



# O Tempora! O Mores! Interrupting the Anthro-po-obScene

## Document Version

Proof

[Link to publication record in Manchester Research Explorer](#)

## Citation for published version (APA):

Ernstson, H., & Swyngedouw, E. (2019). O Tempora! O Mores! Interrupting the Anthro-po-obScene. In H. Ernstson, & E. Swyngedouw (Eds.), *Urban Political Ecology in the Anthro-po-obscene: Interruptions and Possibilities* (pp. 25). Routledge.

## Published in:

Urban Political Ecology in the Anthro-po-obscene

## Citing this paper

Please note that where the full-text provided on Manchester Research Explorer is the Author Accepted Manuscript or Proof version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version.

## General rights

Copyright and moral rights for the publications made accessible in the Research Explorer are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

## Takedown policy

If you believe that this document breaches copyright please refer to the University of Manchester's Takedown Procedures [<http://man.ac.uk/04Y6Bo>] or contact [uml.scholarlycommunications@manchester.ac.uk](mailto:uml.scholarlycommunications@manchester.ac.uk) providing relevant details, so we can investigate your claim.



# 2

## O TEMPORA! O MORES!

### Interrupting the Anthro-poScene

*Erik Swyngedouw and Henrik Ernstson*

#### Introduction<sup>1</sup>

“The Anthropocene” has become a popularized term to denote a proposed new geological era during which humans have arguably acquired planetary geophysical agency. Despite wide-ranging engagement with the term by natural scientists and geo-engineers to social scientists and humanities scholars (see e.g. Castree 2014a; 2014b; 2014c; Hamilton, Bonneuil and Gemenne 2015), which seemingly indicates the term’s heterogeneous and contentious meaning, we intend to show how the Anthropocene is a depoliticizing notion that risks deepening further an already disastrous capitalist project and its exploitative socio-ecological relations. This disavowal of the political operates, we contend, through the creation of particular “earthly” narratives that lay claim on how humans and non-human materials and organisms interrelate and function as assembled imbroglios. These narratives, albeit by no means homogeneous, constitute what we refer to as “AnthroScenes” that on-stage certain relations and possibilities, while off-staging others. In contradistinction to the Anthropocene, we propose the term *the Anthro-poScene*. Awkward as it may sound, this signifier hacks a popularized term to render its uncannily underbelly visible and sensible. The term draws upon classic Greek theatre’s understanding of “the obscene,” which precisely meant the off-staging of dramatic action that was considered to be too emotionally intense to be shown explicitly, such as sexual conduct, extreme violence, or expressing deep anguish and fear. These acts were still performed, however, but hidden behind a curtain or behind the stage. Out of view and off-staged, the spectator was nonetheless uncannily aware of their invisible and disturbing presence. It is from this perspective that we mobilize “the Anthro-poScene” as our tactic to *both attest to and undermine* the performativity of the utterly depoliticizing stories of the Anthropocene.

In the following, we shall first argue that the Anthropocene constructs a set of stages and performances that disavows a range of voices and ways of seeing. Its ontological constitution renders some forms of acting (human, non-human, and more-than-human) off-stage. More specifically, we interrogate how much Anthropocene-talk has forced things and beings, human and non-human, into a relational and all-inclusive straightjacket that does not allow a remainder, an excess, or outside, thereby permitting and nurturing specific ways of seeing and doing, while prohibiting others. To politicize urbanization and its planetary socio-ecological metabolism, will require, we contend, the foregrounding of how such *off-staging* is a decidedly political gesture, followed by voicing, naming, and making sensible what has been censored and rendered obscene.

In this chapter, we build on a post-foundational view of the political. This perspective understands the political in terms of performance and following Jacques Rancière we view politics as non-ontological and radically contingent.<sup>2</sup> The political is understood as the interruptive staging of equality by the “part that has no-part” (Rancière 1998). The political appears when those that are not normally counted make themselves heard and seen—that is, as perceptible and countable—in the name of equality. The political as performance is thus more concerned with forms of appearance than with existing institutions or processes of policy formulation and mediation (see Žižek 1999; Kalyvas 2009; Swyngedouw 2011). It is this notion of the political, as a form of interruptive acting over and beyond what holds socio-ecological assemblages together, that we are interested in bringing into urban political ecology (UPE) and “Anthropocene”-discussions more generally. Political acting subtracts—or adds—from what is given in any situation. It is the voice, the body, the critter, the organ, the process, for which the normalized order has no name and which cannot be symbolized within the existing order of the sensible. Put simply, the political is the signifier that stands for the immanent rupturing of relations, thereby exploding the myth of the possibility of a fully closed relational constellation.<sup>3</sup> With this strictly performative perspective of politics, there is no grounding in any current or historical order or ontological logic, based on, say, race or class, or the Anthropocene, but the political turns into an aesthetic affair understood as the ability to disrupt, disturb, and reconfigure what is perceptible, sensible, and countable. To politicize thus means to focus on supernumerary forms of acting—human, non-human, more-than-human—that trespass, undermine, and exceed existing situations and relational configurations. This is the dividing line we are seeking to make explicit. We argue that the Anthropocene hinges on a fully closed relational configuration that disavows the political as interruptive performance, making the political unthinkable and un-actable. Our key intervention is to move from a political ontology that grounds itself in certain Anthropocenic narratives, to a situation that foregrounds an ontology of the political as performative (see Pellizzoni 2015).

The chapter is organized in three parts. In the first part, we engage with “the event of the Anthropocene” as Bonneuil and Fressoz (2013; 2016) call it. They suggest how this event inaugurates the recognition of the active role of humans

in co-constructing Earth's deep geo-historical time and problematize this new ontological framing of relational symmetry between humans and non-humans. Yesterday's ontology was, or so the Anthropocene argument goes, predicated upon externalizing Nature (while nonetheless increasingly socializing the non-human) in a manner that nurtured human mastery over Nature. In the second part, we interrogate how this emergent symmetrical relational ontology, variously referred to as more-than-human or object-oriented ontology, which accompanies part of the Anthropocenic narratives, fuels the possibility of a new cosmology, a new ordering of socionatural relations (Stengers 2003; Latour 2005; Coole and Frost 2010; Braun and Whatmore 2010; Morton 2013). Despite its radical presumptions, we contend that this new cosmology permits deepening particular capitalist forms of human/non-human entanglements and that it can be re-inscribed in a hyper-accelerationist eco-modernist vision and practice in which big science and big capital can gesture to be joining hands to save Earth and humanity within a broadening neoliberal frame. We shall argue how such a symmetrical framing articulates with a deepening of what Roberto Esposito (2008) calls an immunological biopolitics, the always failing attempt to immunologize life from harmful intruders or potential disintegration. In the third part, we develop the Anthro-obScene as a discourse and performance that aims to recast the depoliticized story of the Anthropocene. Here we explore the contours of a new politicization of the socio-ecological conundrum we are in, while fully and radically embracing our interdependence with non-humans. It is a view that recognizes exteriority and separation as the condition of possibility for interdependence and relationality. We insist that relationality implies a certain separation and, thereby, the always-immanent possibility of acting that undermines, transforms, or supersedes the existing relational configuration. This opening of the political is predicated on foregrounding the alterities, the radical differences, and heterogeneities that both sustain and undermine any relational configuration and that open up all manner of possibilities for excessive acting that cut through any relational assemblage and render it ultimately unstable and precarious. This is a form of politicization that does not legitimize itself on the basis of an ontology of Nature, whether Anthropocenic or otherwise, but through the performative staging of equality.

