

Featured Review

Not by Grain Alone

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Against the Grain: A Deep History of the Earliest States. By James C. Scott. New Haven: Yale University Press, 2017. 336 pp., \$26.00, hardback, ISBN 978-0-300-18291-0.

This book is an analysis of the emergence of agriculture and pastoralism, the ephemeral consolidation and later disintegration of early “states” and their dependence on nonstate peoples, and a paean to the survival of nonstate peoples into the modern period. It is the latest in a series of thought-provoking books by political scientist James Scott on the theme of peoples who resist and evade governmental authority. Like his other works, it contains valuable insights, but his bias against states and toward nonstate peoples leads to problematic conclusions.

Scott developed his ideas gradually over decades. In *The Moral Economy of the Peasant* (1976), he argued that peasants shared a collectivist belief that everyone had a right to food, and presented this value as a basis for peasant rebellion against French colonialism in Vietnam. In *Weapons of the Weak* (1985), he proposed that nonviolent “everyday resistance” was much more widespread and more effective against colonial and state power than revolution. In *Seeing Like a State* (1998), Scott explored how governments used power to simplify and make legible traditional practices, and specifically focused on the “authoritarian high modernism” of the USSR in the 1930s and socialist policies in African states as examples.¹ A logical conclusion to these ideas came in *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia* (2009), a substantial study of several native peoples in Zomia, a mountainous region stretching across Southeast Asia, southern China, and eastern India, and their efforts to escape and evade regional and imperial governments’ efforts to control them. In this latter book Scott argued that

1. On some of the problems with his arguments, see Mark B. Tauger, “The Moral Agronomy of the Peasant v. the Moral Economy of the Town,” *H-Russia* (April 1999), <https://networks.h-net.org/node/10000/reviews/10148/tauger-james-c-scott-seeing-state-how-certain-schemes-improve-human> (Accessed June 20, 2018).

ostensibly cultural practices have political significance. Wet rice cultivation, for example, facilitated state control and taxation, while cultivation of tubers was an effective way of evading state control. Governments in lowland regions sought to concentrate populations for taxation and military recruitment, so mobility and living in mountain regions subverted oversight. He even argues that some of these peoples abandoned their written languages to elude state record-keeping. Scott admitted his reliance on the work of other scholars, and sees his contribution in the way he organized these ideas.²

Against the Grain grew out of Scott's reading of recent scholarship on the origins of agriculture and the first city-states in the Ancient Near East in order to revise course lectures. Scott found that recent research challenged the conventional views of these topics he had lectured on in the past. *Against the Grain* basically summarizes this recent research but incorporates it into the theories he developed in *The Art of Not Being Governed*. Scott writes that scholars have been "mesmerized" by the idea that civilization constituted progress, and that settled farmers replaced "savage, wild, primitive, lawless, violent hunter-gatherers" (7). Scott argues instead that there was no clear shift from hunting/foraging to cultivating. He cites research showing that sedentarism began before agriculture, that sedentary peoples combined cultivation with foraging and hunting for millennia and sometimes returned to a mobile lifestyle. The first settlements in the Near East, as in other regions of early settlement, were in wetlands, where people could combine "flood-retreat" planting of crops on silt with hunting and foraging among rich sources of wild plants and animals.

Scott proposes a broad definition of domestication beyond specific plants and livestock to encompass human shaping of the local environment, most importantly by "domesticating" fire. He invokes the ideas of journalist Michael Pollan and anthropologist E. E. Evans-Pritchard that the mutual interdependence that developed between nascent farmers and their crops and livestock had the effect of "domesticating" those people, citing Pollan's description of himself as a "slave" of the potato, and Evans-Pritchard's description of the Nuer people and their cattle as "mutual parasites" (87). Scott claims that the shift to farming narrowed peoples' lives and understanding, contrasting the "amazing" extensive knowledge that hunter-foragers had of plants, animals, and their environments, with the ostensibly limited knowledge of farmers, exemplified in a Farmer's Almanac that only told them when to plant corn. Farming, he argues, enmeshed farmers in routines, centered on their grain

2. Quoted in Ruth Hammond, "The Battle Over Zomia," *The Chronicle Review*, Sept. 4, 2011, <https://www.chronicle.com/article/The-Battle-Over-Zomia/128845> (Accessed June 20, 2018).

crops, that were a core part of the “civilizing process” (90–91).

