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## Our Pigs, Ourselves

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J. L. ANDERSON. *Capitalist Pigs: Pigs, Pork, and Power in America*. Morgantown: West Virginia University Press, 2019. xiii + 300 pp., illus., index. ISBN: 978-1-946684-73-8. \$34.99 (paper).

ALEX BLANCHETTE. *Porkopolis: American Animality, Standardized Life, and the Factory Farm*. Durham, NC: Duke University Press, 2020. xvii + 320 pp., illus., index. ISBN: 978-1-4780-0840-8. \$27.95 (paper).

THOMAS FLEISCHMAN. *Communist Pigs: An Animal History of East Germany's Rise and Fall*. Seattle: University of Washington Press, 2020. 296 pp., illus., index. ISBN: 978-0295747309. \$40 (cloth).

TIAGO SARAIVA. *Fascist Pigs: Technoscientific Organisms and the History of Fascism*. Cambridge, MA: MIT Press, 2016. xiv + 344 pp., illus., index. ISBN: 978-0262536158. \$19.95 (paper).

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The Question may just have occurred to you: What's the point of paying attention to pigs? Scholars of this species have heard it before. "Who wants to deal with pigs and potatoes," the historian Tiago Saraiva riffs on The Question, "when one can explore film, sports, and architecture?" (8). Actually, films can be haunted by The Question, too. It took the documentarian Victor Kossakovsky years to secure funding for *Gunda* (2020), a quietly riveting feature that keeps close to a sow and her piglets in the barnyard. Kossakovsky had already

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The following abbreviations are used: CAFO, concentrated animal feeding operations; GDR, German Democratic Republic.

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established himself as a prizewinning filmmaker, but when people heard the pitch for this venture, they laughed. “About pigs? Who’s going to watch it?”<sup>1</sup>

Pigs strike some people as a joke. They can seem like a pet project rather than a significant subject. They can seem marginal rather than essential to our lives and our histories. These impressions are understandable. Hundreds of millions of pigs are slaughtered every year, over one hundred million in the United States alone, but many of us have never seen even one pig “in person.” We have forgotten about the pigs that produce our pork. And so we wonder why it’s worth producing a monograph—or many monographs or a film or a review essay—about these animals we hardly know.

The Question is a legacy of the twentieth century. Move back deeper in time, or to places beyond the orbit of agribusiness, and you’ll find many more people who cared about pigs because they cared *for* pigs. And whether we have noticed it or not, the lives of pigs and humans have been so tightly intertwined for so long that both species have changed each other continually. Pigs are an intimate index of humans’ own perspectives and experiences. That is not all they are, of course, but it helps us appreciate what they’re capable of.

If such a proposition feels too personal, we begin our re-evaluation in terms of cold-hard cash: all the studies under review recognize that money talks more easily than animals do. Saraiva, J. L. Anderson, Alex Blanchette, and Thomas Fleischman have written four very different books, but all of them point out that pigs’ economic importance alone should make us rethink their putative marginality. Anderson tracks the myriad ways that pigs have been key players in American economies since they first set hoof in North America, whether as suppliers of pork rations in wartime or as startup capital in the Civil Rights Movement. Saraiva highlights how Nazi ideologues saw pig husbandry as a technological opportunity that could help solve the specter of food scarcity. By the early ’70s, as Fleischman demonstrates, East Germany had begun “to gamble in global markets” (66) in an effort to secure cheap food and a low cost of living, by concentrating substantially on pork exports. And Blanchette calculates that in 2013, under the auspices of one single agribusiness in the middle of the United States (one cannot say where, exactly, because Blanchette is an ethnographer and he uses pseudonyms to ensure the anonymity of his informants), production facilities housed 180,000 sows and five and half

1. Digital moderated discussion between Kossakovsky and Joaquin Phoenix, appended to the Film Forum’s screening of the film, <https://filmforumhome.org/main/gunda> (accessed 16 Apr 2021).

million of their offspring whose bodies and effluvia were processed and sold to buyers around the world, at a rate of approximately 2,815,800 pounds of meat, 793,300 pounds of bones, 736,440 pounds of organs, 287,000 pounds of blood, 281,500 pounds of lard, and 8,700 pounds of feces every day (3).

