

On capitalogenic climate crisis: unthinking Man, Nature and the anthropocene, and why it matters for planetary justice

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“Human society causes climate change.” This from the Intergovernmental Panel on Climate Change’s *Sixth Assessment* (2022: SPM-4). It is positively underwhelming in its simplicity – and quite possibly mistaken, in partial but crucial ways that undermine any politics of climate justice worthy of the name.

As the flat-earth climate denialism of previous decades wanes, a new form has gained hegemony: “climate change [is] unequivocally caused by human activities.” That’s Jim Skea (2023), the newly-elected IPCC chair, speaking on the eve of yet another useless global convergence, COP 28, held in, of all places, the United Arab Emirates.

How on Earth – one might reasonably ask – are such statements a form of denialism? My answer is simple. To deny the relations behind the climate crisis is scarcely less serious than denying the crisis itself. It’s no exaggeration to say that everything about our climate politics turns on one’s assessment of just who has done the deed. And to make sense of that, we’ll need a world history that takes seriously class and capitalism in the web of life.

Anthropogenesis as Climate Denialism

On one thing, the would-be masters of the universe agree: it’s not our fault. From the IPCC to the World Economic Forum to Wall Street, the lords of Spaceship Earth have embraced the reality of climate crisis – and courageously accepted that everyone is to blame. We now live, or so we are told, in the Anthropocene – the “age of humans” (Crutzen and Stoermer, 2000). “We have met the enemy,” as Pogo announced on the first Earth Day in 1970, and “he is us” (Moore, 2023a).

Every denialism involves two elements. One is the reality that is being denied. The other pivots on those responsible. I’m not invoking ethical responsibility, but the rather concrete relations of competition and conflict inscribed in the long development of the climate crisis. I have spent the lion’s share of my adult years making clear that the origins of today’s planetary crisis are found in the rise of capitalism after 1492, a matter to which we’ll turn presently. For now, I want to underline the pervasive denial of the causal geohistorical relations behind the climate crisis. This occurs under the sign of *anthropogenic* climate change – a popular idea whose pretension to innocent description is every bit as pernicious as the denial of climate change itself. Half-truths, as Benjamin Franklin opined in 1758, easily become the “greatest lies.”

As I'll do my best to unpack in the following pages, the argument that history is determined by an Eternal Conflict between Man and Nature is an early modern invention. Bourgeois legitimacy always depended on some version of "natural law" thinking, from the earliest Civilizing Projects to Malthus to neoliberal economic dogma. That's no base-superstructure argument. The capitalist mode of production emerged, Marx and Engels emphasized, as more than an abstractly material assemblage of markets, machines, and classes; these cohered through the "means of mental production" specific to bourgeois rule (2010: 59). Scientific ideas and ideological claims coupled promiscuously – then as now.

Long associated with the Scientific Revolution, the latter was as much consequence as cause. *Bourgeois* naturalism necessarily preceded scientific naturalism (Furfey, 1942). The early modern organization of the means of mental production implicated the "software" of Cheap Nature: imperial power and its ambition to transform planetary life into profit-making opportunities (Patel and Moore, 2017; Moore, 2023f). Not coincidentally, capitalism as a mode of thought crystallized amidst climate crisis: the Little Ice Age (c. 1300-1850). The era's most harrowing passage was the "long, cold seventeenth century" (c. 1550-1700), defined by endless wars, political instability, and economic volatility (Ladurie and Daux, 2008; Parker, 2013). The unfavorable climate was, in part, *capitalogenic*, "made by capital," as coercive proletarianization led to the destruction of indigenous populations (Lewis and Maslin, 2015). Far from the happenstance of Man and Nature, this was a climate-class conjuncture. In contrast to the late medieval crisis, it was the first time a civilization was forced to respond to climate conditions partly of its own making. What followed was a far-flung "climate fix" that involved a new mode of thought alongside the dramatic reinvention of territorial, financial, and military power. The core principles of this Cartesian Revolution – above all its managerialism, instrumental reason, and love affair with dualism (and hatred of dialectics!) – were forged in the midst of climate crisis (Moore, 2018). It would be foolish indeed to believe that the mode of thought involved in the making of planetary crisis can deliver an emancipatory politics of climate justice.

The new climate consensus is a creature of this imperial naturalism. It recognizes geophysical reality while denying its geohistorical causes. This should not surprise us, for reasons that turn on contemporary history no less than the *longue durée*. Second-wave environmentalism, with Pogo and *The Population Bomb* (Ehrlich, 1968), was a reaction to the era's potentially dangerous radicalism (Robertson, 2012). Notwithstanding its apocalyptic rhetoric, this was an Environmentalism of the Rich (Dauvergne, 2016). As American workers learned in the 1970s, *their* environmental problems – in Louisiana's Cancer Alley, in the Central Valley's strawberry fields, in working-class suburbs like Love Canal – were irrelevant in the second-wave paradigm (Moore, 2022a). Environmentalism, let's be clear, had long been an elite affair. As boomer professionals flocked to the cause, its underlying politics of eco-managerialism combined individual virtue-signaling ("live simply so others may live") with a sober and modestly reformist technocratic politics inherited from first-generation conservationists (Moore, 2023b). Both shared a demographic basis in the professional-technical intelligentsia. *Plus ça change....*