Scott repeatedly contends, based on the writings of the economist Ester Boserup and others, that hunter-foragers led much easier lives and had better food than early farmers, and would not have shifted to sedentary lives and reliance on the “drudgery” of farming voluntarily. He emphasizes that sedentarism made farm villages into “Neolithic multispecies resettlement camps” where early peoples contracted from animals virtually all of the major diseases that have since plagued civilizations (96ff.). He also claims that the farmers’ diet, with its emphasis on plant foods, was “less nutritious” than that of hunter-foragers. Despite these and other criticisms, however, at the end of this discussion he admits that “the older narrative of civilizational progress is, in one basic respect, undoubtedly correct” and that “Neolithic agriculture was far more productive, in a concentrated way, but far more fragile than hunter-gathering or even shifting cultivation” (113).

Scott argues that grain was the central basis of the first city-states that formed around 3300 BCE. It was a “political crop” because it was a basic food source; it could not easily be hidden; it was “legible” in that its output could be easily measured and taxed; and it could be easily stored and transported. He claims that there could not have been a “chickpea” or “lentil” state because those crops were not as controllable as wheat or barley (131–35). Scott also emphasizes the roles of walls in confining farmers within city-states and keeping out raiding nonstate peoples, and the central role of writing for state record-keeping, taxation, and control over population. In Chapter Five he details at length how “coerced labor” in various forms was an essential part of early states’ economics and politics. While admitting that the scale, character, and changes of coerced labor are speculative, he quotes Adam Hochschild’s claim that by 1800 probably three-quarters of the world’s population were unfree laborers. He concludes that given an opportunity or in “hard times,” the “civilized” population of city states would readily flee and rejoin their erstwhile brothers among the nonstate peoples.

Scott also considers the other side of this problem: the fragility of the early state. While “astonished” at the “statecraft and improvisation” of the early states, he also emphasizes how easily they could collapse. He discusses the ways disease, war, ecocide (mainly deforestation and soil salinization) and overexploitation of internal resources could cause a state to disintegrate. Yet he also makes the important point that state “collapse” did not necessarily mean disaster for the population; it might have greatly improved their conditions by eliminating taxation, slavery, and war, allowing people to return to a

pre-state or nonstate status.

This point brings Scott to his concluding chapter on the “golden age of the barbarians,” which lasted into the modern colonial period. He again asserts that barbarians lived better lives and that they provided a frontier to which state residents fled. States were threatened by barbarian raids but also depended on products they traded. Barbarians sometimes took over the state and became state leaders, like Yuan and Manchus in China, and states sometimes incorporated the barbarians as a supportive military force, such as the Cossacks in Russia. The nonstate barbarians were in all these ways the “dark twin” of civilization.

The book leaves the reader with a bleak but hopeful picture in which civilization is portrayed as oppressive and deprived, and survives only thanks to healthy, free barbarians. But there is other evidence on many of his key points.³ The central problem in Scott’s thesis is his focus on grains (wheat and barley) as “political crops,” which in his view formed a narrower basis of early states’ food sources compared to those of the “barbarians.” Wheat and barley lack vitamin C, and do not have all the essential amino acids, especially lysine, and sometimes threonine and tryptophan. If the “state peoples” really ate only grain, they would have died in a few months from scurvy (like many Early Modern European maritime explorers) or suffered debilitating illness from inadequate protein. Scott asserts that there could have been no “lentil” or “chickpea” state, but he does not explain these and other legumes were domesticated at the same time as wheat and barley, if not earlier; they were “companions of wheat and barley” at the origin of agriculture.⁴ The combination of grains and legumes provided all nine essential amino acids, and thus both were necessary for the subsistence of the “in-state” population.⁵ Scott’s early states were “lentil and chickpea” states just as much as grain states.

In addition, a study of ancient Mesopotamian cuisine by Jean Bottéro cites

3. On a peripheral point, in two places Scott misdates the Little Ice Age: 1500–1850 (39), and 1550–1850 (60). While the beginning of the Little Ice Age is disputed, it was certainly much earlier: Arctic pack ice and glaciers both increased in the late thirteenth century and accelerated in the fourteenth century; see for example G. H. Miller et al., “Abrupt Onset of the Little Ice Age Triggered by Volcanism and Sustained by Sea-Ice/Ocean Feedbacks,” *Geophysical Research Letters* 39, no. 2 (Jan. 2012).

