Reformulating Emancipation in the Anthropocene: From Didactic Apocalypse to Planetary Subjectivities

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Abstract

The ideal of emancipation has been traditionally grounded on the premise that human activity is not restrained by external boundaries. Thus the realisation of values such as autonomy or recognition has been facilitated by economic growth and material expansion. Yet there is mounting evidence that the human impact on natural systems at the planetary level, a novelty captured by the concept of the Anthropocene, endangers the Earth's habitability. If human development is to be limited for the sake of global sustainability, can emancipation be kept as a mobilising ideal? As opposed to alternative views such as that of degrowth, this article argues that it can. The key lies in the ability of the Anthropocene to produce planetary subjectivities. By recognising the bounded quality of human embeddedness, the possibility of a different emancipation is opened up. The latter does not give up material well-being, yet it makes sure that the latter does not endanger planetary habitability.

Keywords

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What happens to emancipation once the material conditions that accompanied its unfolding in the past are changed in a way that severely limits the scope for human transformative action? Such is the question that this paper deals with. It departs from the assumption that modern emancipation, theoretically outlined and historically realised along the modern period, implicitly depended upon a range of material conditions ultimately provided by the human colonisation of the natural world. The latter sustained a strong economic growth that made possible both an increase in the material well-being of previously excluded social groups and a larger provision of public goods and services. Modernity thus forges a link between the human dominion of nature, indefinite economic growth, and the socio-political emancipation of groups and individuals. This conceptual and historical association must be taken into account

if the dialectic of emancipation — i.e. the dynamic relation between the ideal of emancipation and the conditions that either facilitate, hinder or prevent its realisation — are to be understood.

This rationale was first put into question by the fiscal crisis of the welfare state back in the early seventies, which posed the question of how to sustain a growing social spending in the long run — a question that remains to be answered. As the COVID-19 pandemic has dramatically shown, however, there is yet another story to be told. It concerns the relation between human emancipation and socionatural relations, i.e. the material and ecological foundations of human societies. Viruses are, of course, a reminder of human vulnerability in the face of biological threats — yet they are hardly a novelty. The dangers of the Anthropocene, from climate change to biodiversity loss, are a better representation of the structural constraint that humans are bound to suffer for the time being. Insofar as they compel existing societies to radically change themselves lest the planet becomes inhospitable, both the practical feasibility and normative usefulness of emancipation comes into question.

Nevertheless, the category of emancipation remains useful as a driver of social change *despite* the limitations that the Anthropocene poses for human action. In fact, the Anthropocene opens up the possibility of developing a new understanding of emancipation. In this paper, the emergence of planetary subjectivities in the Anthropocene will be presented as the way to go as far as rethinking emancipation in a warming planet is concerned. The argument is presented as follows. In section 1, I reflect upon the meanings of emancipation and present my view of the latter. Section 2 outlines the troubled relation between emancipation and the Anthropocene, while section 3 describes the alternative to modern emancipation that is defended by degrowth theorists. Section 4 offers a criticism of degrowth and suggests that ecomodernism and the ideal of the «good Anthropocene» open up the possibility of pursuing emancipation in the modern sense of the concept while securing the planet's habitability. Finally, section 5 introduces the notion of planetary subjectivity as the means through which emancipation can be refined, both theoretically and practically, in the Anthropocene.

The meanings of emancipation

Emancipation is commonly described as the transition from heteronomy to autonomy, from dependence to freedom, from alienation to self-realisation (Susen, 2014: 1025). All forms of emancipation thus involve an individual or collective assertion of sovereignty, so that existing barriers to human development are theoretically critiqued and practically rejected in the typical

process of emancipation, as they obstruct the unfolding of human self-powering potential. Some nuances are in order: emancipation has not just meant the transgression of boundaries, as in revolutionary outbreaks, but also their redrawing or reconfiguration. Let us think of the granting of voting rights to women but not to ethnic minorities, or consider the way in which the collapse of the feudal system did not bring total liberation but the sedimentation of new boundaries and constraints that came along with industrialisation. Total liberation, on the other hand, is a chimera — as long as human beings live in complex social systems and are embedded into thick layers of social relationships, they cannot govern themselves in absolute freedom. The outcome of emancipatory processes must thus be appraised in relative, not absolute, terms (see Haderer, in this Special Issue).

Needless to say, the concept of emancipation is interpreted differently by different traditions of thought. In this respect, the modern era features a gradual shift from the granting of personal rights to the liberation from subtle forms of control — legal and material constrains thus give way to an emphasis on alienation and the search for authentic forms of life (see Adorno and Horkheimer, 1997; Foucault, 1986). Yet the different dimensions of emancipation were all outlined from the start: Rousseau (1984) argued that human beings have gradually alienated themselves from the natural roots of their existence, thus anticipating the emphasis that Critical Theory placed on individual alienation in the mass society (see Brunkhorst, 2004), while Marx (2000a, 2000b) underlined the practical challenge of achieving emancipation. A different current of thought focused on the use of reason as the path to individual and collective self-liberation: while Kant (2009) does not discuss emancipation explicitly, in his thought the latter is tantamount to an autonomous use of reason. Habermas (1987) anchored emancipation in rational self-determination too, if only to stress the importance of communicative reason as a tool against the disempowering effects of the social system.

