

its parameters on the basis of several thousand antibody tests conducted in Santa Clara, California, using a kit Stanford University microbiologists concluded erred on the side of false positives.⁵³¹ Alongside the obvious impacts on the model parameters, for one, increasing the case fatality ratio's denominator, study scientists also complained of the impact of reporting back unsubstantiated test results to study participants.

But perhaps worse was the political economy in play. The complaint also showed the study was funded in part by and conducted in coordination with David Neeleman, the JetBlue Airways tycoon and reopen proponent. Despite a bailout of astounding proportions, the airline sector as it is presently constituted is on the verge of collapse.⁵³²

Red Vegans Against Green Peasants

The bad takes on COVID wend across the political continuum into the more recognizable left. Superficially more grounded anatomies of the crisis have leapt atop the backs of the dead animals and broken landscapes that did indeed help produce the pandemic. But in a classic riding trick, the acrobatics suddenly switches mounts mid-ride to characteristically Eurocentric hobbyhorses from which to herald imperium-old edicts on how to live, eat, and die.

Should we eat meat, with source livestock an apparent driver in the emergence of deadly pathogens? Documentarian Astra Taylor, environmental historian Troy Vettese, and political scientist Jan Dutkiewicz —TVD, for brevity's sake—answer in the negative: “Individually, we must stop eating animal products. Collectively, we must transform the global food system and work toward ending animal agriculture and rewilding much of the world.”⁵³³ With anthropogenic global warming already taking carbon dioxide levels through the roof, meat was already an easy target. It's a synecdoche for effete gluttony, the emblem of a global class divide, an easy piece of fat—and protein—to trim from wealthier consumption baskets, and a neat way to merge individual ethical consumption and world ecology.

The anti-meat crusade has apparently received an unintended and misused push from recent ecological and epidemiological work on the likely origins of the pandemic.⁵³⁴ These analyses traced how the interaction across confined animal feeding operations, monoculture doppelgangers,

fading forests, and antimicrobial marination has produced a petri dish of new diseases. Out of this combination, one virus after another easily jumps from animal populations to humans.

Pre-pandemic, TVD fellow travelers rejected such political ecology, which in their psychologizing dismissal “often romanticizes what are seen as anti-modern subsistence livelihoods on the margins of global capitalism.”⁵³⁵ But now, given the obvious realities on the ground, a pandemic strain that hopped from bat caves on the other side of the world into the lungs of urban workers they champion, the ecomodernists (again to no reputational damage given their golden tickets) have turned to folding in the analyses they previously characterized in the most scurrilous terms as if they approved all along.

Such systems—these incubators for viruses, huge biological emitters of CO₂ and methane, rampant deforesters, and living beings suffering amid the cruelty of enclosed industrial animal camps—merge into a pithy command from TVD: No, don’t eat meat. The team suggests we plow “public-directed investment” into “both plant-based meat alternatives and cellular agriculture,” or, in other words, lab meat, a product that so far exists primarily among venture capitalists, a few labs, and red-washed ad copy lauding it as a socialist wonder food from Keynesian Green New Deal cookshops.⁵³⁶

Key questions are greased over, restricting, as sociologist Andy Murray describes, the very discourse lab meat proponents claim they wish to open up.⁵³⁷ Who is this “we,” for one, and even, what is meat? Veganism and animal rights, to which one needn’t object as ethos on their face, are reflexively deployed here to conflate objects and processes. There is no *thing*, meat, that has uniformly negative ecological, social, or epidemiological consequences. Meat only has in common that it comes from living creatures, and animals, just like people, can only be fundamentally understood in relation to the material environments within which they live, are loved and cared for, or maltreated and abused, and, in the case of most food animals, killed.

The question of “Should we eat meat?” therefore, appears very different among different sets of “we” and the different relations “we” have with such animals.

There are millions who might bridle at, or whose lives would be simply upturned and devastated by, enforceable commands that they simply cease

meat production and consumption. Tunisian camel herders in the semi-arid steppes of the Jerid who rely on herding for day-to-day survival, or Bedouins in the northern Gaza Strip, have not been consulted about how they feel about an order from the Global North—in this case from Harvard and Johns Hopkins direct—to stop eating meat or engaging in the meat trade.⁵³⁸ Nor, in the other direction, have these researchers asked if such meat is substantively identical to the confined feedlots they rightly condemn.

