

## **Upstream**

### **A History of the World in Seven Cheap Things**

**With Raj Patel and Jason W. Moore**

**Robert Raymond:** Welcome to Upstream. Thanks so much for taking the time today, and I'm wondering if you could just maybe start by briefly introducing yourself for our listeners.

**Raj Patel:** Thanks so much for having me here. My name is Raj Patel. I'm a research professor at the Lyndon Baines Johnson School of Public Affairs at the University of Texas at Austin. And I have for much longer than I've been a professor here, been an activist for transformation and revolution in the food system.

**Robert Raymond:** Great. Before we get into the questions around the topics in your book specifically, I'd like to start by asking you what your thoughts are on COVID and what that's revealed about maybe specifically our food system, but also just broadly about our current national and global economic system?

**Raj Patel:** Well, it's hard to say anything original about this other than to observe that particularly in the food system where injustices always reigned supreme, they've been uncovered and revealed in some fairly stark ways. So, for instance, look at who it is that most at risk of getting COVID beyond those who are in nursing homes. And in Texas, where I live, it's going to be people in the control system and people in meat processing facilities and the sort of carceral logic of people being put in place and being operated on as if they were meat that operates in prisons in the United States and operates in many workplaces, clearly operates in slaughterhouses. And the disassembly line there is absolutely rife. And obviously it was COVID hotspot around the world when the disease first broke out. And the fact that under Trump meat processing was declared an essential service reflects the power of the food industry to override the lives of workers, obviously, and obviously the livestock that are fed into that machine. But, broader public health goals in general. So, the food system is set up to make a profit. It's not set up to feed people. It's not set up to leave us with a livable planet. And covid has revealed that abundantly.

**Robert Raymond:** Let's get into one of the big concepts and one of the ideas that you write about in your book. There's a lot of talk about the Anthropocene and you introduce the concept of the Capitalocene. I'm not sure if that's how you pronounce it, but the Capitalocene, and yeah,

I'm wondering if you could explain sort of what that term means, its significance and how you sort of distinguish it from this idea of the Anthropocene.

**Raj Patel:** So the Capitalocene, and that's how I pronounce it, was coined by my co-author Jason Moore. And the reason we use it in the book is because there's so much talk about how humans have destroyed the planet and how there's an indelible human trace in the fossil record. And that's true. If there's any civilization after humans and they scrape the fossil record, what will they find? They'll find radioactivity from nuclear weapons tests. They'll find plastic. There's going to be more plastic than fish in the oceans by 2050. And they're going to find things like the traces of our meat industry, of our food industry. They'll find chicken bones, trillions of chicken bones. But it would be inaccurate to say that there's something innate to humans that caused that. And Anthropocene suggests that it's just all about humans being humans. And of course, humans will go around and detonate atomic weapons and manufacture so much plastic that it outweighs the fish in the sea and so on. But it's not human nature. If ever there was such a thing to do this, it is the outcome of capitalism, because humans obviously pre-date capitalism and humans didn't leave such an indelible trace in the fossil record.

So it's important to point the finger where the blame squarely lies. That's why we use capitalism rather than Anthropocene, because it's also the case that there are many humans who are not merely not responsible for these traces in the fossil record, but who have actively fought them and resisted them. And whether it's indigenous civilizations or whether it's peasant movements around the world, there are lots of human civilizations that are not OK with what capitalism has done. But to use the term Anthropocene is to tell them with the same brush as the capitalists who are abundantly happy with all of this.

**Robert Raymond:** Yeah, I really appreciated that distinction. I think it's a really important one. And you also so you argue in the book, you and your co-author argue that we're coming to the end of the Capitalocene era.

**Raj Patel:** Well, to understand that, you've got to get into the argument that we're making about capitalism, and capitalism, we suggest, is a system that won't pay its bills, that can't pay its bills. And by that, what we mean is that capitalism is always on the hunt through its frontiers for ways of avoiding paying for things like labor or for resources or for care work. And so through successively dodging the bills that come home to roost, capitalism has found new frontiers. And what we can talk about that in a second. But what we're talking about when we talk about the end

of this sort of moment of capitalism is the. Points to the fact that all the things that capitalism takes for granted, all the frontiers through which capitalism has managed to dodge paying its bills are now coming due. The most obvious moment of that is in the crises of extinction that we are living through at the moment and the systemic collapse that has been a result of the fact that capitalism just thinks of the world beyond humans as an infinite resource and an infinite dustbin. You know what? We can pump whatever we like into the atmosphere. We can spew whatever we like into the seas. We can befoul the air in any way we see fit because ultimately it's free and capitalism doesn't have to pay for it. And unfortunately, in all of the ways that capitalism has been using the more than human world around us, that is backfiring.

