



Nature and other dangerous words: Marx, method and the proletarian standpoint in the web of life

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We've got it all wrong about capitalism, class, and the climate crisis.

Not the facts. Climate change is real, and relentless. Even if it does not spell existential doom—as the masters of mankind have us believe—the conditions of planetary life will change significantly over the next century. They're *already* changing dramatically. Sea levels are rising. Agricultural productivity has hit a wall. Outdoor workers wilt in the summer heat, and labor productivity—indoors and outdoors—is stagnating. Country-size glaciers calve. Biodiversity suffers.

We all know the facts. It's how we make sense of them that shapes our politics.

The climate crisis is real, and capitalism is the culprit. Yet, saying so hardly settles things. Slogans are easy: “system change not climate change.” But misunderstanding “the system” has momentous implications. Following the turn-of-the-century globalization studies craze, “critical” intellectuals convinced many of us to think the problem with capitalism is its fantasy of self-regulating markets—not class exploitation.¹

Here's a distinction with a difference, producing divergent political priorities premised on divergent historical interpretations. *How* we think with and through—and then act upon—“systems” is what matters. *Systems* here implicates the prewar communist meaning, not its postwar rendering, later repackaged by *The Limits to Growth* team (Meadows et al. 1972). The Marxist point is dialectically bound to historical inquiry and a piercing critique of the “imagined concrete.” The latter, characteristic of bourgeois ideology, arises from the fetishes that seek to control the world-historical imagination—and with it, proletarian consciousness (Max 1973, 100). One's world-historical assessment of the origins and development of planetary crisis determines one's political priorities in the climate crisis.

My interpretive and political outlook is shaped by Marx and Engels' insistence on proletarian method and praxis. The proletariat, they underline, can “only exist

¹ They key reference here is Polanyi (1944)—a book that is deliberately not cited in *Capitalism in the Web of Life*. See, *inter alia*, Selwyn and Miyamura 2014; Moore 2023b.

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world-historically” in its “twofold character,” at once “a natural ... and social relation” (Marx and Engels 1975, 49, 43). I have been obsessed with these questions of power, profit, and life for the past three decades. *Capitalism in the Web of Life* was an important moment in that journey of synthesis (Moore 2015). Beginning with labor history, I’ve spent those decades wrestling with capitalism’s metabolic antagonisms as dialectically joined to class formation, class structure, and class struggle in their manifold expressions.

Marx’s ontology is, I learned along the way, crucial to making sense of it all. It is a labor theory of life. Far from a labor reductionism, which would lead to formalism, undialectical monism, or some other bourgeois pathology, Marx launched historical materialism through a double critique. One was the critique of “abstract man” and “abstract nature” (Marx 1975a, 327; Marx and Engels 1975: 327). That theme runs throughout the *Manuscripts* and *The German Ideology*. Crystallized in the famous “Theses on Feuerbach,” Marx decries the fetish of *Man*—his capitalization—and insists on “*real*, historical man” through historically specific “ensemble[s] of the social relations” (Marx and Engels 1975, 39; Marx 1975b, 39).

What are the preconditions of those ensembles? Certainly, non-dialectical forces, starting with the “natural conditions” of climate and topography (Marx and Engels 1975, 30). Marx’s second critique was reconstructive, pushing back against the temptations of bourgeois naturalism and environmental determinism. This alternative foregrounds the labor process as the ontological and historical pivot through which “modifications” of “the rest of nature” occur (*ibid*). These are dialectical antagonisms: what I’ve tried to capture in my labor-centered account of *environment-making*. The labor process is not the product of “abstract man.” Abstract man is a fetish. Rather, labor is the active moment of human evolution: “labor created man” (Engels 1987, 452). In sum, “abstract man” (and “abstract nature”) is the “imagined concrete”; *historical man*, in contrast, is the product of labor, a specific kind of “natural force,” through which not only landscapes but bodies, speech, brains, and all the conditions of human sociality form. Thus the double register of Marx’s ontology and the animating premises of historical materialism: labor is at once “a natural ... and social relation” *and* a relation of immediate production and intergenerational reproduction (Marx and Engels 1975: 43). In Marx and Engels’ labor theory of life, the philosophy of praxis informs the proletariat’s strategic vision as capitalism confronts a distinctive crisis complex of dialectical and non-dialectical antagonisms. A historical materialism that cannot make sense of how distinctive class societies and their dialectical antagonisms are overdetermined by solar cycles, volcanism, and all manner of geophysical events and patterns—*non-dialectical* antagonisms—is one that cannot make sense of the past, the present, and our possibly socialist futures.

Marx and Engels’s labor theory of life leads one to make sense of class struggles and their manifold expressions through these shifting world-historical conditions. Richard Levins and Richard Lewontin captured the methodological argument a quarter century ago:

There is no organism without an environment, but there is no environment without an organism. There is a physical world outside of organisms and that world undergoes certain transformations that are autonomous. Volcanoes

erupt, the earth precesses on its axis of rotation. But the physical world is not an environment, only the circumstances from which environments can be made ... [O]rganisms remake the environment at all times and in all places. Every organism consumes resources necessary for its survival, and produces waste products that are poisonous to itself and others ... A consequence of the codetermination of the organism and its environment is that they coevolve. As the species evolves in response to natural selection in its current environment, the world that it constructs around itself is actively changed ... [O]rganisms are the active makers and remakers of their milieu ... [A] rational political ecology demands that knowledge. One cannot make a sensible environmental politics with the slogan “Save the Environment,” first, because “the” environment does not exist and second because every species, not only the human species, is at every moment constructing and destroying the world it inhabits (Lewontin and Levins 1997, 96–98).