At a minimum, we know that ceasing meat production and consumption would require a massive political intervention in those countries. We know that isn't what the authors intend, heaven forbid. But we also know that intention does not get us very far, particularly when the *Guardian*, where the TVD piece was published, has rarely shied from advocating for neocolonial assaults on the Third World.

Beyond that coliseum, it would not be the first time that phantasmagorical narratives of “environmental degradation,” “resurrecting the granary of Rome,” or “making the desert bloom” have been used to justify the extirpation and violation of the rights of Arab people in the peripheries of the world system.⁵³⁹ The impulse is little different from the One Health approach, which, connecting wildlife, livestock, and human health, warmly speaks of “the creation of a healthy and sustainable reconnected future for our planet.”⁵⁴⁰ Indeed, many a leftist outlet—Sonia Shah interviewed on *Democracy Now!*, for instance—platforms such cant in COVID's wake.⁵⁴¹ In actuality, the approach aims to recapitulate colonial medicine, blaming local indigenous and smallholders for outbreaks and failing to incorporate social determinants of epizootic spillover.⁵⁴² In much the same way, a red veganism of the North carries its own burden of green histories, among them antebellum slaveholders aiming for “ecological” plantations and closing the cotton cycle by forcing slaves to eat cottonseed oil.⁵⁴³

Perhaps more important, there is no reason to think meat production in and of itself need have negative ecological impacts. In fact, it can be part of ecological restoration and a keystone of poor pastoral livelihoods across swaths of the Third World.⁵⁴⁴

We know from the work of the geographer-veterinarian Diana Davis with the Aarib in southern Morocco that these pastoralists are expert managers of their animals and the range alike, and that banning grazing has in fact harmed the health of the rangeland, where animals and people alike

flourish in non-equilibrium dynamics.⁵⁴⁵ The best way to use these “highly variable arid environments is to amplify and facilitate pastoralists’ mobility and to strengthen common property systems,” building up on the lifeways and knowledge systems of the herders themselves. We likewise know from the work of sociologist Ricardo Jacobs in South Africa that urban slum dwellers live a dual life, as urban workers and as herders and livestock-keepers.⁵⁴⁶ Such work is part-and-parcel of their daily social reproduction. On what grounds should researchers from the North demand the cessation of these activities and their replacement with lab meat?

Or, to take a third example, we could consider the buffalo of North America, which had long had a symbiotic relationship with the short grasslands of the Great Plains. In such ecosystems, buffalo were the “keystone herbivores within the Great Plains, sharing complex landscapes with other herbivores and predators for nearly 10,000 years.”⁵⁴⁷ Their constant feeding and grinding of manure, seed, and spare herbaceous matter underfoot historically ensured the ecological biodiversity of that environment and was the cause of the boggling richness of the black soil of the Plains.

As the Plains were “settled” by epochal primitive accumulation, the capitalist political ecology of the settlers displaced that of the Plains Indians, setting the stage for massive population destructions and colonial genocides. Later, the wheat planted on those fields was sold on world markets to undercut Third World agricultural systems, or fed to fatten up animals, all to the great profit of private corporations in the United States. While wheat and other commodities of the Green Revolution perhaps paradoxically have led to starvation, hunger, ecological wreckage, and the loss of peasant knowledge across the Third World, in what we might think would be an obvious symmetry, we hear no calls for banning cereal farming in total.⁵⁴⁸

Instead, researchers increasingly advocate restoring to the Great Plains the buffalo or other large herbivores that are capable of mimicking the grazing patterns of those extirpated animals.⁵⁴⁹

Elsewhere, the Gwich’in of Alaska subsist off caribou, and across the Sahel, millions of pastoralists survive off the production and sale of animals and meat, for their own consumption or tied into petty-commodity production.⁵⁵⁰ Banning animal agriculture means banning animal agriculture in this world, and not in another world, which means, we should be clear,

banning all the actual instances where people are engaged in animal agriculture. What should happen to the many millions of people whose modes of life are considered inappropriate?

