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Doing Things With Natures:
A Performative History in Four Anthropo(s)cenes

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ABSTRACT
The article expands on Lewis and Maslin's "double two-step" historicization of the Anthropocene, with two major transitions in energy (agriculture and fossil fuels) and two in social organization (modernity and the Great Acceleration). Insofar as planetary impacts arise from "what we spend our time doing" – foraging, farming, feudal then waged labour, finally unsustainable consumption – such "doing" is understood as precisely 'performative' in the sense that its effects only arise from a massive social repetition that is confused with essential nature and thus concealed. Through a graphic model of such 'plural performativity,' four consecutive Anthropo(s)cenes are sketched: the Giving World of agriculture and state formation; the New World of colonial pillage and world trade; the Netherworld of wage labour and fossil capital; then 'All the World' but not with all of 'us' as players. Apart from environmental changes, the paper targets performances of power and inequality: normative histories of 'common sense' on the one hand, concealing 'people's histories' of conflict and opposition, on the other – the Anthropocene arising not simply from what the majority of people have been doing, but from what they have always been forced to do.

KEYWORDS
Anthropocene, capitalism, environmental history, performativity, world history

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Doing Things With Natures:
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In their commendable 2018 overview *The Human Planet: How We Created the Anthropocene*, geographer Simon Lewis and climatologist Mark Maslin historicize this issue's epoch of concern through a "developmental double two-step" of cumulative human impact, with two major transitions in energy use (agriculture and fossil fuels) and two in social organization (what they call Globalization 1.0 and 2.0: the 'modern world' and the post-World War Two 'Great Acceleration'). This leaves them with "five broad types of human society that have spread worldwide," as outlined in Figure 1, each distinguished from the other by global increases in energy use, available information, and "collective human agency."[1] While Lewis and Maslin theorize their generic "modes of living" as 'stable states,' in the language of complex adaptive systems, an important point of theirs is that planetary impacts ultimately arise from what "most people spend a significant amount of their time doing": foraging, farming, feudal then waged labour, then all of the above plus unsustainable consumption.[2]

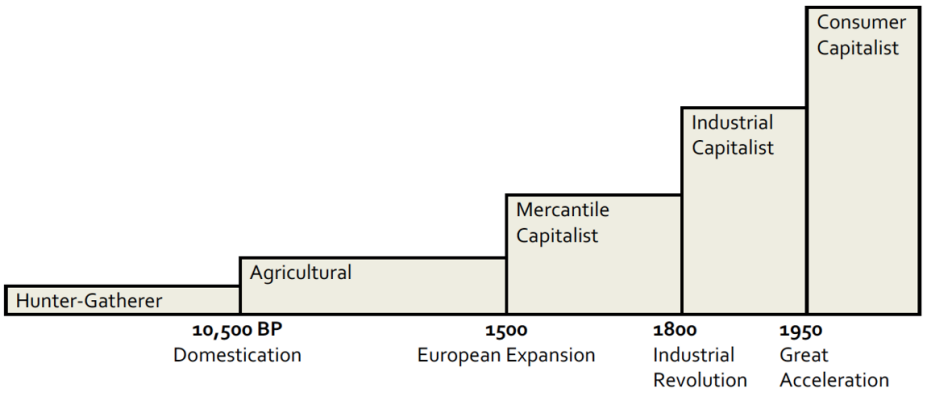

Figure 1. "The becoming of Anthropocene over Lewis and Maslin's 'modes of living'."

1 As the authors repeatedly insist, where we place the emphasis has political consequences. Focus only on the atmosphere, and we effectively reduce the Anthropocene to climate change, obscuring its deeper causalities; peg it to the earliest conceivable impacts, and we "normalize environmental change" as "part of the human condition," evading action against fossil capitalism (Lewis and Maslin 2018, 7–8, 281–2). While I identify proponents of the different versions, the scope of this article is more with the social, rather than the natural-science side of what has now become a veritable Anthropocene industry.

2 Lewis and Maslin 2018, 10–14, 333–4. The authors do admit cultural variability but note that

In this article, I define such doing as precisely 'performative,' in the sense that its effects only arise from a massive social repetition that is confused with essential nature and thus concealed: you *do* something, and it begins to look like some *thing*. To present this dynamic at one glance, in Figure 2 the doing is illustrated by the drawing of a circle, the thing by the static boundary that ensues; the 'inversion' of one to the other is a dual function of production and dissimulation. Superficially, all four aspects are derived from the critical gender theorist Judith Butler. In her terms the doing and the done reflect practices of reiteration (in some social context) and normativity (with its excluded outside), with the latter constituted by, but also concealing its basis in the former.[3] While I can hardly touch on the figure's nuances, and will only return to it at the very end, I intend it as a quick graphic heuristic, with a set of simple terms and variables, for framing and grasping complex issues in need of recognition. Specifically, the article will highlight the denied dependency of the naturalized 'done' on its ongoing 'doing,' so as to complicate any euphemistic derivations of the Anthropocene from some unspecified, apolitical 'human agency.'

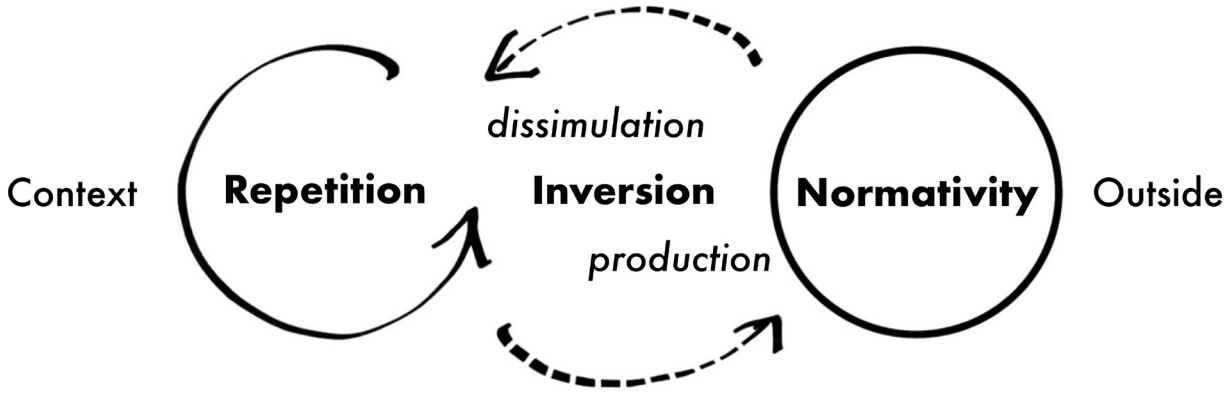

Figure 2. Plural Performativity: Historical Process as the Doing of Things.