### **AnthroScenes: Staging the Anthropocene**

As Christophe Bonneuil and Jean-Baptiste Fressoz observed, the notion of the Anthropocene implies an AnthroScene, the staging of a narrative (or set of narratives) with profound implications that require careful attention (Bonneuil and Fressoz 2016). They offer a range of alternative narratives such as, among others, thermocene, thanatocene, phagocene, capitalocene, and polemocene. William Cronon had already remarked, more than 20 years ago, that any environmental history and re-presentation implies a storyline with its theatrical setting that stages a particular cast of key actors, agents, props, and relations, while of necessity excluding other potential performers and relations (Cronon 1992). Such staged narratives, in

both their showing and non-showing, obscure as much as they elucidate. The irremediable gap between history, as the unfolding of the Real of history on the one hand, and the Story as history's fractured symbolic reconstruction on the other, has to be fundamentally endorsed in an attempt at revealing the Imaginary that desperately tries to cover up the gap, so that we may discern the abyss, the uncanny remainder, that lurks in-between.<sup>4</sup> Of course, 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 social scientists and politicians, the signifier "Anthropocene" conveys a particular set of messages and signals and potential courses for future action (Castree 2014c). Let us delve into some of the key contours of the AnthroPoScenic stage-set and its underbelly.

### ***A temporal disjuncture***

First, the stories of the Anthropocene reflect a strange temporal disjuncture that splits modernity into two—the before and the after. Irrespective of the ongoing debate over the exact moment of its inauguration (Lewis and Maslin 2015; Steffen et al. 2011a), the event of the Anthropocene presumably announces a new socio-geophysical era, one that recognizes that human kind, as a species, has acquired deep-time geological agency.<sup>5</sup> This gesture prompted Dipesh Chakrabarty, among many others, to call for a retroactive re-writing of the world's environmental-cum-social history (Chakrabarty 2009; 2014; 2015) where humans as a generic category have to be inserted in the world's geophysical history as active agents in the making of their own combined earthly past and future. With this move, the "modernist" split between the physical world and humans is finally relegated to the dustbin as an archaic, uneducated view that can be transcended through a new relational web of mutual determination between humans and nature—or so it seems. What we note here however is how this retroactive re-writing of the world's geo-social history radically obscures and silences what has been an integral part of the modernist trajectory all along. Throughout modernity, many interlocutors already recognized the role of (some) humans as active agents of Earth's transformation, and this has been a key ingredient of many modernist visions and analytical frameworks. At least since the eighteenth century, political economics and geo-scientists *avant la lettre* insisted on how human history is a history of rekindling the Earth in an intimate relational articulation. Marx (1959 [1844]) famously quipped: "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." Charles Fourier, another nineteenth century thinker, lamented in his *De la détérioration matérielle de la planète* (1847 [1821]) that "climate disorders are a vice inherent to civilized culture," going on to argue that a more socio-ecological benign Earth would require a transformation of this civilization (cf. Bonneuil and Fressoz 2016, 257; Fressoz and Locher 2010). In fact, Bonneuil and Fressoz demonstrate how modernity has been marked by a continuous battle unfolding between, on one the hand, advocates of a sustained society-nature

dichotomy and man's (*sic*) manifest destiny to be master and commander of his external conditions of existence and, on the other hand, proponents of a more modest and socio-ecologically sensitive mode of conduct and engagement, a process that would require a transformation of *both* social and ecological relations.<sup>6</sup> The long genealogy of intellectuals, who already in the nineteenth century called for what we might today label an AnthroScenic storyline, one that emphasizes co-construction between humans and nature, continue to be scripted out and silenced, thereby skilfully 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 victory of one side in a fierce confrontation between radically opposing views (Bonneuil and Fressoz 2016). It is for this reason that Bonneuil and Fressoz suggest the name “Polemocene” to signal the deeply polemical, contested, and conflicting cosmologies and political views that animated and still animate the unfolding of modernity and the making of the Anthropocene.

The event of the Anthropocene is nonetheless foregrounded by most analysts as a moment of rupture of the temporality of modernity understood as monolithic and total, thereby dividing its history in an arguably un-reflexive (pre-)modernity and a post-evental reflexive (post-)modernity, a simple before and after. It is just a matter for the International Commission on Stratigraphy of the International Union of Geological Sciences to decide on the exact date. The proposed rupture splits time and its geo-history into two. In doing so, modernization as an internally fractured and highly contentious process of continuous conflicting and politically contested transformations becomes reframed as a singular and teleological movement of the unfolding of modernity's history. Yet modernity is not a single-headed process that now has been surpassed. As Frédéric Neyrat (2016, 117, our translation) 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, [it is] a political division.

It is the double-headed internal struggle between those that view nature as outside, as extra-terrestrials, and those who fight from the inside, as Earthlings working in and with the non-human, where the political battle-lines need to be drawn and which predate as well as postdate the event of the Anthropocene. This includes recognizing that the Earthlings are configured within heterogeneous and power-laden inter-human and non-human constellations and their constitutive, and often conflictive, relations.

### ***A symmetrical ontology***

Second, much of AnthroScenic thought has adopted a symmetrical relational ontological displacement away from a human-centred ontology. This ontological shift, in turn, announces allegedly a new political ontology that articulates around

hyper-reflexivity, horizontality, immanence, contingency, and symmetry that calls for and is supported by an ethics of care. The development of post-human thought as a critique of capital and its power to shape the trajectory of modernity, not least from the likes of Haraway (2015) and Garuba (2012), is certainly crucial in shaping revolutionary subjectivities against capitalist, patriarchal, and neo-colonial structures of knowledge. However, what is troubling is how others, from what might be called a “de-caffeinated” post-human school (including as diverse thinkers as Chakrabarty 2009; Morton 2013; Hamilton 2015a; Latour 2015a; 2015b), can at times be mobilized and certainly misread in support for eco-modernist projects. Quite at work is an interweaving between Promethean geo-engineering and reconstruction of the Earth’s more-than-human dynamics and a symmetrical, mutualistic ontology that can render Earth an intricate intertwined socio-ecological imbroglio that with proper and loving supervision and careful techno-natural nurturing and man-icuring, permit an imaginary that promises both a more modest and an egalitarian future. For example, is it not telling that the belated recognition of Gaia as an Earth system’s science in which humans and non-humans interweave, seems to *also* offer the best guarantee for the blinkered (eco-)modernist call of a total management and careful “adaptive” massaging of the Earth system, to not only support, but indeed accelerate, a capitalist project?

The nurturing of a symmetrical view comes at a time when the infernal consequences and theoretical trappings of the dualist trajectory of relating to nature, the victorious ontology of capitalist modernization, became all too evident to ignore in the Real of the actually existing climatic and environmental catastrophe. The hegemonic Promethean and dualist vision of the human/non-human relationship had to be revisited and revised if civilization as we know it is to continue for a while longer. Indeed, the accelerating enrolment of non-human matters and lives within the circuits of capital circulation and accumulation throughout modernity has produced a series of both anticipated and unexpected outcomes. These dynamics not only propelled the ecological condition to a major concern of a global elite, but it also ruptured the very ontological foundation of the nature-society split that had served them so precociously in nurturing and legitimizing the deepening of human/non-human entanglements during the past few centuries.

While the Promethean dualistic symbolization of the world permitted precisely the knotting of the social and the physical as control and mastery, the gap between this symbolization and the excessive acting of the intensifying socio-ecological transformation of Earth and its socio-physical-ecological dynamics could no longer be covered up by a fantasy of hierarchical and total control of a presumably external nature. The horrifying consequences of man’s (*sic*) intervention became all too clear and sensible. The current re-ordering of the elite’s cosmology imposes itself with great urgency in a bid to make sure that nothing really has to change. And it is one that has to be in line with the most recent insights of Earth systems and cognate scientific insights, and into which hand newly fashioned symmetrical ontologies risk playing. What is at stake here is precisely how the promise of a fast-forwarding capitalist modernization can

proceed unheeded *through* an altered ontological premise, and with a different storyline to mask what is really at stake.

