

Stop making sense

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Introduction

The Dawn of Everything is shaping up to be the most influential book on the past since Yuval Noah Harari's *Sapiens* (2015) or even Jared Diamond's *Guns, Germs, and Steel* (1997). It has been discussed on television and radio and in newspapers and magazines as well as in academic journals, and it has quickly become a bestseller. Anthropologists, archaeologists, and historians have a long history of winning wide audiences for stories of ancient times, but *Dawn* is different from most earlier books—and particularly different from Harari's and Diamond's works—in bringing to general readers a new interpretation that is not evolutionist. In fact, Graeber and Wengrow (from here on, GW) are explicitly anti-evolutionist. That makes *Dawn's* publication an event of real importance for anyone in sympathy with the general evolutionist aims of *Cliodynamics*.

GW tell us right at the outset what they are against:

human societies before the advent of farming were not confined to small, egalitarian bands ... the world of hunter-gatherers as it existed before the coming of agriculture was one of bold experiments, resembling a carnival parade of political forms, far more than it does the drab abstractions of evolutionary theory. Agriculture ... did not mean the inception of private property, nor did it mark an irreversible step towards inequality ... [and] a surprising number of the world's first cities were organised on robustly egalitarian lines, with no need for authoritarian rulers, ambitious warrior-politicians, or even bossy administrators. (GW 4)

GW never provide a formal definition of evolutionist thinking, partly, I suspect, because the context usually makes it clear what they are objecting to, and partly perhaps because sociocultural evolutionists disagree so much among themselves over what their approach is. In the interests of clarity, though, I will begin by saying that in what follows I assume that evolutionists are theorists who see some conceptual continuity between human history and biological evolution; who consider sociocultural evolution to be governed by identifiable mechanisms functioning somewhat like natural selection; who see these mechanisms as involving adaptation to the environment; who believe that the mechanisms

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operate on all societies regardless of time and space; and—usually, but not always—who recognize a series of overlapping but largely sequential stages of social/cultural evolution, from egalitarian foraging bands through hierarchical agricultural empires and pastoral tribes, to modern fossil-fuel-based nation-states (the literature is enormous; I lean particularly on Boyd and Richerson 2005 and Mesoudi 2011, plus Trigger’s [1998] account of the field’s intellectual history).

Dawn deserves credit for being the most extended and detailed rebuttal to evolutionism this century, but also deserves criticism for exactly the same reason. It is an original and ambitious book, making deep history speak to the larger human condition. Because its arguments span multiple millennia and girdle the globe, it is a work of synthesis; GW’s originality lies not in grubbing new facts from the dirt, but in combining old facts into a new picture of early history. GW also deliver their thesis with verve, stuffing the story with vivid images and fine turns of phrase. They make the ancient world exciting. Even more remarkably, they combine a lively retelling of prehistory with a massive and impressively up-to-date scholarly apparatus. *Dawn* is effectively two books in one: the 526 pages of the main text, which are likely to shake up almost everyone’s assumptions about prehistory, and the 165 pages of end matter, which give specialists at least some of what they need to push back against that main text.

GW tell us that since the eighteenth century, almost everyone has gotten almost everything wrong about early history (GW 504). Back then, they suggest, some Western intellectuals reacted to Native American critiques of European hierarchy and violence by inventing a story that humanity had evolved through a series of stages, from prehistoric hunter-gatherers through ancient herders and farmers to modern commercial folk (i.e., Western Europeans themselves). In this view of history, people started off with a lot of liberty but not much prosperity and ended up with a lot of prosperity but not much liberty. To many authors, this was a good thing; to others, Jean-Jacques Rousseau being the best known, it was bad. That said, almost all agreed that it had been inevitable, because scale automatically generated both wealth and hierarchy; and although twenty-first-century archaeologists are much better informed than eighteenth-century Europe’s self-styled philosophical historians, GW allege that they continue to think the same way (GW 27–77)—that “the best we can hope for is to adjust the size of the boot that will forever be stomping on our faces” (GW 8).