Habermas was not alone in signalling the key role that new social movements had to play in fostering emancipatory practices and imaginaries, yet Marcuse (2002) introduced a crucial idea when he suggested that individuals *enjoy* the false needs created by the capitalistic consumer society — the latter celebrates individual liberty in a restricted manner, a condition that the notion of «enforced toleration» tries to capture. Moreover, individual emancipation can only take place when society as a whole liberates itself, which in turn cannot happen without the overthrowing of current social structures (Adorno, 2004: 173; Horkheimer, 2013). In the steps of this tradition, however, Blühdorn (2019; see also his contribution in this Special Issue) has

warned lately that the very impulse behind «first-order emancipation» threatens to undermine liberal democracies, as a «second-order» emancipation takes shape in which the acceptance of the limits to self-liberation gives way to their rejection — as if Marcuse's enforced toleration could no longer perform its structural function.

My own take on emancipation departs from the assumption that liberal-democratic societies offer the necessary conditions for self-liberation, i.e. for conquering personal autonomy. The focus on alienation is thus unwarranted and ultimately sterile: who is to say what an *authentic* way of life is? In a pluralistic society in which different forms of life and conceptions of the good are embraced, the individual must be able to decide by itself — provided that economic inequalities are addressed, so that the lack of material well-being or opportunities does not hinder the pursuit of autonomy. Material and legal obstacles to emancipation, measured by a liberal-welfarist yardstick, are easier to adjudicate than feelings of alienation or the philosopher's claim about the alienation of others. In turn, forms of life are subject to moral or political criticism (Jaeggi, 2014).

The notion of emancipation should thus be detached from notions of alienation. There is no higher moral ground for deciding who is alienated in a pluralistic liberal society. This should be rightly understood: the claim that someone *is* alienated may be presented in the public debate, but there is no way to adjudicate it. For that reason, emancipation should be conceived as the move from heteronomy to autonomy in the Millian sense — personal rather than moral, yet not deprived of moral value as autonomy opens up the opportunity to lead an examined life. Mill (2015) saw autonomy less as a source of ethics (as Kant did) than as the capacity of the individual to reflect on its own values, choices and commitments. Gerald Dworkin offers a definition along these lines, according to which autonomy is

> «a second-order capacity of persons to reflect critically upon their first-order preferences, desires, wishes and so forth, and the capacity to accept or attempt to change these in light of higher-order preferences» (Dworkin, 1988: 20).

Those who believe that self-liberation is unfeasible under the conditions of late capitalism will reject this view of emancipation. Yet if self-liberation is impossible, how can social movements appear under those very conditions? And what about the empirically verifiable existence of different forms of life? An emancipated subject is not liberated from *all* constrains, but has

gained the capacity to reflect upon his or her own preferences. A good society is that in which the opportunity to acquire such capacity, and to act upon it, is potentially open to all. This openness can result in the rise of exclusionary movements which can ironically hold the promise of self-liberation for their members.

That autonomy is not achieved easily does not necessarily suggest that, *pace* Horkheimer, self-liberation is only feasible once the current social system has been overthrown. Social psychology and affect theory have pointed out the shortcomings of human rationality, highlighting the subject's tendency to make quick and biased decisions that favour members of our in-group rather than deliberate, self-aware ones (see Greene, 2014; Kahneman, 2011). This may help to explain why the autonomous subject has remained as the normative core of modern democracy despite the fact that it has always been a promise rather than an accomplished reality (Blühdorn, 2019: 4). Yet this does not mean that the autonomous subject is a *fiction* — it should rather be described as an *ideal* that requires a constant effort on the part of the individual.

Thus I take the core of emancipation to be the conquest of personal autonomy, which includes the ability to develop one's own plan of life without unjust interference from others. Yet the move from heteronomy to autonomy demands that both legal discrimination and economic necessities are addressed. The autonomous subject is not just someone who reflects critically upon its own preferences, but also someone who has the opportunity to develop its own plan of life. This liberation from *necessity* cannot be achieved individually, as it requires social cooperation for creating material wealth and distributing it accordingly. This aspect of emancipation was not envisioned by Kant, but Mill assigned a role to the state as a provider of opportunities and even denounced the subjection of women (see Mill 2008, 2015). On his part, Locke (1988) was aware of the key role of materiality and thereby placed property rights at the centre of his political theory, suggesting that it is physical human labour that legitimises acquisition. The practical aspect of emancipation was, of course, at the centre of Marx's thinking. It is thus unsurprising that the conquest of nature was conceived by most modern thinkers as a means to the end of emancipation: only by taming the forces of external nature could mankind secure material progress (see Vetlesen, 2015). Both the liberal and the socialist tradition endorsed a Promethean view of the human species in which the realm of heteronomy was identified with nature in an encompassing sense, including women. More than two centuries after the beginning of the industrial age, though, the side-effects of material progress

are in plain view: the anthropogenic disruption of natural systems threaten to block the pursuit of emancipation by depriving the latter of its material conditions.

