Article

Interrupting the Anthropo-obScene: Immuno-biopolitics and Depoliticizing Ontologies in the Anthropocene

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Abstract
This paper argues that 'the Anthropocene' is a deeply depoliticizing notion. This de-politicization unfolds through the creation of a set of narratives, what we refer to as 'AnthropoScenes', which broadly share the effect of off-staging certain voices and forms of acting. Our notion of the Anthropo-obScene is our tactic to both attest to and undermine the depoliticizing stories of 'the Anthropocene'. We first examine how various AnthropoScenes, while internally fractured and heterogeneous, ranging from geo-engineering and earth system science to more-than-human and object-oriented ontologies, place things and beings, human and non-human, within a particular relational straitjacket that does not allow for a remainder or constitutive outside. This risks deepening an immunological biopolitical fantasy that promises adaptive and resilient terraforming, an earth system management of sorts that permits life as we know it to continue for some, while turning into a necropolitics for others. Second, we develop a post-foundational political perspective in relation to our dramatically changing socio-ecological situation. This perspective understands the political in terms of performance and, in an Arendtian manner, re-opens the political as forms of public-acting in common that subtracts from or exceeds what is gestured to hold socio-ecological constellations together. We conclude that what is off-staged and rendered obscene in 'the AnthropoScenes' carries precisely the possibility of a return of the political.

Keywords
Anthropocene, biopolitics, de-politicization, environment, politics

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Introduction

One possible origin of the word obscene derives from classical Greek theatre. The 'skene' was the structure behind the stage with internal rooms hidden from the audience and from where actors emerged to narrate the story. However, some acts had to remain off-stage, *ob-skene*, as they were deemed inappropriate to be shown explicitly. This included sexual conduct, violence, and death, but also emotions of deep anguish and fear. Nonetheless, the spectator was uncannily aware of their disturbing subterranean presence. It is from this perspective that we mobilize the somewhat awkward term 'the Anthropo-obScene', which we place in a troubling relation to the now popularized notion of 'the Anthropocene'.

In this contribution, we shall use 'the Anthropocene' to denote the proposed new geological era during which humans have arguably acquired planetary geo-physical agency, a term increasingly mobilized by geologists, earth systems scientists and scholars from the humanities and social sciences. While recognizing a wide-ranging and often contentious debate (see e.g. Castree, 2014a, 2014b, 2014c; Hamilton et al., 2015), we hold that the Anthropocene is a deeply depoliticizing notion that off-stages political possibilities. This off-staging unfolds, we contend, through the creation of what we refer to as 'AnthropoScenes', the *mise-en-scene* of a particular set of narratives that are by no means homogeneous, but which broadly share the effect of off-staging certain voices and forms of acting. Our notion of the Anthropo-obScene, then, is our tactic to *both attest to and undermine* the performativity of the depoliticizing stories of 'the Anthropocene': a hacking of a popularized term to render sensible its uncanny underbelly.

We shall deploy this term through two broader registers. First, we examine how the AnthropoScenes can be viewed as a set of stages that have constructed and variably engaged the signifier 'Anthropocene'. While internally fractured and heterogeneous – ranging from those promoting geo-engineering and earth system science as an immunological prophylactic to our situation, to interlocutors developing more-than-human and object-oriented ontologies in search of a new politics – there is an uncanny effect of placing things and beings, human and non-human, within a particular relational straitjacket that does not allow for a remainder or constitutive outside. Such relational ontology tolerates no excess, subtraction, or supernumerary. This gesture risks precisely to off-stage the political. Second, building on post-foundational political thought, we shall articulate in theoretical terms what is being censored and rendered obscene, and how foregrounding what is off-staged may hold possible paths toward re-politicization. We mobilize theoretical perspectives that have attempted to cut through the last decades of pervasive de-politicization. These views understand the political

in terms of performance and, in an Arendtian manner, as constituted through a space of appearance, a performative public acting-in-common that politicizes subjects and spaces (Arendt, 1958: 199). From this perspective, the political is understood as forms of acting subtracted from or excessive to what is gestured to hold socio-ecological constellations together. In other words, the political is manifested in forms of supernumerary acting that exceeds the internal relational assemblage from which it emerges. Put simply, 'the political' is the signifier that stands for the immanent rupturing of relations, thereby exploding the myth of the possibility of a closed relational configuration. In sum, the paper critically examines the potentially depoliticizing implications of a political ontology proposed by a range of new materialist and more-than-human perspectives in the absence of a critical ontology of the political (see also, for example, Pellizzoni, 2015).

The paper is organized in three parts. In the first part, we examine how various AnthropoScenes, despite great debate and important differences, share two key characteristics. Each comes with its own disavowals and silences. First, the view that the inauguration of the 'Anthropocene' announces a rupture, a before and after its founding moment (contested as it may be), suggesting a radical 'newness' in the state of the situation. Second, the view that the AnthropoScenes implicitly or explicitly embrace a new more-than-human ontological perspective, one that foregrounds a horizontal relational materiality of how humans and non-humans are enmeshed. We interrogate how versions of such symmetrical relational ontologies, variously referred to as more-than-human or object-oriented ontologies, fuel a new cosmology, a new ordering of socio-natural relations (Stengers, 2003; Latour, 2005; Braun and Whatmore, 2010; Coole and Frost, 2010; Morton, 2013; Harman, 2016). We contend that this in turn opens the spectre (albeit by no means necessarily or intentionally so) for a deepening of a hyper-accelerationist eco-modernist vision in which big science, geo-engineering, and big capital can gesture to save both earth and earthlings (Neyrat, 2016).

In the second part, we examine the implications of these new ontologies and question their radical political presumptions (Pellizzoni, 2015), further demonstrating how they resonate with a biopolitical frame of immunization, a form of governing that secures the life of some while sacrificing others. This immunological biopolitical fantasy, we contend, depoliticizes matters, making sure that capitalist civilization as we know it can continue a while longer. It sustains promises of adaptive and resilient terraforming, an earth system management of sorts that permits life as we know it to continue for some, while turning it into a necropolitics for others.