But “what if,” GW ask, “instead of telling a story about how our species fell from some idyllic state of equality, we ask how we came to be trapped in such tight conceptual shackles that we can no longer even imagine the possibility of reinventing ourselves?” (GW 9). Doing this, they say, leads to replacing the evolutionary narrative with “another, more hopeful and more interesting story,” which shows that “we *could* have been living under radically different conceptions of what human society is actually about. It means that mass enslavement, genocide,

prison camps, even patriarchy or regimes of wage labour never had to happen ... it also suggests that, even now, the possibilities for human intervention are far greater than we're inclined to think" (GW 3, 524). We should reject current theories that envisage a decline from egalitarian hunter-gatherers through unequal ancient city-states and empires to modern global capitalism, GW say, because these stories:

1. simply aren't true;
2. have dire political implications;
3. make the past needlessly dull. (GW 3)

This was the point, just three pages into their text, where I began to part company with GW. Taking their points in reverse order, I personally think that evolutionist accounts often make the past extremely interesting. I've also found, in forty years of hanging around evolutionists, that they rarely agree on what their work's political implications are, let alone whether they're dire. However, rather than go down those rabbit holes, I will concentrate here on GW's initial claim: that evolutionist accounts aren't true.

As I see it, there are three main ways to evaluate this. First, there are the facts themselves. Do GW get them right? Anyone writing such a wide-ranging book is bound to make some mistakes, so the question here is not whether every datum in *Dawn* is exactly accurate. No book has ever cleared that bar. Rather, it is whether GW commit so many howlers that their central thesis is invalidated. Area experts will doubtless find errors that I did not, but it seems to me that GW pass this test with flying colors. I did disagree strongly with their claim that "the earliest large cities, those with the greatest populations, did not appear in Eurasia ... but in Mesoamerica" (GW 285; compare 329, where "Teotihuacan ... could easily be put on a par with Rome at the height of its imperial power"); Uruk, Nineveh, and Rome (discussed below) seem to be much larger than contemporary New World settlements. They also seem to be mistaken in saying, on the basis of rye seeds from Abu Hureyra in northern Syria (Willcox et al. 2008) that "the cultivation of wild cereals dates back at least to 10,000 BC" (GW 234). Colledge and Conolly (2010), now supported by Weide et al. (2021), seem to have disproved this. But these details hardly invalidate GW's argument; *Dawn* is a very well-researched book.

The second criterion is their selection of facts. Given how much we now know about antiquity, combined with the huge gaps that still remain, authors of global syntheses can easily cherry-pick details and arrange them to tell almost any story imaginable. I do have some qualms on this issue, to which I will return; and GW—like most of us—sometimes start treating their own hypotheses as certainties (as when a "speculative" suggestion that Uruk in Sumer had "democratic self-governance" around 3300 BCE morphs into confidence that Uruk enjoyed "centuries of collective self-rule" [GW 306, 380]). But that said, I rarely found myself asking "What about X?" and feeling that GW had just ignored uncomfortable

evidence. The whole point of *Dawn*, they explain, is to bring in *more* evidence, by asking “what happens if we accord significance to the 5,000 years in which cereal domestication did *not* lead to the emergence of pampered aristocracies, rather than just the 5,000 in which it did?” (GW 523).

My most serious disagreements with *Dawn* concern a third criterion: logic. GW left me feeling far from certain that the facts are either inconsistent with evolutionary accounts or more consistent with their own alternative. From the many cases GW offer, I will take just half a dozen, each of which seems important for GW’s thesis, but none of which, I believe, entirely makes sense.

Seasonality

Evolutionary models typically tell how egalitarian foraging groups turned into ranked farming societies and then into stratified states. However, GW note, anthropologists have regularly found societies that have moved back and forth on this spectrum, sometimes rapidly. Nineteenth-century Native American groups on the Great Plains are a famous case. The Crow, Cheyenne, and others spent much of the year in tiny, aggressively egalitarian foraging bands, with no chiefs at all. But for several weeks each autumn, they flocked together to slaughter the great herds of migrating bison. They appointed chiefs and provided them with what the anthropologist Robert Lowie called “a police force,” which “issued orders and restrained the disobedient. In most of the tribes,” Lowie continued, “they not only confiscated game clandestinely procured, but whipped the offender, destroyed his property, and, in case of resistance, killed him” (GW 109, citing Lowie 1948: 18).