Most of us may not think about pigs very much, but these figures mean that *some* people are still thinking about them every day. “If it wasn’t for the hogs,” a local told Blanchette in a small town nearby, “there’d be nothing here” (1). These books take such sentiments seriously. But it is not only the vast economies of pork that concern them. They are after something even meatier.

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The *Sus* genus originated in Southeast Asia but eventually wound its way westward over most of Oceania, Eurasia, and Africa.<sup>2</sup> Thousands of years later pigs were enlisted as collaborators in colonialism and came to populate the Atlantic world and many other areas they hadn’t already reached.<sup>3</sup> And in the twentieth and twenty-first centuries, even when confined to very small stalls, they still crossed boundaries systemically, if not exactly organismically: the paths charted in these books are strikingly global, even though they are oriented toward Germany and the United States. Anderson sketches, for example, how farmers and manufacturers in the U.S. tried to appeal to all sorts of international appetites: lean pork for Europeans, fatty cuts for Chinese, and *svinaia tushonka* made specially for Soviet palates (131–34). Saraiva notes that although Nazi agriculturalists were fixated on raising native animals fed by

2. E.g., G. Larson et al., “Worldwide Phylogeography of Wild Boar Reveals Multiple Centers of Pig Domestication,” *Science* 307 (2005): 1618–21; Umberto Albarella, Keith Dobney, and Peter Rowley-Conwy, “The Domestication of the Pig (*Sus scrofa*): New Challenges and Approaches,” in *Documenting Domestication: New Genetic and Archaeological Paradigms*, ed. Melinda A. Zeder, Daniel G. Bradley, Eve Emshwiller, and Bruce D. Smith (Berkeley: University of California Press, 2006), 209–27; Albarella, Dobney, Anton Ervynck, and Rowley-Conwy, eds., *Pigs and Humans: 10,000 Years of Interaction* (Oxford: Oxford University Press, 2007); Marcel Amills, Oscar Ramírez, Ofelia Galman-Omitogun, and Alex Clop, “Domestic Pigs in Africa,” *African Archaeological Review* 30 (2013): 73–82; Geoffrey Clark et al., “Distribution and Extirpation of Pigs in Pacific Islands: A Case Study from Palau,” *Archaeology in Oceania* 48 (2013): 141–53.

3. E.g., Justo L. del Río Moreno, “El cerdo: Historia de un elemento esencial de la cultura castellana en la conquista y colonización de América (siglo XVI),” *Anuario de estudios americanos* 53 (1996): 13–35; Virginia DeJohn Anderson, *Creatures of Empire: How Domestic Animals Transformed Early America* (Oxford: Oxford University Press, 2004); León García Garagarza, “The Year the People Turned into Cattle: The End of the World in New Spain, 1558,” in *Centering Animals in Latin American History*, ed. Martha Few and Zeb Tortorici (Durham, NC: Duke University Press, 2013), 31–61.

native crops, the carefully monitored bloodlines of their Edelschwein pigs included the parentage of English Large White pigs (109), who were themselves partly descended from Chinese pigs.<sup>4</sup> Fleischman finds that despite its communist commitments the GDR found itself attracted to American capitalist models. And Blanchette observes that pig operations in the Great Plains in the twenty-teens were staffed by workers from Mexico, Cuba, Guatemala, Burma, Sudan, Ethiopia, China, Somalia, and Vietnam (254 n. 1). They were governed by Japanese management training (103–04), fueled by Siberian phosphates (217), and informed by the taste-testing skills of European cats (222–24). Their biofuels fed servers for Google (225).

Because pigs' histories have intersected with humans' in so many different ways, the books about them cross different fields and address different audiences, despite their similarly punchy titles. Anderson's *Capitalist Pigs* briskly charts how forms of pig husbandry and pork consumption have changed over three hundred years of American history, following pigs from their days as free-ranging colonial misfits to their caging as industrialized occupants of concentrated animal feeding operations, a.k.a. CAFOs, starting in the 1960s. The book is not overtly analytical. It chronicles developments in swine pathologies without exploring correlated shifts in medical cultures. It surveys dietary differences according to class and race without inquiring much into power structures, while leaning into puns like *gehography*. And it is crammed with details that might strike some readers as tedious (but others as completely delightful)—such as a list of nineteenth-century nicknames for pigs including “stump suckers” and “land sharks” (41); a tour of several varieties of midcentury hog house (189–98); and an unsettling exhibit from 1939 of cartoonish dancing pigs, sculpted in lard to advertise this MOST ECONOMICAL SHORTENING to crowds at the Indiana State Fair (161).