In the third part, we return to examining the particular relational ontology on which object-oriented ontologies are based in order to examine how the disavowal of exteriority, combined with an impoverished

notion of what constitutes 'the political', intensifies already deeply de-politicizing processes. We conclude by making a case for a return of the political through an ontology that strictly works with a relationality that recognizes excess and subtraction. We argue that all relationalities, such as patriarchy, capitalism, colonialism, and 'the Anthropocene', are dependent on excess and subtraction, which can, when made visible and sensible (as has been done in feminist, proletarian, subaltern, queer politics), open a politicizing procedure. There is indeed a possibility to re-cast the depoliticized story of the Anthropocene, and through that, to explore the contours of re-politicizing the socio-environmental conundrum we are in, while fully embracing humans' interdependence with non-humans. Drawing on post-foundational political thought, this perspective recognizes exteriority and separation as the condition of possibility for interdependence and relationality. It holds that all relational configurations imply a certain separation and distancing, and, thereby, the always-immanent possibility of forms of acting that undermine, transform, or supersede existing relational configurations.

In sum, our main objectives are: (i) to excavate the de-politicizing underbelly of much of Anthropocene-talk with a particular focus on post-human ontologies; (ii) to demonstrate how these new horizons potentially permit a further deepening, while transforming, capitalist forms of socio-natural assembling and thereby securing capital's hold over life; and (iii) to argue how a re-thinking of the relational socio-natural configuration might inaugurate emancipatory forms of politicization.

AnthropoScenes: Staging the Anthropocene

The Anthropocene argument fully recognizes the active role of humans in co-constructing the earth's deep geo-historical time. But it also inaugurates a new ontological framing of relational symmetry between humans and non-humans. This double movement is what Christophe Bonneuil and Jean-Baptiste Fressoz (2013, 2016) have called 'the event of the Anthropocene'. Yesterday's ontology was, or so the Anthropocene argument goes, predicated upon externalizing nature in a manner that nurtured humans' mastery over nature (while nonetheless increasingly socializing the non-human). The inauguration of the modern nature–society split allegedly muted nature while subordinating it to the whims and wills of a fast-forwarding capitalist modernity. In contrast to this, the Anthropocene ostensibly announces a more modest and horizontal ontology, an immanent and indeterminate process of co-shaping heterogeneous socio-natural imbroglios. This then opens *the promise* of a mutually supporting and diversified nurturing of human–non-human constellations.

The notion of the Anthropocene implies an AnthropoScene, the staging of a narrative (or set of narratives) with profound implications that

require careful attention (see Bonneuil and Fressoz, 2016; Malm and Hornborg, 2014). They offer a range of alternative narratives such as, amongst others, thermocene, thanatocene, phagocene, and polemocene. Likewise, Jason Moore (2015, 2016) suggests the notion of the capitalo-cene, the age of capital. For him, the culprit is the expansive historical and geographical process of capitalist economic-political organization that operates within nature's web of life and which includes colonialism, industrialization, and globalization; TJ Demos (2015) develops the gyno-cene, locating geological violence within patriarchal domination, and sketches a feminist and gender-equal environmentalism; and Donna Haraway (2016), in a more positive naming of our epoch as the Chthulucene, shifts the focus toward inter-species collaborations and the 'sym-poiesis' of co-becoming that structures the very conditions of life. None of these scholars, including ourselves, can escape what William Cronon (1992) remarked upon already more than 20 years ago. He argued that any re-presentation of environmental history implies a story-line with its theatrical setting that stages a particular cast of key actors, agents, props, and relations while inevitably excluding other potential performers and relations. It is with this Crononian injunction in mind that we try, in the next section, to chart the underbelly of the AnthropoScenic stage-set.

A Temporal Disjuncture? Enrolling Revisionist Geo-history

The notion of the Anthropocene resonates widely among scientific and lay publics alike. Its appeal and rapid proliferation, from discussions among climate change scientists, environmental humanists and artists, to a catchword among observers, politicians and activists, has become a key diagnostic of our time and shapes ideas for future courses of action (Castree, 2014b; Lorimer, 2016). Across these widely different AnthropoScenes, which we recognize as distinct and internally conflict-ing, we hold that several of them share and thrive upon a peculiar tem-poral disjuncture that splits modernity into two – the before and after. Indeed, and irrespective of the ongoing debate over the exact moment of its inauguration (Steffen et al., 2011a; Lewis and Maslin, 2015), the event of the Anthropocene announces a presumably new socio-geo-physical era, one that recognizes that human kind, as a species, has acquired deep-time geological agency. This prompted Dipesh Chakrabarty (2009, 2017), amongst others (e.g. Yusoff, 2013; Clark, 2014; Erle et al., 2016), to call for a retroactive re-writing of the world's geo-envir-onmental-cum-social history:

> While freedom has been the most important motif of accounts of human history since the Enlightenment, there has never been an awareness of the geological agency human beings were gaining

through processes linked to their acquisition of freedom. Whatever the rights we wish to celebrate as our freedom, we cannot afford to destabilize conditions that work like boundary parameters of human existence. (Chakrabarty, 2009: 1)

In his call to re-write history, humans as a generic category have to be inserted in the world's geo-physical history as active agents in the making of their own combined earthly past and future. This relegates the 'modernist' split between humans and nature to an archaic view that needs to be left behind by constructing a new ontology based on a relational web of mutual determination – or so it seems. This kindling of a new ontology can be noted too in the AnthropoScenes that strictly follow techno-managerial and earth science approaches, narratives spun around 'earth system governance', 'planetary stewardship', and the 'good Anthropocene' (Biermann, 2007; Steffen et al., 2011b; Biermann et al., 2012), including eco-modernist notions of a geo-engineered terraformed earth (Shellenberger and Nordhaus, 2007, 2011). Political theorists, in turn, have called for a hyper-reflexive 'geopolitan democracy' which takes into account human and non-human matters and their associational configuration (Eckersley, 2017). The reliance on a 'modernist split' can also be noted in Donna Haraway's Chthulucene's inter-species co-becoming (Haraway, 2016); in Timothy Morton's speculation with 'hyper-objects' (Morton, 2013); as well as in Bruno Latour's embrace of Gaia (Latour, 2015a, 2017). However, to insist on a modernist split and to call for a re-writing of the world's geo-social history radically obscures, silences and off-stages what has been an integral part of the modernist intellectual trajectory all along. As Locher and Fressoz put it:

> By virtually denying the environmental awareness of past societies, [the Anthropocene] depoliticizes the long-term history of environmental deterioration while, by stressing the recent reflexivity as an intrinsic characteristic of our contemporary societies, such narratives tend to treat ecological concerns as a given and disregard the conflicts that have actually driven them. (Locher and Fressoz, 2012: 581)