GW call such chiefs “play kings,” their power largely a matter of “*performance*,” and suggest that “their reality was, in effect, sporadic. They appeared and then dissolved away” (GW 117, 429). Recognizing this, they say, undermines evolutionism because

the nineteenth-century Cheyenne or Lakota would have been seen [by evolutionists] as evolving from the “band” to the “state” level roughly every November, and then devolving back again come spring. Obviously, this is silly. No one would seriously suggest such a thing. Still, it’s worth pointing out because it exposes the much deeper silliness of the initial assumption: that societies must necessarily progress through a series of evolutionary stages to begin with. (GW 110-11)

Yet evolutionists have had no real problem incorporating these back-and-forth societies into their typologies. Allen Johnson and Timothy Earle (1987: 31-38, drawing on Steward 1938) even used the Great Basin Shoshone of a century ago as a case study in their widely read book *The Evolution of Human Societies*. Like the Cheyenne, the Shoshone spent most of the year in unranked, family-sized groups,

but some of them periodically granted “rabbit bosses” and “antelope shamans” far-reaching powers to coordinate large-scale hunting and trapping. Most of the time, the Great Basin’s aridity made family-level organization the most effective way to hunt and gather, but when opportunities arose for rabbit drives, the Shoshone put people in charge and did what it took to get the job done. The Shoshone did not thereby become subjects of a stratified state. Bosses and shamans had no coercive powers beyond people’s willingness to follow their lead, whether that meant clearing brush and stringing out hundreds of feet of nets to accomplish a common goal or punishing free riders whose unruliness threatened the shared effort. The minute the jackrabbits or bison stopped running, Shoshone and Cheyenne, who now had no need for multi-family organizations (and no food supply abundant enough to support them), scattered across the landscape in tiny groups—until the next hunting season.

GW are right that prehistorians have neglected seasonality, but wrong that seasonality is inconsistent with evolutionism.

Upper Palaeolithic Burials

GW are probably also right that seasonality is relevant to the spectacular burials of Upper Palaeolithic Europe. These graves, dating from roughly 15,000 through 34,000 years ago, are the second issue on which I think GW’s logic is flawed. From Russia to Wales, excavators have found rich grave goods, sometimes including thousands of mammoth-ivory beads and what look suspiciously like scepters and other insignia of office (Pettitt 2011). These finds are definitely problems for any simple egalitarian foraging band to hierarchical agricultural empire model, but what makes them even more interesting is that the skeletons in the graves had extraordinary numbers of pathologies. “It seems extremely unlikely,” GW very reasonably comment, “that Palaeolithic Europe produced a stratified elite that just happened to consist largely of hunchbacks, giants and dwarfs” (GW 103). Here too they see “play kings,” and make an analogy with the precolonial Nuer of South Sudan, who sometimes interpreted people “who in our own society would likely be classified as anything from highly eccentric or defiantly queer to neurodivergent or mentally ill” as “being touched by God.” In moments of crisis, they explain, “a person who might otherwise have spent his life as something analogous to the village idiot would suddenly be found to have remarkable powers of foresight and persuasion.” Such a one might even “propose entirely different visions of what Nuer society might be like” (GW 98).

To GW (104), rich Ice Age burials speak of a playfulness and willingness to shift between equality and hierarchy that evolutionism cannot accommodate. Yet here too, their logic is flawed. In multiple essays (especially Hayden 1995), Brian Hayden has identified some foraging societies as what he calls “transegalitarian,” lacking rigid class structures but nonetheless “having private property, surpluses,

prestige objects, and significant socio-economic differences” (Hayden 2014: 643). Anthropologists have long known that foragers lucky enough to find dense concentrations of predictable and reliable resources in otherwise difficult environments tend to become less mobile, settling down to monopolize the oasis of abundance (Dyson-Hudson and Smith 1978). The rich Ice Age burials overwhelmingly come from sites that were superbly placed for ambushing mammoth and reindeer on Europe’s frozen and otherwise forbidding plains, and Hayden suggests that the need for top-down organization—as in the Cheyenne and Shoshone hunts—turned these into niches in which transegalitarian hunter-gatherer societies could evolve. “Aggrandizing” chiefs, as Hayden labels them, often claim to have been touched by the gods. Possibly the pathological Palaeolithic skeletons belong to village idiots/prophets; or perhaps the discovery at Sungir, Dolní Vestonice, and Arene Candide of skeletons of strapping young men with horrific wounds or stone weapons embedded in their bones represent more conventional aggrandizers who coopted visionary hunchbacks, giants and dwarfs in their cause. Maybe the power these men wielded was as transitory as that of a rabbit boss; or maybe some Ice Age societies were unlike anything documented in the ethnographic record (Wobst 1978). Either possibility requires us to recognize that cultural evolution can work in multiple ways, but neither requires us to reject its central premises.