In the sketches that follow, accordingly, four consecutive 'worlds' are performed both up close and through some of their consequences, zooming in and out between context and containment, doing and done, repetition and normativity. I call them the Giving World of agriculture and state formation; the New World of colonial pillage and world trade; the Netherworld of wage labour and fossil capital; then All the World but not with all of 'us' as players. On the one hand,

"stable states tend to last": despite otherwise disruptive changes, "the farmers remain farmers" (335–6).

3 As for the abstraction of one to the other, the notion of inversion is Tim Ingold's – "turning the world in on itself so that its lines and movements of growth become boundaries of containment" (see Paavolainen 2018a, 211, 24–8) – but bears affinity with the Marxian concept of fetishism too: people create something, then act as if that thing has power over them. See also Butler 1993, e.g. 12–13, 234.

even as these can be understood as so many 'inciting incidents' for the potential emergence of the Anthropocene (the rising arc of Figure 1), each scene is a major turning point in environmental relationships as such: both in the practices that are massively repeated and in the norms of 'society' and 'nature' thus entrenched (read these in terms of Figure 2). In a generally Marxian vein, what counts as 'nature' for any human community is understood as largely produced by its previous generations' labour, which again is understood as both naturalized and dissimulated by its continued social reiteration. If such doing corresponds with the cycle of repetition in the general graph of plural performativity (Figure 2), the second cycle of inversion (production/dissimulation) is about processes of normalization on the scale of generations – most usually dozens of them.

On the other hand, my overall approach in this article is that of a caricaturist not a historian. To give my four (Anthropo)scenes a veneer of affective reality, each is outlined through a fairly specific set of verbs and nouns, again reflecting the performative cycle and circle of Figure 2: verbs for the repeated practices specific to each, nouns for how those practices and their attendant 'natures' would have been named and valorised. In such terms, with the anthropologist David Graeber and the Marxist sociologist John Holloway, the cycle is one of social doing – constitution, community, bringing together – whilst the circle denotes static being: existence, identity, fragmentation, utterly dependent but also denying its dependence on such doing.[4] Pertinent to their positioning in Figure 2, Graeber might go as far as to relate the cycle and the circle to the 'political ontologies' of the Left and the Right, "bringing things into being" through imagination or violence respectively (creativity, care, reproduction / possession, destruction, consumption).[5] For both artists and revolutionaries, as he notes, the world is thus "something that we make, and could just as easily make differently"; for Holloway, "the latent is the crisis of the apparent, the verb the crisis of the noun."[6]

And here, in brief, is the rationale for applying this model of plural performativity to the twin crises of global capitalism and environmental breakdown. Rather than naturalizing either away as a function of 'our' just 'being human' (the essentialist excuse) or as determined by nonhuman actants beyond any human control (what might be dubbed the posthuman excuse),[7] they only appear 'natural' to

4 Esp. Holloway 2002. Such binaries pervade both authors' work to a point of possible annoyance, but I choose to delight in their poetics: taken as non-exclusive simplifications, structural dualities do schematize complex material in what I would consider a 'theatrically' synoptic way (Paavolainen 2018a).

5 Graeber 2011b, 42ff.

6 Graeber 2011b, 47; Holloway 2019, 275.

7 Daring to dispute the posthuman norm (shades of Jon McKenzie) of contemporary theatre and performance studies, it might be argued that while posthuman and new materialist thought has done much to undo the destructive baggage of liberal humanism – male, white, European, able-bodied – it runs a converse risk of drowning the baby in the now-determinant bathwater. Taking seriously Andreas Malm's (2018a) and Alf Hornborg's (2019) strong critiques, distributing 'agency' from 'society' to 'nature' *now* is tantamount to giving it away: as the concomitant sense of responsibility – e.g. for the climate catastrophe – is externalized to the carbon cycle itself, politics is reduced to mere passive adaptation, "the homogenising bulldozer of capital" (Malm 2018a, 218–19) entirely unperturbed. While increasingly intertwined in empirical reality, the *analytical*

the extent that their social performance is dissimulated, and may just remain humanly changeable as well. So first of all, a performative Anthropocene is neither environmentally nor – least of all – apocalyptically determined; to study its variables is to try and tease out the doneness of the seemingly given or abiding. Second, however, this doing is most certainly socially stratified. Much of what the article contributes to Lewis and Maslin's storyline is drawn from social scientists to the left of the spectrum, such as James C. Scott, David Graeber, Silvia Federici, Jason Hickel, or Andreas Malm. Apart from complicating apolitical notions of 'human' agency (L&M would not disagree), this work serves to complicate the Butlerian notion of performativity itself. As Federici argues, her concept helps denaturalize femininity – or here nature – but may also "flatten the content of social action": "suggesting that the only alternatives open to us are consent or dissent," we "underestimate the rebellion brewing in many acts of consent."[8]

Where Lewis and Maslin, in *The Human Planet*, outline global changes in the Earth system in a 'mode of living' terminology ultimately based on energy use,[9] it should thus be clear that I, here, will target concomitant changes in local and global *inequalities* based on historically accruing structures of *power*.[10] This, I argue, is the level where all the various Anthropocene narratives still continue to matter. Even if the limits of Earth's 'natural variability' were only reached in the most recent stage – the epoch proper as a function of the post-1950s stage of globalized capitalism – the natural and the social have been interwoven from the start. In the summary Figure 3 at the end of this article, the right-hand circle represents official histories of 'common sense' and direct action, concealing the more systemic 'people's histories' of conflict and opposition, in the left-hand cycle – the Anthropocene arising not simply from what the majority of people have been doing, but from what they have always been forced to do.[11]

Altogether, while the following sections are dramatized through their arguably plural performativity at the cost of much historical detail and variability, I do believe keeping the storylines just so blunt and 'left' serves to make complex histories rather more digestible. Expanding on Lewis and Maslin, farming coincides with projects of coercion and accumulation by the early states, the 'first globalization' with further enclosures of land and labour, their total control with the emergence of fossil capital. All extending to the present, these histories

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distinction between society and nature – "what people create through and through and what is not their doing" (Malm 2018a, 75) – is crucial to the prospect of our doing much of anything in the warming world. In refusing human agency, in short, posthuman theory risks defusing political performativity altogether (cf. Hornborg 2019, 193–207).