The recognition of the role of humans as active agents of the earth's terraforming process has undeniably been a key ingredient of many a modernist vision and analytical framework (see, for example, Barnett, 2015). At least since the 18th century, political economists and geo-scientists *avant-la-lettre* insisted on how human history is a history of rekindling the earth in an intimate relational articulation. Consider, for

example, Marx's famous statement from the *Economic and Philosophical Manuscripts of 1844*:

> Nature is man's *inorganic body* – nature, that is, insofar as it is not itself the human body. Man *lives* on nature – means that nature is his *body*, with which he must remain in continuous intercourse if he is not to die. That man's physical and spiritual life is linked to nature means simply that nature is linked to itself, for man is a part of nature. (Marx, 1959 [1844])

Charles Fourier lamented already in 1821 in his *De la détérioration matérielle de la planète* that 'climate disorders are a vice inherent to civilized culture' (cited in Bonneuil and Fressoz, 2016: 257; see also Fressoz and Locher, 2010, 2012). A more socio-ecological benign earth would require a transformation of this civilization. In fact, Bonneuil and Fressoz demonstrate how modernity has been marked by a continuous battle unfolding between, on the one hand, advocates of a sustained society–nature dichotomy and mankind's manifest destiny to be master and commander of its external conditions of existence, and, on the other hand, proponents of a more modest and socio-ecologically sensitive mode of conduct and engagement. The long genealogy of intellectuals, who already in the 19th century called for what we might now label as an AnthropoScenic storyline, one that emphasizes co-construction (see, for example, Marsh 1864, 1874; Sherlock, 1922; Vernadski, 1926), continues to be scripted out and silenced, thereby skillfully forgetting – yet again – that the nature–society split that is customarily deemed to belong uniquely to the singular core and backbone of modernization signals just the ideological victory of one side in a fierce confrontation between radically opposing views (Fressoz, 2015; Neyrat, 2016; Bonneuil and Fressoz, 2016).

Across various AnthropoScenes, 'the event of the Anthropocene' is consequently staged as a moment of rupture of the temporality of modernity. But this (mis)represents modernity as monolithic and total, dividing its history into an un-reflexive (pre-)modernity and a post-evental reflexive (post-)modernity, a simple before and after. This splits time and its geo-history into two. In doing so, modernization as an internally fractured and highly contentious process is off-staged. Its conflicting, socially heterogeneous, and politically contested – often interruptive – transformations become refracted into a singular and teleological understanding of the unfolding of modernity's history; and thus, one can argue, in a revisionist way, that we gained our freedoms by undermining earth's 'boundary parameters'. What is disavowed is precisely modernity understood as the continuous confrontations and political conflicts over

possible future trajectories in the context of dramatically changing socio-ecological situations. As Frédéric Neyrat attests:

> Instead of a division *of* modernity between a before and an after [the event of the Anthropocene], a modernity initially ignorant, but later educated, it is a division *in* modernity that we need to consider. In place of a chronological division, a political division. (Neyrat, 2016: 117, our translation)

Modernity is not a single-headed process that now has been surpassed. On the contrary; it is the multi-headed internal struggle that predates as well as postdates the event of the Anthropocene. The risk with these AnthropoScenes, in spite of their internal differences, is the off-staging of the politics of dissensus that animated the historical-geographical dynamics of modernity.

A Symmetrical Ontology and a New Cosmology

While the process of off-staging varies across different AnthropoScenes, we maintain that the related emergence of a new cosmology could serve to deepen the process of capitalist enrolment of non-human and more-than-human processes. For example, the geo-sciences, and in particular earth system experts have, despite acknowledging the limitation of their models and measurements, entertained a socially performative storyline that the advent of the Anthropocene inaugurates the possibility, if not necessity, for the management and careful 'adaptive' and 'resilient' massaging of the totality of the earth system within its 'planetary boundaries'. Indeed, in their consensual rendering of the earth as an intricate, indeterminate, and complex intertwined socio-natural constellation, they have nonetheless opened up the promise that the earth can, with loving supervision, intelligent crafting, big-data monitoring, and careful techno-natural nurturing and manicuring, be terraformed to whatever socio-ecological condition humans may desire. One representative example of this promise revolves around geo-engineering. While internal debates proliferate over whether or not geo-engineering can or should become part of an adaptive earth system governance arrangement (Barrett et al., 2014), it is not excluded. Political scientist Victor Galaz, for instance, points out that '[e]arth stewardship and geo-engineering are not necessarily in conflict, but instead could be viewed as complementary approaches [to] combat climate change' (Galaz, 2012: 24). Crutzen himself insisted that the Anthropocene inaugurated a tectonic shift from engineering the socio-ecological relations in the interest of 'humanity' to the promises of a geo-engineering of the earth:

> This will require appropriate human behaviour at all scales, and may well involve internationally accepted, large-scale

geo-engineering projects, for instance to 'optimize' the climate. (Crutzen, 2002: 23)

Much of this perspective is indebted to the consolidation of non-linear ecological complexity theory that cherishes 'emergence', 'resilience', continuous experimentation, the 'indeterminacy' of nature, and radical openness (Holling, 1973; Folke et al., 2006), but without explicit attention to capital, culture, and politics (see Nadasdy, 2007; Hornborg, 2009). As Bruce Braun (2015) insists, and drawing on Sara Nelson (2014, 2015), we need to historically discern the parallel but contingent ways through which the non-deterministic geo-sciences (including complexity science and resilience theory) emerged alongside the new materialisms associated with more-than-human and object-oriented ontologies (see also Von Heland and Sörlin 2012; Ernstson and Sörlin, 2013; Protevi, 2013; Pellizzoni, 2016a).[1] Both rose to prominence in the context of the deep crisis of capitalism in the 1970s and its attempts to search for a fix to the malaise in the process of neoliberalization (see Walker and Cooper, 2010; Nelson, 2014, 2015). What is at stake here is precisely how a fast-forwarding capitalist neoliberalization can proceed despite, or perhaps because of, an altered ontological premise, and with a storyline that masks what is really at stake. As Luigi Pellizzoni argues:

> The main point is that the indeterminacy or constant becoming of matter and life, a decentred – post or anti-humanist – account of human agency and the contestation of any fundamental separation between matter and cognition are assumed by post-constructionist scholarship to have 'emancipatory' implications, for both human and nonhuman agents. If the building blocks of reality are not fixed – so the argument goes – politics becomes 'ontological' and novel opportunities for change open up. Targeted at the dualisms of naïve or Cartesian realism and of culturalism, however, this argument misses or downplays the politics of ontology inbuilt in the neoliberalization of nature, which builds precisely on these tenets. (Pellizzoni, 2015: 8)