It's coming to a rather abrupt end and in the same way that we're facing the sort of systemic ecological crises, we're also facing crises in terms of the other cheap things that capitalism takes for granted. Cheap work, cheap care, cheap food, fuel, cheap money and cheap lives. And in all of these respects, there is a moment in which the standard patterns of capitalist exploitation have in some ways run out of things to exploit. And by pointing to all of these, what we're suggesting is that we are heading for a fairly large systemic crisis of capitalism.

And this isn't a reason to celebrate necessarily. I mean, you know, what comes after capitalism needn't be great. When capitalism had one of its paroxysms and one of its periodic crises in the 1930s, what emerged in other places was fascism. And you can certainly see that emerging everywhere from Brazil to India right now. So it's not the case that anyone who despises capitalism ought to be celebrating the end of it just because whatever is not capitalism is good. But what we're suggesting is that if you look at what's been going on in, say, Brazil or in India, you can see within these countries a moment in which ecological crises are being reconfigured into moments of fascist dominance.

**Robert Raymond:** Yeah, we do see that more and more people are becoming aware of the inadequacies and just awful outcomes of the current economic system and are fighting for a better one. But there is no guarantee that it's going to end well. I think we're all sort of at the precipice right now, just sort of holding our breaths. You mentioned briefly in your last response the cheap things, the seven cheap things that you mentioned in your book, which is titled *The History of the World in Seven Cheap Things*. And I think one of the best examples that you use to illustrate this idea of cheapness within capitalism is the chicken nugget. And I'm wondering if you could explain the chicken nugget, sort of how it unpacks this idea of how nature, work, care, food, energy, money and lives have been cheapened in the Capitalocene.

**Raj Patel:** In the very short version is like a two-minute viral Facebook video that we put together when we launch the book. But the slightly more expanded version is this. As I've already mentioned, if there is another civilization after humans, what they'll find is chicken bones. And that's because the chicken industry has been profligate around the world in essentially taking this red jungle fowl from the jungles of Southeast Asia and mutating it using government resources and private sector resources. We now have a bird that's been bred with breasts so large that the bird can't walk. Now, that is an example of cheap nature that we take what we like and dispose of it in any way that we like. And that's why there will be trillions of chicken bones. There aren't trillions of chicken bones in the world around us already. But chickens don't turn themselves into nuggets by magic. You need work and cheap work is the second thing that we talk about now by cheap work. What we need is the exploitation of labor. And the chicken industry has been very creative about the ways that it exploits labor. I mentioned the prison system before and prisoners in the United States are used as low cost workers in the chicken meat complex.

But there's a particularly striking example from Oklahoma, where chicken executives there wanted to kill two birds with one stone. And what they did was set up something called Christian Alcoholics and Addicts in Recovery. And the idea was that this was a diversion center for people who had been caught up in the Sackler-Perdue opioid epidemic. And instead of these people being sent to jail, they were sent to the rehab facility and the rehab facility involved praying to Jesus by day and then by night when workers are very hard to recruit and pay for on the standard capitalist regimes. These recovering addicts were put on the chicken production line, and the great advantage for the chicken executives were that these addicts didn't have to be covered by OSHA, they didn't have to be covered by health insurance. And so when they lost a finger or two, when they were injured, this was just part and parcel of the treatment. And this recapitulates really one of the first forms of forced labor that happened in the Americas when the Spanish first colonized and enslaved indigenous people. What they did was offer a regime in which indigenous people were worked often to death by day and if they survived on Sunday for a little bit, they could pray to Jesus for the salvation of their soul. And really, this is just that but modern. and that cheap labor is running out, as we're seeing here, workers are organizing. Were it not for the pandemic, we'd have seen a more consistent, I think, upward tick in demands from workers. And we can talk at some point about the Alabama strike or the failure of Amazon workers in Alabama to unionize.

But there's more there around workers and working class power in terms of wage raises. And you can see that cheap work, even in China, is starting to be pushed back. What workers in China are organizing and rebelling against the regimes of cheap labor imposed upon them. Now, when workers get injured on the job, the chicken industry doesn't really care. I would rather fire them. So what happens to those workers that they are often forced to be cared for by the community that surrounds them and that invariably under capitalism is gendered work. It's usually coded as women's work to be involved in reproductive labor or to be involved in care work to be involved emotional labor. And that work is essentially unpaid for world capitalism to pay for it. It would amount to two thirds of global output, at least as measured in nineteen ninety five. The most recent figure we can find now, cheap nature, cheap work and cheap care require other cheap things.

So for example, and the irony here is that in order to work at very low wages, you need cheap food. So low calories provided at low cost for workers not terribly nutritious, but produced industrially so that workers meager salaries can enable them to survive to at least make it through the day and take care of their families in some moderate way. And not not at all lavishly and not at all in some cases. And cheap food is becoming more and more expensive. We're seeing again the sort of global rise in food prices. You also need cheap energy in order to make the chicken production facilities work. You need cheap carbon. And we're seeing again after the pandemic is an upward rise in the cost of fossil fuels.