Emancipation in the Anthropocene

There are two mutually dependent aspects to the materiality of emancipation: the need to secure material conditions that liberate human beings from necessity and the ecological limits of the human appropriation of nature. The former was taken into consideration by a number of modern thinkers, whereas the latter has only later become a pressing concern. To put it differently, the Enlightenment view of emancipation overlooked the material conditions required by its fulfilment — or either the ecological context in which it had to be fulfilled. As a result, there is a stark contrast between conceiving oneself as potentially independent from nature (modernity) and finding oneself within a constellation that problematises the modern take on emancipation (late modernity). I will explore this tension by resorting to the notion of the Anthropocene.

It does not seem necessary to explain in full detail what the term «Anthropocene» stands for — the concept has become widespread in the social sciences and the humanities after being launched by the natural sciences in the early twenty-first century. Both geologists who support the recognition of a new geological epoch and Earth System scientists who focus on the disruption of the planetary system point to the same phenomenon: the unprecedented ability of the human species to change how the Earth operates (see Ellis, 2018; Zalasiewicz et al., 2019). Admittedly, human beings have been transforming their environments for a very long time. Yet the Anthropocene signals a *rupture* in socio-natural history insofar as our species has disrupted the functioning of natural systems at a planetary level (see Hamilton, 2016). This is not to say that the Anthropocene has an existence that is independent from its human conceptualisation. However, the material reality that it tries to capture *is* independent from any conceptualisation.

The Anthropocene seems to validate Ulrich Beck's theory of the *risk society*: climate change and other planetary disturbances are the most recent threat produced by the unfolding of modernity (Beck, 1986). This is why late modern societies can be said to be *reflexive* — they are confronted with the unintended consequences of their development (see Beck, Giddens and Lash, 1994). Risk society is global, because modern threats endanger the life and livelihoods of people across the planet: nuclear power, terrorism, financial crisis. Beck's theory focuses on

socially manufactured risks, describing a society that mobilises itself when confronted with a future that is not defined any longer by religion, tradition, or the superior power of nature (Beck, 2009: 4). In other words, he draws a line that separates premodern *natural* risks from modern *manufactured* risks — much as Paul Virilio (2006) speaks of natural and artificial accidents. For that reason, Beck does not ever include pandemics among his risks. Yet there are as many modern threats that present natural elements as there were premodern ones that exhibited social features (Mythen, 2004: 40). This shows that Beck's model does not fully capture the condition of the Anthropocene. In fact, planetary disruptions in the Anthropocene are better described as *socio-natural* threats, insofar as they result from a combination of human agency and natural processes that remain beyond human control (see Dobson, in this Special Issue).

Nevertheless, the interesting discussion to be had is not about whether there is such a thing as the Anthropocene or whether it fits into pre-existing categories of social theory, but rather about the normative implications of an anthropogenically disrupted Earth. That is also Chakrabarty's conclusion as elaborated by Meyer (2016: 48): rather than seeking to clarify whether the Anthropocene is new, we should ask ourselves whether it is *fresh*. Does it do useful work, does it energise our thinking? Both Chakrabarty and Meyer believe it does — and so do I. Yet my aim in this paper is not to deal with the Anthropocene as such, but rather to address emancipation. It is through the lens of the Anthropocene that I intend to do so.

The complication is apparent: if emancipation means the removal or redrawing of barriers that stand in the way of personal or social development, the Anthropocene creates a particular problem by confronting human societies with a major obstacle that they themselves have created. As much as feelings of empowerment were seemingly justified in view of the sustained accretion of material wealth and human population that took place during the modern epoch, that feeling is gradually being replaced in late modernity with one of powerlessness in view of the dangers posed by climate change, loss of biodiversity or ocean acidification. In sum, the Anthropocene seems bound to *hinder* emancipation by dramatically changing the material context in which it is pursued.

This argument has been put forward by thinkers who warn of the seeming inability of modern democracy to guarantee the material conditions for its own development — be them the

conditions for a fair redistribution of wealth or the ecological prerequisites for social reproduction (see Hausknost, 2019; Pichler et al., 2020). More explicitly, Isabelle Stengers (2015: 58) has argued that emancipation must be disentangled from a traditional view of progress that wrongly aspired to free humans from natural constraints. Danowski and Viveiros de Castro sum up this argument:

> «The ever legitimate (how could it not be?) desideratum of 'emancipation' must therefore be radically decoupled from the anthropological machismo implied in the idea of an epic conquest of nature and the meanings that the nineteenth century ascribed to the notion of 'progress'» (Danowski and Viveiros de Castro, 2017: 117).

In a word, both emancipation and the material progress upon which it has depended throughout modernity meet the ecological limits to growth about which environmentalism has been warning for the last fifty years (see Meadows et al., 1972). In the face of the planetary challenges featured by the Anthropocene, then, it seems that the expansionary ideologies that are typical of modernity should be replaced by social imaginaries that foster material restraint. If emancipation is to be an encompassing ideal, it cannot remain tied to the conquest of nature and the related view of progress. Otherwise, there is the danger that global unsustainability ends up *preventing* the emancipation.