Capitalism in the Web of Life—and the wider world-ecology conversation in which it’s embedded—is a relentless effort to make world-historical sense of capitalism through such a method (Moore 2017b, 2022a, b, 2023a).² Its socio-ecological ontology is the labor process: the active, metabolic relation that makes human sociality, and is refashioned and redirected under the bourgeoisie’s class rule. It was first articulated by Marx and Engels in 1840s. Marx amplified those arguments throughout his life, especially in *Capital*. Marx and Engels refused Green Arithmetic—adding up Man, Society, and Nature—because that method expresses, and reinforces, the real relations of primitive accumulation and capitalism managerialism. Green Arithmetic separates in thought the historical separation of the direct producers from the means of life. The question of method, at the center of *Web of Life*, is for this reason not a trivial matter. The dialectical method is fundamental to the class struggle and the philosophy of praxis on the “real ground of history” (Marx and Engels 1975, 53–54; see Moore 2022b, 2023a).

My conceptual alternatives and historical frames emerged from this labor theory of life. “Labor created man”—not the other way around. Such a labor ontology guides us through capitalism’s manifold socio-ecological antagonisms and argues against the liberal pluralist conception—an environmental crisis here, a geopolitical crisis there, an accumulation crisis somewhere else, all mysteriously “converging” or “intersecting.” But capitalism’s deepening epochal crisis is not plural. It’s singular, with manifold expressions. Its underlying source? The class-metabolic contradictions set in motion by the law of value some five centuries ago. Those contradictions involve not only a warming planet but the ideological structures, the *ruling abstractions*, signified by Man, Nature, and Civilization. These too are material forces in the hands of ruling classes.

Readers may have encountered my alternatives, necessarily reduced to slogan-like formulae. Of these, Cheap Nature and the Capitalocene provocation are surely

² The curious reader can find several hundred essays and books contributing to the world-ecology conversation on Academia.edu, see <https://www.academia.edu/Documents/in/World-Ecology>.

at the top of the list. These are, at once, proposals for making sense of capitalism's long and uneven world histories, and an attempt to break free from the putrid and violent legacy of bourgeois naturalism and its environmentalisms, from Malthus onwards.

Let's consider the Capitalocene (Moore 2017a, 2018). This is not an argument about geology. It's a mockery of how bourgeois science is used to narrate the history of capitalogenic climate change. I poke fun at the absurd claim that *Man* is "overwhelming the great forces of nature" (Steffen et al. 2007). That phrase is wrested from one of the Anthropocene's early programmatic statements. It also summarizes the ecosocialist consensus, which merely substitutes an *abstract capitalism* for abstract Man. But the critique of capitalism, if it is to gain any revolutionary traction, must offer a historical reconstruction of capitalism in and through webs of life, which are producers and products of class struggle, and the real content of the law of value.

That Marx and Engels formulated historical materialism as a critique of Man and Nature is rarely recognized (Moore and Antonacci 2025). Just as Marx ridiculed Malthus for his slavish adherence to a "natural law" of population, so the Capitalocene thesis reveals the Anthropocene as an ideological con job, a "*libel on the human race!*" (Marx 1969: 25). In identifying the class-historical origins and development of capitalism as the prime mover of accelerating biospheric crises, the Capitalocene thesis excavates the world-historical movements underpinning the present conjuncture (Patel and Moore 2017). No less significantly, it reveals the ideological alchemy that turns earth system science into Good Science, a set of claims about the collision of Man and Nature and the imperative for state-of-emergency climate politics. This latter is the Popular Anthropocene, an ideological and institutional web of generously-financed academics, policy wonks, and cultural outlets committed to narrating the climate crisis as anthropogenic—and emphatically *not* capitalogenic. The world-ecology argument has consequently highlighted the Popular Anthropocene's ideological functions and social basis, in the process underlining the degree to which ecosocialist thought has been hostage to bourgeois naturalism and humanism (Moore 2017c).

The Capitalocene is therefore an invitation to unthink the ideological power of the Anthropocene and other expressions of the Environmentalism of the Rich (Martínez-Alier 1993). The latter's deliberate blurring and blending of science and ideology has for centuries been fundamental to imperialism and its Cheap Nature regimes. Marxists call it a "double transfer," a recurrent ideological process through which Big Science internalizes bourgeois ideology, then uses scientific output to justify capitalism (Foster and Cark 2008).

Every time imperialist ruling classes have been threatened, there is a mighty return to Nature. This was true in Malthus's time, when the peasant and proletarian forces erupted in popular and anti-colonial revolts. It was no less true in 1968, when the Environmentalism of the Rich emerged as a mass cultural phenomenon in response to the era's revolutionary upheavals (Moore 2021a, 2023d). Today, the fragility of capitalism, revealed through its unprecedented socio-ecological contradictions, has yielded a new climate consensus among the West's ruling strata. Climate denialism is out. Instead, we're told that a "climate emergency" demands

the surrender of the popular classes to Good Science and technocratic rule in the interests of the Point One Percent. In each instance, Nature—as ruling idea and ruling abstraction—justifies the dictatorship of the bourgeoisie, even as it scrambles to move beyond capitalism while maintaining its iron grip on the levers of power (Moore 2023e).

Marxism emerged through the critique of the Eternal Conflict, Man against Nature. The uppcase is deliberate. Marx and Engels understood the profound danger, and class character, of “one-sided” materialism, of “abstract man” and “abstract nature” and the “abstractly material” character of scientific knowledge (Marx and Engels 1975, 42; Marx 1975a, 327, 303). Such one-sided conceptions invariably smuggle bourgeois ideology into intellectual life and revolutionary critique through the double transfer. And so it is today, with leading ecosocialists writing books like *Marx in the Anthropocene* (Saito 2023). Rather than situate the Popular Anthropocene within the history of counter-revolution since 1968, many Marxists presume the innocence of Man and Nature beyond history: the cultural logic of the Environmentalism of the Rich (Moore 2024).