4. S. Abbo et al., “Reconsidering Domestication of Legumes versus Cereals in the Ancient Near East,” *Quarterly Review of Biology* 84 no. 1 (Mar. 2009): 29–50; D. Zohary and M. Hopf, “Domestication of Pulses in the Old World: Legumes Were Companions of Wheat and Barley When Agriculture Began in the Near East,” *Science* 182 no. 4115 (Nov. 1973): 887–94.

5. V. R. Young and P. L. Pellett, “Wheat Proteins in Relation to Protein Requirements and Availability of Amino Acids,” *American Journal of Clinical Nutrition* 41, no. 5 Suppl. (May 1985): 1077–90.

an ancient dictionary of terms for food in Sumerian and Akkadian that listed some eight hundred items: three hundred types of breads, with varied fillings, flavors and grains, twenty cheeses, one hundred soups, many types of fruits, vegetables, meats, fish and shellfish, insects, honey, oils, and herbs, eaten raw, cooked, and dried for preservation.⁶ While elites probably obtained more of these, some of this diversity must have been accessible to ordinary people, since they grew and gathered these items, and especially if, as Scott maintains, the governments taxed mainly grain. Also, a recent study argues that early societies depended on grain-based beer, which for millennia was the only safe fluid source because its alcohol killed germs.⁷ Scott emphasizes the impact of disease in concentrated populations, and mentions that the people drank beer, but he did not explain that this was a way people avoided water-borne illnesses. Mesopotamians made several fermented beverages.⁸ This food diversity implies that farmers in ancient states were not inferior to barbarians in their knowledge and understanding of food sources. Scott asserts that states survived only because they obtained necessary goods from the barbarians, but Bottéro argues that these foods were native to the region and so varied that they “never needed to import food from other areas.”⁹

Scott repeatedly cites the research from past decades inferring that because nonstate people had better diets than in-state people, they were taller, healthier, and lived longer, and this difference derived from nonstate people’s higher consumption of meat (9–10, 94, 107–109, 229). Recent research questions this decades-old argument.¹⁰ A study of the Leverhulme collection of Egyptian skeletons (nine thousand skeletons dating from Neolithic hunter-foragers to 1500 BCE) found that physiological decline began 12,000 years ago with the shift to farming: foragers were about five feet eight inches tall, while early farmers averaged five feet four inches. But by 4,000 years ago the farmers regained most of their previous stature and health, returning to an average of five feet eight inches.¹¹ A similar pattern was also found in the transition

6. Jean Bottéro, “The Cuisine of Ancient Mesopotamia,” *The Biblical Archaeologist* 48, no.1, (Mar. 1985): 36–47. See also S. Abbo et al., “On the ‘Lost’ Crops of the Neolithic Near East,” *Journal of Experimental Botany* 64 no. 4 (Feb. 2013): 815–22.

7. Thomas R. Sinclair and Carol Janas Sinclair, *Bread, Beer and the Seeds of Change: Agriculture’s Imprint on World History* (Wallingford, UK: CABI, 2010).

8. Bottéro, “The Cuisine of Ancient Mesopotamia,” 40–41.

9. Bottéro, “The Cuisine of Ancient Mesopotamia,” 38.

10. See for example Jared Diamond, “The Worst Mistake in the History of the Human Race,” *Discover Magazine*, May 1987, 64–66, <http://www.ditext.com/diamond/mistake.html> (Accessed June 20, 2018).

11. Sanjida O’Connell, “Is Farming the Root of All Evil?,” *The Telegraph*, June 23, 2009, <https://www.telegraph.co.uk/news/science/science-news/5604296/Is-farming-the-root-of->

to agriculture in central and southern Europe from antiquity to the medieval period, and the authors connected the initial phase of physiological decline to early childhood malnutrition and disease.¹² A detailed dissertation based on a broader range of skeletons from Egypt found that stature changed repeatedly over antiquity, varied by region, sex, ethnicity, and historical periods, and was related to environmental stresses as well as food.¹³ These data suggest that the reasons for physiological differences between foragers and farmers cannot be reduced exclusively to diet.

The connection Scott draws between nonstate peoples' health and meat consumption almost evokes the "Paleo diet," a problematic concept.¹⁴ A meat-based diet also increases the rate of atherosclerosis and heart disease. A study of Egyptian mummies, almost all members of the elite, and whose diets were extremely high in animal products, found extensive atherosclerosis. A comparative study of mummified remains of elites in four ancient societies had similar findings, especially among Canadian Inuit who subsisted mostly on meat.¹⁵ To the extent that hunter-foragers were big meat eaters, they may not have been models of health. A large scientific literature shows that a plant-based diet is much healthier for humans than one based on animals. This research challenges the view, which Scott seems to invoke, that a grain-based diet is poor nutrition, and that people need "animal protein."¹⁶ The plant-based diet of in-state farmers may have been healthier than the meat-based barbarian diet he views as superior.