This soft denialism keeps our thinking in the shallow end of the pool. Its underlying intellectual architecture is the binary of Man and Nature. I'm calling this the Eternal Conflict. The uppercase is deliberate. It is of course anything but eternal. As historians have long maintained, the geocultural sorting of planetary reality into Man and Nature emerged tentatively, then rapidly, in the two centuries after 1492 (Wynter 2003; Abulafia 2008; Moore, 2015, 2017a, 2017b 2018, 2021b). They became what Marx and Engels called ruling ideas, the Eternal Conflict its ruling binary (2010: 59).

In place of medieval, organic, holisms, after 1492 a new truth regime materialized around the fundamental separation of Man and Nature. This is the alienation of class formation expressed in thought – and *mediated through ideology* (Patel and Moore 2017). It was the work of soldiers as well as priests, planters no less than *philosophes*. At its heart was an essentially managerial outlook, dividing the world – as in Descartes' classic formulation – into “thinking things” and “extended things.” Thence was installed the Eternal Conflict between Man and Nature, variously theologized and secularized in modern form. That conflict would be managed by the Civilizers, in various combinations Christianizing, civilizing, and developmentalist. Invariably, the Civilizers claimed some incarnation of “natural law,” since World War II justified by Good Science (Moore 2021a; Selcer 2018). The Civilizing Project guided the rule of the Enlightened over Nature, a ruling conceit encompassing not only soils and streams, but the human majority. These latter were the “savage” and the “wild” and the “undeveloped” – in the language of the times, from Shakespeare to Truman. They were biological humans – but not, or *not yet*, civilized. Thus the practical utility of bourgeois naturalism in supplying ideological raw material for every ideology of domination, not least sexism, racism, and imperial nationalisms (Hage, 2017).

Without this line of critique, we are left with the fetish of abstract Man as historical actor, one whose anthropological essence encounters an external Nature. That external Nature must be tamed, civilized, developed. This was – and remains – the philosophy of imperialism and its “rational mastery of the world” (Weber 1951: 248). Not for nothing, the modern critique of human nature and capitalism's world-historical character *begins* with an assault on this view of abstract Man (Marx, 2010; Marx and Engels, 2010). For Marx and Engels, *humanity does not make history*. Empires make history. Corporations make history. Labor unions and revolutionary parties make history. Churches make history. For historical materialism, these all express and mediate the class struggle: the contradictions of specific modes of life and modes of production, of “real *historical* man” (Marx and Engels 2010: 39). Engels underlined the point: “labor created man” (1987: 452). From this standpoint, the climate crisis is not anthropogenic, but capitalogenic: the product of *historical man* as specific “ensembles” of labor-metabolic relations, with and within webs of life (Marx, 2010: 4; see Moore and Antonacci, 2023).

For Marx and Engels, then, the prime mover was class struggle, producer and product of metabolic and other “natural conditions” (2010). Man and Nature were materialist, but abstractly so. Keenly aware of Malthusianism's influence, they warned against a one-sided naturalism no less than idealism.

Here we encounter superficial, but also deeper ideological, problems with the Popular Anthropocene. The Popular Anthropocene is not the strictly geological project focused on “golden spikes” demarcating one geological epoch from another (Moore, 2017c). More ideological phenomenon than scholarly enterprise, the Popular Anthropocene is the latest incarnation of neo-Malthusian eco-catastrophism evolving since the end of World War II (Robertson, 2012). Critical scholars have picked the low-hanging fruit and denounced the Popular Anthropocene as distributing responsibility for climate change amongst all humans rather than focusing blame on the One Percent.

Eco-populism takes us only so far, however. The problem has deeper roots. Underneath the Anthropocene's blame dispersal is something worse. This turns on how the Anthropocene, in recuperating the terms of the Eternal Conflict, short-circuits a socialist critique of the climate crisis. Narrating the crisis as human-caused, the hegemonic climate consensus makes unthinkable the critique of capitalism and its class dynamics in the web of life as first order contradictions. The geocultural trinity of Man, Nature, and Civilization performs a crucial ideological function, blinding many “critical” intellectuals to capitalogenic climate forcing. The outcome has been a breathtaking flight from world history (Moore, 2022b). Both mainstream and critical tendencies within environmental studies have embraced the Eternal Conflict and surrendered to its ideological-linguistic doublespeak –

anthropogenesis, “human society,” overshoot, ecological footprints, and much more. Under no circumstances, these fetishes tell us, should we pay attention to the Man Behind the Curtain.

The construction of climate crisis as *human-caused* reads like the biospheric expression of Naomi Klein’s shock doctrine (2007): never let the threat of a crisis go to waste. Just take care to obscure its causes in the ideological pabulum of Man and Nature. The new climate consensus aims to sublimate any awareness of capitalogenic relations into popular into popular frames of anthropogenic climate change. To the degree this succeeds, it erases the dynamics of class, capital and empire; meanwhile, it naturalizes these into derivatives of the Eternal Conflict. Hence the insistence that a “climate emergency” must be addressed by emergency, authoritarian, *and above all scientific*, measures.