In this shift from a Promethean relation to nature to a symmetrical one, the expert protagonist changes from the engineer to the ecologist. Ecology is the science of biophysical relations, a scientific discourse much more in tune with the breathing rhythm of life than engineering ever was. And while many ecologists have used their science to critique the nexus of capital and power (for example, Rachel Carson and Richard Lewontin), the discipline also carries a long legacy of nurturing an imaginary of itself as capable of assuming a global supervisory role in managing the world's local and global ecologies. Peder Anker's *Imperial Ecology*, for example, narrates how ecology grew within the British Empire from the early 1900s onwards into the science *par excellence* that gestured to be able to integrate all other sciences—natural and social—into a meta-framework for manicuring, controlling, and exploiting optimally the environments and peoples of the colonies, often with racist and moralizing overtones (Anker 2001). Ecologists and British intellectuals Julian Huxley and Herbert George Wells popularized the discipline further. Inspired by and in collaboration with George Tansley himself, often deemed the father of ecology and the coiner of the term “the ecosystem” in the late 1800s, they argued in the 1930s for “creating,” as phrased by Anker, “a scientific brotherhood or a board of directors of the economy of nature to steer the world” (Anker 2001, 235). In the 1960s, this pattern was repeated with the ecology-inspired book *A Guide for the New Masters of the World*, with “masters” referring to these new managers-cum-scientists. While further treatment is needed on how this history has shaped contemporary ecology, we here note how an influential subset of contemporary ecologists have made the unrelenting call for “Earth system Governance” (Biermann 2007; Biermann et al. 2012) and “Planetary Stewardship” (Steffen et al. 2011b) that conjures on stage the role of supervisors, experts, and “masters,” albeit cushioned rhetorically within ideas of “adaptive” co-management and governance. While there are notable differences from their predecessors, this urge to take on the burden to help navigate the world in a beneficial direction—and without foregrounding a critique of capital, knowledge, or patriarchy—seems to run as a thread through the discipline of ecology, especially the perspective that is concerned with resilience and complex adaptive systems theory.<sup>7</sup> As before, critique is evacuated, and a stage is built on which ecologists and climatologists can claim expert knowledge, although this time around it is not the material needs of Empire that intermingles with their claims, but the story of the importance of producing a “good Anthropocene” (Hamilton 2015b).

### ***A new cosmology***

Third, there is tendency in how symmetrical and flat ontologies are mobilized into a new cosmology of Earth's bio/geophysical system and staged as a necessary relational perspective that can foster a continuation of civilization as we know it. 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, the symmetrical ontology of the AnthroScene permits—at least in discourse and imaginary—a potentially more benign, mutually supporting, and sustainable assembling of human/non-human relations, a constellation that would permit capitalism to propel forward to even greater heights of socio-ecological knotting. Here we encounter the promise of a renewed and ecologically sensitive capitalism that takes seriously both the geophysical force of humans and the material acting of the non-human, while redeeming the sins of the past. Indeed, in the staging of this AnthroScene as the “good” Anthropocene, the new symmetrical relational ontology with its veil of radical newness runs the risk of functioning as a philosophical quilt for sustaining and advocating an accelerationist hyper-modernizing and neo-Promethean manifesto (Ellis 2011; Hamilton 2015b). Saving both capital and nature now squarely resides in deepening our socio-ecological assemblages, in intensifying our relationship with nature. An early example is undoubtedly the UK's Royal Society 2009 Policy document, *Geoengineering the Climate*, with its mixture of Promethean promises and can-do fervour (The Royal Society 2009). We need not less capitalism, but a deeper, a more intense and radically reflexive form of capitalism (Moore 2016).

One of the most iconic bearers of this view is the Breakthrough Institute (BI) and its intellectual protagonists (Shellenberger and Nordhaus 2007; 2011). Drawing upon, and at times misreading post-human theorists, the Breakthrough Institute is a vocal proponent of what we refer to as a hyper-accelerationist view and helps to clarify what is at stake. For them and fellow “eco-pragmatists,” the intensification of nuclear energy use, shale gas exploitation, large-scale climatic geo-engineering, bio-engineering, and the intensified development of new eco-techno-machineries points to the promises to be both unleashed by and realized in the Anthropocene while making sure that the existing capitulo-parliamentary order, as Alain Badiou would call it, remains intact and unchallenged as a universal order. These accelerationist manifestos mobilize a reflexive relational understanding of society–nature relationships to underpin an environmentally Promethean-modernist platform that calls for a radical geo-engineering of a more-than-human Earth in an effort to save both planet and capitalism.<sup>8</sup> And it is precisely through such geo-constructionist strategy, so their argument goes, that humans' impact on nature can be minimized and a more reflexive and nurturing relationship can be sustained. Although some interlocutors fully recognize the depoliticizing tenure of the “good” Anthropocene (see Latour 2015b), the same interlocutors disavow what is at stake politically and economically, namely the socio-ecological survival of capitalist civilization as we know it. What is often missed is how the apparently new and revolutionary symmetrical ontologies offer a storyline, a new symbolization of the Earth's past and future that performs the ideological groundwork that capitalism urgently needs in order to continue what it does despite the fact that we know that the uneven and combined socio-ecological geographies that sustain capitalist development will only intensify.<sup>9</sup> In other words, the various ontological politics inaugurated by the Anthropocene are decidedly Janus-faced.

The connection between big capital (as in geo-engineering), big science (as in Earth system Science), and the partial enrolment of newly fashioned symmetrical ontologies to shape various AnthroScenes (as in critical social theory and humanities), can be traced to the deep crisis of capitalism in the 1970s. Following Bruce Braun (2015), who draws on Sara Nelson (2014; 2015), both the consolidation of non-deterministic geo-sciences (including complexity science and resilience theory) and the new materialisms associated with more-than-human and object-oriented ontologies 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 also Walker and Cooper 2011; von Heland and Sörlin 2012; Protevi 2013; Pellizzoni 2016). While parts of the social sciences and humanities developed a “flatter” and radically symmetrical ontology, the natural sciences had already discarded the linear systems model of Cold War cybernetics, one that promised command and control for every step on the road if initial conditions were known, to nurture new grand narratives based on complex adaptive systems theory that emerged and replaced the linear model.<sup>10</sup> This apolitical version of science and ecology resonated strongly with chaos mathematics, network analytics, and non-equilibrium economics, theories that became increasingly influential from the 1980s and onwards, composing as it were, after the fall of the Berlin Wall and what Francis Fukuyama had proposed as “the end of history” (Fukuyama 1992), a scientific way forward for grand thinking that was environmentally sensitive in a post-ideological time, but retained a strong techno-managerial focus. A key ingredient in its making and success is how this framework permits the ontological integration of everything into a “social-ecological system,” which conceptually and materially includes all things human and non-human, while advocating, superficially at least, a more modest ambition not of total control, but of “adaptive governance,” a dynamic self-organizing, decentered and decentralized, and inclusive multi-scaled “Panarchy” system (Holling and Gunderson 2002; Folke et al. 2005).<sup>11</sup> As theory and storyline, this discourse can fully recognize on one hand “true uncertainty” of socionatural entanglements, but on the other hand still proceed to develop grand management procedures, from the local to the global. “True uncertainty” becomes the *raison d’être*, the quilting point around which “resilience” and “adaptive governance” turns with the effect of stretching out this ecological or “resilience thinking” into nooks and crannies of the social, the ecological, and the political. Because of “true uncertainty,” its pundits would claim, the active involvement of all parts of society is needed to carry out management procedures. While debates and denouncements exist among climate scientists of geo-engineering (Barrett et al. 2014), it forms part of the storylines of a well and adaptively managed planet: “Earth 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 (2002) himself did not rule out geo-engineering projects “to ‘optimize’ [the] climate” and insisted that the Anthropocene inaugurated a shift from manipulating the environment in the interest of humanity, to the promises of a geo-engineering of Earth as an entangled human/non-human whole. His fateful,

yet adjuring concluding remarks in his 2002 article *The Geology of Mankind* rings of Huxley and Wells' suggestion of "a scientific brotherhood" to steer the world from the 1930s:

A daunting task lies ahead for scientists and engineers to guide society towards environmentally sustainable management during the era of the Anthropocene. This will require appropriate human behaviour at all scales, and may well involve internationally accepted, large-scale geo-engineering projects, for instance to "optimize" climate.