8 Federici 2020, 47.

9 See Lewis and Maslin 2018, 442n1.

10 As Andreas Malm has noted (2016, 17–19), the English double meaning of 'power,' as both social and thermodynamic, may not be altogether accidental insofar as different historical parties' social power over their peers tends to increase quite in line with their control over their environments. In a more recent article (2018b, 179), Malm draws on the anthropologist Richard Newbold Adams to much the same effect: as he cites Adams (1975, 13) citing C. S. Lewis in an epigraph, "Man's power over Nature … turns out to be a power exercised by some men over other men with Nature as its instrument."

11 On George Lakoff's distinction between 'direct' and 'systemic' action, see Paavolainen 2018b.

will leave behind no 'human' planet but one of chicken bones and plastic, under business as usual.

Even as the rest of the article may well be read as a quick thumbnail survey of ground well trodden, I hope to have now sensitized the reader to the generic dramaturgy I suggest, synoptically outlined in Figure 2. Thus each of the proposed worlds only comes about through the naturalization of certain kinds of humanity to the exclusion of certain notions of nature (Normativity and its constitutive Outsides); whether framed as essence or efficiency, such containment reliably depends on and so also needs to conceal extended histories of practice and coercion (Doing and its Contexts). So first, this is no environmentally-determined spectacle of Nature being Natural, but an unequally distributed human performance of slow violence.[12] Second, to address such violence we need to consider forms of power and agency that are not only positively dispersed in either the Foucauldian or the posthuman sense, but which operate, quite old-fashionedly, top-down.

Giving World: Agriculture and State Formation

While definitively a 'Holocene' phenomenon, geologically, some of the earliest stirrings of a humanly performed nature may be dated to some ten thousand years ago, when *agriculture* was developing in many different spots the world over, classically in the Fertile Crescent of the Mesopotamian alluvium. To be sure, it is only a few hundred generations ago that some human communities took to farming the land and tending livestock. After mere millennia of deforestation and increasing irrigation, global concentrations of CO_2 and methane then began to rise, some 8 and 5,000 years ago respectively – just enough to delay an impending ice age and to stabilize the Holocene climate sufficiently for large-scale civilizations to develop. This is the 'early anthropogenic hypothesis' controversially claimed by palaeoclimatologist William Ruddiman. Affecting "more than a third of Earth's land surface" today, agriculture is clearly no neutral mode of pastoral 'nature' but "the largest [human] alteration of Earth's surface … yet achieved."[13] For Lewis and Maslin, farming initiates "the first energy revolution," only to be surpassed by the recent discovery of fossil fuels.[14]

Here, I take my cue on this history of 'domestications' from anthropologist James C. Scott's 2017 study *Against the Grain: A Deep History of the Earliest States*. Understood as "control over reproduction," the term domestication here applies not only to plants and animals "but also to slaves, state subjects, and women in the patriarchal family."[15] If his somewhat anarchist reading could be summarized in a sentence, it might be that farming turned out bad for the people but good for the early states. Even if his focus lay "almost entirely on Mesopotamia," sedentism and domestications appear in the region a "breathtaking" four millennia before "anything like a state" does.[16] Here, this

12 Cf. Nixon 2011.
13 Ruddiman 2005, 63. See also Lewis and Maslin 2018, 138–46.
14 Lewis and Maslin 2018, Chapter 4.
15 Scott 2017, xii–xiii.
16 Scott 2017, xiii, 58, 116.

puzzle betokens the key performative tension of *repetition and normativity*. While the agrarian kingdoms would of course "distinguish themselves as sharply as possible from the populations from which they sprang," early sedentism is pioneered by "opportunistic generalists with a large portfolio of subsistence options," which only gradually centre around what Scott calls the *domus*, or farmstead, and the state – so slowly that in the end "nobody remembered that they had ever lived differently."[17]

On one level, the story of domestications is one of radical concentration. Of the swarms of species foraged by foragers, only a select few were ever fit for herding or farming, such as goats, sheep, pigs, cattle, and wheat in Mesopotamia – all in all, "the full 'Neolithic package'" would have been "in place" by 6,000 BCE.[18] On the other hand, "the very word 'agriculture' suggests a radically new process where the wild field (*ager*) is … turned into a human construct": a *home* "as a domain separate from wilderness."[19] From the Latin 'house,' the *domus* provided a novel "module of evolution" not only for grains and livestock and their parasites, but for people themselves: newly dependent on a mere handful of plants and animals, they were effectively domesticated by the sheer amount of work that their new mode of production demanded.[20] In popular historian Yuval Noah Harari's recap, the agricultural revolution was not only a "trap" but "history's biggest fraud," whereby "the average farmer worked harder than the average forager, and got a worse diet in return." Apart from peasants "dying by the thousands and millions" from failed harvests and epidemic diseases, they wore down their spines, necks, and knees for a reduced cereal diet that was "poor in minerals and vitamins, hard to digest, and really bad for your teeth and gums."[21]

Then what was it good for, apart from boosting the sheer replication of human DNA? The key to Scott's very argument is that cereal grains were ideal for *state making*, being "visible, divisible, assessable, storable, transportable, and 'rationable,'" thus supremely "legible."[22] Indeed, that virtually all the earliest agrarian states were based on grain rather than other kinds of crops[23] – Mesopotamia, Egypt, Indus Valley, Yellow River – makes a good deal of sense once you assume the perspective of the tax collector. Providing determinate harvests, above ground and predictably simultaneously, "wheat, barley, rice, millet, and maize [become] the premier *political* crops," with "enormous

17 Scott 2017, 7, 59; Harari 2015, 98 ("nobody").

18 Scott 2017, 44.

19 Lent 2017, 109, 105. With the megafauna extinct and nature's "easy pickings" picked, in Lent's terms, the "giving environment" of the foragers thus becomes a world of limitations and anxiety, where "nature now provides food only in return for the right conduct" (99, 112). As all the major religions arise soon after, perhaps to alleviate the new levels of injustice, this performative relation is then extended through the mediation and manipulation of priests and gods (Lent 2017, 112, 114).

