to the Graeber and Wengrow narrative, along with something missing from their account: a principle of selection by which some configurations of strategies will tend to be more widely adopted and others decline. Variants of these models predict the widely documented 50/50 crop share as the outcome most likely result of the evolutionary process (the so-called stochastically stable state.) A feature of stochastic evolutionary game theory that Graeber and Wengrow would endorse is that outcomes are expressed as a stationary distribution—that is, probabilities of states on alternative paths—not as teleological inevitabilities.

Selection not only within, but also between, populations is an essential part of evolutionary dynamics. The most parsimonious way of representing this process is cultural group selection. In these models, subpopulations characterized by differing preferences and rules of the game are "born"—through succession or revolution, for example—and "die"—by environmental calamity, population dispersion by means of migration, or defeat in warfare. Though Parsons did not make it explicit, this is the reasoning underlying his evolutionary universals, and the same is true of Hayek's extended order of markets and private property. A response to their framework based on contemporary evolutionary theory and evidence would be a valuable contribution.

A "new science of society" capable of testing and advancing the aspirations of Graeber and Wengrow might be developed along these lines. Behavioral ecology would play a central role in representing both private payoffs and external effects of strategies governing how humans relate to other animals and our natural environment. Agent-based modeling would provide a tool—one not available to Hume, Smith, and the others—for the exploration of alternative institutional designs in more realistic dynamic settings than are mathematically tractable using the above models.

Many economists and other scientists (me included) are disappointed by this work of Graeber and Wengrow because their rhetorical strategy, which dominates the book, was to refute a defunct and somewhat strawman version of "evolutionism" rather than to engage with contemporary evolutionary theory. But let not us—critics of their work—disappoint as well. Their book, or at least my reading of it, is an invitation to contemporary game theorists, mechanism designers, behavioral ecologists, and agent-based modelers to learn from



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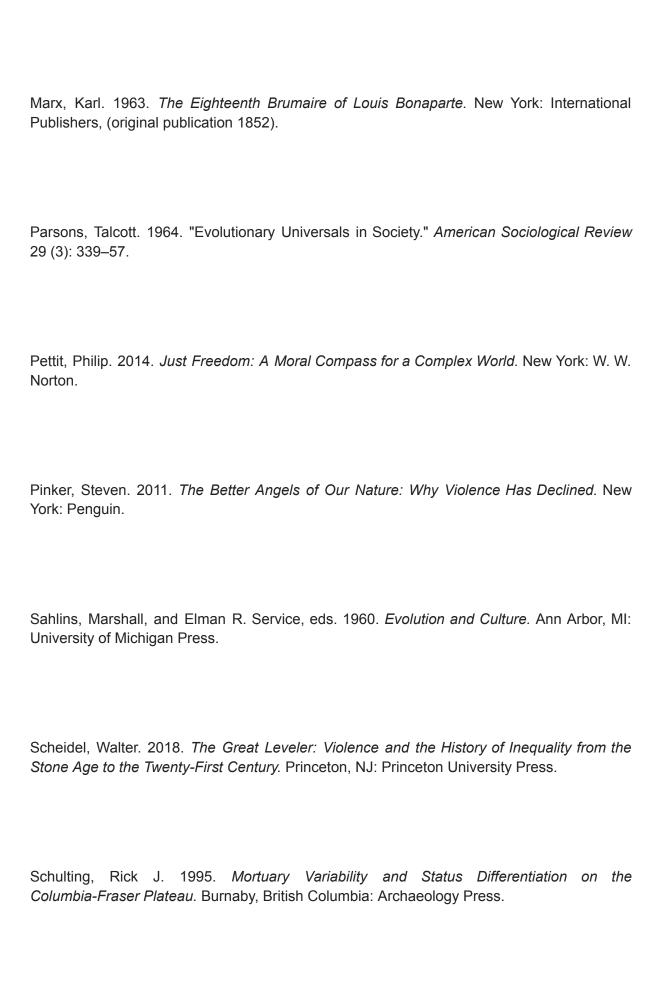
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NOTES
<sup>1</sup> I deeply regret David Graeber's passing, and that he cannot be part of the ongoing discussion of his work. For support of this research, thanks to the Dynamics of Wealth Inequalities Project of the Behavioral Sciences Program and Caroline Seigel, Librarian, both at the Santa Fe Institute and for contributions to this review, Amy Bogaard, Bob Bettinger, Monique Borgerhoff Mulder, Wendy Carlin, Gary Feinman, Mattia Fochesato, Tim Kohler, Ian Morris, Dan Rockmore, Walter Scheidel, Eric Alden Smith, Michael Smith, Polly Wiessner, and Elisabeth Wood.
<sup>2</sup> Scheidel (2018), Diamond (1997), Flannery and Marcus (2012), Fukuyama (1992).
<sup>3</sup> Having recently (with Mattia Fochesato) written a paper titled "The Origins of Enduring Economic Inequality," a truth-in-reviewing alert is in order: I am writing this knowing that, had we published our paper a few years ago, we might have earned a spot with the "prejudices dressed up as facts" storytellers cited above. The first footnote in The Dawn of Everything reads: "If one reduces world history to Gini coefficients, silly things, will, necessarily follow"

(p. 527).

<sup>4</sup> Available at <a href="https://escholarship.org/uc/item/24f0h2t3">https://escholarship.org/uc/item/24f0h2t3</a> . Accessed January 15, 2023.
<sup>5</sup> Remarkably, they entirely overlook the important contributions over the last decade by economists Gregory Dow and Clyde Reed on ancient inequality, the introduction of farming, and the formation of early states, recently brought together in their Economic Prehistory (Dow and Reed 2023), reviewed by Bowles and Bogaard (forthcoming).
<sup>6</sup> What Marx actually wrote is "Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past" (Marx 1963).
<sup>7</sup> Bogaard, Fochesato, and Bowles (2019); Sherratt (1981); Bogaard et al. (2013). Graeber and Wengrow recognize the importance of the introduction of plough-based farming on the Nile in the fourth century BC but regard the economic consequences as less important than the cultural effects: " quite likely, it was not ecological circumstances but the social requirement to provide bread and beer on ceremonial occasions that allowed such [class] divisions to become entrenched" (p. 406).
<sup>8</sup> Mattia Fochesato and I provide evidence for this process in Fochesato and Bowles (2023).
<sup>9</sup> Young (1998) exemplifies this approach. Related works inspired by models in population genetics (but substituting learning for genetic inheritance) are by Cavalli-Sforza and Feldman (1981) and Boyd and Richerson (1985). The conditions under which evolution favors inequality are explored in Bowles et al. (2021).