It is here, in the adoption of a symmetrical and relational ontological displacement away from a human-centered ontology, that various AnthropoScenes come together. This displacement has become a creative foundation from where various thinkers have searched for an allegedly post-capitalist politics that operates through horizontal, heterogeneous, and multi-species entanglements. This move stretches from post-industrial spaces where Anna Tsing (2015) has found laboratory environments where unexpected inter-species and organic-inorganic arrangements dwell, to the high Andean landscapes where Marisol de la Cadena

(2015: 3) has carefully uncovered more-than-human collectivities that since the 16th century have resisted 'a war waged against world-making practices that ignore the separation of entities into nature and culture'. In parallel, Deleuze and Guattari's 'immantism', often in dialogue with Isabelle Stengers' (2003) cosmopolitics, has served to articulate the experimental making of 'pluriform' inter-species entanglements, which for Jamie Lorimer and Clemens Driessen (2014) suggest a 'rewilding' of the world as exemplified by the *Oostvaardersplassen* experiment in the Netherlands. Dalby (2017) and Yusoff (2017) have re-considered geo-politics in light of humans' entanglement with geo-physical strata. Taking us deep into the mycelia of her Chthulucene, Donna Haraway (2016) has in turn called for making kin with all manner of heterogeneous siblings rather than gestate children for an already overpopulated (by humans) earth. Among these thinkers, we recognize that some have more explicitly foregrounded a 'relative autonomy' of non-humans, with Nigel Clark (2014), for example, developing a politics of ethical engagement and care as a consequence of the unpredictable, contingent, and often-erratic acting of non-humans. Our key point here, while recognizing crucial distinctions between different thinkers, is that symmetrical relational ontologies have not only served as common foundation for a fundamental rethinking of socio-environmental issues, but that they also stand guarantee for a post-capitalist politics. It is precisely this assumption we interrogate critically here.

This assumption of symmetrical ontological relations has indeed mobilized a new cosmology of earth and life that points to a new horizon beyond the present. Nonetheless, such radical re-scriptings have undoubtedly articulated with capital and neoliberalization in what Bruce Braun, after Elisabeth Provinelli, calls a 'strategic containment' of the more radical futures that symmetrical ontologies of the geo-sciences and post-human theories might hold (Braun, 2015). To put it bluntly, the immanentist ontology of earth's multifarious acting does not in itself guarantee a political transformation. That requires a re-thinking and re-enacting of the political too. Or in other words, not only do we need to on-stage the exteriority of the non-human, but also the exteriorities that cut through the human.

Despite its veil of radical newness that announces a departure from earlier modernity, interpretations of post-human thought could set the stage for a deepening of what capitalist modernization has pursued relentlessly since its inception. While in earlier dominant accounts non-humans were considered to be recalcitrant, uncooperative, and prone to revengeful action when marshalled into capital's subordination and use (Bakker, 2004), a symmetrical ontology permits – at least in discourse and imaginary – a potentially more benign, mutually supporting, sustainable, and resilient assembling of human–non-human relations. This ontology would permit capitalism to propel forward to even greater

heights of socio-ecological knotting while recognizing the acting and the incalculability of the non-human. The excessiveness or supernumerary acting of 'nature' becomes enfolded within capitalism itself. To save the world and ourselves, we need not less capitalism, but a deeper, more intense and radically reflexive form of capitalism, one that revolves around reconstructing DNA and genetic material, forces gas out of shale formations so it can be 'carbon-stored' elsewhere, mobilizes the power of the nuclear to drive the economy, and works to terraform earth in a mutually benign co-constitution. Here we encounter the promise of a renewed and ecologically sensitive 'hyper-reflexive' capitalism that takes seriously both humans' geo-physical force and the material acting of the non-human, while redeeming the sins of the past. It is in this staging of the AnthropoScene, the 'good' Anthropocene, where the new symmetrical relational ontology could function as a philosophical quilt for sustaining and advocating accelerationist hyper-modernizing manifestos (see Ellis, 2011; Ellis et al., 2016; for a critique, see Hamilton, 2013, 2015b; Neyrat, 2014, 2016).

One of the most emblematic bearers of this view is The Breakthrough Institute and its intellectual advocates (Shellenberger and Nordhaus, 2007, 2011). For them and fellow eco-pragmatists (Brand, 2009), the intensified use of nuclear energy, shale gas, climatic geo-engineering, bio-engineering and the development of new eco-techno-machineries (based on sun, wind, and photosynthesis) points toward the promises unleashed by the Anthropocene (see Neyrat, 2016, for a detailed account).[2] Indeed, accelerationist and geo-constructionist manifestos mobilize a reflexive horizontal relational understanding of society–nature. They endorse nature's radical contingencies, while making sure that the existing capitalo-parliamentary order, as Alain Badiou (2008) would call it, remains intact and unchallenged in its universalizing march. As Pellizzoni maintains:

> [T]he ontological turn accommodates both post-humanist and trans-humanist arguments, precautionary and proactionary outlooks, decelerationist and accelerationist claims. And, indeed, the difference between these positions seems to blur. This raises the question of the extent to which non-dualist ontologies help analyze divergences and unrecognized affinities between, for example, new materialist movements . . . and positions like those expressed by the 'Ecomodernist Manifesto', with their plea for an accelerated Anthropocene. (Pellizzoni, 2016b)

In a rebuttal to The Breakthrough Institute's eco-modernist manifesto, Bruno Latour (2011, 2015a) could seemingly not go beyond a feeble 'love your monsters'. Only tender loving care of our produced techno-natural imbroglios can bring hope. Clive Hamilton's (2015b) critique too remains

on the safe terrain of accusing these newly styled eco-modernizers of not properly grasping the cosmology of the post-human turn and its ethico-political implications. While Latour and Hamilton might fully recognize the depoliticizing tenure of the 'good' Anthropocene (see Latour, 2015b), they disavow what is at stake politically and economically for the elites, namely, the socio-ecological survival of capitalist civilization on the one hand, and the way that symmetrical ontologies are being enrolled within its orbit on the other. While The Breakthrough Institute is one example, an earlier, and more institutionally recognized example is undoubtedly the UK's Royal Society 2009 policy document, *Geoengineering the Climate*. Its usual mixture of Promethean promises and can-do fervor (The Royal Society, 2009) has been followed by a range of others (for a review, see Morton, 2015).