That presumption derives from the weaknesses of contemporary Marxism, conditioned by the defeat of the proletarian forces and socialist alternatives since the 1970s. It’s worth noting that before 1970, Marxists took their distance with ecological thought for sound reasons. Ecologism was never a friend of the working classes. It’s therefore not surprising that within so-called ecological Marxism, the problems are especially severe. Much of it blends a mishmash of Marxist vocabulary with a retrofitted *Limits to Growth* perspective (Meadows et al. 1972; e.g., Foster et al. 2011). Not only have leading ecosocialists refused to interrogate the world-historical patterns and dynamics behind capitalogenic climate crisis. They’ve heaped scorn upon the world-ecology conversation, which is odd, because our position takes flight from Marx’s insight that the “proletariat ... can only exist world-historically” (Marx and Engels 1975, 49).³ Capitalism must be interpreted—and narrated—through its world-historical development. In their flight from world history, “ecological” Marxists remind me of Marx’s commentary on Feuerbach: “As far as Feuerbach is a materialist he does not deal with history, and as far as he considers history he is not a materialist” (Marx and Engels 1975, 41; see Moore 2022c). In this effort, one can choose either the categories of the bourgeoisie—Man, Nature, and Civilization—or the standpoint of the proletariat in the web of life.

Man and nature? Bourgeois ideology and the eternal conflict

Raymond Williams once called Nature the most complex word in the language (1983, 219). I say it’s also the most dangerous. And not just in English—in all the Western languages. For Marxists, language is a distinctive moment in culture and ideology (Williams 1977). It is not the free-floating signifier of the poststructuralists.

³ Perhaps Andreas Malm (2016) especially wishes to avoid the point, given his Anglocentric avoidance of the plantation proletariat in the making of fossil capital!

Nor is it the epiphenomenal reflex of material forces implicated by many ecosocialists. Language and consciousness are dialectically, materially, connected; they are, “from the very beginning [of the human experience] a social product”—which is to say, they are a labor process (Marx and Engels 1975, 44; Engels 1987). With the rise of class society, ideology took shape. Ideologies are languages of power. Marx, as usual, offers a delicious summary of why this matters. Language is “practical, real consciousness” rooted in social relations; in class society, language and class consciousness are bound to “ruling ideas” (Marx and Engels 1975, 44, 59). All those relations unfold as, and within, webs of life (ibid, 30). All are pivotal to the unfolding planetary crisis.

These are among the philosophical premises of historical materialism. Their power is found in asking the right questions. And these questions can only be resolved, as I argued a decade ago, through praxis. It is *bourgeois* theory that deludes itself in thinking that theoretical difference can be resolved through assertions of theoretical difference. In contrast, communist theory poses questions and propositions that can only be resolved—to the degree that any dialectical antagonism can be resolved!—through praxis. The proletarian intellectual does not conjure concepts and impose them on past and present; instead, she “remains constantly on the *real* ground of history” (ibid, 53–54). Our questions and proposals seek to explain capitalism’s world-historical patterns and turning points, so that we may identify the decisive contradictions of the “present as history” (Sweezy 1953)—what Lenin aptly describes as the “weak links” in capitalism’s chains of power, profit, and life (1964).

For Marxists, the philosophy of praxis in the revolutionary struggle is twofold. First the obvious: *praxis* implicates the development, revision, and application of theoretical knowledge in light of the unfolding class struggle. Distinctively, for Marxists, that *theoretical knowledge* is profoundly historical. Praxis joins the skills of the prophet, the politico, and the historian. Marxism also recognizes that every predictive enterprise depends on world-historical retrodiction. Why? Because the proletariat “can only exist world-historically.” Marx’s dialectics are crucial in this enterprise. Their ontological priority insists that we conceptualize any entity or process through its relations with the constitutive outside: “a being which does not have its nature outside itself is not an ... objective being” (Marx 1975a, 337). This is how dialectics *should* help socialists to guard against what Marx calls “one-sided” formulations. And why should that be crucial? Because one-sided formulations lead to misrecognitions of capitalism’s world history, and therefore of its weak links, and thence to one-sided politics.

I wrote *Capitalism in the Web of Life* out of the conviction that Marxists, environmentalists, and “critical” intellectuals had misrecognized capitalism’s unfolding epochal crisis. Their conceptions were not necessarily wrong; they were one-sided. (This was always the nature of my disagreement with Foster, whose work I have continued to praise across the past decade [see, *inter alios*, Moore 2017b].) One-sided formulations worthy of critique are not the same as bad scholarship; much less do they imply any rejection of Marxism. More problematic, for the theoretical struggle, are those arguments that cherry-pick phrases (“monism”!), attribute arguments via ecological inference (“hybridity”!), or that otherwise make mountains out

of molehills while evading the real ground of history. They owe much to the intellect worker's view of the world: fragmented and in denial of the "totality of the historical process" (Baran 1961, 10).