A herd of examples stampedes to the horizon, but the point on that front is clear enough. Advocating intervening in the Global South and blithely demanding adopting capitalist technology in the name of a socialist Half-Earth, as does Vettese, who orders that it “must be from pasture that an eco-austere world will derive the land needed” for tree planting, is a form of “natural geo-engineering,” developed according to specific values, specific devaluations, and pathological externalizations. These are not the no-brainers their advocates presume.⁵⁵¹ Compulsory veganism and lab meat, endorsed by prominent social democrat Green New Dealers, among them UPenn sociology prof Daniel Aldana Cohen, consents to the brute confiscation and erasure of peasant and pastoral particularisms in the name of “universal” ideals: rewilding Earth upon the bones of supposedly atavistic peoples poor and brown.⁵⁵²

Rampant “afforestation” sidesteps what the *Yale Environment* 360 article Vettese cites actually focuses on as a widely diverse array of natural carbon sequestration strategies that don’t resort to the age-old colonial strategy of planting trees.⁵⁵³

In fact, in Ethiopia, the model country for tree planting’s carbon absorption, non-native eucalyptus have caused tremendous damage to soil nutrients and water tables.⁵⁵⁴ In other arenas, tree cover concusses biodiversity, as savanna wildebeests have the odd trait of failing to flourish in the forests planted by Harvard fiction writers.⁵⁵⁵ Adding trees reduces fires, but fires have beneficial ecosystemic functions: they burn off the vegetation that casts shade over the ground-level of the landscape.⁵⁵⁶ In that way, regular burns actually produce the grass upon which animals eat. Planting nice green trees hither and yon may end up killing all the antelope —quite an outcome for our colonial vegans.

In other artificial forest zones, streams and rivers have dried up and shrunk, precisely what is forecast to occur under global warming. Do we wish to adopt a political ecology that helps accelerate the present change in climate?

Where Tech Meats Capital

Lab meat is not a good idea even on its own biogeological grounds. It requires a massive amount of energy, and given that most agree that we need to reduce, not increase, Northern energy consumption, it makes little sense we would adopt a method of making food that depends exclusively on electricity. Initial studies show that making it low- or zero-carbon would require a misnamed clean energy, with at best less-dirty energy dependent upon mining nuclear and non-nuclear metals also producing pollutants and the impetus for land grabbing.⁵⁵⁷

Such meat also requires feedstock, a complex broth in which it grows. Presently, some are made using, of all things, fetal cow's blood.⁵⁵⁸ So much for vegetarianism. Most also require massive bio-reactors made of plastic, which would need to number in the tens of millions to supply a similar amount of meat as people currently consume. Plastic, of course, is another material- and energy-intensive material. More expensive than cow's blood is an unlabeled witch's brew of glucose, amino acids, vitamins, and minerals from industrial monocrop inputs. Again, not very energy-efficient and serving only as the next dumping grounds for many of the very inputs industrial meat now absorbs.

Finally, the technology reinforces relations of production to which red vegans declare they object, depending entirely upon venture capital angel investors, who see in the "innovation" a path to a new generation in massive profits.⁵⁵⁹

Here, again, we see a recurring feature, where "technology" is imagined as a neutral set of gewgaws, rather than summoned into being, as Marx described, in a specific form, by specific people, for a specific set of purposes.⁵⁶⁰ Under capitalism, tech also arrives with a specific set of material needs, which are made possible only out of artificially depressed prices, including environmentally unequal exchange, just another way to loot anyone only peripherally connected to centers of capital, from the Global South to rural sacrifice zones in the U.S. and Europe, just outside these centers.⁵⁶¹ All in the name of progress.