*Crutzen (2002, 23)*

We have so far demonstrated how three aspects of the AnthroScene—a temporal disjuncture, a symmetrical ontology, and a new cosmology—set particular narrative stages with the effect of depoliticizing our socio-ecological predicament and leaving it in the hands of experts. We now move to interrogate how the Anthropocene has been inserted into the art of governing.

### From biopolitical governance to necropolitics

The staging of the AnthroScene inserts humans as active agents into what hitherto was largely understood as an inert field of non-human forces. This opens up, as we have outlined above, all manner of new possibilities, ranging from calls for a more modest and "adaptive" human/non-human articulation, to advocating geo-engineering and geo-management perspectives to manicure the dynamics of the Earth system. Understood from the perspective of capital, however, what becomes visible and within reach is an extraordinary new frontier, this time in the name of saving not just humanity but the whole Earth with it.

We are here at the dawn, therefore, of a deeply disturbing reinterpretation. A new worldly cosmology is taking shape whereby critical ontologies of post-human relationality, post-modern hyper reflexivity, and "true uncertainty" of complex systems are mobilized in a manner that is radically conservative, one deviously blind to the multiple asymmetries that shape the socio-ecological dynamics of an earthly world co-constituted through human action. While the practices from yesteryear and based on the old nature–society split had put the socio-ecological Earth system onto a highway to Armageddon, with the termination of human life at the horizon, the spectre opened by the name of the Anthropocene has actively been used to promise humans' active co-construction of Earth's deep geophysical forces. This in turn has come to prefigure the possibility to turn the prospect of apocalyptic annihilation into the potential for accelerating civilization as we know it, provided that the right metabolic vehicles and the correct geo-engineered technical intermediaries are put into place.

In what follows in this second section of our chapter, we will first argue that the promise of this horizontal relational ontological perspective permits reproducing and deepening the immunological desire upon which an already existing liberal

biopolitical governance regime was founded. This possibility is nonetheless, and second, predicated upon positing 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, one that finally can be manicured through “adaptive” micro- and macro-engineering of human/non-human relations. The AnthroScene truly puts the non-human off-stage. We conclude that there is a profound re-articulation of environmental politics unfolding, one that is primarily aimed at depoliticizing the environmental question but doing so in a highly politicized manner.

### ***The depoliticized politics of the Anthropocene: An immuno-biopolitical fantasy***

As suggested above, the AnthroScene provides for an apparently immunological prophylactic against the threat of an irredeemably external and revengeful nature, a more-than-human material acting that has Really leapt out of the bounds in which the Cartesian dualist “mastery of nature” tried to cocoon it symbolically. Nonetheless, we still have to account for the AnthroScene’s formidable performativity and its discursive success as a signifier that is popular and scientific, horrifying and promising, potentially radical yet utterly reactionary. How can this god-like trick be accounted for? And how can we cut through this deadlock whereby apparent critical and radical thought can be marshalled into the service of a reactionary continuation, if not deepening, of the obscene trajectory on which “humanity,” or rather a particular social and geographically situated sub-set of humanity, embarked a long time ago?

Roberto Esposito’s analysis of biopolitical governmentality, enhanced by Frédéric Neyrat’s psychoanalytical interpretation, may begin to shed some light on this deadlock (Esposito 2008; 2011; Neyrat 2010). Esposito’s main claim expands on Michel Foucault’s notion of biopolitical governmentality as the quintessential form of modern liberal state governance by demonstrating how this biopolitical frame is increasingly sutured by an immunological drive, a mission to seal off objects of government (the population) from possibly harmful intruders and recalcitrant or destabilizing outsiders that threaten the bio-social happiness and socio-ecological integrity, if not sheer survival, of the population. “Immunological” has to be understood here as the suspension of the obligation of mutual communal gift-giving, a form of asylum that suspends one’s obligation to participate in the rights and obligations of the commons, of the community. The (neo)liberal injunction to enjoy individual freedom and choice is precisely the founding gesture of such an immunological biopolitics, i.e. the accelerating ring-fencing of the fragmented body from its insertion in the obligations and violence that bonds community or common life, from the socio-ecological imbroglios that we inhabit (Brossat 2003). And it is precisely immunitary biopolitical governance apparatuses, i.e. a set of practices, rules, institutions, and techno-managerial proceedings, that work to create an imaginary sense of protection and sequestration.

Immuno-politics are clearly at work, for example, in hegemonic Western practices around immigration, health, 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, digital, and institutional-legal dispositifs—from tighter immigration law and continuous surveillance and big-data profiling 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.<sup>12</sup> Similar examples can be identified in the strict cordoning off when infectious diseases threaten to spatialize in manners that could penetrate the immuno-engineered eco-topian bubbles of the elite's local life. For us, we see a parallel in that much of the sustainability and eco-managerial practices that populate ecological interventions, smart technologies, and governance practices are precisely aimed at re-enforcing the immunological prowess of the immune system of the body politic against recalcitrant, if not threatening, outsiders (like CO<sub>2</sub>, waste, bacteria, refugees, viruses, ozone, financial crises, pollution, and the like) *so that* life as we know it can continue. Immuno-biopolitics deepens biopolitical governance in an era of uncertainty and recognized perpetual risk (Neyrat 2008). As Pierre-Oliver Garcia (2015, 321, our translation) puts it: “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.”

Roberto Esposito and Alain Brossat (2003) call this “immunitary democracy.” This is a social configuration operating as an immunity system that guarantees not being touched, of being immunized. It is a fantasy of a total protection and securitization of life, without exposure to “risk.” For Brossat, this is a dangerous fantasy, as the immunitary logic entails nothing else than the destruction of community, of being-in-common. Necessarily, this logic creates the continuous production of the exposed (the non-immunized) as the flipside of the immunized body and leads to depoliticization; the immunized becoming mere spectators of the suffering of others from the cocoon of their sanctuary spaces. As Maria Kaika (2017) argues, such immunological sanctity space offers only either hate or compassion for the threatening intruder, while sustaining their expulsion into the peripheral zones of refugee camps, migration enclaves, and imposed exclusion where life remains bare.

Of course, as Neyrat (2008) insists, the immunitary dispositif does not Really function as the exposure to risks affects all, albeit not all to the same extent. In relation to refugees, (bio-)security, and economic-financial collapse, the immuno-biopolitical gesture often succeeds in translocating risks and fear of collapse and integration (while nurturing them all the same) into a terrain of a crisis to be governed or a situation to adapt to or become resilient against. However, this immuno-biopolitical dispositif of crisis management is rapidly disintegrating in the face of the Really existing uneven and combined socio-ecological catastrophe. Indeed, with respect to our socio-ecological condition, the standard apparatuses of neoliberal governance that sustain and nurture the immuno-biopolitical desire that Esposito points to as the primary logic of neoliberal governmentality become increasingly ineffective. Few believe, for example, that limiting global temperature

rise to 1.5 degrees Celsius, a threshold set by the “international community,” will be achieved irrespective of the number of COP meetings on climate change that the United Nations will organize.<sup>13</sup> Is it not the case that the immuno-biopolitical managerial tactics of Earth system governance, geo-engineering, and other eco-governance arrangements leave an uncanny remainder? Are we not left with the 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? In spite of the combination of market-led adaptation and mitigation strategies that were argued to provide a safety-wall against further climate change, the Real of the ecological disintegration still gallops forward. While other “risks” (economic, refugee, or geopolitical/security crises) are subject to immuno-biopolitical gestures that promise life unencumbered (for the included, thereby re-producing and expanding the exposed) in the face of potentially lethal threats by means of deepening immunological management, screening, and techno-shielding, the environmental biopolitical masquerade—invariably captured by empty signifiers of sustainability, adaptation, resilience, smart development, or retro-eco-engineering—secures at best a palliative for temporary relief.