Here is a serious threat indeed. “Climate emergency” and “existential threat” discourses are species of political rhetoric long deployed by authoritarian rulers, from imperial anticommunism to the “war on terror” after 9/11 (Antonacci, forthcoming). Emergency politics historically favor anti-democratic “solutions.” Its core climate thread runs like this: *Humans* cause climate change; climate change represents an “existential threat” to humankind; emergency measures are necessary because “we are out of time”; those emergency measures will require the unprecedented centralization of power and an unprecedented submission to a biosecurity state if “we” are to “save the planet.” We haven’t time for democratization, much less social revolution. “Tree huggers” are fine, Europe’s leading climate scientist Johan Rockström told *The Guardian* in 2021. But the real solutions, Rockström highlights, will be found through the alliance of elite scientists and technocrats with “bankers and CEOs” (Watts, 2021). As Joseph Biden told voters on the road to the White House in 2020: “nothing will fundamentally change” (Prokop, 2019). Fukuyama’s “end of history” (1989) – this time as climate farce – has moved to the center of global politics.

Man, Nature & Capitalogenesis

Anthropogenic. Let’s take a moment to consider its audacity. *Anthropogenic*: “Made by Man.” We know this to be untrue. Taking refuge in abstract generalities is nearly always a defense of the status quo. The research on the relational drivers of climate change is vast. While Marxists and centrist liberals tend to default to some measure of resource fetishism – “fossil capital” is one prominent instance (Malm, 2016) – the world-historical character of resource mobilization allows us to see how resources *become* (Zimmerman 1951). Coal is just a rock in the ground; it becomes a fossil fuel under specific geohistorical conditions (Moore 2015). The problem is not “stopping oil”; it’s stopping capital and socializing the capitalogenic means of material and mental production.

While one may quibble with precise formulations, the verdict is clear: 103 corporations dubbed “climate majors” are responsible for 70 percent of carbon emissions *since 1751*. The United States alone has been responsible for 20 percent of carbon emissions since 1850 – a figure that disregards carbon emissions financed or otherwise coerced by the American empire in the countries of the Global South over the past century (Heede, 2019). Anthropogenic? Made by Man? Let us consider the patently absurd notion that the genocides of the Americas after 1492 were anthropogenic. Or consider the Nazi destruction of European Jewry and the murder of 28 million Soviet peoples during World War II. Or the slave trade. *Were these anthropogenic phenomena?* No. All these movements were *capitalogenic*. Made by *capital*. Those responsible have names and addresses.

I hear the objections. Science abstracts from “human” relations to isolate human from natural causation. It’s crucial, for instance, to distinguish the climate influences of orbital variations or volcanic eruptions from smokestacks, feedlots, and cities. And that’s all true.

But the Anthropocene is not a narrowly scientific procedure. That’s why I call it the Popular Anthropocene. It’s a key ideological expression of capitalism’s scientific infrastructure, with proximate sources in postwar American hegemony and deeper roots in the rise of capitalism (Moore 2018; Selcer 2018). I’ll leave aside the obvious, that science is a social infrastructure shaped by definite social and ideological forces. It’s enough for now to underscore how the scientific advocates of the Anthropocene are shameless in their willingness to translate their expertise into neo-Malthusian narratives. Worse, countless critical, even socialist, intellectuals adopt this neo-Malthusian framing, with titles like *Marx in the Anthropocene...* as if Marx did not *begin* his outline of historical materialism with a searing indictment of “abstract man” (e.g., Saito, 2022)! Instead, across a broadly defined “critical” intellectual spectrum, there is widespread silence on the geohistory of capitalism and a *de facto* acceptance of Anthropocenic “trajectories” (Steffen, et al., 2015). These yield a sequence of banal empiricisms foregrounding the epochal significance of technology, markets, population, and other expressions of the so-called “human enterprise” – a delicious blend of sci-fi futurism and Spaceship Earth neoliberalism. In one landmark formulation, Nobel laureate Paul Crutzen (2002) proclaimed 1784 as Year Zero for the Anthropocene, identifying Watts’ rotary steam engine as the key machine of anthropogenic climate change, somehow joined to the prodigious demographic expansion that commenced a century or so later. That’s bad economic history, bad environmental history, and terrible politics (Moore, 2017b, 2023c).

The Capitalocene: Cheap Nature, Climate Fixes & The Geohistory of Climate Crisis

Capitalogenesis orients us to a different history: not of Man and Nature, but of Marx’s dialectic of the “soil and the worker,” an internal relation of class struggle in the web of life (1977: 638).

We can start the clock on capitalism’s environment-making revolutions in 1492 (Patel and Moore, 2017). The capitalogenic remaking of the biosphere began immediately. The Columbian invasions were quickly followed by an eohistorical revolution unprecedented in planetary history: the imperialist creation of a capitalist Pangea, as the new empires knitted together the geobiology of Eurasia and the Americas (Crosby, 1986; Moore, 2017a). From the beginning, capitalism was a biogeological force.