Covering up the contradictions of capitalist eco-modernization, the apparently revolutionary new materialist ontologies offer new storylines, new symbolizations of the earth's past and future that can be corralled to help perform the ideological groundwork required to cover up the contradictions of capitalist eco-modernization and help perform the ideological groundwork required. Having come this far, we now turn our attention to how the Anthropocene becomes inserted within politics, the governing of things and people in common.

The Injunction to Biopolitical Happiness

The staging of the AnthropoScenes opens up new promises – from modest, ethically inflected multi-species arrangements, to geo-engineering and geo-management perspectives that supposedly can manicure the dynamics of the earth system. The mainstream interpretation of nature's end, the recognition of an intimate and unbreakable symbiosis between human actions and biophysical processes, really does terminate nature; it suspends the split between humans and nature (Swyngedouw, 2016). In doing so, nature is finally completely *aufgehoben*, rendered null and void. Nonetheless, as Neyrat asserts, 'any relational configuration is asymmetrical, always to the advantage of a colonizing side at the expense of a subservient side – that is why we need a certain distance' (Neyrat, 2016: 34, our translation). If the old nature–society split fuelled practices that put us onto a highway to Armageddon and the potential termination of human life, the spectre opened by the name of the Anthropocene promises humans' active co-construction of the earth's deep geo-physical forces, a promise to turn the prospect of apocalyptic annihilation into the potential for sustaining civilization as we know it, provided that the right metabolic vehicles and the correct geo-engineered technical intermediaries are put into place. And in this AnthropoScene, humans are thought simultaneously as super-powerful subjects and powerless victims (Neyrat, 2016: 83), as both inside and outside.

In what follows, we shall first argue that the openings provided by horizontal relational ontological perspectives could permit reproducing and deepening the immunological desire upon which a (neo-)liberal bio-political governance regime is predicated. Second, this promise assumes nonetheless a strict symmetrical relationality that no longer allows for a constitutive outside. It is a relationality that permits a phantasmagorical scripting of a fully socialized nature.

The De-politicized Politics of the Anthropocene: An Immuno-biopolitical Fantasy

The storylines of the AnthropScenes provide for an apparently immuno-logical prophylactic against the threat of an irremediable external and revengeful nature. They offer a symbolization of the desire of humanity to protect and to immunize itself from the vagaries of a more-than-human acting that has leapt out of the bounds in which the Cartesian dualism of Nature and Culture symbolically tried to cocoon it. With such a tempting offer, it seems understandable why the Anthropocene has been so successful as a signifier – popular and scientific, horrifying and promising, potentially radical, yet utterly reactionary.

Roberto Esposito's analysis of biopolitical governmentality, enhanced by Fréderic Neyrat's psychoanalytical interpretation (Esposito, 2008, 2011; Neyrat, 2010), offers an analytical entry into this conundrum. Esposito's main claim expands on Michel Foucault's notion of biopoli-tical governmentality as the quintessential form of modern liberal gov-ernance. He demonstrates how this biopolitical frame is increasingly sutured by an immunological drive, a mission to seal off objects of gov-ernment from possibly harmful intruders and recalcitrant outsiders that threaten bio-social integrity and security, if not sheer survival, of the population, and guarantees that life can continue to be lived. For Esposito, 'the more humans, as well as ideas, languages and technologies, communicate and are bound up with one another, the more necessary preventative immunization as counterweight becomes', until it becomes the coagulating point of contemporary life (Esposito, 2008: 60). In other words, extending the relational configuration intensifies the immuno-logical drive.

'Immunological' has to be understood here as the suspension of the obligation of communal gift giving. This creates an asylum that suspends one's obligation to participate in the rights and obligations of the com-mons, of the community. The (neo)liberal injunction of individual free-dom and choice is precisely the founding gesture of such an immunological biopolitics, i.e. the ring-fencing of the fragmented and individualized body from its insertion in the obligations and violence that bonds community life (Brossat, 2003) and is, therefore, deeply de-politicizing.

Immuno-politics are at work, for example, in western practices around immigration, health, environment, or international terrorism. A rapidly expanding arsenal of soft and hard technologies is put in place in an ever-denser layering of immunological, technical, infrastructural, and institutional-legal dispositifs – from tighter immigration law and continuous surveillance to the actual construction of steel and concrete walls and barriers, and the proliferation of all sorts of camps and other militarized or policed enclosures. Eco-managerial practices too, articulated around resilience and adaptation, which populate ecological interventions, 'sustainable' technologies, and governance practices seem precisely to re-enforce the immunological prowess of the immune system of the body politic against recalcitrant, if not threatening, outsiders (like CO_2, waste, bacteria, refugees, viruses, ozone, hurricanes, financial crises, and the like) *so that* we can believe that life as we know it can continue. Immuno-biopolitics deepens biopolitical governance in an era of foundational uncertainty and recognized perpetual risk (Neyrat, 2008). With respect to the politics of climate change, Pierre-Oliver Garcia puts it as follows:

> An immunitary power takes control of the risks, dangers and fragilities of individuals to make them live in a peaceful manner while obscuring any form of dissensus. (Garcia, 2015: 321, our translation)

Roberto Esposito (2008, 2011) and Alain Brossat (2003) call this drive immunitary democracy. This is a socio-political configuration operating as an immunity system that guarantees not being touched, that promises immunization. It is a fantasy of a total protection and securitization of life, without exposure to 'risk', a prophylactic closure against the socio-physical relations that produce anxiety, uncertainty, and the risk for bodily disintegration. For Brossat, this is a dangerous fantasy, as the immunitary logic entails nothing else than the destruction of community, of being-in-common. It produces the exposed (the non-immunized) as the flipside of the immunized body, and leads to de-politicization where the immunized become mere spectators of the suffering of others from the cocoon of their sanctuary spaces (Brossat, 2003). What remains is hatred of the other or distanced compassion with others' suffering as flipsides of immunitary distantiation (Kaika, 2017). Of course, as Neyrat (2008) insists, the immunitary dispositif does not really function, since the exposure to risks affects all, albeit not to the same extent.