20 Scott 2017, 73 ("module"); Harari 2015, 90–1. See also Pollan 2001.

21 Harari 2015, 90–94.

22 Scott 2017, 129. On the notion of legibility, cf. Scott 1998.

23 As Scott notes, "history records no cassava states, no sago, yam, taro, plantain, breadfruit, or sweet potato states," adding that "'banana republics' don't qualify" (2017, 21).

administrative advantages" for the efficient performance of appropriation.[24] On the one hand, the embryonic states only needed to harness or "parasitize" an "agro-economic module" of grain and manpower already in place, on the other they would have to both keep it there and make it produce a surplus.[25] Apart from grains, hence, they also depended on walls and writing, the very distinction of which assumes one between unfree labour and nonproducing elites – great city walls erected not only for the sake of protection, but also, simply, to keep the taxpayers inside.[26]

For no more than their constituent farms were the early states remotely self-sufficient; we come to the 'constitutive outside' of the state container. Much like the discourse of binary gender evokes an abject sphere of queer sexuality, the allegedly "essential, permanent, and superior" domain of civilization was ever dependent on vast populations of undomesticated "nongrain" peoples, inhabiting any geographies unsuitable for intensive farming and hence state making: hill peoples, forest peoples, swamp dwellers – or in Scott's "ironic shorthand," *barbarians*.[27] Spread across several food webs, both their ecologies and their subsistence practices defied taxation in their mobility, diversity, illegibility. In performative terms as well – Lewis and Maslin: "what the majority of humanity did, day in, day out"[28] – foraging activity is quite as varied as are its settings. By contrast, agriculturalists are strapped to a back-breaking "round of ploughing, planting, weeding, reaping, threshing, grinding," their daily and annual routines geared to the exacting tempo of their one chosen food web – a 'civilizing process' that Scott is tempted to see as a *deskilling contraction of focus*: of their "practical knowledge of the natural world," of their diet, space, and ritual life.[29] Evading essentialist distinctions between foraging and farming as separate stages in a story of human progress, however, all such performances of subsistence are situated "along a vast continuum of human rearrangements of the natural world." There is no "fateful line" that separates savagery from civilization, nature from culture.[30]

Thus the normative boundary between domus and wilderness, or state and barbarians, is only performed over time by divisions of power and population. As Harari reflects on their provision, "history is something that very few people have been doing while everyone else was ploughing fields and carrying water buckets."[31] As he adds, however, most of the world would have remained "too cold, too hot, too dry, too wet, or otherwise unsuited for cultivation": as late as 1400 CE, a "minuscule 2 per cent of the earth's surface constituted the stage on which history unfolded."[32] Outside that stage, James C. Scott would hasten to add, a good third of the globe was occupied by dispersed bands of hunter-

24 Scott 2017, 130–3.
25 Scott 2017, 117, 23, 151–2.
26 Scott 2017, 29–30, 137–49.
27 Scott 2017, 32–3, 219–22, 227–8; cited 249 ("essential"), 222 ("ironic").
28 Lewis and Maslin 2018, 149.
29 Scott 2017, 19, 88–92.
30 Scott 2017, 8, 61–2, cited 71, 68.
31 Harari 2015, 114.
32 Harari 2015, 111.

gatherers, pastoralists, and shifting cultivators, most of whom had never met a routine tax collector. Overall, he argues this "golden age of barbarians" ought to be "measured not in centuries but in millennia." Beginning as "a mere smudge on the map of the ancient world," statehood was but a "wobbly variable" of human life for thousands of years, hegemonic no earlier than about 1600 CE.[33] It is from around that time that the next two sections trace more modern developments of the Anthropo(s)cene, on the American and the European continents respectively.

New World: Colonial Pillage and World Trade

For Lewis and Maslin themselves, the true beginning of "the human epoch" and "the decisive change" in human-environment relationships comes with the *organizational* transition "from an agricultural to a profit-driven mode of living" – what many prefer to call a 'Capitalocene' taking root over the long sixteenth century.[34] Whatever the terminology, this periodization does lay bare a "deeply uncomfortable" backstory of colonialism, slavery, and capitalism as "intrinsically linked to long-term planetary environmental change."[35] Insofar as this is also the beginning of a newly global economy and ecology, my choice of tracing its first four centuries on separate sides of the Atlantic is relatively violent itself, yet I hope to prove it justified by the deeply ironic performances of *expansion* and *liberation* teased out in this and the following section respectively. In the more euphemistic language of 'Great Explorations' or the 'Age of Discovery,' the present one begins with a century's worth of famed European vessels – from Columbus's fleet, utterly lost in 1492, to the British Mayflower of 1620 – reaching a range of newly Edenic shores still inhabited by a bunch of barbarians.

In the Anthropocene narrative, however, it is the "many species just hitching a ride"[36] that prove far more interesting than the heroic mariners of standard histories. Conquest wise, the most important would have been the many Old-World germs and pathogens to which the natives had no immunity whatsoever. Helped by brutal human violence, the likes of smallpox, measles, and influenza decimated up to 60 million, amounting to some 95 per cent of Indigenous peoples and perhaps 10 per cent of all humanity, in just over sixty years.[37] Climate wise, Lewis and Maslin's grand thesis is that this demographic collapse also initiated a century of global cooling, thanks to the quick reforestation of agricultural land across the continent – the very reverse of the initial effects of farming, suggested in the previous section, and quite in line with today's schemes for combatting

33 Scott 2017, 14, 16, 253.

34 Lewis and Maslin 2018, 13. While sympathetic with the idea of Capitalocene, usually linked to the work of Jason W. Moore, they find it wanting as an epochal marker since "the Anthropocene will last so far into the future … that it may well encompass other future modes of living" (2018, 444n21). In the other direction, the epithet does however defy overly Eurocentric accounts that tend to obscure the histories of exploitation paving the way for industrialization (Bonneuil and Fressoz 2016, 228–9). Following Immanuel Wallerstein, the 'long' sixteenth century extends from approximately 1450 to 1640.

35 Lewis and Maslin 2018, 326–7.

36 Lewis and Maslin 2018, 10.

37 Lewis and Maslin 2018, 156–8.

climate change by massive tree-planting.[38] Anthropocene wise, however, the most geologically significant effect of this 'Columbian Exchange' of species would have been their sheer homogenization, leaving notions of 'natural habitat' obsolete and the fossil record itself shaken across continents: suddenly, there is cattle and wheat in the Americas, potatoes and tomatoes in Europe.[39] As global circuits of trade start "threading together" the continents and ocean basins after 200 million years of separate evolution, standard notions of containment are all but frustrated.[40]

And this is the great irony I highlight in this section. At the same time as this novel 'Age of Sameness' is instituted – a *Homogenocene* of species and commodities – the grand narrative of expansion and exploration still capitalizes on cultural difference. If the idea of biotic or commercial *exchange* assumes cyclical flows of money or migration in some generalized equivalence, then the project of *expansion* is all about denying any such dependencies, promoting ideals of civilizational superiority instead. Indeed, this could be taken as the grand inversion of an emergent capitalism: as the primary goal of surplus production shifts from direct consumption to ongoing accumulation, the spheres of performative praxis and normativity are themselves cut apart. In terms of Figure 2, the left-hand cycle of social repetition remains very much the motor for the right-hand norms of 'civilization,' but needs to be actively distanced and dissimulated for them to take effect; if there is to be profit and growth, it needs to be taken from someplace else. In this case, that place is actively unseen as a 'state of nature' outside the sphere of civilization, hence an object of conversion and expansion.