And all of this requires low interest loans of cheap money in order to be able to carry on. And although interest rates are really as low as they've ever been, the sort of logic of neoliberal capitalism still demands low interest loans in order to be able to grease the wheels of capitalism. And when all of this goes wrong for capitalists, then they require cheap lives. They require the callous offshoring of work onto communities that are considered worth less than white communities. Whether that's the ideal of a white male liberal, and I'm not using liberal in the left sense, but just liberal in the idea of liberal capitalism. That white male liberal subject has been at the center of capitalism since its invention and white supremacy is sort of indelibly baked into certainly North American capitalism. But certain kinds of supremacist ideals is to be found everywhere where capitalism reigns, whether that's increasingly Hindu supremacism in India or the variants of white supremacy ism you see in Brazil or recently certain kinds of nationalist Chinese supremacist. All of these are problematic and are ways in which other humans are their bodies are constructed and read in different ways. And there is increasingly an outcry against all of those kinds of cheap things of cheap nature, cheap work, cheap cheap food, cheap fuel, cheap

money and cheap lives. And all of those are kind of running out. And that's why your chicken nugget, which is produced in ways that require all of these things, is a symbol of what it is that's wrong with capitalism.

**Robert Raymond:** Can you talk a little bit about the idea of overpopulation? What are its origins? How has it been used to frame discussions around hunger and resources and other issues within global capitalism?

**Raj Patel:** So, you know, I mean, although Thomas Malthus is the first person really associated with this and the person who kind of abstracts the fecund working class and says, look, because the working class is you know, they're just eating and shagging and reproducing and at some point this population boom will outstrip food supply. This is an idea that really sort of gets its wings through strange kinds of white supremacist thinking in the nineteen sixties that people now refer to as the tragedy of the Commons. Garrett Hardin was the odious thought experiment whose idea of the Commons is something that people still refer to today. And the idea here is when you think of the tragedy of the Commons, you think of an owned land where people will just crowd together and exploit the land to hell this idea that unless private property and enlightened ownership can safeguard a resource, it's always going to be extracted and destroyed. That isn't actually how the Commons operated. And coal mining was precisely about having a vocabulary and a practice of things like stinting where you didn't consume something and gleaning where those who had excess produce were happy to let it fall into the hands of those who are hungry.

And there was a moral economy to the Commons that allowed the Commons to flourish and to be a source of survival for the peasantry, and in order for capitalism to flourish, the Commons needed to be destroyed. And so the tragedy of the Commons gets it sort of backwards that rather than having a fecund working class that is going to just overpopulate and destroy and consume away, it is, in fact capitalism that is feckless and entirely craven and looking for perpetually for new resources to be able to exploit and move on from, whereas communities that are able to manage and control their own resources do a very good job of managing and controlling them without the state and without the private sector. So the danger with the discourse of overpopulation is that it blames the victim. It blames the poorest people for conditions, the architecture for which have been firmly put in place by a capitalist class and are enforced by their police.

**Robert Raymond:** What's your response to somebody who would argue that we are actually pushing planetary boundaries in terms of how many humans are on the earth and how much space we're taking up, versus the idea that it is potentially possible for there to be billions and billions of people on the Earth with distribution of resources that allows us all to live fairly good lives and also be in harmony as much as possible with the planet.

**Raj Patel:** You see the discourse everywhere and all of a sudden everyone is trying to suppress and or nurture that in a sense. And the fact is that if the planet was inhabited by people who had the consumption level of Tanzanians, we wouldn't be beyond planetary boundaries. So I'm entirely happy to recognize that there are limits to what our capitalist ecology can sustain. And the planet does have physical limits in terms of the cycling of carbon and of nitrogen. And we've gone way beyond that. But I can say that and at the same time recognize that it's not population that is responsible for that in the same way that it's not the Anthropocene, that is, it's not all humans that are responsible for this situation we find ourselves in. It is entirely possible to imagine a world in which everyone consumes enough to be able to live a healthy and fulfilled life. And for me to find overpopulation discourse is entirely racist. And I have to explain anything that I mean, I can just point to the fact that when we look at who it is that's doing most of the overconsumption, it is the global north, it is rich people and it is disproportionately white people who are find themselves consuming more than their fair share of global resources.

And when you when you put it like that, then all of a sudden the conversation around overpopulation becomes a little more awkward. Because really what that leads to is what we need is birth control for white people, that we basically need to snip them at birth and the world will become a better place. And if I start talking in those terms, you get to see that, in fact, the overpopulation discussion is coded with certain kinds of racial animus. So I'm all for the idea that people who have been overconsuming not only need to consume less, but need to pay reparations for the damage they've caused. And at the same time, I can say that overpopulation discourses are ways in which a rich capitalist class that is disproportionately white gets to talk about the failures of communities, of people of color without ever acknowledging that the wealth of white people has been accumulated through centuries of racial capitalism.