But there is still an argument at the heart of this enthusiastic survey, which Anderson articulates at the start and which loosely coheres in the particulars. It is that the efforts to make pig husbandry more “productive” have come at a steep cost. Some of these trade-offs were clear at the time: Anderson's book tantalizingly glances at the debates that took place in the pages of newspapers and trade journals about changes in pig husbandry and their consequences. Other costs were clearer in retrospect. Widespread immunization against hog

4. On the Chinese ancestry of Large Whites: Sam White, “From Globalized Pig Breeds to Capitalist Pigs: A Study in Animal Cultures and Evolutionary History,” *Environmental History* 16 (2011): 94–120, at 104.

cholera emboldened the turn to CAFOs that in turn “created the conditions for new diseases to thrive” (150). High-density pig farms moved to the suburbs as part of efforts to reform waste-management systems but harmed the health and the property values of their residential neighbors. Even the efforts to fence free-ranging pigs in the nineteenth century had entailed serious damages, though some of them were entirely intentional. White southern farmers advocated closing the range, for example, to reduce the resources of Black farmers. Altogether, what Anderson’s book does very well is to canvas pigs’ omnipresence in the American metabolic system.

In contrast to Anderson, Saraiva scales small, and things get even more interesting. The pigs that concern him are the pigs that commercial and university agronomists developed over roughly a decade at the initiative of the Nazi state. They occupy only one chapter in *Fascist Pigs*, alongside chapters featuring wheat, potatoes, *kak-sagyz* (a source of substitute rubber), coffee, cotton, and curly-fleeced Karakul lambs—in *toto* comprising a history of science and technology across Italian, Portuguese, and German fascist regimes. But although their appearance is fleeting, these pigs are not bit characters. They play major roles, and this is precisely Saraiva’s point: fascism did not just aim for total control of human lives. It also transformed plants and animals into “technoscientific organisms” in an effort to “materialize fascist ideology” (3). As a result, these pigs fed fascists as well as fascist imaginations. They enacted the projects of “alternative modernity” (4) and helped broadcast visions of a fascist future.

One driving goal of fascist states was to attain agricultural autarchy, and Saraiva documents the logistical challenges that Italy, Portugal, and Germany faced, first in developing strains of wheat, potatoes, and pigs that met their expectations of scale, and second in attempting to steer production by centralized directives. He also finds that fascist definitions of “autarchy” were interpreted loosely enough to include colonized territories, so that Italy counted Ethiopia’s coffee as a “native” product—as did Germany with *kak-sagyz* from Eastern Europe, Portugal with cotton from Mozambique, and all three states with Karakul sheep. Saraiva notes the recurring tendencies of these agricultural projects to echo the fascist biopolitics of reproduction: varieties of wheat were bred to become “elite races,” bureaucratic behemoths were mobilized deep into the countryside to combat potato pathologies, indigenous populations were stripped of their pasturelands and rendered into cheap labor.

As for pigs: the Minister of Food Agriculture in Germany from 1933 to 1942, Richard Walter Darré, saw them as “a constitutive element of being German”

(105). They were deployed in service of *Bodenständigkeit*, the Nazi virtue of rootedness. (One wonders if the Nazis noted the irony that pigs, which love to uproot things and explore, would be part of a campaign to fix things in the soil.) As part of that scientific-industrial agenda pigs' genealogies were documented, their litters counted, their bodies x-rayed—all in order to re-engineer them as “native” foods for “native” Germans. In other words, pigs were technoscientific organisms because they had become molded and modernized through the partnership of agriculture and science. And as technoscientific organisms, they shaped what researchers, farmers, bureaucrats, and ideologues thought was typical and possible. From ideology to flesh and back again: another form of co-evolution.

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Fleischman and Blanchette are also interested in the ways that pigs have been systemically influential—but like Kossakovsky they also try to draw nearer to pigs as individuated actors. In eastern Germany after the war, as Fleischman shows in *Communist Pigs*, both pigs and ideologies were looking more unstable. Darré's department of agriculture had been dismantled. The Soviets had redistributed millions of hectares of land and forced farmers to collectivize. And in yet another turn of events, the GDR began testing the waters of capitalist agriculture in the 1960s, with modern farms, hybrid pigs, and production oriented toward international markets.