Farming

Since the 2000s, archaeologists and paleobotanists have moved away from three older theories about the origins of agriculture: first, that population growth after the end of the Ice Age (around 9650 BCE) drove experiments with gardening and herding that led to the domestication of plants and animals in the Near East; second, that domestication happened in a few core regions of the Near East and then spread steadily outward; and third, that farming inexorably drove processes of sedentism, rising labor inputs, and increasing inequality. Instead, most experts now suggest that the relationship between population and domestication was complicated and variable; that experiments with cultivating plants went on in multiple locations, particularly wetlands; that domesticated plants caught on extremely slowly, needing three thousand years (c. 9500–6500 BCE) to go from under 20 percent of Near Eastern assemblages to over 80 percent; that the drift toward domesticated resources was regularly reversed; that rather than causing sedentism, domestication was often its consequence; that sedentism and experiments with plant cultivation began as early as 21,000 BCE, at the coldest point in the last Ice Age; and that there is little sign of institutionalized inequality in the Near East before about 5500 BCE (Asouti and Fuller [2013] have been particularly influential; on population, Palmisano et al. 2021).

From this, GW conclude that “people were effectively trying farming on for size, ‘play farming’ if you will, switching between modes of production, much as they switched their social structures back and forth.” Rather than locking farmers into increasing inequality, they argue, “farming actually set humanity, or some small part of it, on a course *away* from violent domination” (GW 248).

Once again, my argument with GW is not over the facts, which seem increasingly clear, but over what the facts mean for evolutionism. GW are right that some evolutionist accounts of the agricultural revolution now look old-fashioned, but that is generally because they were written before the new evidence was available, not because the new evidence is inconsistent with evolutionism. Across the last twenty years, evolutionists have adopted more sophisticated frameworks (such as Niche Construction Theory: B. Smith 2001, Zeder 2012) to accommodate the new findings, and Stephen Shennan’s superb book *The First Farmers of Europe* (2018: 1–54) provides a thorough and convincing evolutionary account of the origins and expansion of agriculture. It would not take much work to rewrite the relevant sections of Diamond’s *Guns, Germs, and Steel* to be consistent with the last twenty years of discoveries.

Monuments Without Agriculture

It used to be a truism among archaeologists that farmers build monuments, mobilizing huge amounts of labor, but foragers do not. This, we now know, is overstated. The most famous exception is Göbekli Tepe, an extraordinary cluster of sunken chambers with massive, carved stone pillars near the Turko-Syrian border. Construction began here by 9500 BCE, just as experiments with domestication were beginning not far to the south; but all the evidence suggests that the builders were hunters and gatherers. Stonehenge, the most famous prehistoric monument, was built between roughly 3000 and 2600 BCE by herders rather than farmers, and as early as 8000 BCE, foragers had set up a series of monumental posts (perhaps totem poles) at the site. At Locmariaquer in Brittany, fishermen dragged a 20-meter-tall, 350-ton stone stele for five kilometers around 4500 BCE and then erected it over a communal tomb. In coastal Peru, other fishermen started building mounds at Aspero, Caral, and Sechin Bajo before 3700 BCE. Foragers in Louisiana heaped up giant earthworks at Watson Brake around 3400 BCE and even bigger ones, using a standardized unit of measurement, at Poverty Point around 1600 BCE (GW provide references for Göbekli Tepe, Watson Brake, and Poverty Point; for Stonehenge, Parker Pearson 2011: 135-37; Locmariaquer, Cunliffe 2001: 143–51; and Aspero, Caral, and Sechin Bajo: Malpass 2016: 53–60).