The insistent intrusion of the Real of socio-ecological destruction undermines terminally this immunological fantasy script, exposes its unstable core, uncovers the gap between the Symbolic presentation of a sustainable earth-in-the-making and the Real of rapidly degrading socio-ecological conditions in many parts of the world, and undermines its supporting discursive matrix, thereby threatening the coherence of the prevalent socio-ecological order. The incessant return of the Real of ecological disintegration might fatally undermine our drive’s primordial energy as we are increasingly caught up in the horrifying vortex of radical and irreversible socio-ecological disintegration. The fantasy of eternal life meets the Real of its unavoidable but always premature end. A radical re-imagination of the socio-geophysical constellation of the Earth system was therefore urgently called for, barring the unbearable Reality of an untimely death that is now firmly on the horizon. The uncanny feeling of anxiety that all is not as it should be, that keeps gnawing, is sublimated and objectified in the horrifying “thing” around which both fear and desire become articulated.

As Roberto Esposito argues, the immunological biopolitical *dispositif* turns indeed into a *thanatopolitics*, of who should live or die. This revives for Achille Mbembe the long history of *necropolitics*, which, as in slavery, is imposed on the excluded as indeed the flipside of the immunological biopolitical fantasy. While liberal biopolitics revolved around “making live and let die,” immunological *necropolitics* triages humanity around “letting live and make die” (Mbembe 2003; Gržinic 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 twentieth century—the thermocene of unbridled carbon metabolization and energy production to fuel both capital accumulation and middle-class mass consumption—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, 352–53). In other words, the mechanisms that permit making and securing life end up threatening its very continuation. This infernal dialectic, Frédéric 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<sub>2</sub>, cannot any longer be contained and ignored that a widening and intensification of the immunological biopolitical drive is called for (Neyrat 2014), a procedure predicated upon an ontological reversal that internalizes again the pathological outsider in order to render it “governable,” while re-doubling the phantasmagorical desire for absolute immunization, a process that deepens further 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 geo-imaginaries that accompany the inauguration of the Anthropocene find their ultimate ground (Neyrat 2014).

The symmetrical human/non-human foundation (compared with the ontological split between nature and culture of yesteryear) on which many of the AnthroScenes rest, promises indeed to cut through the unbearable deadlock between immuno- and thanato-politics without really having to alter the trajectory of socio-ecological change. In fact, it deepens it. In psycho-analytical terms, the immuno-biopolitical prophylactic that the AnthroScene discloses 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 and the promise of enjoyment, propels us forward as if we would live forever irrespective of (and even moved along by) the threats, risks, and obstacles we encounter on our journey to the end. The energy of the drive is fuelled by the disavowal of a certain death. It is the hysterical position that guarantees that death remains obscure and distant, an obscene impossibility.

The AnthroScenic promise of a geo-engineered Earth, or—for a more modest and nurturing society–nature relationship—the fulfilment of a constructivist symmetrical materialist ontology, brings finally the whole of nature, the Earth system as a totality, within an immuno-biopolitical frame that guarantees the sustainability of civilization as we know it, the continuation of life’s drive. The outsider that threatens the integrity of our socio-spatial matrix (Nature as we knew it) is duly brought within an ontological frame that opens the possibility for its total incorporation. Such phantasmagorical staging of the AnthroScene depoliticizes the matter of nature. We can survive and do so without the necessity of facing political actions and radically different political choices. A shift in the techno-managerial apparatuses, supported by a new political ontology of a more-than-human world that acknowledges uncertainty, contingency, and risk will suffice.

This gesture confidently projects our survival into eternity without considering the need or potential for a transformation of socio-natural relations themselves, for the need to think and practice a new politics; it invites and nurtures techno-managerial adaptations to assure the “sustainability” or “resilience” of the existing. The class, gender, and neo-colonial conflicts and struggles that are an integral and defining part of the uneven and combined socio-ecological process called capitalism are disavowed or repressed and political struggles around questions of equality, freedom, and emancipation foreclosed as the promise of a different socio-ecological governance and management regime will suffice to secure the survival of the world as we know it. While previous socio-technical arrangements and intermediaries to mitigate human’s eco-physical imprint (from carbon trading to the manufacturing of carbon sinks and alternative energy sources) could at best only provide a palliative to postpone for a while the Endgame of an inhabitable Earth, the AnthroScene, in its eco-modernizing straightjacket, offers the promise of radical reinterpretation so that nothing really has to change; it promises the crafting of a manageable inhabitable Earth, one that guarantees our survival, freed from the uncertainties (while fully endorsing a reflexive consideration of the associated risks) and destructive acting of an external nature, one radically split from the human, and rapidly veering out of control (Neyrat 2016).

It is in this context that the presumably radical and critical ontological edifice in which the AnthroScenes are vested requires careful scrutiny. In the transcendence of the nature–society split or dualism, promised by introducing a human/non-human ontology, the radical otherness upon which relationality is necessarily conditioned is strangely suspended. In other words, the move to a relational new materialism sutures things such that the exteriority that undergirds relationality runs the risk of disavowal. Or, differently put: the effort to contain and transcend the nature–society split or dualism through ontologies of internal relationality disavows the separation upon which relationality is constituted (Neyrat 2016, 266ff.).

### ***A relationality without excess***

While a more-than-human cosmology embraces a relational ontology that disavows exteriority, and thereby subscribes to a relational unity between the human and non-human, it opens up the spectre of annihilating relationality itself. And with this, the off-staging of the political itself. What needs to be foregrounded, therefore, is the exteriority or separation that renders a relationship possible. 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). Patriarchal gender relations render woman non-existent, mute, or void. Similarly, the symbiotic relationship that goes under the signifier of “class” is equally one that renders the worker invisible and non-acting. The capital–labour relation, whereby capital produces both content and substance to the body of the “worker,” defines his or her properties. Feminist or working-class



politics—the becoming of feminist of proletarian political subjects—in contrast, resides precisely in the process by which the exteriority of the relationship is affirmed, whereby the separation between genders or between capitalists and workers is foregrounded. When “woman” or “worker” refuse to continue to assume the role and place assigned by the class or patriarchal relations through which these places and functions are assigned. The immanence of exteriority become symptomatically sensible when women become feminists and 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 what cannot any longer be contained within the existing relational matrix. These are moments that open up potentially new possibilities of emancipatory politicization.

This too holds for socionatural constellations. While the one-dimensional Promethean and modernist myth of the human–nature split has to be abandoned fully, the radical difference, the condition of exteriority, between and among heterogeneous humans and heterogeneous non-humans has to be recognized and fully endorsed. Without abandoning a relational perspective 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 condition of possibility for creating relations, requires us to insist on the immanent possibilities of excessive, supernumerary acting of all sorts of both humans and non-humans in the unfolding of the socio-geo-ecological past and possible futures. Or in other words, our human and non-human alliances and networks produce outcomes that are, of necessity, not fully integrated within the relations that produced them. There is always a remainder, a gap, an inconsistency, a hard bone or stain that resists incorporation, something that stubbornly refuses to be a cooperative actor in the relational assemblage. It is those remainders that open up possible forms of acting that supersede, 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, subtracted from the relational configuration, which preclude the sort of Anthropocenic control and management some pundits foreground. It is precisely this excess to the relation, the acting over-and-beyond the ones sustained by the relational frame, which will keep haunting and propel the earth system and Earthlings in all manner of different, and largely unpredictable, possible future trajectories. It is within this whimsical acting that sides have to be taken, choices made, and through which political subjectivation unfolds.