This was the plan, at least. And in some ways, it succeeded. American, Yugoslavian, and German pigs were crossed to produce animals that could withstand the conditions at factory farms. Large pig-production complexes sprang into being, such as the facilities at Eberswalde (or “Boar Woods”)—a place-name that the pigs would have taken to be a sick joke, had they understood German. And by the 1970s, the GDR was exporting pork.

But Fleischman tenaciously demonstrates that this seemingly successful system was out of control in almost every particular. Once the GDR had exponentially more pigs on its hands, it faltered in finding enough grain to feed them. Crops were overfertilized and poisoned the pigs with nitrates. There were fodder shortages that left pigs hungry, and fodder surpluses that fermented and turned the pigs into alcoholics. And when the state turned to grain imports, it tried to make up the costs by producing more pork, which of course did not quite solve the problem. At the same time, farmers found themselves dealing with unprecedented quantities of urine and feces, so they stockpiled cesspools and mountains of waste in the countryside that released noxious

gases and contaminated drinking water. It took a long time to develop better solutions, Fleischman suggests, because researchers and farmers were used to thinking of manure as a beneficial ingredient in farming. They were fixated on trying to find agricultural uses for it, without realizing that *this* waste was a totally different entity than the manure of the nineteenth century.

Just as manure could be variable, so could pigs, and Fleischman introduces readers to the garden pigs and wild pigs that also populated East Germany—both of which offered additional lessons about the flaws of the factory model. East Germans tried to make up for the shortcomings of the industrial-market system by raising crops and animals on their garden plots in the cities or on their personal subsistence farms on the collectives. A key advantage of doing this, besides the sense of autonomy and satisfaction that people derived from the work, was that the pigs they raised individually weren't dependent on international grain prices. And in fact when the GDR experienced a perfect storm of fodder shortages and porcine disease outbreaks in 1982, millions of industrial pigs were slaughtered, while the price of garden pigs lurched up: it was an acknowledgement that “the country's socialist farms were not working” (193). Likewise the wild pigs of East Germany revealed the system's weaknesses in another way: thanks in no small part to the vast monocropped fields that emerged in these decades, the *Sus scrofa* population exploded. These new “common pests” were a product of an economic system that had caused many ecological ruptures—and they proved to be all too capable of causing ruptures themselves.

Perhaps the biggest surprise of all is that the pigs that reside in the alternate dimension of factory farms are *still* affecting humans deeply. It is not just garden pigs and wild pigs and technoscientific pigs of a fascist fever dream that can do this. This is the revelation of Blanchette's *Porkopolis*. It is an ethnography of swine production in the twenty-teens, in an unidentified spot in the Great Plains where several vertically integrated operations concentrate within 100 miles of a small town that Blanchette dubs Dixon. To write this book Blanchette shadowed the number-crunchers and the semen harvesters. He worked as an artificial inseminator. He spoke with vets, managers and management trainers, slaughterhouse workers, truck drivers, and industry veterans with a passion for waste management. He attended the company Christmas parties. He gained access to facilities with the photographer Sean Sprague to capture them as the corporations idealized them, coupled with messier tableaux of heavily used workspaces: a jumble of numbers and drawings on a whiteboard (208); a break room filled with rubber boots, bug spray,

and lunch coolers protecting bags of semen (75); a sow snouting around her gestation crate with the severely limited motions available to her (86–87). And after doing this for several years, Blanchette learned that although the hyper-industrialization of pigs may have distanced most of us from the animals almost completely, the people who worked with pigs experienced the opposite. Their lives had become totally remade by the animals.