GW conclude, quite rightly, that these monuments “look about as far from small, nomadic, egalitarian ‘bands’ as one can possibly imagine”; but then claim, quite wrongly, that evolutionists have largely ignored them. “Scholars and professional

researchers,” they announce, “have to actually make a considerable effort to remain so ignorant” (GW 140, 147). Not so. Hayden’s (1995) account of transegalitarian elites monopolizing rich, stable resources in oases of abundance accommodates foraging/fishing monuments perfectly well, and the evolutionary archaeologists Kent Flannery and Joyce Marcus (2012: 238–43) take the Peruvian case as a prime example in their book *The Creation of Inequality*. But that said, while we now know of foraging/fishing monuments from many parts of the world, they remain extremely rare compared with those of early farmers. Mesolithic England produced a row of totem poles at Stonehenge; Early Neolithic England was crowded with tens of thousands of long barrows and causewayed enclosures (Cunliffe 2013: 149–68 has a clear overview). Farmers were not the only people able to organize enough labor to move great quantities of earth and stone, but evolutionists are right that the scale on which farmers operated was orders of magnitude greater than that of foragers.

Cities Without Inequality

All living things, from amoebas to elephants, can increase their populations when conditions are favorable. When monkeys or other animals multiply, however, they continue to live in troops of roughly the same size. There are no simian cities. We humans are unique in our ability to scale up our permanent settlements. So far as we know, there were no year-round, sedentary communities with even 1,000 residents before Beidha, Basta, and Çatalhöyük, around 7000 BCE; none above 10,000 residents before Uruk, Susa, Tell Hamoukar, and Tell Brak in the Near East and Majdanetske, Taljanki, Dobrovodi, and Nebelivka in Ukraine, all roughly around 3500 BCE; none above 100,000 before Nineveh, around 700 BCE; none above 1 million before Rome, around 50 BCE; and none above 10 million before New York, London, and other early-twentieth-century super-cities (I go into the calculations behind these numbers in Morris 2013: 144–65, now augmented by McMahan 2020). Although we have continued to evolve biologically since 7000 BCE, we are still more or less the same animals as we were then. What has evolved out of all recognition is our institutions, giving us the organizational tools for cooperation on much larger scales; and evolutionary anthropologists have consistently concluded that, through most of history, top-down hierarchy has been what made this possible (Fletcher 1995).

Yet as GW (276–327) note, the link between scale and hierarchy seems less obvious now than it did in 1950, when Gordon Childe published his famous essay “The Urban Revolution” (best read with M. Smith 2009). Excavations have uncovered palaces and royal or aristocratic tombs at most early cities, but not all (Flannery 1998 summarizes the typical pattern; Jennings and Earle 2016 discuss some prominent exceptions). Signs of massive, institutionalized inequality are hard to find not only at Beidha, Basta, and Çatalhöyük, but also in the Ukrainian

mega-sites, Sumerian Uruk, the Indus Valley cities (occupied between 2500 and 1900 BCE), Teotihuacan (around 300 CE), first-millennium BCE and CE West African settlements such as Dakhlet el Atrous and Jenné-jeno, and most archaic and classical Greek city-states (700–300 BCE) (GW again provide references for most of these cases; for Greece, I offer a few thoughts of my own in Morris 1997; Jennings and Earle 2016 discuss some New World exceptions; and on West Africa, Monroe 2018).

Specialists dispute how egalitarian some of these cities were, but GW's observation that "the mere fact of urban life does not, necessarily, imply any particular form of political organization" (GW 277–78) seems reasonable. However, the conclusions they draw from this are less so. These examples, they suggest, add up to "a surprisingly common pattern" in which "a dramatic increase in the scale of organized human settlement took place with no resulting concentration of wealth or power in the hands of ruling elites" (GW 322), which "is robust enough, not just to upend the conventional narrative but to open our eyes to possibilities we would otherwise never have considered" (GW 284). The truth is that we just don't know why a few urban systems got along perfectly well without palaces or elite cemeteries; but we do know that it really was only a few systems, and that the vast majority of ancient cities did have rich, powerful rulers. To be convincing, a general theory must explain both the overall trend toward hierarchy and the occasional egalitarian exceptions, rather than just declaring that one pattern trumps the other. Fortunately, sociologists, historians, and archaeologists are already providing such accounts (e.g., Tilly 1992; Flannery and Marcus 2012: 448–74; Scheidel 2013: 30–32).