In relation to refugees, (bio-)security, or economic-financial collapse, immuno-biopolitical gestures customarily succeed in trans-locating risks and fear of collapse and disintegration (while nurturing them all the same) onto the terrain of a crisis to be managed or a situation to adapt to. However, in the face of existing combined and uneven

socio-ecological catastrophe, this immuno-biopolitical dispositif of crisis management is rapidly disintegrating (Parenti, 2011). Indeed, with respect to our socio-ecological condition, the standard technologies of neoliberal governance become increasingly ineffective in sustaining and nurturing the immuno-biopolitical desire that Esposito (2008, 2011) points to and which Brossat (2003) develops further in his *Immunitary Democracy*. Few believe, for example, that the 1.5 degrees Celsius threshold for the limiting of global temperature rise, set by the 'international community', will be achieved, irrespective of the number of COP meetings to be held. Is it not the case that 'earth system governance', geo-engineering, and other eco-governance arrangements leave an uncanny remainder? Are we not left with a gnawing feeling that despite the elevation of the ecological condition to the dignity of a global public concern, the socio-ecological parameters keep eroding further? Indeed, while other 'risks', like refugees, terrorists, and financial markets, are subject to immuno-biopolitical gestures that promise life unencumbered (for the included, and thereby re-producing and expanding the exposed), the environmental biopolitical masquerade captured by empty signifiers like 'sustainability', 'adaptation', or 'retro-eco-engineering' secures at best a palliative for temporary relief. This palliative operates indeed as a *pharmakon*, both poison and remedy (Derrida, 1981).

Drawing on Neyrat's use of Lacanian categories (and signified here with capital letters), the insistent intrusion of the Real of socio-ecological destruction, despite the recurrent promises of a 'sustainable' future, undermines terminally this immunological fantasy script, exposes its unstable core, uncovers the gap between the Symbolic and the Real, and undermines its supporting Fantasy space and discursive matrix. The emperor is without clothes. The incessant return of the Real of ecological disintegration might fatally undermine our drive's primordial energy as we become increasingly caught up in the horrifying vortex of radical, irreversible and uneven socio-ecological disintegration. The Fantasy of eternal life meets the intrusion of the Real of unavoidable but always premature end. A radical re-imagination of the socio-geo-physical constellation of the earth system was therefore urgently called for, a chance to avoid the unbearable reality of an untimely death that is now firmly on the horizon. Within this configuration, as Esposito (2008, 2011) continues, the immunological biopolitical dispositif turns indeed into a thanatopolitics of who should live or die. Achille Mbembe expands on this by suggesting that the 'make live and let die' of biopolitical governance becomes transfigured under generalized neoliberalization into a necropolitics of let live for the included and make die for the excluded as the central figure of a combined but unevenly triaged immunity bio-politics (Mbembe, 2003; see also Gržinić, 2016). In the excessive acting of the immunological drive, the dispositif turns against that which it should protect. It becomes self-destructive in a process of auto-immunization.

The very mechanisms that permitted biopolitical governance in the 20th century – the thermocene of unbridled carbon metabolization and energy production, combined with the capitalocene of accumulation and mass consumption for the few – turned into an auto-destructive process. This auto-immunization process, in turn, isolates the pathological syndrome and treats it as an externalized 'bad' that requires isolation and sequestration (Garcia, 2015: 352–3). In other words, the mechanisms that permit us to make and secure life end up threatening its very continuation.[3] This infernal dialectic, Neyrat argues, is predicated upon re-doubling the fantasy of absolute immunization, the fact that despite the fact we know very well we shall die, we act and organize things as if life will go on forever (Neyrat and Johnson, 2014). It is precisely at a time when the Real of the excessive acting of an externalized threat, in particular in the form of CO_2, cannot any longer be contained and ignored that a widening and intensification of the immunological biopolitical drive is called for (Neyrat, 2014). This procedure, in turn, is predicated upon an ontological shift that internalizes the pathological outsider through a relational matrix that renders it 'governable'. For Esposito (2011), such interiorization of the threatening outsider is precisely the key dispositif of immunological techno-governance. This re-doubling of the phantasmagoric desire for absolute immunization deepens a thanato-political auto-immunization process. It is in this fantasy space, sustained by a human exceptionalism as the sole species capable of preventing its own death, that both the modest and more radically accelerationist AnthropoScenes that accompany the inauguration of the Anthropocene find their ultimate ground. The strategy of adaptive and resilient assembling of the human and non-human in an unpredictable and uncertain world risks deepening this immunological drive (Neyrat, 2014).

The symmetrical human–non-human foundation promises to cut through the unbearable deadlock between immuno- and thanato-politics without really having to alter the historical trajectory of capitalist socio-ecological change. In fact, it deepens it. In psycho-analytical terms, the immuno-biopolitical prophylactic that these AnthropoScenes disclose circulates around the death-drive, the obsessive pursuit of desire that permits covering up the inevitability of death; it is the process that makes sure that we can go on living without staring the Real of eventual (ex-)termination in the eye. While the pursuit of happiness lies in avoiding pain, the death drive, sustained by desire, propels us forward as if we would live forever irrespective of (and even moved along by) the threats we encounter on our journey to the end. The energy of the drive is fuelled by the disavowal of a certain death. It is this hysterical position that guarantees that death remains obscure and distant, an obscene impossibility. Fantasy permits covering up this deadlock.

The AnthropoScenic promise of a radically constructivist materialist ontology brings the whole of the earth system within an

immuno-biopolitical frame. This would guarantee the sustainability of civilization as we know it and push forward life's drive, while, at the same time, deepening auto-immunological disintegration. Such phantasmagoric staging of the AnthropoScene depoliticizes matters. We can allegedly survive without the necessity of facing radically different political choices: a shift in techno-managerial apparatuses, supported by a particular materialist ontological script, will suffice.

It is in this context that we need carefully to scrutinize the presumably radical ontological edifice in which some of the AnthropoScenes are vested. In the transcendence of the nature–society split promised by introducing a human/non-human ontology, the radical otherness upon which relationality is necessarily conditioned is strangely often suspended (with a few notable exceptions that recognize non-human exteriority; see Clark [2014, 2017] and Yusoff [2013]). In other words, the move to a relational-materialist ontology sutures things such that the exteriority that undergirds and structures relationality runs the risk of disavowal. To put it simply, the effort to contain and transcend the nature–society split or dualism through ontologies of internal relationality disavows the separation upon which relationality is necessarily constituted. Or, put differently, split does not equate separation (Neyrat, 2016: 266ff).