This, we would insist, is part of the AnthroPoScenic stage while simultaneously hiding the very truth of its own script. The signifier of the Anthropocene heralds the advent of a socio-ecological symmetrical ontology in the unfolding of the Earth’s history, past and future. The genesis of the term points to a moment in the past (still under dispute) as the founding moment, the year Zero, from whence onwards the external relationality—the split—between humans and their environment turned into an internal relationality of complex mutual determination and co-transformation. Yet, it is precisely the actual history of the Anthropocene that signals

the truth of the relational exteriority. As many, from Marx onwards have argued, the Earth's futures are socio-ecologically scripted, whereby the heterogeneous supernumerary actings of multiple players produce all manner of different possible trajectories and thus possible future histories. It is the excessive, supernumerary acting, the acting over and beyond the bounds of the relational assemblages, that pulls time forward, precisely by interrupting the symmetrical co-existence while nonetheless accepting contingency and uncertainty. These are the moments and places from where transformation is enacted. This unsymbolized acting is, in Žižekian terms, the moment of the return of the Real, the violent intrusion of the non-symbolized and non-symbolizable excessive component, the stain that disrupts the smooth surface and interrupts the state of affairs. In doing so, the truth of the situation, the properly obscene character of the AnthroScene is revealed for what it is, merely an already failing attempt of subsuming the newly found socionatural 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 in the Anthropocene**

The exteriority of the relational configuration may be what Jane Bennett understands as the political matter of matter (Bennett 2010). Non-human “stuff” acts in not always entirely predictable manners within a socionatural relationship and asserts the possibility for supernumerary acting, the excess of the relational configuration, and the stubborn refusal of its annihilation in a strictly symmetrical assemblage. Indeed, plastic piles up in the oceans, dams break down, nuclear reactors melt, planes fall out of the sky, infrastructure networks fail, GMOs inserted in the environment rekindle DNAs in non-predictable manners, particulate matter settles in lungs, nano-particles and new materials mingle with human organs and non-human things, or new virus strains emerge. In doing so, nature's heterogeneous acting transgresses the bounds of the human/non-human constellations, destabilizes the order of things, and interrupts the smooth functioning of the human/non-human imbroglios. Such acting outside the bounds of the socio-ecological matrix is undoubtedly performative. It has all manner of consequences, both for humans and non-humans as well as for human-human and human-non-human relationships. It is this excessive performativity that nurtures concern with risk, adaptation, resilience or immunization. In this sense, the supernumerary acting of various natures sustains all manner of anxieties and a feeling of uncanny risks—something that the Anthropogenic forcing may have intensified—that are sublimated in a permanent fear of breakdown, intrusion, and possible collapse. As argued above, it is precisely here that the immuno-biopolitics of the Anthropocene may perform its most incisive work, the impossible promise of a fully managed and manicured Earth system.

Nonetheless, nature's acting out of the bounds of its relational constitution should not be equalled with political acting. While having profound and always uneven consequences, which invariably enter the theatre of politics, political acting

should be understood as the interruptive acting *under the aegis of equality and freedom* that radically affirms the capacity of each and everybody to govern the commons collectively (Swyngedouw 2014). While the controversies over the Anthropocene are mobilized in all manner of ways, suggesting indeed a politicization of the stuff of things, the “political” cannot and should not be grounded on the eventual truth of the Anthropocene. There is no code, injunction, or ontology that can found and thus legitimize a new political ecology.

The ultimate depoliticizing gesture resides precisely in letting the naming of a geo-social epoch decide our politics. It is yet again a failing and obscene attempt to ground a new politics on a contested truth of nature. “The political,” as we understand it, is nothing else than the signifier of the radical heterogeneity that cuts through the “us” or the “we,” and affirms the radical heterogeneity that separates “the human” from itself, that signals the ruptures and struggles that divide the social. The political, in the end, can only be founded on the absence of the “we,” “our,” or “us” and on the recognition that the “we” and the “us” are irrevocably fractured within often conflicting or antagonistic class, gender, age, and racialized relations, and traversed by radically different fantasies of what might constitute a “good” Anthropocene. It is precisely this lack, the gaps that render the “we” and the “us” impossible, that the Anthropocene and its AnthroScenes cover up, by relentlessly insisting there is a “we,” a terrestrial human/non-human constellation of mutually interrelating Earthlings without surplus, remainder, or gap that prevents a smooth-functioning whole. While fully endorsing the performativity of the whimsical, recalcitrant, and never fully accounted for non-human forms of acting, political action can only be legitimized in relationship to itself and not on the basis of a thoroughly symbolized nature.

The claims made above about the AnthroScenes and their performativity in no 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, and interventions in the name of a thoroughly imagined and symbolized humanized Nature, a procedure that necessarily forecloses a political frame through which such imaginaries become constituted and hegemonized and disavows the constitutive split of the people 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 force political choices between this rather than that nature. 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, destabilize any community, and—in doing so—proposes and works through forging new human/non-human entanglements.

**Acknowledgements.** We thank colleagues that have given input, including Nate Millington, Maria Kaika, Andrés Fabián Henao Castro, and Irma Allen. A different version of this argument was published in *Theory, Culture and Society* in 2018 and we thank three anonymous reviewers for their input. We acknowledge the UK’s Economic and Social Research Council (Grant ref: ES/M009408/1; TLR). The

second author acknowledges support from the Swedish Research Council Formas (Dnr: 211-2011-1519; MOVE) and the Marcus and Amalia Wallenberg Foundation.

## Notes

- 1 Another version of this chapter was published in *Theory, Culture and Society* (Swyngedouw and Ernstson 2018).
- 2 Two schools of thought have developed in viewing politics as performative with an important difference in relation to the ontological. While Hannah Arendt (1958) departs “from identifiable ontological modes of being” in relating politics to performance (e.g., work, home, action), as described by Henao Castro and Ernstson in Chapter 4 of this book (note 14), such ontological modes (and their borders) are not necessary for Rancière’s notion of politics but are in fact radically resisted. Politics can burst open anywhere and by anybody; it is radically contingent and has no ontological grounding.
- 3 For further development of Rancière’s argument for the need for a performative and non-ontological foundational premise for politics, see Henao Castro and Ernstson (Chapter 4).
- 4 As will be clear we are here drawing on Lacanian categories, using capital letters for these concepts.
- 5 The idea that humans can change Earth’s climate can be traced as far back as 1873 to Antonio Stoppani, an Italian geologist, who referred to an ‘anthropozoic era’. Michael Samways used the term ‘Homogenocene’ in 1999 when discussing biodiversity loss. The current use of the term “Anthropocene,” is from a later date, first used by biologist Eugene Stoermer in the 1980s and then developed in collaboration with climatologist Paul Crutzen. Together they wrote the first publication that explicitly made use of the term in a newsletter in 2000 for the International Geosphere-Biosphere Programme. The name Anthropocene, from its Greek roots of “anthropos” and “scene,” means “human” and “new” and follows how geologists have named geological time periods, as in Holocene and Pleistocene (see Crutzen 2002).
- 6 Those on the other end of the modernist divide insisted of course on a split between the human and the physical world and would pursue the Promethean myth of man [*sic*] as possessor and master of Earth, paving the golden road to freedom and civilization. The galloping acceleration of capitalism’s expansion would eventually render the Promethean cosmology victorious, particularly in the nineteenth and twentieth centuries. Its victory was seemingly so total that human domination over nature and, through this, humanity’s increasing emancipation from nature became scripted as the singular content and premise of the modernist project, embraced equally enthusiastically by really existing socialism, fascist totalitarianisms as well as by liberal capitalism. In the process, the highly politicized charges levied against this injunction by then-contemporary and successive generations of scholars, activists, and philosophers were symptomatically and systematically silenced.
- 7 The second author recognizes his collaboration with Joshua Lewis in this section, partly summed up in the unpublished manuscript “The Alchemy of Transformation: On the Impoverishment of Socio-ecological Imaginaries” (Ernstson and Lewis 2013).
- 8 For a review, see Hamilton (2013). Interestingly, there is also a Marxist variation of the accelerationist world-view in Williams and Srnicek (2013).
- 9 Both Clive Hamilton and Bruno Latour (2015b) keep on insisting that it is not the Real of capital that forced the Anthropocene on the Earth’s stage, but rather the symbolic narratives of mastery, control, and separation upon which capitalism’s possibility rested. While these symbolizations do indeed matter, the historical dynamics of capitalism shows nonetheless how its intellectual apologists change narrative and ontological position as easily as consumers change their mobile phones.