Collapse and Resilience

Evolution is, by definition, undirected. No one is in charge; there is no *telos*. Under some circumstances, selective pressures mean that greater scale and complexity will increase an organism's fitness; under others, simplification will increase its odds of passing on its genes or memes. In principle, sociocultural evolutionists should be just as interested in the scaling-down of societies as in their scaling up. In practice, however, the archaeologist Joseph Tainter was quite right to say that "the development of political complexity has attracted more scholarly attention than collapse, its antithesis" (1988: 3).

Since Tainter wrote, evolutionists have made collapse a key focus, with Jared Diamond (2005) writing a bestseller on the subject; but anti-evolutionists have pushed back, with Patricia McAnany and Norman Yoffee (2010: 11) going so far as to suggest that "'collapse'—in the sense of the end of a social order and its people—is a rare occurrence." Tainter defined collapse as a decline of hierarchy, specialization, centralization, investment in elite culture, information flow, economic integration, and territorial unity, leading him to conclude that "It is small

wonder that collapse is feared by so many people today. Even among those who decry the excesses of industrial civilization, the possible end of that society must surely be seen as catastrophic” (1988: 4, 21). McAnany and Yoffee disagree, responding that while “living through some kinds of change is difficult, painful, or even catastrophic ... Resilience is a more accurate term [than collapse] to describe the human response to extreme problems” (2010: 11).

GW share this impatience with talk of collapse. They firmly lock the word inside scare quotes (GW 379), darkly suggesting that “With hindsight, it’s easy to see just how much these chronological schemes reflect their authors’ political concerns” (GW 381). As an alternative to evolutionist accounts of collapse, they offer an extended treatment of the North American Hopewell and Mississippian cultures (GW 456–70). Between 1350 and 1400 CE, the great center of Cahokia, which had boasted 15,000 people just three centuries earlier, turned into “a haunted wilderness of overgrown pyramids and housing blocks crumbling back into swamp, occasionally traversed by hunters but devoid of permanent human settlement” (GW 468). This, they speculate, was caused by “mass defection ... as subjects sought freer lives elsewhere.” “People simply walked away” from violent rulers, GW explain, in “a self-conscious rejection of everything the city of Cahokia stood for” (GW 467, 469). “In the wake of Cahokia,” they conclude, there followed “a broad movement away from overlords of any sort and towards constitutional structures carefully worked out to distribute power in such a way that they would never return” (GW 491).

GW tell this story well, but it does seem to be the case that when left alone by outsiders, societies that have gone through an episode of collapse/resilience tend to regenerate complex societies within a few centuries (Schwartz and Nichols 2006). GW dismiss counterfactual arguments as “at best an idle game” (GW 449), but I cannot shake the suspicion that, left to themselves, North Americans would have regenerated their complex societies by the nineteenth or twentieth century CE. In reality, of course, a tidal wave of European conquest and disease cut off any possibility of Indigenous state regeneration. When GW insist that “The case of North America not only throws conventional evolutionary schemes into chaos; it also clearly demonstrates that it’s simply not true to say that if one falls into the trap of ‘state formation’ there’s no getting out” (GW 481–82), they seem to me to be flying in the face of comparative logic.

Discussion

In all six examples, GW’s analysis is original and stimulating, and had they contented themselves with drawing attention to evolutionists’ failure to come fully to grips with these cases, their book would have been a valuable contribution to the academic literature. However, it would not have been a publishing event. What lifts *Dawn* to that level is GW’s idealist, voluntarist alternative to materialist,

determinist evolutionism. History has not been a long-term decline from a Rousseauian state of egalitarian grace into an Orwellian one of face-stomping, they insist, because people have always possessed “three primordial freedoms”: “the freedom to move, the freedom to disobey and the freedom to create or transform social relationships” (GW 426). We have always been conscious political actors, and we will always be able to move, disobey, and transform our relationships if we will it. Hence their conclusion, which I already mentioned, that the real issue is not “how our species fell from some idyllic state of equality” but “how we came to be trapped in such tight conceptual shackles that we can no longer even imagine the possibility of reinventing ourselves” (GW 9).