We would suggest instead taking the lead from the international movement for food sovereignty, which is organized under the umbrella of La Via Campesina, as close to a Fifth International as exists in our world today. LVC took its cue from, among others, those who wrote the Wilderswil Declaration on Livestock Diversity:

We will continue to further develop alternative research approaches and technologies that allow us to be autonomous and put control of genetic resources and livestock breeding in the hands of livestock keepers and other small-scale producers. And we will organize ourselves to conserve rare breeds. We are committed to fighting for our lands, territories and grazing pastures, our migratory routes, including trans-boundary routes. We will build alliances with other social movements with similar aims and continue to build international solidarity. We will fight for the rights of livestock keepers which include the right to land, water, veterinary and other services, culture, education and training, access to local markets, access to information and decision making, that are all essential for truly sustainable livestock production systems. We are committed to finding ways of sharing access to land and other resources with pastoralists, indigenous peoples, small farmers and other food producers according to equitable, but controlled, access.⁵⁶²

Livestock are more than thirsty meat bags and poultry more than an egg a day. For smallholders, animals are multifunctional, with a kaleidoscope of ecological and economic contributions.⁵⁶³ They are stores of capital for communities that do not have easy access to banking systems. They are modes of transport. They work on fields and make labor that is backbreaking and tortuous possible. They eat forage from marginal and unplanted fields, and essentially work as protein farms with miraculous efficiency, gathering up photosynthetic energy converted to cellulose and turning it into meat. Amusingly, we do not need artificial (and unidimensional) meat incubators, since nature and the *longue durée* of human cultivation have provided the real deal for us.

Animals also poop, and manure directly enriches soil, restoring its nitrogen balance, providing a haven for soil organic matter, and generally producing beautifully rich and fertile soil perfect for farming. All without extracting almost the entirety of smallholder income for multinational chemical fertilizers (and other inputs) as occurs across so-called developed countries.⁵⁶⁴

For this reason, actual peasants—mysteriously absent from the TVD piece—have made very clear that they do not accept the termination of animal agriculture or compulsory veganism. Their demands are simple and

clear, as in the resounding words of the Latin American Coordination of Rural Organizations (CLOC), a branch of La Via Campesina.⁵⁶⁵ CLOC calls for “the promotion of peasant and indigenous family agriculture; a concept that encompasses all family-based agricultural activities, such as the way agriculture, livestock, forestry, fishing, aquaculture and grazing are organized, managed and operated by a family, and which depends on family labor.”

Such a more-than-human community—extending beyond the family unit to broader landscapes—seems a much better option for the greater majority of the world than an Amtrak corridor—limited notion of ethics and appetites.

Nor are such proposals limited to the South. In the North, planned intensive rotations could sharply increase the Great Plains stocking capacity, at the same time increasing the quantity of animal per hectare and the quantity of carbon stocked away in the soil. Indeed, there are serious claims that meat in the long run could become carbonnegative, with knock-on effects that include increasing the capacity of the soil to retain water and its resilience in the face of the imminent or already present downpours of a warming world.

Smaller integrated farms are not merely a Southern peasant politic. Apparently unbeknownst to Muirian supremacist half-earthers at Harvard, they represent the core of a vibrant Northern food movement, wherein food sovereignty, indivisible from healthy soils, is undergoing a new renaissance, even in the face of agribusiness domination.

Here is a form of “natural geo-engineering” that we can get behind. Whether this would make meat more or less expensive, more or less available, we do not know, but when taking the perilous step of sketching out the cookshops of the future, the task at hand is to collaborate with the sustainable practices direct producers engage and to stick to non-negotiable demands such as unalienated production, ecological literacy, and egalitarianism. We need to avoid issuing blueprints for another world from the faculty dining club.

Left Aporophobia

There is no shortage of strange interventions. Rather than building up a programmatic post-COVID economics based on the living demands of

movements in struggle, where, from the Philippines to Brazil, there are tightly disciplined mass rural movements calling for agrarian reform and agroecology, political economist Geoff Mann speaks *over* such movements —note the pattern—and advocates a new “experimental, adaptable and bold patchwork” that consists of “socializing” the food system.⁵⁶⁶ How, then, ought it to be socialized?