- 10 Complex adaptive systems theory is often said to develop from non-linear ecology as developed by C.S. Holling (1973), but this misses earlier developments in theoretical ecology, in particular Richard Lewontin's 1969 essay on which Holling built. This is crucial to note since Lewontin developed with Richard Levins a dialectical, Marxist, and historical interpretation of non-equilibrium ecology (Lewontin and Levins 1985), while Holling advanced a strikingly managerial version known more commonly as "resilience thinking" (Folke 2006). The latter emerged victorious in the mainstream and at many universities, embedded as an apolitical version of ecology firmly embedded within a "neoliberal counterrevolution" (Nelson 2014).
- 11 It can briefly be mentioned that resilience and complex adaptive systems discourse grew from local-to-regional ecosystem studies in the late 1990s to the level of the planet through collaborations between ecologists, geologists, and climatologists. Key institutions were the Resilience Alliance, founded in 1999, the Stockholm Resilience Centre, established in 2008, and the International Geosphere-Biosphere Programme (IGBP, 1986–2015), which included collaborations between Paul Crutzen, Will Steffen, Stephen Gunderson, and Carl Folke, among others, and political scientists entering the fray from around 2005 with Frank Biermann and Victor Galaz nurturing ideas of "Earth system Governance" and "Planetary Stewardship."
- 12 From Foucault, we mean with *dispositif* and *apparatus* "a thoroughly heterogeneous ensemble" of institutional, physical, and administrative mechanisms and knowledge structures that enhance and sustain the exercise of power to shape conduct, speech, thought, and imaginary (cf. Foucault 1980).
- 13 COP, Conference of Parties in the framework of the United Nations Framework Convention on Climate Change.

## References

- Anker, Peder. 2001. *Imperial Ecology: Environmental Order in the British Empire, 1895–1945*. Cambridge: Harvard University Press.
- Arendt, Hannah. 1958. *The Human Condition*. Chicago: Chicago University Press.
- Barrett, Scott, Timothy M. Lenton, Antony Millner, Alessandro Tavoni, Stephen Carpenter, John M. Anderies, F. Stuart III Chapin, et al. 2014. "Climate Engineering Reconsidered." *Nature Climate Change* 4: 527–29.
- Bennett, Jane. 2010. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press.
- Biermann, F. 2007. "'Earth System Governance' as a Crosscutting Theme of Global Change Research." *Global Environmental Change* 17: 326–37.
- Biermann, Frank, K. Abbott, S. Andresen, K. Bäckstrand, S. Bernstein, M.M. Betsill, H. Bulkeley et al. 2012. "Navigating the Anthropocene: Improving Earth System Governance." *Science* 335: 1306–07.
- Bonneuil, Christophe, and Jean-Baptiste Fressoz. 2013. *L'événement anthropocène: La Terre, l'histoire et nous*. Paris: Seuil.
- Bonneuil, Christophe, and Jean-Baptiste Fressoz. 2016. *The Shock of the Anthropocene*. London: Verso.
- Braun, Bruce. 2015. "New Materialisms and Neoliberal Natures." *Antipode* 47(1): 1–14.
- Braun, Bruce and Sarah Whatmore, eds. 2010. *Political Matter: Technoscience, Democracy and Public Life*. Minneapolis: University of Minnesota Press.
- Brossat, Alain. 2003. *La démocratie immunitaire*. Paris: La Dispute.
- Castree, Noel. 2014a. "The Anthropocene and Geography I: The Back Story." *Geography Compass* 8: 436–49.

- Castree, Noel. 2014b. "Geography and the Anthropocene II: Current Contributions." *Geography Compass* 8: 450–63.
- Castree, Noel. 2014c. "The Anthropocene and Geography III: Future Directions." *Geography Compass* 8: 464–78.
- Chakrabarty, Dipesh. 2009. "The Climate of History: Four Theses." *Critical Enquiry* 35(Winter): 197–222.
- Chakrabarty, Dipesh. 2014. "Climate and Capital: On Conjoined Histories." *Critical Enquiry* 41(1): 1–23.
- Chakrabarty, Dipesh. 2015. "The Anthropocene and the Convergence of Histories." In *The Anthropocene and the Global Environmental Crises*, edited by Clive Hamilton, Christoph Bonneuil, and Francois Gemenne, 44–56. Abingdon and New York: Routledge.
- Coole, Diana H., and Samantha Frost, eds. 2010. *New Materialisms: Ontology, Agency, and Politics*. Durham: Duke University Press.
- Cronon, William. 1992. "A Place for Stories: Nature, History and Narrative." *The Journal of American History* 78(4): 1347–76.
- Crutzen, Paul. 2002. "Geology of Mankind." *Nature* 415(January): 23.
- Ellis, Erle. 2011. "The Planet of No Return: Human Resilience on an Artificial Earth." *The Breakthrough Journal* 2(Fall 2001): 37–44.
- Ernstson, Henrik, and Joshua A. Lewis. 2013. "The Alchemy of Transformation: On the Impoverishment of Socio-ecological Imaginaries." Working Paper Series. KTH Environmental Humanities Laboratory, Stockholm.
- Espósito, Roberto. 2008. *Bios: Biopolitics and Philosophy*. Minneapolis: University of Minnesota Press.
- Espósito, Roberto. 2011. *Immunitas*. Cambridge: Polity Press.
- Folke, Carl. 2006. "Resilience: The Emergence of a Perspective for Social-ecological Systems Analyses." *Global Environmental Change* 16(3): 253–67.
- Folke, Carl, Thomas Hahn, Per Olsson, and Jon Norberg. 2005. "Adaptive Governance of Social-ecological Systems." *Annual Review of Environment and Resources* 30: 441–73.
- Foucault, Michel. 1980. *Power/Knowledge: Selected Interviews and Other Writings 1972–1977*. Hempstead: Harvester.
- Fourier, Charles. 1847. *De la détérioration matérielle de la planète*. 401–40. Paris: Aux Bureaux de la Phalange.
- Fressoz, Jean-Baptiste, and Fabien Locher. 2010. "Le climat fragile de la modernité: Petite histoire climatique de la réflexivité environnementale". Published in online magazine La vie des idées, April 20, 2010. (English translation accessible on same address.) Accessed April 7, 2018. [www.laviedesidees.fr/Le-climat-fragile-de-la-modernite.html](http://www.laviedesidees.fr/Le-climat-fragile-de-la-modernite.html).
- Fukuyama, Francis. 1992. *The End of History and the Last Man*. New York: Simon and Schuster.
- Galaz, Victor. 2012. "Geo-engineering, Governance, and Social-ecological Systems: Critical Issues and Joint Research Needs." *Ecology and Society* 17: 24.
- Garcia, Pierre-Olivier. 2015. *Sous l'adaptation, l'immunité. Etude sur le discours de l'adaptation au changement climatique*. PhD Dissertation, Université Grenoble Alpes.
- Garuba, Harry. 2012. "On Animism, Modernity/Colonialism, and the African Order of Knowledge: Provisional Reflections." *E-Flux Journal* 36: 1–9.
- Gržinić, Marina. 2016. "'Afterwards': Struggling with Bodies in the Dump of History." In *Body between Materiality and Power: Essays in Visual Studies*, edited by Nasheli Jiménez del Val, 163–82. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Hamilton, Clive. 2013. *Earthmasters: The Dawn of the Age of Climate Engineering*. London: Yale University Press.