Marx's method orients us to how one-sided formulations refract and reflect ideological structures' sustained institutional power and, in the final analysis, the evolving balance of class forces. I make no argument that the gods have spared me from one-sided interpretations. I differ from most ecosocialists in raising the problem explicitly, grounded in a class-historical reading of knowledge. This explains my embrace of Marx's philosophy of internal relations as a countertendency. One-sided formulations among Marxists are not grounds for condemnation, but opportunities for synthesis. (This method has governed my reading of metabolic rift, fossil capital, the second contradiction, and accounts for the mix of praise and critique I've directed at each.)⁴ These and other major concepts—certainly mine included—are dialectical manifestations of ideological structures, not least the disciplines of the knowledge factory, that enforce one-sidedness, the expression in thought of capitalist alienation in material life. As I argued a decade ago, the inevitably partial character of my proposals would be—*could only be*—illuminated on the real ground of world history. The history of ideas, ideology, and science is fundamental to those world histories; without it, the only materialism that Marxism can produce is an exceedingly vulgar one.

Marx and Engels on the labor theory of life

Among recent Marxism's greatest concessions to bourgeois materialism is the claim that the history of class society—"written history," Engels reminds us—is a derivation of Man and Nature (Marx and Engels 2002, 219n). It is not. *Man* and *Nature* are the greatest of the bourgeoisie's "ruling ideas." They are the ideological software of capitalist hegemony over power, profit, and life. Their invention, in the two centuries after 1492, is well documented, widely studied—and generally ignored by Marxists (Moore 2023c).

Although we do not need their authority to make the case, Marx and Engels took *as their point of departure* the critique of bourgeois humanism and bourgeois naturalism. Marxists easily forget the sixth thesis on Feuerbach and its elaborations in *The German Ideology*. Feuerbach's error was to conceptualize *Man* abstracted from the "ensemble of the social relations" (Marx 1975b, 4). There is only "real, historical man" and real, historical *nature* (Marx and Engels 1975, 39). This latter is a richer, evolving historical totality, foregrounded in *Web of Life*. Historical nature is, at once, the condition of possibility for a given phase of class society, and the terrain upon which class struggles unfold, in turn shaping those environments. It includes "real, historical man" through labor, mediating dialectical and non-dialectical antagonisms with the "rest of nature" (ibid, 31).

⁴ See Moore 2017b. In relation to the fossil capital thesis, my concluding remarks in Moore 2017a, and sustained discussions in Moore 2021c, 2023f.

These ensembles flow through labor as a “specifically harnessed natural force”—in and through “the rest of nature” (Marx 1973, 612; Marx and Engels 1975, 31). Ensembles of labor—modes of life and production—within given “natural conditions” subsequently “modify these natural bases” (ibid). This labor process of environment-making “modification” is constitutive of modes of production; organizing work relations is a labor-mediated relation of “man and man” and “man and nature,” through which a given class society “act[s] upon external nature and change[s] it, *and in this way ... simultaneously changes [its] own nature*” (Marx 1976, 133, 283). Labor activates “the potentialities slumbering within nature”—human nature as “a force of nature” no less than “external nature” (ibid, 283).

The labor theory of life is fundamental to the longstanding proletarian critique of bourgeois naturalism. In the foundational statement of historical materialism, Marx and Engels warned of the seductive allure of “ruling ideas.” Across their lives, perhaps no critique of ruling ideas featured more prominently than their ruthless deconstruction and mockery of Malthus’s “natural law” arguments. They understood, as many today do not, that Malthus’s ideological emphasis was not overpopulation in itself, but the invocation of “natural law” to justify capitalism’s brutal inequality (Marx and Engels 1975, 59; see McNally 1993, Santora 2025, Moore 2021a).

If that class war is justified through natural law, the labor theory of life is its dialectical kryptonite. Following Marx and Engels, I’ll share four major observations on the real ground of history and historical method. (Whether or not my historical interpretations are correct, flawed, or a bit of both is what we *should* be discussing—and what the ecosocialists are not.) First, the labor process is, for communists, the ontological and methodological point of entry for the historical study of human relations, which are always “more than human”—thereby giving *real* substance to the empty phraseology of “critical” theorists (e.g. Haraway 2016). This is especially true for the history of class societies.

Second, the labor process is a metabolic contradiction. It variously expresses, internalizes, and mediates the concrete dynamics of class through its “dialectical inversions” (Marx 1976, 423). Above all, this involves the mixing of dialectical and non-dialectical antagonisms in the web of life: of “natural bases” and their “subsequent modification” (Marx and Engels 1975, 31.) This means class contradictions are metabolic all the way down—without flattening the “socio-natural properties” of any specific metabolic arrangement (Marx 1976, 165).

Third, the modern proletariat can only exist world-historically. That world-historical existence unfolds through the class struggle over surplus value, whose labor processes unfold through a *doubly* “twofold relation” (Marx and Engels 1975, 43). On the one hand, this is the “production of life, both of one’s own in labour and of fresh life in procreation” (ibid). This social metabolism unifies the differentiated unity of production and reproduction which every class society must create and regulate (see also Secombe 1992). On the other hand, capitalist metabolisms are not shaped by a “rift” between Nature and Society, but emerge through the class struggle; they *are* a class struggle. These labor relations and processes manifest “as a natural [and]... a social relation” (Marx and Engels 1975, 43).

Fourth, the bourgeoisie actively produces ideologies that have empirically verifiable consequences for humans and other webs of life. These modern ideological

structures implicate the production of “abstractly material” science, necessary to sustain a geocultural binary code of Man and Nature. This is why every capitalist ruling class threatened by crisis and revolt returns to Nature to justify its power – from Malthus to Galton to the Anthropocene.

I’ve drawn three major implications from this reading of Marx and Engels, together outlining a labor theory of life. First, “labor created man.” Engels was not proposing a labor reductionism (1987). That would violate the most elementary procedures of dialectical thought. Rather, the labor process is the generative moment of social metabolisms, its contradictions weaving together cooperation, conflict, and consciousness. Levins and Lewontin subsequently developed these themes in their critique of Cartesian reduction and the environment-making dialectics of gene, organism, and environment (1985).