To cut a familiar story extremely short, and prefiguring many later rounds of structural adjustment, the normative guideline for the colonial project was readily identified with the linear 'progress' of a universal humanity, be it of the Spanish or the British variety. Yet this universality was itself based on an "ontological distinction between … the European Self and Atlantic Other," the latter effectively defined through its lacking from the European norm.[41] This time around, the main qualifiers of barbarian otherness would have been the perceived absence of civilization, reason, and private property. Through such attributes, the colonizers were essentially set apart from the untamed passions of animal nature, and the plunder of the New World not only legally and theologically justified, but translated into a high moral obligation.[42] Insofar as the Anthropocene is about humanity's relationships with the natural world, in short, the colonial innovation was to figure the relation as one of Conquering Nature (as theorized by a Francis Bacon or a René Descartes) while also relegating most of living humanity to the other side. In an ironic feat of European inversion, peoples who were at least their equals, in living standard, were soon reduced

38 Lewis and Maslin 2018, 179–87.

39 Lewis and Maslin 2018, 158–61; their Figure 5.1 lists many further examples of "the globalization of species" (160). The 'Columbian Exchange' was first systematically studied in Crosby 1972.

40 Lewis and Maslin 2018, 162–9.

41 Anievas and Nişancıoğlu 2015, 122, 126–7.

42 Lent 2017, 311–12; Anievas and Nişancıoğlu 2015, 121–73.

to savage lives that they actively made, in the worn Hobbesian adage, "poor, nasty, brutish, and short."[43]

In terms of what a good number of people would have been *doing*, I suggest no specific verbs this time, but rather the kinds of items they now began to shift around – the notion of *exchange* entailing both the 'colonial pillage' and the 'world trade' of this section's title. Covering vast swathes of history and geography, the extra-American imports alone range from the relatively tacit – the pathogens, people, and practices already touched on – to the violently explicit. After the decimation of native populations, this means filling the void with African slaves and extraneous Europeans (i.e. the poorer peasants to be dispossessed in the next section), but later also the Western goods for which the colonies provided a captive market, thus enabling Europe's industrialization. Beyond the 'primitive accumulation' of land, labour, and capital, conversely, New World exports soon centered around imposed monocultures of cash crops – produced not for subsistence but for the world market – causing erosion and soil exhaustion in the Americas, and new rounds of market dependence on both sides.

And remarkably, this 'mercantile' capitalism went global almost as soon as it had emerged. In the transatlantic slave trade, as Alf Hornborg likes to put it, "American fields, African slaves, [and] British workers" were all "transformed into commensurable and interchangeable commodities" through the globalized circulation of *money* that now came to virtually replace solar energy as "the vital force flowing through agrarian societies."[44] Insofar as capitalism is ultimately about investing money in the expectation of returning a profit, both were there virtually from the start. Over the centuries, as Jason Hickel recounts, the colonies provided an economic and ecological windfall that veritably "developed Europe," rather than the other way around.[45] What Europe provided was a commercial credit system that was able to finance its expansion much more efficiently than old-style tax collecting, effecting a fundamental inversion of political and economic power. Befitting my imagery for performativity, Harari dubs this "the magic circle of imperial capitalism: credit financed new discoveries; … colonies provided profits; profits … translated into more credit."[46] (Much later in the story, part of the magic is how the formerly colonized countries now find themselves as the global debtors, still being 'helped out' on the ladder of progress.[47])

Netherworld: Wage Labour and Fossil Capital

The third transition in Lewis and Maslin's scheme of Anthropo(s)cenes is another *energy* revolution, surpassing that of agriculture by leaps and bounds. Heralding a newly urban species of humans, the Industrial Revolution ostensibly introduced new kinds of machines and workspaces in late eighteenth-century England – the

43 Lent 2017, 277–87; Patel and Moore 2017.
44 Hornborg 2016, 36, 20.
45 Hickel 2018, 71–6, cited 93. This line of argument owes heavily to Frantz Fanon.
46 Harari 2015, 352–6, cited 354.
47 Hickel 2018.

steam engine and the factory, powered by coal and wage labour respectively.[48] The climatic consequences are incontestable. Eclipsing deforestation as the key source of anthropogenic CO_2 emissions, "fossilized concentrated sunshine" has since "pushed Earth outside the environmental conditions that every human culture evolved within."[49] That industrial civilization may boast positive norms of 'growth' or 'prosperity' as if they were its inherent, essential virtues – *apart* from the black performative motor – is, I will argue, a function of its apparent 'liberation' not only from the energetic limitations of wind, water, and muscle, but indeed from the very dictates of nature itself.[50]

And yet, as meticulously documented by Andreas Malm in his magisterial *Fossil Capital*, the primal reason that coal was first adopted in Britain was not that it had some neutral edge in cost or performative efficiency, but the fact that it gave factory owners superior control over labour, effectively *liberating them* from workers' demands.[51] In the slightly longer performative trajectory traced in this section, I suggest that the very precondition for the normative 'liberation' of 'production' was that of both land and labour from 'the commons' to the market – the rhetoric of freedom, here, serving to deny and dissimulate an extremely violent process of expulsion and enclosure. De-neutralizing the European 'transition' from feudalism to capitalism, this backstory entails what Marx called the 'primitive accumulation' of capital, and may conveniently be approached as an ongoing performance of multiple separations: that of labour and capital (divorcing workers from their very means of subsistence); the abstraction of exploitation from a direct personal relationship to one mediated by an impersonal market; and ultimately a 'metabolic rift' between humans and the nature of which they are part, leading to their corresponding alienation and disenchantment.[52]