Yet both emancipation and the Anthropocene are problematic in that they are often described as pertaining to *humanity* as a whole, thus generating a species-talk that obscures differences between social groups. While emancipation is supposedly a universal goal, there are great disparities among people as far as the liberation from economic necessity or the conquest of personal autonomy is concerned. On its part, the Anthropocene should not be seen as a «human» affair since it does not affect us all equally and it is not the species that has brought it about — certain members of the species have (Chakrabarty, 2008). The so-called «species-talk» should thus be avoided (see Lepori, 2015). From this standpoint, emancipation cannot be presented as a universal goal and neither can the Anthropocene be conceptualised as a human predicament. Intra-societal differences suggest that humanity is not the subject of neither emancipation nor the Anthropocene.

Both Kant and Marx, however, saw autonomy and emancipation as *universal* goals. Whereas Kant (2009) derived the possibility of autonomy from the *human* capacity to exert reason, Marx

(2000b) distinguished between *political* and *human* emancipation — whereas the former was limited to partial civilisational achievements, the latter transcended the particular interests of social groups or individuals. Emancipation *can* thus be formulated as a universal ideal and this is not contradicted by the fact that social or political movements may seek the emancipation of particular social groups. The human subject is thus the typical carrier of emancipation regardless of how the subject in itself is conceptualized. The distance between a normative ideal and its empirical reality, however essential it may be for social scientists, should not prevent the formulation of encompassing normative principles.

A similar point can be made about the Anthropocene. Of course, some social groups bear more responsibility than others for bringing about climate change and other planetary disruptions. Yet the planet does not care much about *who* exactly did *what* — it registers the impact of our species as a whole and changes accordingly. Likewise, it is indisputable that the Anthropocene does not affect all people equally — there are differences between countries and within countries, all of which are most likely to exacerbate as ecological problems mount in the coming decades. At the same time, though, a planetary disruption has the potential to affect all people. In the long run, global warming may threaten the habitability of some of the world's regions, thus exacerbating social and geopolitical conflicts while deteriorating national economies and decreasing everyone's well-being. Beck (1986: 48) famously claimed that «poverty is hierarchical, smog is democratic» and, for all the criticism that this statement has attracted (see Barnes, 2016), he was partly right: some risks may inflict harm to *all* even though *some* will suffer more harm than others. In sum, it should be possible to talk of the human species while at the same time different agencies and responsibilities are recognised. Humanity is a biological species *and* a differentiated social body — it can be simultaneously contemplated as such.

An alternative path to emancipation

One of the most robust expressions of the argument that the modern conception of emancipation cannot be realised in the Anthropocene is to be found in the literature on *degrowth*, which offers a way out from the current multi-dimensional sustainability crisis facing contemporary consumer societies. Specifically, degrowth is a normative and empirical critique of economic growth; a blueprint for a society that significantly departs from established arrangements; and a new cultural mindset. A brief account of these elements will be enough for the emancipation-related purposes of this paper (see also Pellizzoni, in this Special Issue).

Drawing on the French cultural critique of the growth imaginary (see Latouche, 2010) as much as on environmental and social activism (see Demaria et al., 2013), degrowth aims for a sustainable and equitable reduction of society's throughput — namely the materials and energy extracted, processed, transported, distributed, consumed and finally turned into waste by a society (Kallis, 2011: 874). To that end, not just the economy but societies as a whole are to be downsized by reducing production, trade, travelling, and consumption. Life is to become more local and less mobile, as well as more equitable and ecologically benign, while remaining democratic (see Jackson, 2009). The world of degrowth recalls the blueprints for sustainability advocated by radical environmentalism during the 70s and 80s (see De Geus, 1999).

The critique of growth can take two forms: either growth is regarded as *untenable* in the long run or it is portrayed as being *undesirable* in any case (see Paulson et al., 2020). Growth's unsustainability of growth is commonly explained as a function of its dependence on finite natural resources — at some point, natural systems will not be able to feed the growth machine. This argument was first put forward by the limits to growth perspective in the 1970s (Meadows et al., 1972). Global warming has reinforced this view, as some planned degrowth is presented as necessary if climate change is to be effectively mitigated (Alexander, 2013). On the other hand, it is argued that economic growth is not the panacea for which it commonly passes, as it would have not made individuals happier nor communities stronger — it is an illusion, the false «truth» to which contemporary societies cling (Douthwaite, 1993). The ideology of growth hides the reality of an unfulfilling way of life that also happens to be environmentally unsustainable: more authentic *and* sustainable forms of emancipation are to be found in a degrowth society.