The answer, they conclude, is that villains of various kinds managed to seize what they call “the three possible bases of social power,” defined as “control of violence, control of information, and individual charisma” (GW 365). Some readers will recognize here echoes of the sociologist Michael Mann’s typology of ideological, economic, military, and political sources of social power (Mann 1986); some might even conclude that GW’s argument is actually just a renewal of Mann’s insightful analysis of the shortcomings of evolutionism (Mann 1986: 38-70). I do not think it is facetious to suggest that GW give us Mann’s IEMP framework without the E.

Much of *Dawn* is devoted to tracing how upstarts in different parts of the world got their hands on one, two, or even all three of the IMP sources of social power, producing a twenty-first century in which “something has gone terribly wrong” (GW 76). Fortunately, they say, understanding history properly will allow us to “rediscover the freedoms that make us human” (GW 8)—and the truth that “even now, the possibilities for human intervention are far greater than we’re inclined to think” (GW 524).

These sentiments are what *Dawn* will be remembered for, but the only way for GW to raise them above the level of mere sloganeering is by showing (as they claim on p. 3) that evolutionists’ alternative theories simply aren’t true. My great problem with *Dawn* is that I find it hard to say whether the book adds up to a falsification of evolutionism, because GW never really try to show that it does. They tell us that evolutionism is boring, dangerous, and wrong, and provide fascinating details of multiple cases that look like awkward fits for evolutionary narratives; but at no point do they specify how we can tell if these details have passed the threshold at which any reasonable reader would have to agree that the principles of evolutionism have been falsified. This is because GW have no method.

The anarchist philosopher Paul Feyerabend’s book *Against Method* is most famous for its offhand comment that “*anything goes*,” but its larger argument could—perhaps did—provide a playbook for *Dawn*. Normal science, Feyerabend asserted, “assumes that ‘science’ is successful and that it is successful because it uses uniform procedures”—but this “is not true because there are no such

procedures.” “This being the case,” Feyerabend asked, “what shall we make of the methodological demand that a theory must be judged by experience and must be rejected if it contradicts accepted basic statements?” The answer: “This demand, these theories, are now all seen to be quite useless ... The right method must not contain any rules that make us choose between theories *on the basis of falsification*” (Feyerabend 2010 [1975]: 12, xx, 44, 45; emphases in original).

In keeping with these dicta, GW never set out a method for judging how well evolutionists’ theories, or their own alternative, fit the facts, let alone make the effort to isolate testable propositions. One of the great problems in the social sciences is that theories regularly develop in ways that make it difficult to test them empirically (Gellner 1985 is a good account of this problem, focusing on psychoanalysis), but, whatever their other faults, sociocultural evolutionists have avoided this sin. If the evolutionists are right, farming societies should generally be more politically and economically unequal than foraging ones, and agrarian empires should generally be more unequal than smaller-scale agricultural groups. Settlements should typically be bigger in farming societies than in foraging ones, and in imperial than in state-level ones. Larger cities should be more organized and hierarchical than smaller ones. The regions where farming began first should also be the ones where permanent governments and cities appear first. And so on.

How would we know whether the cases that GW explore are sufficient to falsify the evolutionists’ claims? Explicitly asking the question would be a good starting point, best followed up by seeking ways to measure such crucial variables as political and economic inequality, scale, the energy extracted by different subsistence patterns, and the frequency with which people challenged the status quo. It would be equally helpful to specify a threshold at which the evolutionary null hypothesis has been disproved. Is a single exception adequate? Will two or three do? Or do GW need to show that a majority of cases fail to follow the rules?

GW never ask these questions, and in fact go out of their way to avoid measurement of any kind. I found the almost complete absence of statistics in a book that is ultimately about inequality very surprising (imagine Thomas Piketty’s *Capital in the Twenty-First Century* [2014] with no numbers). *Dawn’s* only extended discussion of quantification in fact comes in its very first endnote (GW 527 n. 1), devoted to my own book *Foragers, Farmers, and Fossil Fuels*. There, I offered some estimates of economic inequality across time, expressed in Gini coefficients, the commonest metric in the social sciences—a mistake, say GW, because “if one reduces world history to Gini coefficients, silly things will, necessarily, follow.”