Starting in sync with Europe's colonial expansion in the sixteenth century, the enclosure of its own territory "changed the relationship between people and the environment"[53] quite as vitally as the agricultural *domus* once had – except that now its residents were themselves kicked out. As common meadows, forests, lakes, and pastures were enclosed for the production of commodity crops and especially wool for the international market, the very bases of peasant reproduction (grazing animals, gathering wood and berries, hunting, fishing, foraging) were translated from customary rights into criminal offences on a 'private property' now administered from a distance.[54] In Lewis and Maslin's recap, "the trick was to dispossess people from the land, in order that they then worked the same land but needed to pay to lease it."[55] As for those who could

48 Lewis and Maslin 2018, 209, 192.
49 Lewis and Maslin 2018, 223, 11.
50 See also Salminen and Vadén 2015.
51 Malm 2016.
52 Marx discusses "the so-called primitive accumulation" at the end of *Capital* Volume I; his remarks on the 'metabolic rift' in 19th-century industrial agriculture are wonderfully extended in Foster 2000.
53 Jones 2017, 117.
54 Jones 2017, 6, 97, 101; Federici 2004, 24, 71.
55 Lewis and Maslin 2018, 343, also 174–5.

not pay rents, their only means of survival was to sell performances of labour to those who now 'owned' the means of survival of which they had been 'liberated.'

Scientifically, this process entailed a wholesale disciplining of the body. As the mechanical philosophy of the time sought not only to fix its work in time and space, but to render it predictable and controllable, it might well be argued, with Silvia Federici, that "the first machine developed by capitalism" was "not the steam engine, and not even the clock," but the human body converted into labour power.[56] With strict legislation to homogenize social behaviour, though, this "work-machine" could only become a model of conduct by destroying "a vast range of pre-capitalist beliefs, practices, and social subjects" that contradicted its core norms of discipline and regularity. For Federici, this "state intervention against the proletarian body" culminates in the mass execution of hundreds of thousands of 'witches' over the 16th and 17th centuries.[57] Also 'at stake' is "the constructed character of sexual roles in capitalist society": boosting differences, the witch-hunt performatively "'produced' the Woman as a different species" – lusty, weak, carnal, insubordinate – a savage exemplum that, having outlived its usefulness by the 18th century, was then tamed or inverted to the classic bourgeois prototype of domestic femininity (passive, asexual, moral, obedient).[58]

Well before the burning of fossil fuels, thus, the burning of 'witches' helped finalize the key inversion of industrial capitalism, and also the long process of domestications (which, earlier, James C. Scott defined as "control over reproduction"[59]): in reverse of all subsistence economies, reproduction now became fully subordinate to production. For Federici, this history provides an important corrective to those that attribute all leaps in productive efficiency only to advances in management and specialization. "Just as the Enclosures expropriated the peasantry" from the land, so the witch-hunt "liberated" women's bodies "to function as machines for the production of labor."[60] In utterly performative terms, what the normative equation of capitalism with 'free wage labour' serves to hide and naturalize – be it as biological destiny or natural vocation – is all the "washing, cuddling, cooking, consoling, sweeping, pleasing, cleaning, exciting, mopping, reassuring, dusting, dressing, feeding … and caring" that is emphatically required for getting it into the labour market in the first place.[61]

In sum, it is against this background – the control and cheapening of labour – that fossil fuels eventually become a necessity for the continued accumulation of capital. While the mechanization of the body had reduced the *performance* of work to sheer repetition (decoupled from skill and care, which are restrictive and expensive), getting enough of bodies where the water-powered mills lay still

56 Federici 2004, 146, italics omitted.
57 Federici 2004, 140–1, 144.
58 Federici 2004, 14, 192, 100–3. The assault created deep divisions in the working class: much like current discourses of terrorism or indeed immigration, charges of sorcery led many poor "men who had been expropriated … to blame their personal misfortunes on the castrating witch" (189–90).
59 Scott 2017, xii–xiii.
60 Federici 2004, 115, 184, italics omitted.
61 E.g. Federici 2004, 8, 14, 75, 91; the fine list of verbs is Peter Linebaugh's, in Federici 2019, xiii.

left considerable leverage to the workers. Hence the factory owners chose to invest in coal and steam instead, despite "water being abundant, cheaper and at least as powerful, even and efficient" as Malm has documented.[62] Likewise, as Timothy Mitchell has argued, a key reason why oil would eventually surpass coal was that it is far more dependent on capital than on labour, hence immune to such disturbances in market freedom as coal miners could still perform (trade unions, people's parties, universal suffrage, social insurance).[63] It did need massive subsidies, though: "To increase their profit margin," Mitchell explains, oil companies also had to "build the kinds of societies" that would demand their products.[64] As is now well known, such a world was felicitously performed over the twentieth century, as what began with all solids "melting into air" (e.g. as carbon dioxide) would spread and solidify in "an immense accumulation of commodities."[65]

All the World (But Not All of 'Us' as Players)

The most recent stage in Lewis and Maslin's timeline is the second reorganization of global society: the 'Great Acceleration' of economic activity since the Second World War, or in their 'modes of living' terminology, the age of consumer capitalism.[66] In that window, world GDP has increased seven and trade elevenfold, while the number of people themselves has trebled, surpassing all of previous human history – some 3.4 Earths would be requisite for them all to adopt high-end lifestyles (they won't). Above 400 ppm[67] for the first time in three million years, three quarters of human-produced carbon dioxide has found its way to the atmosphere in this same time frame, causing significant warming not only of global climates but of the oceans, loading them with such energy that 'once-in-a-century' hurricanes are now commonplace.

However, global warming is only one aspect of the Anthropocene condition, predominant in current debates given the centrality of energy policy to economic growth. Apart from their dramatic decline as carbon reservoirs, the depletion of both soils and forests spells a loss of biodiversity potentially amounting to a sixth mass extinction. This is hardly compensated by the rising homogeneity of what remains: of the world's mammal biomass, only 3 per cent live in the wild, literally outweighed by humans and their domesticated animals, at 30 and 67 per cent respectively.[68] From near nonexistence in 1950, moreover, the world

62 Malm 2016, 93, italics omitted; Lewis and Maslin 2018, 197–201.
63 Mitchell 2011, 20–1, 36–9, 192–3; see also Bonneuil and Fressoz 2016, 119–20.
64 Mitchell 2011, 193.
65 Citing Marx and Engels, *The Communist Manifesto*, and the first sentence of *Capital* Volume I.
66 Lewis and Maslin 2018, 225–65.
67 Parts per million: the standard metric for atmospheric carbon dioxide. Up until the Industrial Revolution, the maximum global average was about 280 ppm; while 350 ppm would still count as 'safe,' the current average hovers above 410 ppm, with a record high of 418 ppm measured in May 2020 (www.co2. earth). Overall, coronvirus restrictions might, however, even cause an 8% fall in emissions, which, if repeated every year over a decade, might actually help in limiting warming to 1.5 C (carbonbrief.org, 19 May 2020).
68 Lewis and Maslin 2018, 4–5, 246. For revealing graphics, see also Damian Carrington, "Humans just 0.01% of all life but have destroyed 83% of wild mammals – study," *The Guardian*, 21 May 2018.

has been taken over by cars and plastics, such that its entire surface could now be wrapped in thin layers of both plastic *and* concrete.