**Robert Raymond:** So just a couple more questions I'm wondering, so this show's called upstream, I'm not sure if you're familiar with the upstream metaphor. You know, you go upstream to see what the root of the problem is. And I'm wondering if you were to go upstream and think about sort of really systemically the root causes of, you know, a lot of the crises that

we're facing today. Like, what do you see as the upstream problem? What's the root of a lot of the issues that we're dealing with?

**Raj Patel:** I've just finished writing a book that will be out in a couple of months time with my friend and comrade Rupa Marya. She's a medical doctor. She's a physician at UCSF. And together we've explored precisely this question. We've thought about diagnosis as really a way of telling stories. And when you diagnose, for example, someone with COVID, you can just point to the spike on the virus and see what it's how it's interacted with the lungs and the damage the subsequent inflammation has caused. And then you can say, well, that's that's fair enough. But why is it that there are who is it that's really affected by this? And we observe in the United States, it's predominantly low income communities and communities, people of color. And then we can ask, well, why is that? And then we can say, well, you know, there's a liberal response. That is why if you look upstream of that, you can see that there's racism, a structural racism, and then we also where that come from, and then we get into awkward questions about colonial capitalism. And in the United States, we talk about how it is that through centuries of colonial capitalism, the institutions of race and gender have been policed and embodied. And so today, when you see communities of people of color disproportionately affected by COVID and by respiratory disease and by air pollution, you can see that not as a sort of unfortunate liberal accident to the otherwise benign unfolding of capitalism, but actually integral to the way that capitalism works and has always worked.

And that's important so that we can understand not only why our bodies are inflamed, but also why it is that our communities and our planet are suffering from the information that comes from the long season of fire that is ahead of us. So what we point to not only the information that comes from colonial capitalism, but also the anti-inflammatory activities of resistance of people fighting back of communities where there are indigenous communities that are given protective power by the stories that they tell about their relationship to the rest of the web of life. And those kinds of anti-inflammatory resistance are the real source, we think, not only of a deep medicine, but also of hope for the rest of the planet. And those kinds of practices are ones that are, I think, what you get when you look upstream and you're happy to embrace the fact that it is colonial capitalism that has got us here. And if that's the case, then decolonizing has to be the medicine to the situation in which we find ourselves right now.

**Della Duncan:** And now here's our conversation with Jason W. Moore, an environmental historian, historical geographer and professor of sociology at Binghamton University.



**Robert Raymond:** So, yeah, welcome to Upstream, Jason, great to have you.

**Jason W. Moore:** Thanks, Robbie. It's great to be here.

**Robert Raymond:** Great. So, yeah, I guess before we get into my questions around the topics in your books, I'd like to start by asking you what your thoughts are on what COVID has revealed about our current national and global economic system.

**Jason W. Moore:** Well, it's a great question. And it reveals, of course, that capitalism's imagined control over the web of life, including human webs of life, is always just that. It's an imaginary and of course, it's been one in terms of the control of disease, an extraordinary history in many respects. But what we have over the past year and change now a year and a half is a test case and really seeing just how much predatory capitalism, which is always predatory. So I don't want to be redundant, just how much capitalism has really consumed and degraded its underlying conditions of reproduction of the health care systems, of the workers who make it possible, of the industrial food systems and so on and so forth. It's also revealed the sacrifice zones, which the sacrifice zones, as we are seeing in India at this moment, are the same sacrifice zones. As always, they are the zone of what's called nature, not civilization. And that's been a way not just of thinking about the world, but of rendering human beings as workers, as workers in all sense of the term are disposable, and especially those who are in the colonial and now post-colonial world have always been regarded as part of nature and therefore cheap and disposable in the United States.

Where that reveals is not just, as my friend Raj Patel likes to say, a coming out party for American inequality, but also a kind of great revealing of the balance of class power in the United States. At the moment, we have a situation where, in contrast to the rest of the rich countries in the world, the ruling class has been content not only to let everyone die and go hungry, but also this willingness to just pulverize the working class and make them pay it every single step. My favorite snapshot of this is maybe some of your listeners recall this, that early in the pandemic, I think it was at Perdue, a chicken meat packing facility where the largely female workforce went out on strike just to protect their access to the job in case they needed to call in sick because of it. And that, for me, reveals the extraordinary power of the American ruling class of this moment and their commitment to making the rest of us pay.

**Robert Raymond:** Yeah, and so you mentioned India. And one thing that's dominated news headlines recently has been the patents on COVID vaccines, particularly the fact that countries like India, who are just being devastated by COVID right now, have been pleading for months to have the WTO, the World Trade Organization, lift the patents on COVID vaccine so that they can prevent potentially millions of people from dying. So, yeah, finally, after blocking this request for months, the Biden administration caved under pressure and what was probably a horrible PR situation for them, and they announced they're in support of temporarily lifting these patents. But, of course, the World Trade Organization operates by consensus and several wealthier nations, including Japan and even Brazil, which is being hit super hard by COVID right now, too, are still blocking this. And despite the Biden administration's announcement, they still haven't said anything about, you know, waiving intellectual property rights for coronavirus therapeutics and diagnostics. And so, yeah, I'm wondering if you could maybe unpack that a little bit and sort of contextualize it within our current global economic system is just really obsessed with profit and could care less about actually saving lives.