- Hamilton, Clive. 2015a. "Human Destiny in the Anthropocene." In *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch*, edited by Clive Hamilton, Christophe Bonneuil, and Francois Gemenne, 32–43. London: Routledge.
- Hamilton, Clive. 2015b. "The Theodicy of the 'Good Anthropocene.'" *Environmental Humanities* 7: 233–38.
- Hamilton, Clive, Christophe Bonneuil, and Francois Gemenne (Eds.). 2015. *The Anthropocene and the Global Environmental Crisis: Rethinking Modernity in a New Epoch*. New York: London.
- Haraway, Donna. 2015. "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin." *Environmental Humanities*, 6: 159–65.
- Holling, Crawford S. 1973. "Resilience and Stability of Ecological Systems." *Annual Review of Ecology and Systematics* 4: 1–23.
- Gunderson, Lance H., and Crawford S. Holling. 2002. *Panarchy: Understanding Transformations in Human and Natural Systems*. Washington DC: Island Press.
- Irigaray, Luce. 1985. *The Sex that Is Not One*. Ithaca: Cornell University Press.
- Kaika, Maria. 2017. "Between Compassion and Racism: How the Biopolitics of Neoliberal Welfare Turns Citizens into Affective 'Idiot.'" *European Planning Studies* 25(8): 1275–91.
- Kalyvas, Andreas. 2009. *Democracy and the Politics of the Extraordinary: Max Weber, Carl Schmitt, and Hannah Arendt*. Cambridge: Cambridge University Press.
- Latour, Bruno. 2005. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Latour, Bruno. 2015a. *Face à Gaïa: Huits Conférences sur le Nouveau Régime Climatique*. Paris: La Découverte.
- Latour, Bruno. 2015b. "Fifty shades of green': Bruno Latour on the Ecomodernist Manifesto." Conference paper at the Breakthrough Dialogue, Sausalito, June 2015 and published at the *Entitle Blog*, June 27, 2015. Accessed April 14, 2018. <https://entitleblog.org/2015/06/27/fifty-shades-of-green-bruno-latour-on-the-ecomodernist-manifesto/>.
- Lewis, Simon L., and Mark A. Maslin. 2015. "Defining the Anthropocene." *Nature* 519: 171–80.
- Lewontin, Richard C. 1969. "The Meaning of Stability." *Brookhaven Symposia in Biology* 22: 13–23.
- Lewontin, Richard C. and Richard Levins. 1985. *The Dialectical Biologist*. Harvard: Harvard University Press.
- Marx, Karl. 1959 [1844]. *Economic and Philosophic Manuscripts of 1844*. Translation by Martin Milligan. Moscow: Progress Publishers.
- Mbembe, Achille. 2003. "Necropolitics." *Public Culture* 15(1): 11–40.
- Moore, Jason W., ed. 2016. *Anthropocene or Capitalocene?* Oakland: PM Press.
- Morton, Timothy. 2013. *Hyperobjects: Philosophy and Ecology After the End of the World*. Minneapolis: University of Minnesota Press.
- Mouffe, Chantal. 2005. *On the Political*. London: Routledge.
- Nelson Sara H. 2014. "Resilience and the Neoliberal Counterrevolution: From Ecologies of Control to Production of the Common." *Resilience* 2(1): 1–17.
- Nelson, Sara H. 2015. "Beyond the Limits to Growth: Ecology and the Neoliberal Counterrevolution." *Antipode* 47(2): 461–480.
- Neyrat, Frédéric. 2008. *Biopolitique des catastrophes*. Paris: Les Prairies Ordinaires.
- Neyrat, Frédéric. 2010. "The Birth of Immunopolitics" *Parrhesia* 10: 31–38.
- Neyrat, Frédéric. 2014. "Critique du géo-constructivisme Anthropocène and géo-ingénierie." In *Multitudes* 56. Accessed March 4, 2018. [www.multitudes.net/critique-du-géo-constructivisme-anthropocene-geo-ingenierie/](http://www.multitudes.net/critique-du-géo-constructivisme-anthropocene-geo-ingenierie/).
- Neyrat, Frédéric. 2016 *La part inconstructible de la terre*. Paris: Editions du Seuil.

- Neyrat, Frédéric, and Elisabeth Johnson. 2014. "On The Political Unconscious of the Anthropocene: A Conversation with Frédéric Neyrat." in *Society and Space Open Site*. Accessed May 5, 2018. <https://societyandspace.com/material/interviews/neyrat-by-johnson/>.
- Pellizzoni, Luigi. 2015. *Ontological Politics in a Disposable World: The New Mastery of Nature*. Farnham: Ashgate.
- Pellizzoni, Luigi. 2016. "Catching up with Things? Environmental Sociology and the Material Turn in Social Theory." *Environmental Sociology* 2(4): 312–21.
- Protevi, John. 2013. *Life, War, Earth: Deleuze and the Sciences*. Minneapolis: University of Minnesota Press.
- Rancière, Jacques. 1998. *Disagreement*. Minneapolis: University of Minnesota Press.
- Royal Society. 2009. *Geengineering the Climate: Science, Governance and Uncertainty*. London: The Royal Society.
- Shellenberger, Michael, and Ted Nordhaus, eds. 2011. *Love Your Monsters: Postenvironmentalism and the Anthropocene*. Oakland: The Breakthrough Institute.
- Shellenberger, Michael, and Ted Nordhaus. 2007. *Break Through: From the Death of Environmentalism to the Politics of Possibility*. Boston: Houghton Mifflin Co.
- Steffen, Will, Jacques Grinevald, Paul Crutzen, and John McNeill. 2011a. "The Anthropocene: Conceptual and Historical Perspectives." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Science* 369: 842–67.
- Steffen, Will, Åsa Persson, Lisa Deutsch, Jan Zalasiewicz, Mark Williams, Katherine Richardson, Carole Crumley et al. 2011. "The Anthropocene: From Global Change to Planetary Stewardship." *Ambio* 40: 739–61.
- Stengers, Isabelle. 2003. *Cosmopolitiques*. Paris: La Découverte.
- Swyngedouw, Erik. 2011. "Interrogating Post-democracy: Reclaiming Egalitarian Political Spaces." *Political Geography* 30: 370–80.
- Swyngedouw, Erik. 2014. "Anthropogenic Politicization: From the Politics of the Environment to Politicizing Environments." In *Green Utopianism: Politics, Practices and Perspectives*, edited by Karen Bradley and Johan Hedrén, 23–27. London: Routledge.
- Swyngedouw, Erik, and Henrik Ernstson. 2018. "Interrupting the Anthro-obScene: Immuno-biopolitics and Depoliticizing Ontologies in the Anthropocene." *Theory, Culture and Society*. First Online February 13, 2018. <https://doi.org/10.1177/0263276418757314>.
- Von Heland, Jacob and Sverker Sörlin. 2012. "Works of Doubt and Leaps of Faith: An Augustinian Challenge to Planetary Resilience." *Journal for the Study of Religion, Nature and Culture* 6(2): 151–75.
- Walker, Jeremy and Melinda Cooper. 2010. "Genealogies of Resilience: From Systems Ecology to the Political Economy of Crisis Adaptation." *Security Dialogue* 42(2): 143–60.
- Williams, Alex, and Nick Srnicek. 2013. "#ACCELERATE MANIFESTO for an Accelerationist Politics." Published online at Critical Legal Thinking, May 14, 2013. Accessed May 2, 2018. <http://criticallegalthinking.com/2013/05/14/accelerate-manifesto-for-an-accelerationist-politics/>.
- Žižek, Slavoj. 1999. *The Ticklish Subject: The Absent Centre of Political Ontology*. London: Verso.



# URBAN POLITICAL ECOLOGY IN THE ANTHROPO-OBSCENE

Interruptions and Possibilities

*Edited by Henrik Ernstson and  
Erik Swyngedouw*

 **Routledge**  
Taylor & Francis Group  
LONDON AND NEW YORK

First published 2019  
by Routledge  
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge  
711 Third Avenue, New York, NY 10017

*Routledge is an imprint of the Taylor & Francis Group, an informa business*

© 2019 selection and editorial matter, Henrik Ernstson and Erik Swyngedouw;  
individual chapters, the contributors

The right of Henrik Ernstson and Erik Swyngedouw to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

*Trademark notice:* Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

*British Library Cataloguing-in-Publication Data*

A catalogue record for this book is available from the British Library

*Library of Congress Cataloging-in-Publication Data*

A catalog record has been requested for this book

ISBN: 978-1-138-62918-9 (hbk)

ISBN: 978-1-138-62919-6 (pbk)

ISBN: 978-1-315-21053-7 (ebk)

Typeset in Bembo  
by Out of House Publishing