From the future stratigrapher's perspective, the sudden appearance of all this might indeed signal the beginning of a new epoch, but historically, this is not an epoch of a unified *anthropos*. Premised on the contradiction between normative performances of consumption, in the so-called core regions of the economy, and their basis in ongoing extraction in its peripheries, this last section of the article moves swiftly from the rhetoric of freedom and opening to various realities of renewed containment. In performative terms, I hope to at least intuit how the norm of consumption is only enabled through a drastic difference between what the core minority and the peripheral majority spend their time doing – buying, flying, driving, as opposed to what is euphemistically called 'developing.' As suggested in Figure 3, moreover, all the previous histories that have been outlined seem very much present in this current stage: global agriculture, colonial divisions, even dirty industry if now outsourced to the global South.

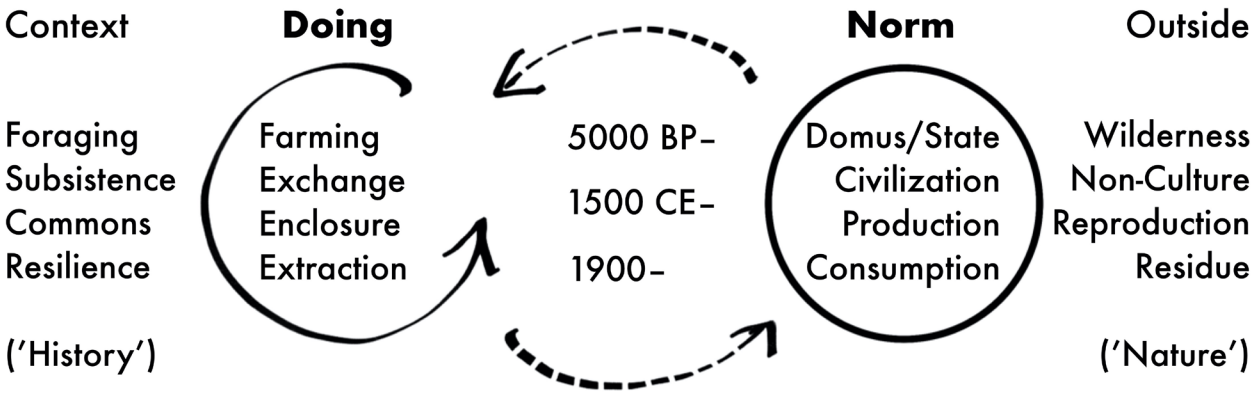

Figure 3. The layered performances of the Anthropocene: a palimpsestic summary.

Institutionally, the Great Acceleration has its basis in the immediate aftermath of the Second World War. First, the "state of exception" the war itself performed – also in relation to the environment – has since been utterly normalized, with "civilian markets designed to absorb the excess industrial capacity" first mobilized for war, and the U.S. military remaining the world's largest consumer of petroleum by far.[69] Second, the global institutions built after 1945 have secured the interests of free markets and economic growth – the World Bank, the International Monetary Fund (IMF), and what is now called the World Trade Organization (WTO) – but also of the individual member states of the United

69 Bonneuil & Fressoz 2016, 122–47, cited p. 129, 145; see also Angus 2017; Graeber 2011a, 365–7. The Cold War context plays a part too: even if "Soviet communism used the state rather than markets to allocate profits," Lewis and Maslin find it structurally congruent with their "broad definition of a capitalist mode of living" – both camps racing to out-industrialize the other (2018, 442n1, 232).

Nations (UN). On the one hand, the liberation of market forces has entailed a massive *increase* in state regulation. After all, it is primarily states that construct, maintain, and renew the material infrastructures that mediate the relationship between capitalism and nature – and conveniently, both international shipping and military emissions are exempted from official accounting in all UN-backed climate agreements (the 2015 Paris Accord makes no single reference even to fossil fuels).[70] On the other hand, latter-day 'free trade agreements' enable corporations to sue even independent states if they impose such limits on future profits as minimum wages or environmental regulations – all for the grand ideal of human freedom.[71]

This, arguably, is the Grand Dissimulation of the Great Acceleration. Under the blind 'post-industrial' norm of 'consumer' capitalism, the brutalities of dirty production, enclosure, and primitive accumulation have not disappeared anywhere, but have only been displaced "to less affluent sectors of the world-system."[72] With the very dynamic of capital veritably saved by the World Bank and the IMF, multinational corporations may now "establish factories in the cheapest places possible with minimal tax obligations and reduced environmental and labor regulations," freely shipping their goods across the very borders that so effectively contain workers, wages, and legislation.[73] With the escalating depletion of the global environmental commons for palm oil production and high-intensity extraction, "the Great Acceleration thus corresponds to a capture by the Western industrial countries of the ecological surpluses of the Third World."[74] As the anthropologist Jason Hickel recounts with admirable clarity in his brief history of *The Divide*, the global South's yearly debt service "vastly outstrips the amount that the UN tells us is necessary to eradicate poverty entirely," the global income gap having more than quadrupled, from 1960 to 2000, to a ratio of 134 to 1.[75]

Hence the violent logic of containment in Figure 3: in Naomi Klein's memorable prose, the global economy is predicated not only on the *existence* of "sacrifice zones – whole subsets of humanity categorized as