**Jason W. Moore:** Well, we are living right now in the belly of the beast, the greatest imperial power in the world, the greatest imperialist power the world has ever known. And its job at all costs is to protect the bottom line for its shareholders. So let me just state the obvious. We live in the United States President Joe Biden. Biden is not just the architect of one of the key pioneers spearheads of the crime bill of welfare reform, of NAFTA, of all the rest. But he was also, for many decades, the senator from MBNA (Maryland Bank National Association) after the credit card company Delaware is home to many credit card company headquarters. So he is very much operating to sustain the bottom line for the capitalist class in the United States in general, but for big finance cap. And, of course, Big Pharma as well. He's been very clear even before the pandemic hit, he was opposed to Medicare for All. He would veto Medicare for All. He would refuse to accept the idea that health care is a human right. And so what we're seeing in terms of the difference between Trump and Biden is meet the new boss, same as the old boss. They will both defend the right of big pharma to issue favorable quarterly reports to its shareholders, regardless of the human cost. Now, the alternative, of course, is a place like Cuba where the Cuban government has developed a vaccine and indeed has been sending doctors all around the world, send doctors to Lombardy in northern Italy at the heart of the pandemic there last March has been doing so for many decades. But this dynamic that you identify with, India and Brazil in particular, not only do they have in common both their own versions of Trump, that is ethno national proto fascists in Modi and Bolsonaro, respectively. But this is a long story of Big

Pharma. We can go certainly go back to the worst days of AIDS in the 1980s and 90s. And it's been the same story.

**Robert Raymond:** A lot of your work explores how capitalism creates cheapness. And I'm just wondering if you can talk a little bit about this concept of cheapness and how it relates to capitalism.

**Jason W. Moore:** Absolutely. So the first thing we want to understand is that capitalism works because it doesn't pay its bills. And then when you do ask, well, how is it that it can survive without paying its bills? Well, it has four or five centuries moved to new frontiers, new frontiers of cheap nature. The four major elements of this are labor and unpaid work. That's one food, energy and raw materials. So labor, food, energy and raw materials are these for cheap. Now, the second thing that I want to say out of this is that cheap does not mean the two or three dollar hamburger that you can get at a fast food restaurant. That's not the kind of cheap that we're talking about. We're talking about the interlocking power of the greatest states, the greatest empires and their bankers, their industrialists, their planters. Their one percent's to do two things at once. And it's quite significant to the moment of climate crisis. Those two things are to reduce in price the big four inputs, these four chiefs of labor, food, energy and raw materials. So there's an economic moment that's politically imposed that's important because we often think of capitalism as an economic system. It has an economic logic, but it is essentially a system of political power, sustaining and creating the conditions for a good business environment that is the cheapest price always requires geopolitical and geo-cultural power, especially forms of racism and sexism.

So that leads to the second moment of cheapness or cheapening as a project to cheapen in prices strategically linked to degradation, to cheapening as in the sense of degrading and disrespecting the lives and labors of women, nature and colonies. To borrow a phrase from the great German social theorist Maria Mies. So there are these two moments. One is ethical, political and about domination, and the other is to reduce some price. And if we pause for a moment, we can look at both of those and understand their very, very intimately connected. We can make all sorts of readily available observations about the feminization of poverty and the racialization of poverty in the United States. But elsewhere, of course, let me say the problem is poverty, not that it's racialized and feminized and the racism and sexism makes possible a series of justifications of inequality. Now, that's one part of it. Now, the other part is what's nature. And I often talk in my

work about the web of life because the web of life forces people to ask, well, what's the web of life? When you say nature, everyone thinks they know what it means.

It means the forests and the fields and the birds and the bees and the streams in the atmosphere. And yes, all of those are webs of life. But humans are part of that web of life to a factory and office, a call center. These also are ways of organizing life, power and profit within webs of life at every turn. So that's one of the elements of it. The other is that from the very beginning of the modern world, from the era of Columbus in fourteen ninety-two onward, almost immediately, you had a great divide that was at one sense ideological, in another sense deeply practical. And the ideological divide was between the civilized, the Christian, the bourgeois, the educated, etc. and nature which included not just all those things I just mentioned, the birds and the bees and the forests in the fields, but also practically everyone who was either a worker or a potential worker. So practically all women, Africans, Slavs, indigenous peoples, Celts, many peasants were regarded as barbarian, uncivilized, savage and so forth. And so in the English language, our language of civilized and savage, what today we call society in nature comes immediately and directly out of Henry the 8ths, a renewed attempt to control Ireland in fifteen forty one.