I hope that my eagerness to respond is not just sour grapes at being called silly; I prefer to tell myself that it is because this, GW’s one discussion of quantitative methods, is just so glib. Having made their disapproval of Gini coefficients known, GW immediately conflate the issue with criticisms of my separate effort to measure average real incomes (expressed in 1990 international dollars, again the

commonest metric in the social sciences). Picking up on my guesstimate for Stone Age foragers, they ask “Where does this figure come from?”—always a good question, although I say three times in my book (Morris 2015: 56–57, 99, 114–15) that I drew on the calculations of the development economist Angus Maddison (2010). GW then remind us that “we also have to factor in all the other things Palaeolithic foragers got for free,” which is exactly what Maddison tried to do. These “other things,” GW say, include “free security [although some, perhaps many, Palaeolithic societies seem to have had rates of violent death an order of magnitude higher than twenty-first-century societies: Allen and Jones 2014], free dispute resolution [we have no idea how they resolved disputes or what it cost, but the rates of violent death suggest that it did not work very well], free primary education [everyone was illiterate], free care of the elderly [not many people lived past fifty or sixty], free medicine [again, we don’t know if it was free, but it did not prevent premature death], not to mention entertainment costs, music, storytelling and religious services” (a lot of which I get for free too). Even if we grant GW the “high-end evening classes in naturalistic rock-painting and ivory-carving—and all those fur coats,” we should remember that there is no such thing as a free lunch. Someone had to find and grind pigments, hunt mammoths, and then skin the beasts, cut up and tan their hides, and sew them together. Someone labored for thousands of hours to carve the mammoth-ivory beads in the 34,000-year-old burials at Sungir, and among the nineteenth-century Comanche, preparing hides was such “an endless succession of hard tasks” that men delegated it to women and, whenever possible, slaves (Gwynne 2010: 198).

I have no doubt that GW’s tongues were firmly in their cheeks while writing this endnote, but I am happy to play the straight man to their gags because this, as their main methodological statement on statistics, is such lightweight stuff. In fact, it seems to be their main methodological statement on almost anything; GW do not explain anywhere else why they avoid other well-established methods, such as the historian’s standard tool of continuous narrative. There is just no method here; the arguments do not make sense.

Method matters, and other archaeologists, ones more wedded to methodological rigor, are currently advancing very different (evolutionist) visions of early inequality. Timothy Kohler and Michael Smith’s edited volume *Ten Thousand Years of Inequality* (2018), calculating Gini coefficients for multiple ancient societies, perhaps appeared too late for GW to take it into account, but the broad patterns that are now emerging seem to owe little to prehistoric peoples’ will to imagine alternative possibilities. Economic inequality did, just as evolutionists have long claimed, increase with the coming of agriculture, and increased most rapidly when population densities reached the point that shortages of land began to matter more than shortages of labor. It also increased more in the Old World than in the New, chiefly because the New World lacked the large draught

animals needed to maximize the output of humans working ever-smaller but ever-more precious plots of land (Kohler et al. 2017; Bogaard et al. 2019; Fochesato et al. 2019). Maybe GW are right that silly things follow if we reduce world history to Gini coefficients, but even sillier ones follow if we ignore them entirely.

Conclusion

So, what are we to make of *The Dawn of Everything*? It is a work of careful research and tremendous originality. It is also a tract for the times, bringing the distant past to bear on issues that deeply concern educated audiences in rich countries in the 2020s. It is probably the most important publishing event in archaeology for decades, its lively, opinionated prose reminding us that it's fun to ask and try to answer history's biggest questions. But at the same time, its arguments run more on rhetoric than on logic. It would be uplifting to think that whatever we dislike about our own age only persists because we have hitherto lacked the imagination and/or courage to put something better in its place. It would be empowering indeed for anthropologists, archaeologists, and historians to know that changing how our readers think about the distant past could change what the future will bring. But reality constantly intrudes. We do make our own history, but not in ways of our own choosing. To insist otherwise is to stop making sense.

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