The brief document to which he links is an odd patrician diatribe against food sovereignty, recycling wholly discredited arguments with which we authors have already dealt.⁵⁶⁷ The only actual programmatic statement we could espy in the document to which Mann links argues *against* living wages for farmworkers and parity prices for farmers, the vanguard demands of the U.S. food sovereignty movement. Instead, True Socialists should promote automation of all “physically exhausting forms of toil” as a defense against the next pandemic.⁵⁶⁸ The demand skips hand-in-hand with the techno-capitalist Breakthrough Institute regurgitating the long-debunked land sparing argument in favor of more intensive agriculture.⁵⁶⁹ The demands are present in no food movement outside pro-agribusiness think-tank tax shelters arguing in favor of consolidating farms from underneath smallholders.⁵⁷⁰

Syracuse University geography professor Matt Huber, Mann’s source, asks after what “automated technologies can be repurposed to create agroecological growing systems.... This means a debate based not on either industrial or smallholder agroecological production, but probably a combination of both.”⁵⁷¹ One is left perplexed as to how Mann and Huber—marking themselves out of their depths—intend to impose agroecological growing systems with industrial production. Industrial farming refers to extensive capital inputs, whereas the question of the degree of mechanization of farming, with harvesters, for instance, is a topic upon which La Via Campesina is agnostic, leaving it up to farmers themselves.

Huber writes as if his objections to farmer autonomy are a matter of personal survival. The possibility farmers might choose to refuse him is a palpable panic—as if farmers aren’t interested in feeding people!—recapitulating the two business parties’ strategy in imposing divide-and-conquer upon rural and urban America.⁵⁷² Huber pays homage to the economies of scale, bourgeois central planning, and capitalism’s sunk costs —tying relations of production to forces of production—that will sufficiently discipline producers and secure his larder. The tenured

Kautskyist gone full Stalinist, leaving, as his *Jacobin* stablemates champion, chicken sandwiches for the plebs.⁵⁷³

The irony is that the next steps out of the agro-economic traps that helped select for COVID-19, H5N2, and other outbreaks require making for a near-opposite heading. Not more of the same. Governmental intervention and regional planning *are* critical for helping agricultural communities emerging free from zones of agribusiness sacrifice, but decision-making in the spirit of the Zapatista principle of *mandar obedeciendo* (leadership from below) calls for those who best know how to grow food on *this*, the landscape they know so well, to help reinternalize a cycle of caring for the land generation-to-generation.⁵⁷⁴

The resulting virtuous cycles of regional food production—felt through land and labor alike—can be found all the way up through the geological scales and, as the International Panel on Sustainable Food Systems describe, the periurban food systems we all share:

Wide-reaching shifts in social and economic relations also emerge as key components of agroecological transition. The Declaration of the International Forum on Agroecology states that “families, communities, collectives, organizations, and movements are the fertile soil in which agroecology flourishes. Solidarity between peoples, between rural and urban populations, is a critical ingredient.”⁵⁷⁵

Summarizing a burgeoning literature, IPES-Food offers a program by which to rewire our food system *for all*. There are multiple examples of communities worldwide connecting ecological agriculture with urban markets, some operating at scales of millions of farmers and consumers.⁵⁷⁶ Political agroecologist Jahi Chappell describes how Belo Horizonte, a city of 2.5 million people in Brazil, built a municipal food program that guaranteed a subsidized market of thousands in town for hinterland farmers, who could now afford agroecological and organic practices that protected local forests.⁵⁷⁷

To think that Huber calls himself a geographer, trafficking in the cheap divides of rural vs. urban and arguing food production has nothing to do with transportation. And if he insists on doing so—along the way citing Farshad Araghi as if the agrarian sociologist was in favor of depopulating

the countryside rather than in appropriate repeasantization—it would be at best as a dishonest representative of a proud discipline.

Across even competing schools of agrarian studies, it's been long understood that for any movement on this front, we need to support farming communities' efforts to decide upon ecologically and socially sustainable levels of appropriate technology and mechanization. Given that we are currently in a race against time—in fact, we are in negative time—to produce the clean tech needed for keystone transition energy technologies, there seems no non-pathological reason to suggest using energy to mine, smelt, and work metals to build automated machines, which would increase U.S. society's overall energy use, making decarbonization harder, not easier.⁵⁷⁸

Better placed is figuring out ways that people might willingly accept and support the manual labor done by that brilliant machine for converting plant calories to mechanical energy, the human body. Alongside whatever automation farmers wish (as opposed to imposed by corporate end buyers or their paid scribes). Labor for labor, not for capital. Would that mean in the short term, double, triple, or ten times the minimum wage? We should all be for it!