There's a longer lineage with the modern history is typically from 1441. The dates are important because this is when all of these terms enter our language, European society, civilized nature. All of these words come in at this very moment in the century after fifteen, forty one more or less. And the English of course regarded the Irish as savage, as wild as needing to be civilized, and then proceeded to act accordingly. The result was in Ireland, never mind in the new world. But just in Ireland, about half to two thirds of the population was either wiped out or driven from the island to different times in two centuries. Once in the middle of the 17th century, another famous with the so-called potato famine, which was in fact an imperialist famine in 1848. So we need to keep in mind that when we think about the world, when we see the world in terms of society, in nature, we are seeing the world through the logic of the imperialists, through the logic of the banker, of the capitalist, and that, in fact, is the thinking that has contributed to today's planetary crisis. So those are different dimensions of cheapness that we need to unthink and rethink in order to develop an effective politics of planetary justice.

**Robert Raymond:** So you coined the term Capitalocene. And so I'm wondering what is the capital of sin and how does it differ conceptually from this idea that we have of the Anthropocene?

**Jason W. Moore:** It's a great question. And first, let me give credit to the person who from whom I first heard this word, who is Andreas Malm, a very well known Marxist thinker. And Andreas and I have now very starkly different conceptions of the capitalocene that I won't walk through in great detail. But essentially, here's the great divide. I'll put it in the form of a question. Do we find the origins of today's planetary crisis in the so-called British Industrial Revolution centering on the steam engine and coal? Or do we find the origins of planetary crisis in the era of fourteen ninety two and the prodigious global conquest, but also the most radical and rapid environment making revolution in human history since the dawn of agriculture? And Raj Patel and I know that you've talked with Raj, made it clear that what we are looking at in fourteen ninety two is the dawn of a new civilization, a new world ecology with a hyphen. That capitalism itself is an ecology of power, including systems of domination like racism and sexism, a system of accumulation in a very, very modern sense, and a system that transforms all of life either into profit making opportunities or into the conditions for profit making opportunities. And what I like to say is that if your politic, if your sense of the origins of crises go back to the Industrial Revolution, then the answer is to shut down the fossil fuel plants, the coal fired steam plants, convert to green energy, etc, etc..

But if your diagnosis of the problem is that planetary crisis begins to emerge in fourteen ninety-two, which incidentally leads to the first great episode of modern or capitalogenic made by capital climate change in the 17th century, the famous episode of climate change in the 17th century which comes out of the New World Genocide's, which comes out of the drive for cheap labor and slaving right there. In that nutshell, you can see that what I've implicated is the origins of what I call the climate class divide climate, patriarchy, climate apartheid. In other words, we need to look at the system of imperialism and inequality in the world, including its constitutive dynamics of racism and sexism as fundamental to climate justice politics today, they're very, very different kinds of politics emerge out of these two senses of the origin of the capitalism. So the capitalist scene is people say, oh, it's an ugly word. Well, the Anthropocene is an ugly word, too. But I say an ugly system doesn't deserve a beautiful term. It deserves an ugly moniker. So the capitalist scene is, above all, an account of the origins of capitalism.

And it is a provocation to now over 50 years of mainstream environmentalism, saying that the problem is man versus nature, technology versus nature or something to that effect. And those are not only misleading ideas of mainstream environmentalism that are now reproduced in what I call the popular Anthropocene. They are in fact directly contributory to the drive towards the planetary inferno. And let me just make one more note of this. When we talk about

Anthropocene, two senses of the term are often confused and they're confused by the practitioners of the Anthropocene discourse itself. There is an Anthropocene that is about stratigraphy. It is about so-called golden spikes in the Earth's geological layers. So a golden spike, for instance, has been proposed for the Anthropocene nuclear testing or plastics or chicken bones, but also of the carbon drawdown in the atmosphere after the new world invasions, the genocides in the new world. This is the so-called Orbis Spike, another Golden Spike of the Anthropocene that the geographers, Lewis and Masland proposed. So there's a geological story that the capital has seen absolutely accepts. And there's a popular story, which is basically the old story of man versus nature, plus technology that begins in the industrial revolution. And that's not only a false history, but it leads to profoundly misleading politics.

**Robert Raymond:** So you wrote an essay for the Progressive Review titled "World Accumulation and Planetary Life or Why Capitalism Will Not Survive Until the Last Tree Is Cut." I'm wondering if you can unpack what you wrote about in that essay and why you think that it's often easier for us to imagine the end of the world than it is for us to imagine the end of capitalism.