A Relationality without Excess

What needs to be foregrounded, Neyrat (2016) argues, is the exteriority or separation that renders a relationship possible, the recognition that there is a non-reconstructable part of the earth. This exteriority, we maintain, must also recognize the possibilities of excessive acting that cut through the 'people' or the 'human' and express class, gender or other divisions. While the separation of yesteryear is turned into a soldering together of the human and the non-human, the multiple exteriorities that co-define the relational configuration have to be recognized too. This is a gesture comparable to Luce Irigaray's position that the dominant structuring of gender relations, occasionally reproduced by feminist thought itself, renders the female invisible and mute, as the male-dominated configuration defines both man and woman (Irigaray, 1985; see Neyrat and Johnson, 2014). Patriarchy renders woman non-existent, mute, or void. Similarly, the capital-labour relation, whereby capital produces both content and provides substance to the body of the worker, will fully define his or her properties. Feminist or working-class politics – the becoming of political subjects – in contrast resides precisely in the process by which the exteriority of the relationship is affirmed, whereby the separation (not the split) between genders or between capitalists and workers is foregrounded. The immanence of exteriority becomes sensible when women become feminists or workers proletarians, a move by which the relational symmetry that announced the

non-existence of the Other is interrupted or subverted by forms of acting, doing, and saying that are subtracted from the existing relational matrix, and cannot any longer be contained within it. Neyrat insists that 'an ecology of separation affirms that without taking distance within a socio-economic situation, no real political decision is possible, no techno-logical choice can really be envisaged' (Neyrat, 2016: 34, our translation). Acting excessive to the bonds and bounds of the relationship opens up precisely the gap that defines the political. As we shall argue below, the excessive or supernumerary acting that interrupts, intervenes in, or undermines a relational constellation is precisely where post-founda-tional political thought discerns the hard kernel of performative political acting and subjectivation (Velicu and Kaika, 2015).

While the one-sided 'modernist' myth of the human–nature split has to be abandoned, the condition of exteriority between and among heterogeneous humans and heterogeneous non-humans has to be recognized and fully endorsed. Without abandoning a relational per-spective that transcends the binary split of the nature–society divide, the focus needs to be squarely on considering the ontology of the relational frame. A relationality that recognizes separation as a con-dition of possibility for relating different entities to one another requires in turn to insist on the heterogeneous, never fully account-able, never closed, potentially excessive or supernumerary interruptive acting of both humans and non-humans. Or in other words, our human and non-human alliances and networks produce outcomes that are, of necessity, not fully integrated within the relations we mobilize to account for them. There are forms of acting that super-sede, transform and, occasionally, undermine the very stability of the relational configuration. To put it simply, natures as well as humans will continue to act in strange, unaccounted for, excessive manners that preclude the sort of Anthropocenic adaptive control and resilient management some eco-modernizers foreground. It is precisely this excess to the relation, the acting over-and-beyond what a relation sustains, that will keep haunting and propel the earth-system in all manner of different, and largely unpredictable, future trajectories. It is within this whimsical acting that sides have to be taken, choices made, and through which political subjectivation unfolds.

These are the moments and places from where disruptive and revolu-tionary transformation is enacted. This unsymbolized acting is, in Žižekian terms, the moment of the return of the Real, the violent intru-sion of the non-symbolized and non-symbolizable excessive component, the stain that disrupts the smooth surface and interrupts the state of affairs (Žižek, 1999, 2002). In such moments, the truth of the situation – the properly obscene character of the AnthropoScene – is revealed for what it is: merely an already failing attempt at subsuming the newly found socio-natural imbroglios within the intensifying and accelerating

circuits of metabolic transformation on which the circulation of capital necessarily rests.

Acting ≠ Political Acting: Re-centring the Political

Where have we arrived in terms of political practice? How can post-foundational political thought help to re-centre the political in a way that embraces the exteriorities of humans and non-humans, while focusing squarely on cutting through decades of de-politicization and neoliberalization? What is a radical democratic practice that moves beyond calls for a multi-species ethics of care and a horizontal-symmetrical pluriverse (Clark, 2014; Hamilton, 2015a)? These are not easy questions to answer, and while any formulation would require it to be situated and provincialized (Lawhon et al., 2014), we believe one possible avenue resides in seeking a political practice that responds to the *three-pronged challenge* that post-foundational political theory has articulated, a political practice that revolves around the excessive or supernumerary acting that interrupts and undermines any relational constellation.[4]

Drawing on a diverse literature (see Marchart, 2007; Wilson and Swyngedouw, 2014), this means, first, to consider political practice to be strictly *aesthetic and performative*. Politics turns around the 'distribution of the sensible', a police order that can be ruptured through the creation of what Ranciére calls 'a polemical scene' within which what was recorded as noise becomes sensible, hearable, and intelligible (Rancière, 1998). The political cannot be 'read off' the social order, but arises out of the excess that no relational order can contain. Second, such performative disruption operates through the axiomatic operation of *equality* when affected bodies, the 'part that has no part' (those who are not accounted for within the existing constellation), demand a rearrangement of the current order – not as a minority to be integrated, but as equals (Rancière, 1998). This foregrounds, and thirdly, a political practice that maintains, as expressed by Alain Badiou, *fidelity* to the truth of the interrupting event such that we 'move within the situation that this event has supplemented, by thinking [our tactics and organizational forms] "according to" the event' (Badiou, 2012: 41). These formulations do not need legitimization on the basis of an ontology of Nature, whether Anthropocenic or otherwise, but through the interruptive and performative staging of equality (Rancière, 1998, 2013; Marchart, 2007).

There is an increasing interest to re-articulate the political within socio-environmental and political ecological discourse. Indeed, the exteriority of any relational configuration, one that asserts the possibility for supernumerary acting, may be what Jane Bennett understands as the political matter of matter (Bennett, 2010: 106). In drawing on Rancière in particular, others have explored this further. For example, Àvila and Ernstson (2018) examine intimate encounters with poisonous scorpions

in bathrooms of Córdoba, Argentina; Cohen (2015) considers escaping zoo animals; and Booth and Williams (2014) articulate 'more-than-human political moments' in relation to wildfires in Australia. These elaborations focus on the ways non-humans might be involved in political speech to express equality. While we agree that contingent non-human acting can and does participate in 'an anarchic disruption of function and place, a sweeping de-classification of speech' (Booth and Williams, 2014: 186, citing Hallward, 2003: 192, these perspectives seem to ignore that such disruptions need *also* to be viewed as taking place within, or are strongly related to, the wider immuno-political dispositif that we outlined above. Rather than weakening the immunitary logic, these more-than-human disruptions are exactly the kind of anxiety-filled disruptive events that immunitarian responses feed off. So, while natures' heterogeneous acting might interrupt the smooth functioning of anthropocentric ontologies and human-nonhuman imbroglios – from hurricanes re-ordering people and things to nuclear reactors blowing up, GMOs rekindling DNA, or new virus strains emerging – it is also this excessive performativity that nurtures concerns with risks and immunization. Simply put, rather than undermining an immunitary logic, they could strengthen modes, mechanisms, and subjectivities of auto-immunization. As argued above, it is precisely in the aftermath of such disruptive events that the immuno-biopolitics of the Anthropocene may perform its most obscene work, the impossible promise that 'humanity' could indeed manage the earth system or even local ecosystems without altering the matrix of existing socio-ecological relations.