Second, the labor process joins the dialectical activation of the “soil and the worker” as a differentiated ontological and historical unity. This is crucial if we are to avoid vulgar materialism. As Marxist geographers have long emphasized, *resources become*. And, before them, Marx: the labor process activates “new potentialities slumbering in nature” (1976, 283). Attributing historical powers to climate, coal, or abstract nature is about as fundamental a rejection of Marx’s dialectical materialism as one can get. (Use-value is a historical relation of the labor process, activating some use-values, not others.) Such substance fetishism emerged historically through the Cartesian revolution, manufactured from the raw material of bourgeois naturalism. This has been the crux of my disagreement with Malm’s fossil capital thesis (2016). Malm discards Marx’s concept of circulating constant capital and hopes no one notices. In my view, Marx’s concept of circulating capital allows us to forge interpretive connections between class and substance. From this perspective, fossil capital and cognates are naturalized substance fetishes. As such, they share a conceptual affinity with neo-Malthusian resource economics (Retort 2005). Rather than a battle of slogans, however, I’ve shown how a recuperation of Marx’s theory of the rising organic composition of capital in the light of the dialectics of fixed and circulating constant capital allows for a historical reconstruction. This alternative reveals imperialist class formation and its commodity frontiers—especially in the plantation system—as pivotal to the “rise” of so-called fossil capital (Moore 2023f).

Third, the origins of capitalism and its capitalogenic crisis tendencies are located, again following Marx, through modern proletarianization in the web of life (Moore 2003; Seccombe 1992). Without an account of proletarianization, Marxism surrenders the intellectual—and political—ground to the neo-Malthusians. The core of Cheap Nature as a bourgeois-imperial project and world-historical process is the search for cheap and tractable labor supplies. It is a history of class formation and politically enforced proletarianization, beginning in earnest with the perfect storm of climate change, geopolitical turbulence, and economic crisis in the 1550 s. Following Marx’s arguments in *Capital*, I argued that worldwide proletarianization, propelled forward by the mechanisms of political accumulation, was central to understanding capitalism’s origins *and* today’s epochal crisis.

In the twenty-first century, natural law arguments appear in a new form but not in historical essence. Nature as “climate emergency” is now deployed in favor of a liberal technocratic program of climate austerity with a powerful justification: “there

is no time.” Nature and other ruling ideas (but Nature especially!), as far back as the Cartesian Revolution and Locke’s ethos of Improvement, have invited intellectuals to “share the illusions” of their epochs (Marx and Engels 1975, 55). For Marx and Engels, these illusions were not merely a question of getting it wrong. Malthus *was* wrong, in so many ways; but this is no exercise in academic point scoring.

Ideas and ideologies are class relations. The “means of mental production” entail the formation of a stratum of “conceptive ideologists,” today represented by highly professionalized and disciplined intellect workers (Marx and Engels 1975, 60). Ideas not only have a class basis; they are fundamental to the class struggle. In the modern era, the most powerful ideas mask the ruling class project in the name of Good Science, which delivers truths about Nature and natural law (Harvey 1974). No serious Marxist approach to the history of ideas and ideology can evade this history—or its contemporary valence in the climate crisis.

In this light, the Anthropocene is not a problem because scholars arrive at different conclusions about the decisive “golden spikes” in the stratigraphic record. The Anthropocene is a problem because it is a cultural complex that produces knowledge framed by the ideological demands of the imperial bourgeoisie. It is a picture-perfect representation of the double transfer. This is the bourgeoisie’s return to Nature and the Eternal Conflict in the twenty-first century. The Anthropocene-Industrial complex produces the ideology and policy-oriented programs for the Point One Percent’s planetary management schemes. It enables the planetary superclass and their house intellectuals to deploy Good Science in pursuit of balancing the costs of climate mitigation and adaptation on the backs and bellies of the global majority. Hence the Anthropocenists’ refusal to name the system and its commitment to the theory of “human-caused” climate change.

We’ve read and heard, time and again, that the climate crisis is anthropogenic. That’s presented as a *fact*. It’s not. *Anthropogenesis*—“made by Man”—is an interpretation (Moore and Antonacci 2025). Neither humankind nor human society is responsible for the climate crisis. It is *capitalism* and its ruling classes, and the imperialist bourgeoisie above all, that is responsible. The climate crisis is not anthropogenic. *It’s capitalogenic*.

That does not minimize the gravity of the climate crisis in geophysical terms. Far from it! Indeed, I accept those assessments as the basis for arguing that capitalism cannot survive. The epochal transformations of the biosphere now in motion undermine capitalism’s ability to sustain itself. Climate is not everything. But it’s impossible to explain *anything* about contemporary capitalism without it. Among the fundamental expressions of the climate-class antagonism is the termination of the agricultural revolution model, which first took shape in the early modern Atlantic. The long era of producing more and more food with less and less labor-time has definitively come to an end.

The High Priests of ecological Marxism have studiously avoided this and similar historical arguments. When first I read John Bellamy Foster’s initial—and somewhat unhinged—response to my book (2016), I wondered: Had he had read all the way to the end? (I wonder still.) There, in the book’s climactic discussion of the end of Cheap Labor and Cheap Food, I affirm the climate crisis as wrapped up in an epochal contradiction irresolvable within capitalism. After all the huffing and

puffing, it turns out Foster and I agreed on the conclusion and disagreed over the method. That's no small thing, but it's hardly a good reason for ex-communication.