One of the pig corporations that Blanchette researched, for example, was so concerned about disease outbreaks among its pigs that it prohibited its employees from cohabiting with workers from other pig-production facilities, and it encouraged them to exercise caution at other gatherings (church, bars, sports events, quinceañeras) so as to avoid cross-contamination. Even employees within the same company felt confined to different “sides”: those who worked with live animals and those who worked with dead ones. The needs of industrial pigs were shaping socialization like an invisible force field. They were also shaping labor. Humans had to feed some piglets themselves, for example, because sows were farrowing more piglets than their own teats could support. This may seem like a fairly innocuous case of accommodation, but Blanchette is alert to its implications: “The biology of the industrial pig is not contiguous with its body. It requires expanding arrays of labor to survive” (124). Humans themselves became industrialized in the process, and as the other “side” of the industry makes clear, that included their own bodies. The work of slaughtering and butchering is aching and sometimes agonizing work. It cannot be mechanized because pigs have not been completely standardized. And to break down pigs’ bodies, humans’ bodies also break down—so much so that their employers opened health clinics to keep them functioning on the line.

From one vantage point these agribusinesses seem like a rigorously closed system, thanks to the logic of vertical integration that turns pig blood into plasma for piglet food, pig fat into biodiesel that fuels transport trucks, and feces into methane to power the barns and slaughterhouses. But the view from *Porkopolis* is arrestingly horizontal: farms extend outward to individuals and families and communities, and restructure their lives in an effort to accommodate an imperfectly industrialized animal. “Modern meat,” Blanchette posits, “revolves around remaking the lives and labor of human beings to make them amenable to capitalist animality” (4). Even though he never saw a live pig outside the factories, the pigs were omnipresent anyway.

Corporate directives were not the only force reorganizing life and labor. The animals played a part, too. An industrial-workshop guru might spout ideational managerese that “pigs have always been Machines” (106), but others



know better. As one expert in the sow barn put it, “Sows are cool” (151). Like many of her coworkers she was attentive to the complexity of the animals and to the myriad ways in which individual pigs could deviate from what was expected of them. Expert inseminators approached their work as a variable process that the sows themselves could influence. Farrowing workers expended huge reserves of physical and emotional labor to keep struggling piglets alive. Truck drivers were careful to avoid making eye contact with pigs or casting shadows that might spook them. And a special sort of holding pen was designed to cool pigs down after their trip to the slaughterhouse, to calm them before they were killed. Although these and other gestures were made in the interests of profit and efficiency, they also represent small concessions to the pigs’ own preferences. Blanchette points out that it is not a coincidence that factory farmers can become excellent free-range farmers: they are highly sensitive and responsive to the animals. They know that pigs have never been machines.

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Despite their different aims and methods, all four books make clear that pigs’ histories matter not simply because they are geographically and economically expansive. They matter because, over the centuries, pigs have reconfigured and are still reconfiguring humans’ lives—not just by feeding us but also by changing the ways we work and think and exist.

In some ways this contradicts the presumption of the industrial system, which is that animals are commodities that can be totally controlled and standardized. But as Blanchette has made clear, even scientists and farmers who work in industrial systems recognize the flaws and costs of its logic. This was the case in earlier phases of livestock industrialization, too. A century before CAFOs had taken over the industry, a contributor to the *Prairie Farmer* objected in 1868 that the introduction of higher-density housing meant that that “the hog is kept shut up, and his former liberty is taken away” (Anderson 191). The GDR introduced a program it called *Mästen mit Resten* (Fleischman 85), a catchy rhyme meaning “plumping the pigs up with slops!,” which obscured the seriousness of the situation: East Germans were being asked to contribute their table scraps to feed factory pigs, whose grain-only diets were leaving them undernourished. Industrial “inputs” were not cutting it.

And Darré’s teacher at the University of Halle, Gustav Frölich, was eager to put agronomy in the service of Nazism, but his view of technological development was still somewhat decentralized: rather than seeking to create The

Industrial Pig, he advocated adapting breeds to different regions, depending on local ecologies (Saraiva 107). This was one interpretation of rootedness in the soil. But Martin Heidegger, who had such high hopes for the Nazi program, was ultimately disappointed with the results. All the academic, industrial, and state initiatives that tried to make *Bodenständigkeit* a reality were only really aiming for “domination and regulation of all objects for the sake of their *usefulness* and *breeding*” (Saraiva 134, quoting Heidegger’s *Contributions to Philosophy*). Objectification occluded existence, and in the process it set humans adrift.