A new cultural mindset is thus meant to reformulate individual understandings of self-determination, so that more simple ways of living become attractive without being perceived as constraining. Actually, degrowth can hardly ever take place without this cultural shift — unless it is imposed by authoritarian governments in the context of a global emergency. The goal is to make people embrace a «voluntary simplicity» (Alexander, 2013) leading eventually to a more satisfying lifestyle (Jackson, 2009: 148). Key concepts that belong to the vocabulary of modern emancipation, such as prosperity or abundance, are reformulated. New forms of wealth are to be generated: more spare time, a renewed role for individual creativity, fulfilling conceptions of work (Princen, 2005). Degrowth thinkers claim that in the society that they

envision people do not have *more* but *better* (Heinberg, 2019). Hence Barry's formula: «low-carbon, high quality of life» (Barry, 2012: 11). The emphasis is placed on human flourishing. As much as the latter is hindered by mass consumption and the modern way of life, the argument goes, it would be facilitated by abandoning growth and embracing sufficiency.

For these reasons, degrowth is often presented as a solution to the problems of the Anthropocene. How? As a radical re-imagination of what it means to live well within modern societies, degrowth can act as «a social imaginary guiding new political thinking for the Anthropocene» (Reichel and Perey, 2018: 246–247). Insofar as the Anthropocene has revealed the constitutive dependency of human life on natural systems, the response must be an ecologically sustainable degrowth economy that replaces capitalistic depredation (Fremaux, 2019). The transition to renewable energies, a global redistribution scheme, the creation of economic value beyond the market — structural changes of this kind would be facilitated by degrowth's adoption as the normative foundation of modern societies. In the meantime, degrowing communities such as the Transition Towns in the UK are to play a crucial role by highlighting the kind of response that democratic societies should give to the conditions of the Anthropocene (Semal, 2015: 98).

How well does emancipation fare in this theoretical framework? For most green theorists, human emancipation is not given up in a sustainable society as defined by a degrowth strategy — it is just reformulated in a manner that is more *realistic* and paired with the emancipation of nature. Emancipation in a degrowth society can be said to be more «realistic» on two counts. On the one hand, it is claimed that the «true» nature of human beings is to produce and consume just enough, a natural self-limitation that is distorted by consumer society (Princen, 2005: 140). A simpler life, one in which individuals are freed from artificial needs, would be more fulfilling (see Gambrel and Cafaro, 2010). On the other hand, green politics is said to adopt «an empirically informed view of the limits and challenges facing human societies and the possibilities for progressive social transformation» (Barry, 2012: 31). Hence degrowth is an answer to current socionatural conditions and the kind of emancipation that it promise is the one allowed by such conditions.

Still, some scholars have explored an alternative foundation for degrowth that dispenses with the notions of scarcity and unsustainability. Given that measuring «natural» scarcity is not possible, it is argued, to speak of degrowth as *determined* by scarcity is to reproduce inversely

the logic of growth (Kallis, 2019; Romano, 2019). Hence degrowth and the kind of post-growth society that it is meant to bring about must be made desirable by themselves and not as the result of a consequentialist reckoning. One of the reasons why degrowth is desirable concerns emancipation: insofar as degrowth seeks to resume the modern agenda of political emancipation (see Deriu, 2012), a society that is arranged along the lines of this project can be expected to provide the context in which an *authentic* emancipation can be achieved. According to degrowth theorists, in fact, there is no alternative: emancipation can only take place in a sustainable society that has given up indefinite growth and mass consumption, thus eliminating the source of those «false needs» that create personal alienation and collective fragmentation.

In sum, the question of whether the Anthropocene is compatible with the ideal and practice of emancipation, understood as the conquest of personal autonomy in a society in which material well-being increases steadily, seems to invite a negative answer. It is the material dimension of emancipation that comes into question in the Anthropocene: without the ability to pursue indefinite growth, individuals would see their chances for self-development dramatically reduced. In a disturbed planet, then, the project of universal self-liberation becomes problematic for ecological reasons. Admittedly, the emancipation of some might be based on the oppression of others — hardly a novelty from a historical perspective. Yet emancipation cannot be defended as a *feasible* universal ideal in an unsustainable context. Whereas emerging and poor countries should give up material expansion lest global sustainability becomes seriously compromised, whole segments of the Western middle class feel that they material aspirations have been frustrated (see Guilluy, 2019).

For degrowth theorists, the answer lies in a different understanding of emancipation. From their perspective, the ecological limits to growth do not have to be detrimental to emancipation *insofar as this realisation is itself emancipatory* and thus can help to reformulate this modern ideal. The turn to degrowth entails an emphasis on human flourishing in local communities and a new sense of prosperity in which sufficiency replaces abundance. In this social setting, human beings would free themselves from imposed needs, acquiring the ability to realise authentic subjectivities. Admittedly, this is not a «bad» Anthropocene, but a positive vision for the future — a point that critics of degrowth do not always concede

Rethinking emancipation for a warming planet

Degrowth is not without problems. The whole project resembles a leap into the void: the conditions that a post-growth world would encounter can be expected to be vastly different from those anticipated in the literature, including the fact that the scarcity produced by economic contraction may lead to more autocratic forms of governance (Crownshaw et al., 2018: 129). Regardless of the attraction that this utopian imaginary may possess for some theorists, it should be regarded as a set of normative claims (Weiss and Cattaneo, 2017) which are often made «in self-referential isolation» from the real world in which degrowth should take place (Beeson, 2019: 32). How is a public health system to be financed, to name just one essential public service that the inhabitants of a post-growth order will most probably demand? By putting the blame on capitalism as a source of oppression and injustice, much critical scholarship overlooks the fact that humans would probably have similar needs and wants under any other economic system (Karlsson, 2018: 78).