There are practical matters at stake. Foster endows capitalism with magical powers to withstand its socio-ecological antagonisms. No, Professor Foster, capitalism will not survive "until the last tree is cut" (Moore 2017d). He tells us that climate change is an existential threat to all humanity—but not to capitalism? Doesn't capitalism need a steady and rising supply of "trees" (and everything else), lest costs rise and profits fall? Foster and his fellow travelers have ignored what Marx would surely say about capitalism's limits in the twenty-first century: the limit to capital is capital itself. Curiously, their arguments, prizing the gravity of the social metabolism as "metabolic rift" (a term Marx never uttered), deny the gravity of that social metabolism in limiting capital's expanded reproduction. It is not I—but they—who minimize the epochal significance of the climate crisis and other metabolic contradictions as class-historical conjunctures. If capitalism can survive independently of whatever happens to the biosphere, just what, pray tell, is the point of "ecological" Marxism?

There is a concrete world history of these climate-class conjunctures. The Mycenaens, Romans, Europe's feudal aristocrats—all saw their civilizations unravel in the face of climate-class crises. The scale, scope, and intensity of twenty-first-century climate crisis dwarfs anything seen in the Holocene. Different, to be sure, but also similar: the lessons are there for the taking. Golden ages have often followed great climate-class crises for the direct producers. To repeat: climate is not everything. But no element of class society can be explained without it. Climate is but one—hugely significant—causal moment within capitalism's class-metabolic arrangements (Brooke 2014; Patel and Moore 2017).

As a heuristic, the distinction between natural and human-forcing can be important. *As a heuristic.* But five centuries of bourgeois naturalism, driven into the minds of every schoolboy and schoolgirl, dies a slow death and remains a corrupting influence. We are tasked with separating the baby from the bathwater. One *can* distinguish species-level processes appropriate to that high level of abstraction. However, Marxists do not explain the class struggle by invoking species-level or natural processes: "abstract nature." We do not explain capitalism's specific antagonisms by referring to "production in general." We do not explain history through "Man in general," nature in general, and other "chaotic conceptions" (Marx and Engels 2002, 250; Marx 1973, 100). Marx's prime example is population, of course tightly joined to his critique of natural law fetishism and his history of politically-determined labor supply. Of these chaotic concepts, as practical bourgeois consciousness and thence as ruling abstractions, Man, Nature, and Civilization emerged first. Marxists, in contrast to bourgeois thought, use historically sensitive concepts to address historically specific events, processes, and patterns.

Early in *Capital*, Marx recognizes that all modes of production and modes of life organize through the labor process. This is a labor-centered metabolism "independent of all forms of society" (Marx 1976, 133). The transhistorical abstraction enables the specification of progressively more determinate conceptions, tracing the character of surplus labor in successive class societies (ibid, 340–352). So, too, for the history of class-metabolic antagonisms, where Marx's procedures of abstraction

allow one to grasp labor as a “specifically harnessed natural force.” Under capitalism, those specific natural forces are transformed into the ecocidal alchemy of surplus value and the disciplines of socially necessary labor time.

Capitalism’s class-metabolic antagonism is an alienation that unifies “the soil and the worker” through the labor process (ibid, 636–638). At the center of *Web of Life*’s reading of Marx’s value theory is the idea that these unifications join valorized work, through the cash nexus, with devalued and appropriated work. Capitalization and appropriation – shorthanded as paid and unpaid work/energy – are dialectically fused in the determination of socially necessary labor-time. (Curiously, the academic left has given a pass to the ecosocialist elision of how unpaid work is a class relation at the heart of capitalism’s ecologies.) Of course, capital’s unification of work within and beyond the cash nexus is exceedingly coercive, precipitating violent abstractions in thought, and ruling abstractions in practice (Sayer 1987; Sohn-Rethel 1978). The alienation of “the soil and the worker” is fashioned through primitive accumulation, a theory (and history) of class formation in the web of life. Society and Nature, the ruling abstractions, are ideological expressions of this primitive accumulation. That’s a concrete, world-historical, *fact*. Its implications, studiously evaded by many ecosocialists, include centuries of capitalist expulsion of most humans from Society, allowing their admittance only through their submission to Cheap—and often deadly—Work (Patel and Moore 2017). Thus bourgeois governance proceeds through the violent abstraction of Society and Nature—and in real historical formations of the Civilizing Project—through which specific “scientific” rules of management and social discipline apply.

Communist praxis rejects such one-sided formulae; it unfolds through recognizing capitalism’s *singular* contradiction, ultimately resting on the law of value and its class antagonism. This recognition creates the possibility for proletarian unity, something disallowed by the pluralist chaos of an “environmental proletariat” (Foster and Clark 2022). To be sure, capitalism’s contradictions find countless expressions and multiple mediations. All, however, flow through the class struggle in the web of life, influenced by those “uncontrollable natural conditions”—for instance, solar cycles, volcanic eruptions, laws of gravity (Marx 1981, 213). For Marx and Engels, the alienated unity of the “soil and the worker” reveals the conditions of possibility for the communist unity of proletariat and “biotariat,” not as abstracted essences but as an internally differentiated and interpenetrated totality (Moore 2021d).

This dialectical position distinguishes world-ecology from vulgar materialisms. Anticomunist Green Thought and ecosocialist tendencies alike privilege the imagined concrete of Nature and its politically toxic forms of substance fetishism. Far from esoteric, the world-ecological position holds that the labor-mediated unity of proletariat and biotariat is crucial to any socialist politics of reconstruction, through which cooperation rather than alienation becomes a “productive force.” (Marx and Engels 1975, 43) If the climate crisis is as serious as so many of us believe it to be, socialists must embrace the biotariat as comrades in arms. The tasks of socialist revolution and reconstruction on a devastated planet require nothing less. That’s the question of the Proletarocene (The Salvage Collective 2021).