The *Capitalocene* is not the kind of wordplay fancied by “critical” intellectuals (Moore 2017a, 2018). It is a geopoetics – literally, earth poetry – that lays bare capitalism’s most potent “ruling ideas” and allows us to make sense of its history. From its origins in the conquest and commodification of the Americas after 1492, imperial-bourgeois ideology has forged not one but many Civilizing Projects (Moore 2023a). The new capitalist empires invented an epoch-making ideological system from Ireland to Brazil to Mexico. Simply (although history is never simple), this was a new cosmology. It reimagined history as a collision of Man against Nature, mediated by the Civilizers. It was the task of Empire – who deceived themselves and many others into thinking they were Civilizers – to assume the moral responsibility for the rational oversight and active management of Nature, including its “savage” inhabitants. From capitalism’s “rosy dawn” after 1492 (Marx, 1977), every great era of imperialism and accumulation has required – and reinvented – this ideological Holy Trinity: Civilization, Man, and Nature. That imaginary today dominates the Environmentalism of the Rich and its Anthropocene-Industrial Complex.

Civilization. Man. Nature. If our uppercase is pedantic, it's for good reason. These words earned their modern place in the English language in the century after 1550. They quickly became the most dangerous words in the bourgeois lexicon, necessary to the era's intellectual revolutions and the conceptual apparatus of imperial policy. These keywords gained traction during capitalism's first great climate crisis and its subsequent climate fix. They were emergent principles of the Civilizing Projects that created the fetishes of "Europe" and its functional antonym: the "uncivilized" and "wild" Americas.

At the heart of this civilizational fetish – the historical precondition of the commodity fetish – was an entirely novel accumulation strategy: Cheap Nature (Moore, 2015). Its fundamental priorities were, and remain, twofold: violently reduce the cost of labor, food, energy and raw materials necessary to advance the rate of profit; violently devalue the ethical and cultural "worth" of human and extra-human work and workers. Nature became not only a "ruling idea" but a *ruling abstraction*, a guiding thread of imperialist praxis. From 1492, Nature became everything the imperial bourgeoisie did not wish to pay for: labor, life, resources, wombs, you name it (von Werlhof, 1988).

The Cheap Nature logic feeds bourgeois naturalism and its claims of natural law. Naturalism was seized upon and encouraged by bankers and kings, priests and planters, soldiers and merchants, becoming the geocultural premise for the invention of modern racism and sexism after the mid-sixteenth century. As Federici illustrates, female humans became *Women*, the "savages of Europe" (2004: 100). Consequently, female work became "women's work," and women's work was redefined as "non-work." They were caged through *Nature*: unworthy of remuneration. Nature, in other words, became an imperial-class project of superexploitation that prized the rate of profit above all else: extending the working day for females imprisoned in the ruling abstraction *Woman*, devaluing her socio-biological labor (Moore, 2023d). Only by accepting the Civilizing Project – and its logic of "taming" the "wild" woman (Shakespeare) – could women find redemption through unpaid work, above all through the Cheap Care regime that ensured the cheap birthing and care that makes capitalism possible (Tilly, 1984; Seccombe, 1992; Patel and Moore, 2017).

On this basis, the Capitalocene thesis argues for a history of capitalism that joins socially-necessary labor time with its dialectical negation: socially-necessary unpaid work in the web of life. Because this dialectic exceeds the cash nexus and market coercion, its covalent bond is capitalism's geoculture and its means of mental production, variously scientific, instrumental, and ideological. Thus the synchronicity of gendered proletarianization, proto-industrialization, and the Cartesian Revolution is hardly accidental (Federici, 2004). The latter's separation of "thinking" and "doing" is the world-historical crystallization of bourgeois managerialism (Moore 2021a). This Revolution accompanied the formation of the planetary proletariat, spanning the era's combined and uneven geography of the plantation, military, extractivist, and proto-industrial revolutions. Every great superpower that followed would reinvent both the Civilizing Project (the White Man's Burden, Manifest Destiny, Developmentalism, etc.) *and* its managerial trinity: seeking to govern work, war, and the biosphere. Today, this planetary managerialism, under the sign of a Davos-aligned Anthropocene, pursues a dystopian world surveillance state as a viable strategy for post-capitalist transition. Intellectually equipped by the Anthropocene, it promises to "fix" the climate crisis by generalizing the imperial-neoliberal degrowth policies imposed by Washington on Latin America, Africa, and across the Global South in the 1980s.

The Capitalocene thesis challenges the Anthropocene's erasure of world history and its falsification of "the" Industrial Revolution as Year Zero of planetary crisis. It's worth noting that this fetishization of the Industrial Revolution originates in Toynbee's high liberalism and his paeans to market liberalization 150 years ago. Toynbee's famous lectures (1884) were, among other things, a contribution to the

Progress and Improvement promised by liberal “competition” – and an anti-socialist polemic against the democratization of economic life. The transformation of British industry after 1800 was a turning point. But it cannot be reduced to an English story of magical substances and machines. Coal and steam power *are* significant. But their epochal significance derives from the radical extension of slavery and the plantation system in the American South during the 1790s and the West Indian plantation profits even earlier. No cotton, no industrialization, at least not as we knew it (Moore, 2023c). The *origins* of modern planetary crisis were found centuries earlier.