It remains unclear how a significant reduction of material living standards is to obtain democratic support. This is not a minor question, because there is a tension between degrowth and democracy — not unlike the one that has always existed between democracy and environmentalism. But degrowth poses some problems for pluralism as well. Despite the claim that there would be more variety of views of the good life in a post-growth social order (Barry, 2012: 10), it is far from evident how this could be the case. Insofar as sufficiency is presented as increasing the quality of life of those who embrace it, it entails not so much a demand for justice as a perfectionist view of the good life (Kanschik, 2016). In any event, it falls to degrowth advocates to persuade others that theirs is a preferable way of life and a desirable form of social organisation. Of course, they may then fall back to a non-moral argument — namely that of survival. If degrowth were the only way to prevent ecological collapse, normative arguments would be rather unnecessary.

There is, however, another possibility: modern emancipation can be reformulated while accepting the implications of the Anthropocene. The key lies in the proposition that there is not just one way of achieving the necessary balance between human activity and planetary systems — this balance can be secured by ways other than degrowth. If this assumption is accepted, then the Anthropocene does not necessarily spell the end for emancipation as a universally feasible ideal. Awakening to humanity's destabilising power leads to the conclusion that a more reflective and sophisticated socionatural relation is to be maintained at a planetary level *without* predetermining the way in which this should be done and *without* necessarily endorsing

degrowth's normative foundations or practical aspirations. In the Anthropocene, emancipation might be harder to achieve than in the past — a more delicate balance between material production and ecological sustainability is certainly required. Yet it is my contention that emancipation is still materially feasible and normatively useful as a mobilising ideal that pervades social imaginaries. This argument is implicit in the notion of a «good Anthropocene» (see Revkin, 2014), as well as in the *ecomodernist* view associated to it (see Asafu-Adjaye et al., 2015).

Ecomodernism is the natural evolution of a heterodox strand of environmentalism — that which can be found in contributions from Lewis (1992), Ausubel (1996), Nordhaus and Shellenberg (2007) or Brand (2009). They all share a critical view of classical and radical environmentalism, as well as the belief that sustainability can and should be combined with political liberalism, technological innovation and economic growth. Admittedly, these are typical characteristics of the «ecological modernisation» theory and policies since the 1980s (see Mol et al., 2009). Yet ecomodernism goes further than ecological modernisation in that it incorporates a truly transformative approach that recognises the need to secure sustainability and to unhinge the logic of nature's instrumentalisation that ecological modernisation policies have proven unable to prevent. In short, ecomodernism presents a more explicit and ambitious answer to Anthropocene and climate change.

In particular, the «good Anthropocene» is that in which «humans use their growing social, economic, and technological powers to make life better for people, stabilize the climate, and protect the natural world» (see Asafu-Adjaye et al., 2015). This is a vision for sustainability in which the human impact on natural systems is dramatically reduced by ways other than degrowthing. Those means are, essentially, the intensification of human activities in order to render them more efficient and hence less dependent on natural resources. The premise is that ecological goals can only be achieved once societies have reached a certain threshold in their development. While not ignorant of the dark side of modernity, ecomodernists belief that modernisation has benefited humanity even as it has damaged the natural world — that is why they imagine a future of global economic convergence in which people everywhere will be able to enjoy the fruits of modernity (Karlsson, 2018: 80). Ecomodernists do not share the view that modernisation is an alienating machine that *obstructs* human flourishing. On the contrary, it makes such flourishing possible by providing safe environments, rising living standards and personal liberties. What ecomodernists claim is that *all* human societies across the globe should

benefit from that kind of progress, while at the same time stressing the need to take care of the natural world in new ways.

Ecomodernism is hardly recognisable in the caricature that is often made of it as a neoliberal project that is set on reproducing the megalomaniac ethos of modernity (see Fremaux, 2019). As Symons (2019: 59) has argued, this is a misreading: ecomodernism argues that the state should play an active economic role shaping the trajectory of technological and economic change. For some thinkers, ecomodernism points to some kind of *global social democracy* (Karlsson, 2018; Symons, 2019). Disputable as this view may be, the fact is that ecomodernism *advocates* greater global equality and the protection of the natural world for its own worth — it is an *eco* after all. Ecomodernism is not just the continuation of ecological modernisation by other means: it is far more transformative and it draws on the promise of modernism as an open-ended process oriented towards emancipation through the clever use of technology and public policy. The progressive use of technology brings ecomodernists close to *accelerationists* — as they reject the destruction of the material platform of neoliberalism and suggest instead that it needs to be repurposed towards common ends (Srniceck and Williams, 2017).