**Jason W. Moore:** Well, the short version is that in all of us, there are traces of the bourgeois imaginary and sometimes more than just traces and that bourgeois imaginary. It goes back to a very modern form of naturalism. Its mature form begins to take shape with Thomas Maltose at the end of the 19th century. And it essentially says that inequality is about natural laws. It's not about class dynamics and class power and the unequal distribution of the social surplus. It's about moral virtue. It's about man's natural tendencies, etc., etc.. So we have a point of view that ramify through both Anthropocene discourses, but especially the popular Anthropocene, which asks questions like to quote a very famous article Are humans now overwhelming the great forces of nature? Now, that is a question that is entirely consonant with the way of thinking of the conqueror and the financier and the planter. There is no such thing. There's no human nature. There's I mean, no human nature in that sense. As a historical actor, of course, humans have a capacity to make symbols, to have a collective memory, to do lots of very distinctive and interesting things, just like all species have distinctive capacities, because that's how evolution works. But essentially, it's harder to imagine the end of capitalism than the end of the world because we have been trained to think in terms of humans versus nature. That's an extraordinarily dangerous way of thinking in the present. But let's also be aware that that essential model, which develops through the early centuries of capitalism between the 15th and

18th centuries, but then really matures in the era of Malthus right at the end of the 18th century, has been a conceptual and ideological hammer in the tools of capitalists and imperialists.

And what I like to point out is that we have seen at least three and maybe today a fourth Malthusian moment. And each time in the late 18th century Malthus is famously writing in the midst of the world revolution of the West, the Haitian French revolutions, the revolts of the Irish, the Túpac Amaru revolt in Peru. We could go down the list for a long time. Within England, there is the emergence of a working class radicalism, sometimes called suspension radicalism in which much of England in the 17. I was on the brink of open class war, the seizure of food wagons, etc., etc. So we need to remember that the Malthusian imaginary of humans versus nature and the implication of natural law began in this period as a direct response to working class and peasant revolt on the world scale. Now comes up again at the end of the 19th century in the era of eugenics, again, natural law as a way of explaining disorder and inequality. Eugenics takes place during the second industrial revolution, the scramble for Africa and in the American context, where it was very powerful in relation to mass immigration from Eastern and southern Europe. Then again, in 1968, when Ehrlich appears with *The Population Bomb*, saying hundreds of millions of people are going to starve, there's a food crisis.

There are too many people. Well, this is also published in the moment of the greatest revolt, the greatest worker socialist national liberation revolt in the history of capitalism. It's no accident. And then, of course, the Anthropocene comes in and says essentially the same thing. It makes a naturalistic argument for the character of human affairs. And then you can see its prognosis. Its prognosis is, well, geoengineering and technological fixes. In other words, not social justice, not democratization, not popular mobilization. But let's have more business as usual under the conditions of capital accumulation. So we have this very, very treacherous history that has crept into our imagination. And then also, finally, not only Marxism, but also environmentalism has a profoundly shallow historical imagination. And so there's not the sensibility that unfavorable climate shifts, say, over the past two thousand years or so have been profoundly destabilizing to class societies from western Rome to feudal Europe to 17th century capitalism. And we'll wait and see what's happening. But we can already see how climate, which is not causing all of this, but is more like a thread that's in everything. Climate is unraveling the whole sweater, just to stick with the metaphor of modern capitalism and people don't want to see it or don't know how to see it, because our historical memory in many respects is erased.

**Robert Raymond:** You mentioned Paul Ehrlich and Thomas Malthus, and those are both two people who wrote a lot about overpopulation and or just population in general. And I'm wondering, whenever I post something about overpopulation or the myth of scarcity, things like that, there's seems to be somewhat of a divide on the left. And I think one extreme side of that is sort of ecofascism, which is the idea that you put nature or ecological concerns ahead of human concerns. I'm wondering what are the origins of the idea of overpopulation and how is it been used to sort of frame discussions around hunger, resources and other issues within global capitalism?

**Jason W. Moore:** Well, it's such a great question. And we need to go back to where we left off on. The last part of our conversation is the absence of a historical imagination, the absence of historical knowledge of how population history actually works. So the first thing that I would say about Maltose and this goes all the way through to Holland and or like I should credit his wife and her, like, as being the uncredited co-author of *The Population Bomb*, also a member of the Federation of Americans for Immigration Reform, which has been sometimes classified as a hate group. I just want to make that public service announcement, along with people like Garrett Hardin of *Tragedy of the Commons* fame. But what all of those people have in common is the complete and total erasure of actually existing population dynamics. And so what they are doing very much out of this way of thinking that I've called bourgeois naturalism is to find some abstract and therefore a historical natural law and apply it to human history. Now we know that human social formations are eminently able to adjust their populations under conditions of relative equality. So one of the great examples of this is the crisis of the Roman West, which was one of human history's greatest slaveholding societies. Certainly to that point came crashing down in the late 4th and 5th centuries, enormously complex.

But it was in an era of the greatest Eurasian drought in two thousand years. That was part of what was driving migrant peoples, the so-called barbarians, into Western Europe. But there was also immediately followed up by what? Historians now call the dark ages cold period, and what we saw across central and Western Europe was the total collapse of Roman class structure save in a very few zones like around Paris and very attenuated form. But essentially, the collapse of that ladder found the Roman oligarchy model. And in its place, peasantry came to re-establish village life and class distinctions went away. There were still gradations of relatively more prosperous and relatively poor, but along with that came starkly new and more equal gender relations. As a result, those peasant modes of production, if you will, pursued not only much more diverse livelihood strategies and therefore grew healthier even in an unfavorable climate, but also



adjusted their fertility. Because, as we know now, women have always known how to control their fertility. And it's a question of how patriarchal class systems seek to surveil and oppress and police women into a pro-natalist regime. Well, the conditions of that pro-natalist regime in the late Roman West went away and there was a significant and meaningful readjustment of fertility. This is not an uncommon phenomenon. Indeed, we've seen that as working mothers have been proletarianized across the rich countries of the world over the past 70 years or so.