The Natures of Epochal Transitions: Climate, Class & Revolution

Capitalism is not only the producer of today’s fateful climate-class conjuncture. It’s also the *product* of the climate-class nexus of two previous great eras of epochal transition. One was the crisis of feudalism, beginning at the dawn of the Little Ice Age in the late thirteenth century. In the wake of this climate shift, feudal agriculture’s socio-ecological antagonisms exploded immediately. Famine and pestilence appeared almost overnight. So did class revolt, and with increasing force. From Flanders to Florence, Catalonia to Scandinavia, workers and especially peasants refused to allow feudal restoration. What followed was a historic victory for western Europe’s direct producers and reproducers. In an era of economic contraction and an icy climate, peasants and workers enjoyed a golden age of living standards. Meanwhile, the ruling classes turned against each other in a Hobbesian war of all against all (Moore, 2003, 2007; Wallerstein, 1974).

At a time when it is often easier to think of the end of the world than the end of capitalism, the fourteenth century’s climate-class conjuncture yields an indispensable insight. Moments of unfavorable climate change in the Holocene are pregnant with political possibility. This is not because climate drives anything (climate does not “have agency”); it is because climate is *in* everything. Climate is a strand of civilizational DNA woven into the socio-ecological relations of power, production, belief, and, well... everything that makes a class society a *class society*. Feudalism’s two great subordinations of the peasantry – in the “long” eighth and eleventh centuries – occurred during the most favorable climates of the Middle Ages (Wickham, 2004). Great climate-class crises – *compromising ruling class capacities* – were prelude and prologue to these great subordinations. These climate-class conjunctures include the implosion of the Roman West in the Dark Ages Cold Period (Harper, 2018), and the historic defeat of feudalism’s One Percent in the Little Ice Age (Moore, 2003). The eras that followed were “dark ages” for the oligarchs. They were golden ages for the vast majority (Wickham, 2004).

The lesson for our times? Unfavorable climate changes across the Holocene have been bad for ruling classes.

We are accustomed to thinking that today’s crisis is the first capitalogenic climate event. It’s not – although ours *is* qualitatively distinct. The Columbian invasions in 1492 marked a geobiological watershed in two significant ways. One was the creation of a capitalist Pangea, 175 million years after the supercontinent broke apart. The conquests placed the potential work and energy of two continents at the disposal of imperial war machines – hungry to turn a profit to fight new wars, to pay their creditors, and to constitute colonial bourgeoisies (planters, merchants, mineowners, ranchers, etc.). The second watershed followed on the heels of the first. No profits could be realized in the Americas without Cheap Labor. The vortex of imperial conquest and colonial class formation demanded ceaseless human sacrifice. It helped that indigenous peoples were regarded as part of Nature, and subject to Cheapening in its most lethal forms. Microbes did not kill 95 percent of the New World’s population; slaving did (Cameron, Kelton, and Swedlund, 2015).

In the geological blink of an eye, the new empires detonated a new era. The Capitalocene does not substitute for geology; it incorporates geobiological change into an assessment of capitalism as a world-ecology of power, profit and life. The genocidal proletarianization of indigenous peoples led quickly to the formation of another murderous proletarianization: the African slave trade. It was quickly reinforced by a climate conjuncture amplified by the American genocides.

The conjuncture was recorded by contemporaries, who observed a series of unfavorable winters by the 1550s, a tumultuous decade of war, financial crisis, and the collapse of Bolivian silver production. The long, cold seventeenth century had begun. It was the worst stretch of “bad climate” in the Little Ice Age – the coldest climatic period of the last 8,000 years. Like earlier climatic episodes of political crisis in late Antiquity and late feudalism, it was an era of endless war, social revolt, and economic crisis. The New World genocides, by devastating indigenous populations, led to an unprecedented drawdown of atmospheric carbon dioxide – forests advanced, soils were left undisturbed by agriculture. The geographers Lewis and Maslin (2015) call this the Orbis Spike (1610). Amplifying contemporary shifts in the North Atlantic Oscillation, solar intensity, and volcanism, the Orbis Spike contributed to the era’s severe cold – and its unprecedented social volatility. Capitalism as we know it might have been stopped dead in its tracks.

This was not unthinkable. Indeed, it was the most likely outcome. Across the previous three millennia, climate shifts and civilizational crises were tightly bound. The crises of the Roman West in the long fifth century and feudal Europe in the long fourteenth-century point to the intimate dialectics of climate, class, and governance (Brooke, 2014). We might also include the Bronze Age Crisis in the twelfth century B.C.E., during which migrations, war and popular revolt unfolded amid drought and famine (Kaniewski, et al., 2010).