It is not surprising that the same people involved in instrumentalizing pigs were also capable of seeing them as complicated and even affective creatures. The medical anthropologist Mette Svendsen spent years working in the intensive-care unit at the University of Copenhagen with researchers and physicians who saw pigs this way, too. One of the hospital’s projects involved subjecting pregnant sows to premature C-sections in order to conduct research on the sows’ piglets, with the ultimate goal of developing better ways to care for prematurely born human babies that experience gut inflammation. Svendsen found that the grad students’ treatment of “their” piglets was intensive and sympathetic and involved “great efforts to eliminate [the piglets’] sufferings.”<sup>5</sup> They recognized the toll their studies took on pigs and piglets, but they also situated and justified their work as part of the ethics of advancing human care. And yet when they presented the results of their research at conferences, these more complex perspectives on the animals’ subjectivity and connections to humanity were absent: piglets became data.

That simultaneous sensitivity to and subordination of animals actually seems to be the norm in agriculture and the sciences. Historians and anthropologists have found the same bifurcated perspective at play among (for example) researchers studying the sexual behaviors of cats in New York in the 1970s, Soviet scientists preparing dogs for space flights, dairy farmers in the U.K. who adopted robotic milking systems, and farm bureaus that worked to exempt the artificial insemination of livestock from bestiality laws in the U.S. The paradox at play is that commodification improves with care. The physician Zhao Xueming had already made this shrewd observation in the eighteenth century.

5. Mette N. Svendsen, “Pig-Human Relations in Neonatology: Knowing and Unknowing in a Multispecies Collaborative,” in *Biosocial Worlds: Anthropology of Health Environments beyond Determinism*, ed. Jens Seeberg, Andreas Roepstorff, and Lotte Meinert (London: UCL Press, 2020), 69–90, at 75.

When it came to the production of prized Jinhua hams, he noted that “it was necessary to determine whether pigs felt hungry and whether pigs felt warm. Under this care, the pigs would yield pork possessing a refined flavor.”<sup>6</sup> The larder depended on that mutual labor.

So despite the agricultural and economic structures that posit the pig as theoretically mechanizable, there have always been farmers and researchers (even apart from ethicists and activists) who recognize the animal as something more. But the twentieth century still marked a profound departure from the options that pigs had in the deeper past, and from the ways that people perceived them. As the historian Joshua Specht recently noted in a roundtable hosted by *Agricultural History*, livestock have become profoundly more objectified than they used to be.<sup>7</sup>

Or more precisely, *some* of them have become more objectified by industrial capitalism—because other modern pigs are still looking more like subjects than objects. Kossakovsky’s sow is not the only one. Take the villagers of Irakia in Papua New Guinea, who decided in the 1990s to stop raising pigs altogether. Pigs had been a vital form of financial and social currency in their community, as they were (and in some cases still are) across much of Melanesia. But the younger generations in Irakia resolved to give up pig husbandry as part of a larger plan to stem the exodus of migrant laborers who were attracted to the amenities of other places. The problem with pigs? They escaped, they rooted up villagers’ gardens, and they mucked up the landscape. When one Irakian looked back on those days, he felt that “[i]t was as if pigs owned people.”<sup>8</sup>

6. Michael Pettit, “The Great Cat Mutilation: Sex, Social Movements and the Utilitarian Calculus in 1970s New York City”; Amy Nelson, “What the Dogs Did: Animal Agency in the Soviet Manned Space Flight Programme”; Lewis Holloway and Christopher Bear, “Bovine and Human Becomings in Histories of Dairy Technologies: Robotic Milking Systems and Remaking Animal and Human Subjectivity,” all in *British Journal for the History of Science: Themes 2* (2017): 57–78, 79–99, 215–34; Gabriel Rosenberg, “How Meat Changed Sex: The Laws of Interspecies Intimacy after Industrial Reproduction,” *GLQ: A Journal of Gay and Lesbian Studies* 23 (2017): 473–507, at 483–91; Chunghao Pio Kuo, “Pigs, Pork, and Ham: The Practice of Pig-Farming and the Consumption of Pork in Ming-Qing China” (PhD dissertation, New York University, 2013), quotation at 182 (Kuo’s translation).

7. Albert G. Way, William Thomas Okie, Reinaldo Funes-Monzote, Susan Nance, Gabriel N. Rosenberg, Joshua Specht and Sandra Swart, “Animal History in a Time of Crisis,” *Agricultural History* 92 (2020): 444–84, at 446–47.