The birth rates have fallen dramatically. So as more opportunities for women in particular situations grow, of course, it's being radically confronted these days for around precisely some of the blood and soil questions you just highlighted. But there is this sense of, well, people can't regulate their own fertility. Marx once urged that we understand the special that is the historical loss of population. And by the way, that could apply as well to the meat industrial complex today. It's not just about human population, but what Marx said is, hey, you have to look at the specific historical dynamics of family formation and population growth or contraction. And that's been completely wiped off the map by the neo Malthusian sensibility. And sadly, even many on the left have no interest in the actually existing history of the capitalist scene, and especially as a population that includes some very, very prominent theorists like Donna Haraway, who says many useful things. But if you're going to talk about population and you don't talk about family history and how that looks different in different parts of the world and different times and places according to the development of capitalism, then you have essentially opened yourself up by appropriation from Malthusian.

**Robert Raymond:** I guess we've explored quite a few of the problems and the challenges that we're facing, and I'm wondering what kinds of political movements, grassroots or not necessarily just grassroots, but just more generally, what kind of movements do you see arising that are challenging the many crises that we've sort of been talking about in this interview?

**Jason W. Moore:** Well, it's a great question, and this is going to sound nit picky, but I want to suggest it's anything but our knee jerk response, because this is how we're taught to think about capitalism, is that it's an economic system, in fact, especially when it comes to your question and social movements, which need to be based on a conception of the working class, a broad conception of the working class. We're taught to pretend that, for instance, labor markets are not politically controlled and instituted, but labor markets are totally politically mediated. Yes, there are some supply and demand dynamics, but if you look at it in a world historical sense, labor has been the one part of nature, arguably the most tightly controlled, and those layers of the world's

working class that are feminized and racialized are super exploited. That is even more tightly controlled in which wage rates are enforced not by economic logic, but by geocultural, that is, and legal mechanisms, but also, of course, by direct political power. That was the whole point of colonialism. These days, people talk about settler colonialism as if it wasn't fundamentally about the creation of a working class that could provide very, very cheap labor under very, very brutal conditions. And so we want to have a sense of what are the movements and what do they need to engage with in order to forge a politics of planetary justice. And it's a difficult question to ask, because after about four decades of neoliberal triumph, even many social movements have taken to celebrating social power and disavowing political power.

And that's a problem because class struggles are resolved at the level of the state. This was the explicit, we acknowledge point of people like Maggie Thatcher and Ronald Reagan and every other neo liberal political leader that's followed in their wake that they were going to use the power of the state to hothouse the conditions for a good business environment, which means, first and foremost, to suppress the conditions of reproduction for the working class and the wage rates for the working class. And so I point this out because we need to begin to nurture a political imagination of what it will take to decarbonize the world and to forge a politics of planetary justice that includes climate justice, but also looks to other movements of reclaiming the commons in many different senses, urban and otherwise, food sovereignty and food, justice of indigenous movements and so on and so forth. And so what I like to point out is that out of this evaluation of capitalism as a system of cheap nature, we need to understand that there is a complex layering and interdependency of not only the working class, the proletariat, but also human unpaid work where I call the cemetery and then the work of nature as a whole, the biotech. And we need to begin to look at the constitutive connections between all of those in order to forge dynamic politics of working class solidarity within countries, but also across countries. And we've been poisoned by neoliberal ideology and telling us that we cannot look at the political experiences of successful national liberation experiments.

We cannot look at those because those were failures and that's just empirically false, that it was not all bad. We can draw a balance sheet. We can look at these experiences. But again, not to be romantic by any stretch of the imagination, but let's look at Cuba. Let's look at the experience of Cuba. And if you don't want to call it socialism, call post-capitalism, call it something else. But of the Cuban National Liberation Project to provide health care not just for themselves, but worldwide, to provide literacy, to navigate the end of cheap Soviet oil in nineteen ninety one, to pioneer a pharmaceutical industry that could be deployed in the interests of the vast majority of

the world instead of the one percent. Those are not small things. And I think that what I would urge many people in the social movements disillusioned with politics to say, yes, of course we're disillusioned, especially in the United States, where we have a one party state with two faces. Yes, of course. But that doesn't mean that we don't need a political strategy. And so how do we link these local struggles to an actual climate politics, which has, by the way, a project that. Has been totally disabled by the big, big green environmental groups in the United States, which have always, at least since the early 80s, been in bed with the billionaire class.