That capitalism survived climate conditions roughly comparable to those experienced in the crises of the Roman West and feudalism matters deeply to contemporary climate politics. Capitalism survived thanks to two great socio-ecological revolutions. These were fundamental to the first great climate fix. One was the Great Domestication. As Silvia Federici demonstrates (2004), the mid-sixteenth century marks an unprecedented rupture in the gendered-class structure of early capitalism. It’s no secret that the climate downturn and the upsurge in “witch hunts” were tightly connected. They were crucial moments in the defeat of the proletarian and peasant forces. A defeated and divided peasantry and semi-proletariat could not halt the redefinition of women’s work as “non-work” essential to the proto-industrial expansion that followed. In short, the Great Domestication made possible the Great Proletarianization, and these two made possible nineteenth-century industrializations (Patel and Moore, 2017). This was the rise of climate patriarchy, a class project of Cheap Nature upon which every imperial or industrialization project henceforth depended.

Meanwhile, empires, capital and science worked hand-in-glove to forge the most audacious productivist revolutions in the history of class society. We may call this the Plantation Revolution, although it included extractive, manufacturing, and stock-raising moments (Moore, 2003, 2007, 2010a, 2010b). Its world-historical pivot was the sugar plantation. In a rapid-fire sequence of frontier movements – beginning in Brazil during the 1560s – the riches of King Sugar greased the wheels of seventeenth-century accumulation. They provided the crucial increments of capital formation for the Industrial Revolution in the late eighteenth century. The Plantation Revolution’s crystallization of the climate class divide and climate apartheid would, in turn, provide the essential apparatus of power and profit for the Industrial Revolution’s decisive techno-resource combination (Moore, 2023c). That was *not*, as usually assumed, coal and the steam engine; it was cotton, the cotton gin, and a new

superexploited and racialized labor regime. Nor was it coincidence that King Cotton was crowned during the last great cold snap of the Little Ice Age (c. 1783-1820) – much as King Sugar had come to capital's rescue two centuries earlier. Taken as a whole, these early centuries after 1492 witnessed the birth of the capitalogenic trinity: the climate class divide, climate apartheid, and climate patriarchy.

Capitalogenic Trinities: Towards the Proletarocene?

Today's world bourgeoisie is not exempt from this pattern of climate crisis and climate fix. The One Percent has dug itself out of crisis by moving soldiers, priests (of the Church, of Development), and financiers to the frontiers (Moore, 2000a, 2000b, 2017b). These frontiers – at least those vast enough to establish a new capitalist golden age – are gone. Enclosed. Exhausted. But the *strategy* persists – zombie-like. The drive towards frontiers continues even as these no longer exist on a scale sufficient to revive accumulation.

We have now come full circle. The Capitalocene depends on successive Civilizing Projects that seek to create new profit-making opportunities through Cheap Nature: a strategy of (economic) valorization and (geocultural) devaluation. From 1492, Civilizing Projects have turned on a Nature that includes most humans. *That* Nature is a ruling abstraction at the core of manifold Christianizing, Civilizing, and Developmentalist Projects. It expresses the bourgeois-imperial naturalism – often under the sign of natural law – that has informed counterinsurgency and counter-revolution since Thomas Malthus, and indeed even earlier (Moore 2021a). Nature is the conceptual raw material that makes the ideological hammers of racialized, gendered, and colonial superexploitation. That superexploitation is not a clash of civilizations – its form of appearance – but a class struggle. It's a strategy that seeks to increase the rate of exploitation (of surplus value) not only through socio-technical restructuring, but by increasing the mass of appropriation: *the extraction of the unpaid work* of “women, nature and colonies” (Mies, 1986: 77). In the same breath, those Civilizing Projects have been continually challenged, upended, and even temporarily reversed by unruly, messy, and contentious webs of life, including modernity's great liberation struggles, working-class movements, and socialist revolutions.

Just as we know who was responsible for the slave trade, and who profited from it – in some cases right down to the specific families and firms – so too do we know who is responsible for the climate crisis. And we know who has profited from that death drive towards the planetary inferno. In the words of the radical folksinger Utah Phillips, we know who is responsible, and they have names and addresses. This is the spirit of the radical challenge to the Environmentalism of the Rich and its super-concept, the Anthropocene. To them we say, *Another biosphere is possible!*