Scott gives the impression that states were like a prison: they used walls
 all-evil.html (Accessed June 20, 2018). More generally, see Ron Pinhasi and Jay T. Stock, eds., *Human Bioarchaeology of the Transition to Agriculture* (Wiley-Blackwell, 2011).

12. A. A. Macintosh et al., "Early Life Conditions and Physiological Stress following the Transition to Farming in Central/Southeast Europe: Skeletal Growth Impairment and 6000 Years of Gradual Recovery," *PlosOne* 11, no. 2 (Feb. 2016), <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0148468> (Accessed June 20, 2018).

13. Michelle H. Raxter, "Egyptian Body Size: A Regional and Worldwide Comparison" (PhD diss., University of South Florida, 2011).

14. See Marlene Zuk, *Paleofantasy: What Evolution Really Tells Us about Sex, Diet, and How We Live* (New York: W. W. Norton, 2014).

15. A. Rosalie David et al., "The Art of Medicine: Atherosclerosis and Diet in Ancient Egypt," *The Lancet* 375, no. 9716 (Feb. 2010): 718–19; R. C. Thompson et al., "Atherosclerosis across 4000 Years of Human History: The Horus Study of Four Ancient Populations," *The Lancet* 381 no. 9873 (Apr. 2013): 1211–22.

16. See for example Michael Greger with Gene Stone, *How Not to Die: Discover the Foods Scientifically Proven to Prevent and Reverse Disease* (New York: Flatiron Books, 2015); T. Colin Campbell and Thomas M. Campbell, *The China Study: The Most Comprehensive Study of Nutrition Ever Conducted and the Startling Implications for Diet, Weight Loss, and Long-term Health* (Dallas, TX: BenBella Books, 2016); Garth Davis with Howard Jacobson, *Proteinaholic: How Our Obsession with Meat Is Killing Us and What We Can Do About It* (New York: HarperOne, 2016).

and slavery to keep most of the people inside and imposed the “unremitting toil” of plow agriculture (95). Yet farming was not simply what Michael Pollan has described as slavery to the potato (87). Stages of crop production were highly seasonal, depending on the periodic increased flow of the rivers, so the “drudgery” of plowing and harvesting took place only during certain periods each year. Scott notes that the time-consuming part of farming was driving out pests, which was not drudgery and could have been done partly by children. City-state farmers, as noted, grew and gathered many other plants, including tree crops and wild plants that did not require plowing, raised livestock and fish, and fermented beverages. Did farmers feel no pride in their work? Did the “coerced laborers” ever have their own small homes and garden plots?

Of course, the early states could be quite oppressive. As Scott points out, the first state-builders had few guidelines. But at least some components of these new states and their authoritarian style derived from those nonstate peoples. Scott admits that slavery predated formation of the early states and was widely practiced among nonstate peoples. He also cites examples of “barbarians” like the Mongols and the Manchus who took over states: those barbarians-turned-rulers did not abolish taxation or dissolve the bureaucracy, but rather quickly adapted to China’s authoritarian system. Some of these barbarians could be at least as authoritarian as the rulers of early states, as can be seen by comparing, for example, the harsh law code or *Yasak* of Genghis Khan with the comparably harsh Code of Hammurabi.¹⁷

Against the Grain is satisfying on first reading because it has innocent victims, heroes, and villains. But it cannot be accepted as an accurate depiction of this formative period of human history. The early city-states were authoritarian, but they were not the deprived “grain states” of Scott’s descriptions, and the nonstate peoples could be even more repressive than state leaders. Scott’s readings in the recent literature did not include enough studies that could have challenged his views. Not all early states and leaders were equally authoritarian, and the history of states in the long term has been toward greater freedom and humanitarianism. These progressive trends resulted not only (if at all) from the example of barbarian enclaves but also from the ideas and insights of educated urban people, who gained the opportunity to develop their ideas thanks to the greater food productivity of agriculture.

17. See “1206: The *Yasak* of Genghis Khan,” <http://www.duhaime.org/LawMuseum/LawArticle-519/1206-The-Yasak-of-Genghis-Khan.aspx> (Accessed June 20, 2018).