The political practice we are searching for, then, needs to make 'a wager' on natures, to articulate and force political choices between this rather than that nature. In doing so, dissensual axes are clarified, lines are drawn and possible future trajectories charted. A re-emergence of the political resides in fidelity, manifested in militant acting, to egalitarian political events that might open a political truth procedure. This involves the emergence of political subjects that maintain a fidelity to the inaugural egalitarian event and aspire to its generalization through sustained actions (Badiou, 2007). With these criteria in mind, we find inspiration (albeit not without reservations) in struggles over land-use like the one against the Keystone XL Pipeline in the USA that brought together diverse groups in disciplined action; but also in militant Andean mobilizations against resource extraction that created, as expressed by De la Cadena (2015: 3), a *mise-en-scène* that challenges 'the transformation of territories into grounds for investment [...] into a relentless demand for politics that reveals, to paraphrase and tweak Rancière, the presence of many worlds being forced into one'.

But it is also imperative to be inspired by supposedly less 'environmental' struggles: the Syntagma Square protests, the Indignados, Occupy!, Black Lives Matter, the feminist-based Kurdish Rojava

communes. Beyond their aspirations to rupture the individualistic and immunological hard kernel of neoliberalism, they are *also and always* political-ecological, producing alternative socio-ecological relations that scholars and activists need to engage with. They help to provoke the question of how militancy, fidelity to the egalitarian event, and the production of new socio-natures might be welded together. In the midst of the Rhodes Must Fall movement in South Africa, writer-activist Leigh-Ann Naidoo spoke of the 'genius' of student-and-worker militancy:

> [The task is] to kill the fallacies of the present. [...] To arrest the present. To stop it. To not allow it to continue to get away with itself for one more single moment. [...] There has to be a measure of shut down in whatever form, for the future to be called. (Naidoo, 2015: 2)

This resonates profoundly with the tactics and militancy required to transform a depoliticized neoliberal-ecological order. The political re-appears here in the fidelity to the practical possibility of the coming community, but without ultimate ontological guarantee in history, geography, Nature, the Party, or the State (Badiou, 2007). Off-staged by so many storylines and narratives, including the AnthropoScenes, the political has to be militantly on-staged as an egalitarian possibility in the here and now. To slowly and relentlessly carve out a new socio-physical reality, often in the face of the most formidable repression and violence, requires continuous political labour and a collective genius, sustained by militant action, painstaking organization and, above all, abandoning the fear of failing, as fail we shall; more-than-human unpredictability guarantees that. Yet, in radically embracing the exteriorities of the socio-natural world, we know from history and everyday experience that more egalitarian ways of being-in-common stand in waiting to be realized.

Conclusion

Placing our notion of the Anthropo-obScene in an uncanny relation to the now popularized term of the Anthropocene, we have attempted to explore the potential de-politicizing processes that accompany the controversies over the Anthropocene and to suggest possible trajectories for re-politicization. Rather than a socio-ecological and historico-geographical description of our situation, as in Moore's Capitalocene (2015, 2016), or in departing from the life-generating co-becomings of Haraway's critters in the Chthulucene, we have developed a post-foundational political perspective that rests on the idea of the political as performative acting, the moment when those who are not counted disrupt the state of the socio-ecological order. We explored how a set of presumably radical

ontological narratives risk silencing or off-staging the supernumerary and excess upon which relationality is necessarily conditioned. This does not in any way suggest ignoring, let alone forgetting, the Real of natures or, more precisely, the diverse, multiple, whimsical, contingent and often unpredictable socio-ecological relations of which we are part. The claim we make is about the urgent need to question the legitimacy of all manner of socio-environmental politics, policies, interventions, and relational ontologies that disavows the constitutive split of the demos by erasing the spaces of agonistic encounter (Mouffe, 2005). The above re-conceptualization urges us to accept the extraordinary variability of natures, insists on the need to make 'a wager' on natures. To the extent that there is an earthly politics, it will have to be one that attests to the heterogeneities that cut through the social, destabilizes any community, interrupts the order of the sensible, subtracts from the relational frame, and – in doing so – proposes and works through forging new egalitarian human–nonhuman entanglements.

Acknowledgements

Notes

1. It is common to refer to C.S. Holling's 1973 essay in theoretical ecology as the foundational paper of non-equilibrium theory. This fails to recognize earlier developments and, in particular, Richard Lewontin's 1969 essay where he developed non-equilibrium ecology on which Holling built. To mention the latter and not the former is an oft-repeated misrepresentation of history in theoretical ecology, somewhat surprisingly repeated by Bonneuil and Fressoz (2016), Braun (2015), and Nelson (2014, 2015). The correction is important since Lewontin went on to develop, with Richard Levins, a dialectical, Marxist and historical interpretation of non-equilibrium ecology (Lewontin and Levins, 1985), while Holling, in contrast, advanced a strikingly managerial and depoliticizing version in the guise of 'resilience thinking' (Folke, 2006), what Nelson (2014) aptly named '[r]esilience and the neoliberal counterrevolution'.

2. For a review, see Hamilton (2013). Interestingly, there is also a Marxist variation of the accelerationist world-view (see, for example, Williams and Srnicek, 2013).

3. Indeed, capitalism, interlinked with, constituted by and enmeshed with colonialism, imperialism and patriarchy, has from its inception exploited women, men, children, soils, forests, animals, seas, lakes, DNA, bacteria, etc., to secure a good life for the few. Many scholars have accounted for this; see,

for instance, Douglass (1986 [1845]), Marx (1967 [1867]), Fanon (1963 [1961]), Haraway (1991), Federici (2004) and Moore (2015).
4. Post-foundational political thought emerged among continental European thinkers from the 1970s in a response to the crisis and failure of state-centred socialism and structural Marxism (Marchart, 2007; Swyngedouw, 2011). It developed in the same decades as both complexity science and new materialist ontologies, but with little mutual recognition.

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