References

- Abulafia, D. (2008). *The Discovery of Mankind*. New Haven, CT: Yale University Press.
- Antonacci, J.P. (forthcoming). "Green Großraum: Carl Schmitt's Political Ecology of Space." *Nordia*.
- Brooke, J.L. (2014). *Climate Change and the Course of Global History*. Cambridge: Cambridge University Press.
- Cameron, Catherine M., Paul Kelton, and Alan C. Swedlund, eds. (2015). *Beyond Germs*. Tucson: University of Arizona Press.
- Crosby, Alfred W., jr. (1986). *Ecological Imperialism*. Cambridge: Cambridge University Press.
- Crutzen, Paul J. (2002). "Geology of Mankind." *Nature* 415(6867), p. 23.
- Crutzen, P.J., and E.F. Stoermer (2000). "The Anthropocene." *IGBP Newsletter*, 41: 17-18.
- Dauvergne, Peter (2016). *Environmentalism of the Rich*. Cambridge, MA: MIT Press.
- Ehrlich, Paul R. (1968). *The Population Bomb*. New York: Ballantine.
- Engels, F. (1987). "The Part Played by Labor in the Transition from Ape to Man." In K. Marx & F. Engels, *Collected Works*, Vol. 25. New York: International Publishers, pp. 452-464.
- Federici, Silvia (2004). *Caliban and the Witch*. Brooklyn, NY: Autonomedia.
- Fukuyama, Francis (1989). "The End of History?" *The National Interest*, 16, pp. 3-18.
- Furfey, Paul Hanley (1942). *A History of Social Thought*. New York: Macmillan.
- Hage, Ghassan (2017). *Is Racism an Environmental Threat?* Cambridge, UK: Polity.
- Harper, Kyle (2018). *The Fate of Rome*. Princeton, NJ: Princeton University Press.
- Heede, Richard (2019). *Carbon Majors*. Snowmass, CO: Carbon Accountability Institute.
- Intergovernmental Panel on Climate Change (2022). *Climate Change 2022*. Nairobi, Kenya: United Nations Environment Programme.
- Kaniewski, David, Etienne Paulissen, Elise Van Campo, Harvey Weiss, Thierry Otto, Joachim Bretschneider, and Karel Van Lerberghe (2010). "Late second–early first millennium BC abrupt climate changes in coastal Syria and their possible significance for the history of the Eastern Mediterranean." *Quaternary Research* 74(2), pp. 207-215.
- Klein, Naomi (2007). *The Shock Doctrine*. New York: Metropolitan.
- Ladurie, E.L.R., and V. Daux (2008). "The climate in Burgundy and elsewhere, from the fourteenth to the twentieth century." *Interdisciplinary Science Reviews*, 33(1), pp. 10-24.
- Levins, Richard, and Richard Lewontin (1985). *The Dialectical Biologist*. Cambridge, MA: Harvard University Press.
- Lewis, Simon L., and Mark A. Maslin (2015). "Defining the Anthropocene," *Nature*, 519, pp. 171-80.
- Malm, Andreas (2016). *Fossil Capital*. London: Verso.
- Marx, Karl (1973). *Grundrisse*. Martin Nicolaus, trans. New York: Vintage.
- Marx, Karl (1977). *Capital*, Vol. 1. Ben Fowkes, trans. New York: Vintage.
- Marx, Karl (2010). "Theses on Feuerbach." In K. Marx & F. Engels, *Collected Works*, Vol. 5. London: Lawrence & Wishart, pp. 3-5.
- Marx, Karl, & F. Engels (2010). *The German Ideology*. In K. Marx & F. Engels, *Collected Works*, Vol. 5. London: Lawrence & Wishart, pp. 19-593.
- Mies, Maria (1986). *Patriarchy and Accumulation on a World Scale*. London: Zed.

- Moore, J.W (2000a). "Environmental Crises and the Metabolic Rift in World-Historical Perspective." *Organization & Environment*, 13(2), pp. 123-57.
- Moore, J.W (2000b). "Sugar and the Expansion of the Early Modern World-Economy." *Review*, 23(3), pp. 409-33.
- Moore, J.W (2003). "Nature and the Transition from Feudalism to Capitalism." *Review*, 23(2), pp. 97-172.
- Moore, J.W (2007). *Ecology and the Rise of Capitalism*. PhD dissertation, Department of Geography, University of California, Berkeley.
- Moore, J.W (2010a). "'Amsterdam is Standing on Norway' Part I." *Journal of Agrarian Change*, 10(1), pp. 33-68.
- Moore, J.W (2010b). "'Amsterdam is Standing on Norway' Part II." *Journal of Agrarian Change* 10(2), pp. 188-227.
- Moore, J.W (2015). *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso.
- Moore, J.W (2017a). "The Capitalocene, Part I." *Journal of Peasant Studies*, 44(3), pp. 594–630.
- Moore, J.W (2017b). "World Accumulation and Planetary Life, or, Why Capitalism Will Not Survive Until the 'Last Tree is Cut'." *IPPR Progressive Review*, 24(3), pp. 176–204.
- Moore, J.W (2017c). "Confronting the Popular Anthropocene." *New Geographies*, 9, pp. 186-191.
- Moore, J.W 2018a. "The Capitalocene, Part II." *Journal of Peasant Studies*, 45(2), pp. 237–279.
- Moore, J.W (2021a). "Opiates of the Environmentalists? Anthropocene Illusions, Planetary Management & The Capitalocene Alternative." *Abstrakt* (November), <http://www.abstraktdergi.net/opiates-of-the-environmentalists-anthropocene-illusions-planetary-management-the-capitalocene-alternative/>
- Moore, J.W (2021b). "Empire, Class & The Origins of Planetary Crisis." *Esboços*, 28, pp. 740-763.
- Moore, J.W (2021c). "Das Planetare Proletariat im Planetaren Inferno." *LfB: Literaturforum im Brecht-Haus*, 7, pp. 4-11.
- Moore, J.W (2022a). "Beyond Climate Justice." In E. Degot and D. Riff, eds., *The Way Out of the Climate Crisis*. Berlin: Hatje Cantz Verlag, pp. 105-130.
- Moore, J.W (2022b). "Anthropocene, Capitalocene & the Flight from History." *Nordia*, 51(2), pp. 123–146.
- Moore, J.W (2022c). "Power, Profit and Prometheanism, Part I." *Journal of World-Systems Research*, 21(2): 1-12.
- Moore, J.W (2023a). "Our Capitalogenic World: Climate Crises, Class Politics & the Civilizing Project." *Studia Poetica*, 11, pp. 97-122.
- Moore, J.W (2023b). "Waste in the Limits to Capital: How Capitalism Lays Waste to the Web of Life, and Why It Can't Stop." *Emancipations*, 2(1), pp. 1-45.
- Moore, J.W (2023c). "There is No Such Thing as a Technological Accident: Cheap Natures, Climate Crisis & Technological Impasse." In Joke Brower and Sjoerd van Tuinen, eds., *Technological Accidents*. Leiden, Netherlands: V2 Publishing, pp. 10-37.
- Moore, J.W (2023d). "Power, Profit & Prometheanism, Part II: Superexploitation in the Web of Life." *Journal of World-Systems Research*, 29(2), pp. 558-582.
- Moore, J.W (2023e). "Imperialistische Kriege in der Endphase der billigen Natur." *Das Argument*, 340, pp. 39-61. [In English as "Imperialism, With and Without Cheap Nature." World-Ecology Research Collective, Binghamton University. *Working Paper 3/2022*.
- Moore, J.W (2023f). "Between the Devil and the Deep Blue Marble: Capitalism, Nature and the Promethean Gaze, from Mercator to the Space Age." In Kathrin Schöneegg and Boaz Levin, eds., *Image Ecology*. Leipzig: Spector Books, pp. 65-75.