70 Hickel 2018, 218 (regulation); Keucheyan 2016 (mediation); Jones 2017, 153–61 (UN critique).
71 Hickel 2018, 184–219; Jones 2017, 128–32.
72 See e.g. Hornborg 2016, 35, 152, cited p. 156.
73 Hickel 2018, 170–2; Jones 2017, 165–6 ("factories"), 126–7, 132.
74 Bonneuil and Fressoz 2016, 250.
75 Hickel 2018, 177, 16. In David Graeber's famous summary, "there is no better way to justify relations founded on violence, to make such relations seem moral, than by reframing them in the language of debt – above all, because it immediately makes it seem that it's the victim who's doing something wrong" (2011a, 5, but see also p. 2). As for the PR tactic of 'development,' Hickel's strong argument is that it served to detach global poverty and inequality from centuries of colonialism and make them appear fully internal to the developing countries themselves, be it due to "corruption or bad governance or poor institutions" (2018, 2–4, 18–21). In a superbly felicitous feat of performative normalization, poor and rich countries were deemed "naturally abundant" in labour and capital respectively, their differences inverted to essentialized traits and the historical takers into benevolent givers (10, 25). Finally, the "single moral justification" for maintaining such an economic order to the present is "the good-news narrative" (61) according to which global poverty and inequality are actually in decline – this being a statistical effect of countries like China that *refused* structural adjustment (37–43) – as is Western consumption itself – an effect of offshore production being off balance-sheet too (287).

less than fully human," but quite as much on the ability of the more privileged to cordon them off "as hinterlands, wastelands, nowheres … middle of nowheres" – "as if we in the West [were] mere spectators."[76] Far from not taking precautions, the climate-change policies of the West are apparent in a massive proliferation and militarization of borders and border walls, "materializing … denial through a literal concretizing of out of sight out of mind." If the displacement of a mere 14 million sufficed to throw the EU into a 'migration crisis' in 2014–15, "the UN envisages 50 million environmental migrants a year by 2030."[77]

Of the three logical components of this containment structure, the first and most material is "the global border regime" itself – one of barbed wire and border patrols, drones and identity documents, backed up with "the full violence of the state."[78] No "natural divisions," as Reece Jones argues, most political borders are centuries old at best, and exist to "protect the economic, political, and cultural privileges that have accrued" over the course of history – the distinction between inside and outside, native and foreigner being at "the foundation of the state as an institution."[79] The second component is the equally ancient trope of barbarian invasion: reduced to runaway migration, climate change is again 'othered' on the reproductive poor. In Andrew Baldwin and Giovanni Bettini's recap, 'the climate change migrant' is figured as a "constitutive outside or excess," a residue of nature that robs the poor of their history but has to be managed or contained, lest it visit a 'return of the repressed' on the rich – "a fear homologous with the midnight worries of the slave holder."[80]

Finally, the bubble of 'consumption' is itself a tight container of aspirations. With previously externalized policies of privatization, austerity, and primitive accumulation now chipping away at the core regions of global capitalism as well, this bubble works to actively repress any alternatives to "the exponential growth of the global economy" that Lewis and Maslin themselves recognize at the root of the Great Acceleration.[81] As the economy is "expected to more than double in size every twenty-five years … ever-more dramatic changes to society and the Earth system become the norm," which again "points towards either a new configuration of human society or its collapse."[82] The

76 Klein 2014, 268, 72.

77 Nixon 2011, 20 ("denial"); Jones 2017, 3–4 (EU); Bonneuil and Fressoz 2016, 5 (UN). Apart from Trump's fantasies, Jones recounts, "new border walls were initiated [in 2016 and 2017] in Algeria, Austria, Bulgaria, Estonia, Hungary, India, Jordan, Kenya, Latvia, Lithuania, Macedonia, [Norway,] Pakistan, Tunisia, Turkey, and the United Kingdom in Calais, France" (2017, vi).

78 Jones 2017, 48–69, 88.

79 Jones 2017, vii, 117–18, 166–9.

80 Baldwin and Bettini 2017, 3, 15.

81 Lewis and Maslin 2018, 14–15. See also Klein 2014, 93–6, 268–72; Graeber 2011a, 282.

82 Lewis and Maslin 2018, 15. This is at a yearly growth rate of 3 per cent; as Hickel notes, "a 4.5 per cent rate of growth – which is roughly the aggregate rate that the governments of the world want to achieve – doubles a 'thing' every sixteen years." His example is eye-opening: "If Ancient Egypt had started with one cubic metre of possessions and grew them by 4.5 per cent per year, by the end of its 3,000-year civilisation it would have needed 2.5 billion solar systems to store all its stuff." (2018, 284.)

likelihood of the latter is suggested by a set of structural 'lock-ins' that will be extremely hard to undo, whether they be technological (networks of roads and gas stations), financial (fossil fuel speculation on 'proven reserves'), or ideological – the performance of countries judged by the standard of gross domestic product (GDP), measuring the rate at which they transform nature and human activities into money.[83] As Hickel explains, ramping up GDP "means ramping up production and consumption each year," multiplying the sheer amount of trade, debt, waste, cars, planes, and energy use *even if* the latter were to magically turn 100 per cent 'clean' overnight.[84]

As worrying new forecasts are announced by the hour – of a world with no clouds or insects, a mere sixty harvests left, its fish outweighed by ocean plastics – this may well be a bubble of "no refuge," making 'the climate refugee,' as Claire Colebrook suggests, "an appropriate way of beginning to think about humans in general."[85] In Lewis and Maslin's collapse-or-reconfigure scenario, the potential for the latter inheres in their observation that their 'modes of living' have each been consecutively shorter: after 300 years of mercantile and only 150 years of industrial capitalism, the mathematical 75 years of consumer capitalism might give way to something else by 2030.[86] As an article like this is bound to evoke the reaction, 'Then what shall we do about it?', what I hope to argue in further instalments is that at least the model of 'plural performativity' provides a graphic way of assessing the available alternatives. If this paper has concentrated on only defamiliarizing a set of problematic norms, the poles of normativity and repetition do suggest further performances of *regulation and resistance*. If prospects of regulation are currently compromised by vexed interests, throughout history the cycles of 'doing' have always comprised much larger portions of humanity than those whose power, money, and weaponry uphold the problematic norms (Figure 3). The logical alternatives are affirmation and negativity: in one sense, we already are 'ecological'[87] and thus fully adaptable to a post-carbon world – one might call this a 'prefigurative posthumanism.' In another sense, to actually get there we will need more than an artistic sensitivity to our nonhuman kin; hence the call remains for strictly human action against strictly social structures of fossil capital.[88]

83 Lent 2017, 396–400.
84 Hickel 2018, 282–90.
85 Colebrook 2017.
86 Lewis and Maslin 2018, 358, and their Chapter 11.
87 Morton 2018.
88 Malm 2018a; Hornborg 2019. We will not be returning to 350 ppm of atmospheric carbon dioxide, but as Extinction Rebellion likes to remind, nonviolent mass movements have been invariably successful once they secure the sustained commitment of a mere 3.5 per cent of a population (see Chenoweth and Stephan 2011, for reference; even this is a tall call though, meaning e.g. 26 million Europeans).

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