The planetary proletariat: Towards an ecosocialism in the web of life

The critique of bourgeois ideology is, therefore, fundamental to socialist climate politics. My line of march follows the imperative to connect historical capitalism's ideological, material-ecological, and class relations. Dialectically speaking, these moments can only be separated as a means of presentation; their concrete-historical unity is assumed, thence requiring a subsequent re-synthesis on each leg of a longer revolutionary march. None of that is a matter of abstract theorizing. Who and what the imperial bourgeoisie designates as Nature and Civilization is fundamental to understanding capitalism's drive towards climate crisis and its capitalogenic trinity: the climate class divide, climate patriarchy, and climate apartheid. An ecosocialism that relegates geocultural domination to the status of a secondary contradiction—rather than woven into the fabric of endless accumulation and the endless conquest of the earth—is one that accepts the economic reductionism of bourgeois thought and disarms movements for planetary justice and socialism (Moore 2022a, 2023a). By the same measure, an ecosocialism that accepts the pluralist alienation of class exploitation from domination does the bourgeoisie's work in disunifying the popular forces.

The unfolding climate crisis calls for a reimagination of the standpoint of the proletariat. For Lukács, the dialectical “point of view of totality” was not only the point of departure (the “subjective” moment) but the point of return, the “objective” moment, for Marxist investigation, interpretation, and its contribution to the struggle for planetary socialism (1971, 27). Yes, from Lukács onwards, Western Marxism offered a philosophical critique external to the concrete historical relations of science, capital and empire. Only in the 1970s did we see a new synthesis – including the paradigmatic contributions of Levins and Lewontin – that emphasized a labor process and class-historical critique of bourgeois science and its pernicious double transfers.

Most of this was memory-holed by ecosocialists as the tendency took shape in the 1980s and 1990s. This lent a one-sided character to the pathbreaking insight of ecological Marxism: the construction of totality proceeds from precisely what is fetishized under capitalism, the “socio-natural properties” and contradictions of accumulation and its patterns of class struggle (Burkett 1999; Foster 2000; O'Connor 1998). Only a method that proceeds from the ontological priority of the class struggle as a “rich totality” of labor, human and extra-human, paid and unpaid, will suffice. That method necessarily centers a labor-process and class struggle approach to bourgeois science, the ruling abstractions of Man, Nature, and Civilization, and the theoretical struggle against these dangerous words. The question of method is a question of the class struggle in the web of life—an interpretive mode of discerning the conditions for a class unity now rejected by many ecosocialists (Foster and Clark 2022).

When Marx observes that capitalism degrades the soil and the worker, he foregrounds the *necessary* conditions of capitalism as world-ecology (Marx 1976, 636–638). Capitalist class formation unfolds through the *political* imposition of property relations that allow for two essential conditions of endless accumulation.

One is Cheap Labor, which includes centrally the unpaid work of humans defined as Natural (for example, women). The second is Cheap Nature, which includes human work, as we have seen, but encompasses all webs of life put to work for capital. These moments—“from above”—imply and necessitate the emergence of proletarian capacities “from below.”

For Marx, the soil and the worker are distinctive moments of an “organic whole” (Marx 1973, 100). *Proletariat* (putting humans to work for capital) and *Biotariat* (putting extra-human life to work for capital) form a world-historical unity (Moore 2021e; Collis 2014). This class struggle—the interpenetrating unity of Proletariat and Biotariat—is the dialectical countertendency to the Civilizing Project and its Promethean fantasies. These projects, fantasies, and the endless accumulation of capital produce its world-historical negation in the Planetary Proletariat (Moore 2022a, 2023a). Prometheanism was the original form of domination, simultaneously creating a dualist cosmology of Civilization and Savagery and cultivating the bourgeois conceit that webs of life may be infinitely controlled in the interests of Man’s improvement. This was the bourgeoisie’s alienated self-knowledge of its Promethean managerialism, which initially emerged in the great plantations and mining enterprises of the Americas (Santora 2025; Moore 2003). For too long, ecosocialists have taken that alienated self-knowledge as their point of departure.

Capitalism creates its biotarian gravediggers alongside the proletarian forces. Together, they co-produce limits that cannot be “fixed” through capitalist politics as usual; they activate negative-value (Moore 2015, 2023d). Biotariat and proletariat are not separate entities but, rather, interpenetrating realities. They are distinctive socio-metabolic moments in late capitalism’s “rich totality of many determinations” (Marx 1973, 100). Notice, dear reader, my emphasis on distinction, contradiction, and interpenetration in the history of class society? Good. *That’s* dialectics. Now you have a ready-made bullshit detector whenever you come across the lazy and mean-spirited attacks on my arguments as *monist*.

Marx was serious when he wrote that “the *true barrier* to capitalist production is *capital itself*” (Marx 1981, 358). Obviously, he did not deny—but affirmed—the centrality of the “life process” in labor’s transformations of “natural conditions.” Understanding that the essence of an entity or process involves processes external to that entity or process, Marx’s method allows us to grasp capital’s socio-ecological limits. These are, at once, internal and external; its nexus is the labor process and the mix of dialectical transformations that it sets in motion, overdetermined by non-dialectical antagonisms, Marx’s “uncontrollable natural conditions.”

This method identifies and seeks to exploit capitalism’s weak links as irreducibly socio-ecological. It allows socialists to make sense of the web of life through Marx’s class-metabolic ontology, identifying the evolving and differentiated unities of class power and world accumulation. If there is one lesson from the long history of climate-class conjunctures, it’s this. Dramatically unfavorable climate changes alter the balance of class power, undermine ruling class capacities, and open new political possibilities. Climate conditions have been geographically external at one level, and at another, causally endogenous to the contradictions of class society, from the Dark Ages Cold Period to the Little Ice Age (Brooke 2014).