But what do we find at the end of the line of citations, nested Russian doll-style, giving Mann plausible deniability, or, much more likely, signaling a simple lack of concern about the real-world consequences of the programmatic politics he espouses at his office? Nothing other than a propaganda piece for GMOs that prominently features plant geneticist Pamela Ronald, tied through more threads to chemical industry front groups such as the Cornell Alliance for Science (CAS)?⁵⁷⁹

Now, the “gotcha!” would be to wonder how *Viewpoint* magazine, where Mann's piece was published, and which in the past has published rigorous anti-Eurocentric work, came to launder the views of capitalist agribusiness and the chemical industry. But that would not take us very far, since we find the same with Vettesse, Taylor, and a Brooklyn loft party of kindred spirits. Each briefcase of sales brochures stashed in the proverbial cloakroom is redwashed as if such opportunism is all according to plan.

In Marx and Engels's names, Huber offers us that nothing is wrong with the present system save who runs it: “The goal of socialism is to take already existing socialized labor systems and socialize the control and benefits.” Nah, bro, Marx vehemently disagreed.⁵⁸⁰ Labor—its machines

and ergonomics already capitalist impositions in relations of production— isn't the only source of wealth.⁵⁸¹ We have to take care of Earth too.

So placing monoculture plantations into worker control, as Huber demands, is neither the “ecological planning” he proposes on the one hand, nor, however necessary, a sufficient enough step in stopping pathogens from emerging out of the global circuits of production that the geographer weirdly also champions.

But such a fancy waves through proudly anti-rural cranks such as Doug Henwood. That *Left Business Observer*, sounding like Trump hawking hydroxychloroquine, recently posted CAS propaganda on his Facebook page about a “little-explored alternative” of delivering a COVID vaccine through genetically modified tomatoes. There's many a reason why it's “little-explored”—how, ironically enough, to assure standardized dosage?—but much as at John Ioannidis's Stanford, from Monsanto to the *Yankee Clipper* left, such ill-vetted, capital-led scientism runs express up the Northeast's coastline.

The problem is a more general one, beyond this particular terroir. Why are so many figures on the *bien pensant* Anglophone left adopting anti-ecological politics that advocate technologies that are as inseparable from their funders as the looms were from the mill owners in the age of the Luddites? Why are these positions serially platformed by allegedly critical podia, time and again, even as their logics are symmetrical to those underlying efforts to force meatpackers back to COVID-infested processing plants, where all that labor is “saved”? There's a through line from Trump to what counts in much of the Global North as the far left.

Clearly the interminable omission reflects an inability to center the voices of the actually existing ecological and anti-systemic movements in the core and periphery alike. Soul Fire Farms, the Savanna Institute, and the U.S. Food Sovereignty Alliance in the core are rendered invisible, as well as the more discomfiting and openly anti-imperialist La Via Campesina, which expresses solidarity with crucial fortresses for humanity's struggle for a better future such as Venezuela, Cuba, and the now-fallen Bolivia.⁵⁸²

Compare such calculated disappearances with the Minnesota Farmers Union's recent efforts to breach the rural-urban divide in the other direction:

You've no doubt heard about the killing of George Floyd this week by a Minneapolis police officer. This horrific act and ensuing

protests and property destruction have been hard to process, not just for those living and working in the Twin Cities Metro, but all Minnesotans and Americans.

There's a lot to reckon with and soul-searching to do to ensure that, at an absolute minimum, nothing like this ever happens again. We have to do more than say that we condemn it, which we do. This comes on top of a deadly pandemic that has disproportionately harmed people of color, including in agriculture and food sectors.

As always, we are here as a community, ready to listen to whatever is on your minds and hearts. Do not relegate this to simply an urban issue. We can't go back to the previous "normal" post-COVID—this makes it even clearer why. We call on our public officials to fight back against all injustices they can, and for everyone to reflect on why injustice persists.

Perhaps such soppy sentiments make us agroecologists "appreciate simplicity," not to say clarity, to borrow a condescending aphorism from a "radical" anatomy in favor of the Bolivian coup.⁵⁸³ We leave that for others to judge, if in the glare of a bank of bright bulbs shining light therapy right to left upon the pandemic.

—MAY 30, 2020

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