- Moore, J.W, and John P. Antonacci (2023). "Good Science, Bad Climate, Big Lies: Climate, Class & Ideology in the Capitalocene." World-Ecology Research Collective, Binghamton University. *Working Paper*, 1/2023.
- Parker, Geoffrey (2013). *Global Crisis*. New Haven, CT: Yale University Press.
- Patel, Raj, and J.W Moore (2017). *A History of the World in Seven Cheap Things*. Berkeley: University of California Press.
- Prokop, Andrew (2019). "Joe Biden's controversial comments about segregationists and wealthy donors, explained," Vox (19 June), <https://www.vox.com/policy-and-politics/2019/6/19/18690910/biden-fundraiser-controversy-segregationists-donors>.
- Robertson, Thomas R. (2012). *The Malthusian Moment*. New Brunswick, NJ: Rutgers University Press.
- The Salvage Collective (2021). *The Tragedy of the Worker*. London: Verso.
- Saito, Kohei (2022). *Marx in the Anthropocene*. Cambridge: Cambridge University Press.
- Skea, Jim (2023). "IPCC Chair's Speech at the Times and Sunday Times Earth Summit 2023," 17 October, <https://www.ipcc.ch/2023/10/17/ipcc-chair-jim-skea-times-and-sunday-times-earth-summit-2023/#:~:text=On%20urgency%2C%20it%20is%20clear,already%20touch%20people's%20lives%20directly>.
- Secombe, Wally (1992). *A Millennium of Family Change*. London: Verso.
- Selcer, Perrin (2018). *The Postwar Origins of the Global Environment*. New York: Columbia University Press.
- Steffen, Will, Wendy Broadgate, Lisa Deutsch, Owen Gaffney, and Cornelia Ludwig (2015). "The Trajectory of the Anthropocene." *The Anthropocene Review* 2(1), pp. 81-98.
- Tilly, Charles (1984). "The Demographic Origins of the European Proletariat." In David Levine, ed., *Proletarianization and Family History*. Orlando, FL: Academic Press, pp. 1-85.
- Wallerstein, Immanuel (1974). *The Modern World-System I*. New York: Academic Press.
- Watts, Jonathan (2021). "Interview: Johan Rockström: 'We need bankers as well as activists... we have 10 years to cut emissions in half.'" *The Guardian* (29 May).
- Weber, Max (1951). *The Religion of China*. Glencoe, IL: Free Press.
- Wickham, Chris (2004). *Framing the Middle Ages*. Oxford: Oxford University Press.
- Toynbee, Arnold (1884). *Lectures on the Industrial Revolution in England*. London: Rivingtons.
- von Werlhof, Claudia (1988). "On the concept of nature and society in capitalism." In M. Mies, et al., eds., *Women: The Last Colony*. London: Zed, pp. 96-112.
- Wynter, Sylvia (2003). "Unsettling the Coloniality of Being/Power/Truth/Freedom. *CR: The New Centennial Review*, 3(3), pp. 257-337.
- Zimmermann, E. (1951). *World Resources and Industries*. New York: Harper & Bros

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