What ecomodernism demonstrates is that there is not just one way to respond to the challenges of the Anthropocene — on the contrary, there are different views on how the planet's habitability is to be secured. This means making it safe so that a flourishing humanity can thrive on it without generating vast inequalities between societies and within them. In turn, this has implications for emancipation. Whereas a degrowth agenda is not compatible with the modern understanding of emancipation, an ecomodernist strategy can adopt an emancipatory language as it promises material well-being for all in a sustainable planet. Against the idea that the Anthropocene dramatically diminishes human possibilities, ecomodernism affirms that ecological limits can be navigated in imaginative ways. In the words of Bruno Latour, the dream of emancipation has not turned into a nightmare — it just was too limited as it excluded non-humans and did not care about the unexpected consequences of human expansion (Latour, 2011: 23). To put it differently, it was a *careless* emancipation that stands in stark contrast to the kind of *careful* emancipation that the Anthropocene requires. As Vogel puts it, choices have not yet been made regarding the shape of socionatural relations «if choices are understood as the outcome of conscious social decision-making» (Vogel, 2016: 230).

In this sense, the Anthropocene can be said to be emancipatory insofar as it puts an end to the delusion of an unbounded human power, but also because it opens up the possibility of pursuing emancipation in a manner that is both empowering and sustainable. A similar claim has been criticised in the past and that is why the idea of limits has been central to environmentalism from its inception (see Dobson, 2016). Yet the Anthropocene represents a substantial novelty that harbours the potential for redefining how socionatural relations are socially perceived, conceptually represented, and acted upon.

From Didactic Apocalypse to Planetary Subjectivities

For emancipation to adopt a reflective shape in the Anthropocene, new planetary subjectivities must emerge. It should be noted that I am not referring to *subjects* but to *subjectivities*, i.e. new context-dependent forms of acting as, and becoming, a subject. To put it differently, a subject is someone who is part of the world and relates to it in an open manner, establishing an unpredictable relation to the processes of subjectivation. On their part, subjectivities are ways of becoming and acting as subjects that are historically contingent and dynamic. My argument is a normative one and it is grounded on a deliberate abstraction from the real, suggesting that humanity can change after for the better being exposed to the experience of vulnerability. To be sure, the experience of vulnerability can unite and divide. Yet thinking about new forms of subjectivities and collective action is to invest in new possibilities for reversing the unsustainability trend in ways that are compatible with personal autonomy and social justice.

In this regard, it has been argued that we are the first generation that is aware of how human actions influence the Earth-system and thus also the first that has the power and the responsibility of changing its relationship with the planet (Steffen et al., 2011: 749). Already in Ulrich Beck's theory of the risk society, the notion of reflexivity featured prominently: according to Beck, global risks can perform an «enlightening function» that allow societies to prevent the dangers that they themselves have created (Beck, 2009b: 91). Yet the new understanding of emancipation that was supposed to rise from the self-identification of society as risk society never quite happened. The problem is thus apparent: what is new about the Anthropocene? Why should the latter provide what earlier period of eco-political mobilisation did not?

To begin with, the Anthropocene should not be understood just as an outcome of modernity — its range is much larger as it connects with the particular way in which the human species

inhabit the planet. As Chakrabarty (2008) points out, different temporalities converge in the Anthropocene: the human, the industrial, the planet's. For that reason, the Anthropocene is less a risk than a condition, i.e. a new planetary context in which humanity must learn to live. As Dryzek and Pickering (2019) put it, the Anthropocene may eventually be proven either good or bad, but we can already be certain that it is «inescapable». The stakes are higher: the anthropogenic disruption of planetary systems, chiefly among them the Earth's climate, is serious enough to provide the enlightening function Beck referred to. The expression of the latter is what I call *planetary subjectivities*, which result from the awareness that (i) human beings are *earthly creatures* that depend on the Earth's conditions for their survival and well-being, and (ii) such conditions are severely endangered in the Anthropocene.

Yet how exactly are planetary subjectivities to emerge? The Anthropocene is an «event» in the sense that Žižek (2014) gives to the word — a radical novelty that cannot be ignored once it enters into our field of perception. Climate change and other manifestations of the Anthropocene are increasingly experienced as parts of our daily life: extreme weather events and firestorms, not to mention the coronavirus pandemic, intrude in a mediated world calling our attention to the increasing dangerousness of the planet. This is the reason why the Anthropocene may serve as a driver for changing the public perception of socionatural relations — despite the competing responses that climate change and other planetary disruptions elicit. What distinguishes the Anthropocene is the manner in which it puts human agency at the centre of the Earth's functioning, integrating the different episodes of environmental disruption into a coherent narrative of global change.

The Anthropocene can thus operate as a *didactic apocalypse*. It acts both as a dystopian narrative oriented towards the transformation of present social conditions and as a real threat located sometime in the future — a threat that gains credibility set in the wider context of a remote but violent planetary history. It is didactic, because it tries to prevent the worst possibilities that are latent in the planet's current trajectory, so that a climatic catastrophe can be avoided (see Steffen et al., 2018). As an apocalypse, the Anthropocene places humanity in the juncture between two temporalities, pointing out both the *continuity* of a planet in which we appeared only recently and the *discontinuation* of the conditions that have prevailed over the last 11.700 years (see Davies, 2016). In particular, it is the Anthropocene's connection to deep time and telluric events that facilitates a new understanding of what is at stake now that

the Holocene has ended (see Milligan, 2013). Humanity has become colossal, reaching such proportions that it is almost impossible to understand or represent it (Raffnsøe, 2016: 12). The same goes for those entities that surround humans and interact with them: Morton (2013) has introduced the «hyperobject» in order to designate those things that are distributed massively in space or time in relation to humans and which have come to represent the end of the Earth as a stable home for humanity. The Anthropocene thus invites a particular viewpoint, that of being at the end of the world.