We cannot reduce history to the logic of capital—or to abstract incantations of *materialism*. We must follow Marx in “rising from the abstract to the concrete,” not once, but relentlessly and without cease. Upon our return from the concrete to the abstract, we must rethink and reimagine anew (Marx 1973, 101). To paraphrase Roy Bhaskar, dialectics is the great loosener (Bhaskar 2008, 354). A journey that fails to grasp how a historical–geographical totality acquires new properties by generating new antagonisms betrays an undialectical method—clearly inadequate to the tasks of the planetary proletariat in the planetary inferno (Ollman 2003; Moore 2017b).

This leads us to a basic observation. What appears to be “external”—as in the *Limits to Growth* model—is, in reality, an internal relation of capital. The philosophy of external relations turns resources into objects. It therefore lends itself to vulgar materialism and a “basic facts” determinism. But world history cannot be explained through such externalism. Marx’s method directs our focus to the internalization of unpaid work and its centrality in capital accumulation (Moore 2018). The bourgeois mantra of “externalities” mystifies the sources of unpaid work/energy that enables capital accumulation. Thus the danger of the ruling abstractions, Man and Nature. They also conceal the revolt of the biotarian fraction of the planetary proletariat—a dynamic of negative-value accumulation that I summarize as the *superweed effect*. While only valorized labor-power produces value directly, the total circuit of capital accumulation depends for its expanded reproduction on the *extra-economic* appropriation of unpaid work. The latter’s principal human sources are found in the female and feminized proletariat—a Femitariat if you will—whose revolutionary capacities derive from its situated position in the relations of exploitation and appropriation (Federici 2004). Biotariat and Femitariat must be continually renewed, which capital can only achieve through new imperialisms that create—at gunpoint—new frontiers. These Cheap Nature frontiers have historically attenuated the surplus capital problem by reducing reproduction costs and creating new, profitable investment opportunities (Moore 2017d). Today, those frontiers are fewer than ever, while the surplus capital seeking investment is greater than ever. An epochal crisis looms (Moore 2021d).

This unpaid work is a class struggle over the working day, and therefore a battle over worldwide surplus value as a metabolic antagonism. Here’s Marx in *Capital*: “What interests [capital] is purely and simply the maximum of labour-power that can be set in motion in a working day. It attains this objective by shortening the life of labour-power, *in the same way* as a greedy farmer snatches more produce from the soil by robbing it of its fertility” (1976, 376). This class struggle over the nexus of paid and unpaid work—mediated through the capitalist state, imperial formations, and the bourgeoisie’s ruling abstractions—is at the center of the climate crisis, and *Web of Life*’s arguments.

The standpoint of the planetary proletariat must be battle-tested on the crucible of world history. It will be refined and reinvented through revolutionary struggle in the planetary crisis—an epochal transition either to a new class society, a “decadent” passage in Samir Amin’s sense, or a revolutionary one: towards socialism in the web of life (Amin 1980). To paraphrase the young Marx, radical ideas become material forces when mobilized by the planetary proletariat (Marx 1970, 137). Here, we may find a vista of hope and praxis in world-ecology that

widens the possibilities for the socialist emancipation of humans and the rest of nature. Ours is an epochal climate-class conjuncture, to be sure. The class struggle does not merely “occur” in the web of life; it is a product and producer of the webs of life that will shape our planetary habitats for millennia. The liberation of the “soil and worker” will come together, or not at all.

Our theoretical struggle in the climate crisis must look anew at Marx’s revolutionary epistemological hope: for a “natural science [that] will in time incorporate into itself the science of man, just as the science of man will incorporate into itself natural science: there will be *one science*” (Marx 1975a, 304). Pivotal to the tasks of planetary socialism must be the transcendence of an epistemic, but also always geocultural, rift that enables bourgeois hegemony. We must look to create the possibilities for “one science”—a necessarily *proletarian science*, to take a term strenuously, and tellingly, avoided by ecosocialists. This would, as Marx indicates, integrate the differentiated unities of human sociality in the web of life. A proletarian science would, among other tasks, inform the communist possibilities of advancing the forces of production through cooperation and knowledge freed from the prison house of the Cartesian Revolution. When Marx scolded the German socialists in the *Critique of the Gotha Program*, warning against a fetishism that endows labor with “supernatural creative power,” he insisted on the unity of human and extra-human labor as the “sources” of all wealth (2010, 81; Marx 1976, 638). And, as if to underline the point, Marx continued: “*labour* ... itself is only the manifestation of a force of nature” (2010, 81).

In this famous passage, Marx advances an *activist* materialism in the web of life. This is the standpoint of the planetary proletariat. That’s no academic quibble. It’s necessary to guide the strategic (and unevenly interpenetrating) unity of proletariat, femitariat, and biotariat. Lacking such a standpoint, the global left will be relatively powerless to identify the decisive contradictions of our world-historical moment. (And, therefore, also to identify the decisive political-strategic questions of a given transitional era.) A generative *socialist* theory sufficient to guide strategy in the age of the planetary inferno turns on its capacity to identify capitalism’s decisive contradictions—its “weak links”—as irreducibly socio-ecological phenomena. This commitment to dialectical method on the real ground of history, and a socialist theory of capitalism in the web of life, is the beating heart of the world-ecology conversation and its reimagination of planetary socialism in the twenty-first century.

This is the invitation, and incitement, on offer in the pages that follow.

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