8. David J. Boyd, “Life without Pigs: Recent Subsistence Changes among the Irakia Awa, Papua New Guinea,” *Human Ecology* 29 (2001): 259–82, at 270. See also Katharina Schneider,

In the long view, historically and globally, the industrial-mechanical approach to pigs has been catastrophic, but it is also a minority perspective, whereas the villagers of Irakia probably represent the majority. In Europe's agro-pastoralist days, for example, pigs were just as difficult to manage, for nearly identical reasons. Law codes from the fifth through the eighth centuries attest to pigs escaping and rooting around cultivated grain, vineyards, pastures, and woods. The codes also attest to the rage of farmers and landowners who caught pigs doing this, to the high value ascribed to swineherds who did the difficult work of caring for them, and even to the fights that swineherds would be drawn into, presumably on account of their animals. Farmers and lawmakers treated pigs as somewhat uncooperative members of their farming communities, and their legal cultures were informed by that supposition. Such adaptations were worth making not only because pigs make pork. The tradeoff was more sophisticated. Pigs provided a unique form of labor: as mostly free-ranging animals they navigated a wide range of ecologies, converting all manner of organisms that humans wouldn't or couldn't harvest into flesh that humans *did* eat. And in the process pigs helped humans appreciate that their lived environments were dynamic systems that merited a flexible approach to inhabiting them. These "systems" were understood locally, in the context of farms and their micro-ecologies, but they were also envisioned in the wider contexts of region, kingdom, globe, and cosmos. All of creation was an interdependent and fluctuating world that could be better understood by attending to even its smallest features. So a single pig should be watched carefully to ensure that it did its important work in the right places—and also to scrutinize the logic of the divine order.<sup>9</sup>

There is something counterintuitive about all of this. The industrial ethic, for all its frenetic activity and growth, is perpetually seeking stability through scalability, whereas the nonindustrial world (at least as the situation in the early Middle Ages suggests) accepts flux, and in balance is less disruptive. Likewise the dizzying corporate ideal of vertical integration that Fleischman and Blanchette document in their books is ironically less capacious than the early medieval view of cosmic integration, which not only stretched to the heavens but was also more attuned to local and horizontal relationships.

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"Pigs, Fish, and Birds: Toward Multispecies Ethnography in Melanesia," *Environment and Society* 4 (2013): 25–40, on interspecies agency.

9. Jamie Kreiner, *Legions of Pigs in the Early Medieval West* (New Haven, CT: Yale University Press, 2020).

It is not that agribusinesses were the first to treat pigs as an economic resource. Even in the premodern world, pigs were instrumentalized and quantified—as heads in a herd, as shoulders of pork, or as measures of lard that the English called *spic*.<sup>10</sup> But they were not “built to spec” as the pigs of Blanchette’s study were (105), and as so many other pigs in the universe of industrial agriculture have been, too. Instead they were treated as difficult co-workers (albeit subordinate and edible co-workers), with skills and capacities that were worth accommodating. Their curiosity and cleverness called for the same qualities in their keepers, as the villagers of Irakia would wryly recognize centuries later.

Historians and anthropologists of the pig are urging us toward a way of seeing that is coincidentally something more like the early medieval perspective. Anderson’s survey of pigs before CAFOs, Saraiva’s treatment of pigs as boundary objects, Fleischman’s mapping of gardens and woods and mountains of manure, and Blanchette’s attention to the intermeshing of pig and human bodies: each of these approaches would have made a certain sense to farmers and philosophers fifteen hundred years ago. This is not to say that they are looking backward. Instead they are dismantling our pretensions of modernity. Of course there are significant differences between the free-ranging herds of the seventh and seventeenth centuries, and between *those* pigs and the industrialized pigs of the twenty-first. But it would be a mistake to think that we have become progressively more liberated from them. We assume that we “use” animals to feed ourselves, but the meat and minds of our own bodies are still morphing to make that possible. Pigs are fascinating for all sorts of reasons. But the most obvious reason to care about their histories is that they are completely entangled with ours. Pigs are cool. Pigs are us.

10. For this last product, see, e.g., charters S 1195 and S 1198, in *The Electronic Sawyer: Online Catalogue of Anglo-Saxon Charters*, at <https://esawyer.lib.cam.ac.uk/charter/1195.html> and <https://esawyer.lib.cam.ac.uk/charter/1198.html> (accessed Jul 2021).