Fostering planetary subjectivities thus involves getting familiar with the *possibility* of extinction, which is a risk inherent to our earthliness. The corresponding sense of vulnerability is expected to be a key driver of planetary subjectivities. In this sense, vulnerability responds to the harms and insecurities that constitute «a precarious position in the world» (Butler, 2016). Eco-feminist thinkers have also stressed the key role of vulnerability, connecting it to a relational view of the world that rejects the modern emphasis on the need to overcome natural constraints in order to be emancipated humans (see Haraway, 2016). In the Anthropocene, we are bound to discover that the Earth can be a precarious place for all, that the world itself becomes dangerous if not properly taken care of. Needless to say, this abstraction must be put to work. A discourse on the Anthropocene is to be developed in academia, the media, collective action, political discourses, contemporary fictions, artistic works. The Anthropocene is a symbolic and affective device that can be exploited by political actors, grassroots organisations, scholars and artists with the purpose of disturbing established ways of seeing. This is happening: the Anthropocene features in books, movies, novels, pop albums and even an opera.

Resistance is, of course, just a possible outcome of such discourse. Yet the opposition to current social arrangements can also be expressed in a different way, namely by developing a planetary subjectivity that leads to the demand that a «good Anthropocene» is actively pursued by means other than overthrowing the current social organisation. That is why urgency must be emphasised, but also opportunity: the debate on the «good Anthropocene» is not just about survival, but about the particular way in which we wish to inhabit the Earth. As Rorty (1999) cautioned, «social hope» should be at the centre of public debate, understood as a plausible narrative of progress — meaning the belief that things *can* change for the better. The argument is not that everything will be turned around, but rather that the intrinsic features of the Anthropocene and the discourse that is emerging out of them can make a difference. Let us

recall Kant's (1992) argument about moral progress — the spectator's enthusiastic response to the French Revolution was a sign of a moral disposition in humankind in which the orientation towards the best is implicit. For the Anthropocene to perform that function, though, apocalyptic narratives must be supplemented with positive ones.

That is why emancipation remains as relevant as ever — provided that it is conceived in a way that is attuned to the distinctive features of the Anthropocene. It has to be reflective, i.e. aware of the biophysical foundation of social reproduction. It is thus an effect of experience (the experiences of vulnerability in the Anthropocene) as well as an effect of reason (knowledge of the Anthropocene). As the emergence of new subjectivities can be expected to coincide with an ever-growing amount of severe planetary disruptions, the availability of a positive view of the Anthropocene should help to reduce the plausibility of denialist counterarguments. By presenting a positive view of humanity in the Anthropocene that contrasts with the emphasis on austerity and restraint (see Arias-Maldonado, 2020), ecomodernism can successfully represent an alternative to those political discourses that insists on the impossibility and/or undesirability of human emancipation in a climatically disturbed planet.

References

Adorno T and Horkheimer M (1997) *The Dialectic of Enlightenment*. London: Verso.

Adorno T (2004) *Minima Moralia. Reflections from Damaged Life*. London: Verso.

Alexander S (2013) Voluntary Simplicity and the Social Reconstruction of Law: Degrowth from the Grassroots Up. *Environmental Values* 22(2): 287–308.

Arias-Maldonado M (2020) Blooming landscapes? The paradox of utopian thinking in the Anthropocene. *Environmental Politics* 29(6): 1024–1041.

Asafu-Adjaye J, et al. (2015) *An Ecomodernist Manifesto*. Available at: http://www.ecomodernism.org/

Ausubel JH (1996) Can technology spare the earth? *American Scientist* 84(2): 166–178.

Barnes J (2016) Rifts or Bridges? Ruptures and Continuities in Human-Environment Interactions. In: Emmett R and Lekan T (eds) *Whose Anthropocene? Revisiting Dipesh Chakrabarty's 'Four Theses'*. Munich: Rachel Carson Center Perspectives, pp.41–46.

Barry J (2012) *The Politics of Actually Existing Unsustainability*. Oxford: Oxford University Press.

Beck U (1986) *Risikogesellschaft. Auf dem Weg in eine andere Moderne*. Frankfurt: Suhrkamp.

Beck U, Giddens A and Lash S (1994) *Reflexive Modernization. Politics, Tradition, and Aesthetics in the Modern Social Order*. Cambridge: Polity Press.

Beck U (2009) *World at Risk*. Cambridge: Polity Press.

Beeson M (2019) *Environmental Populism: The Politics of Survival in the Anthropocene*. Singapore: Springer.

Blühdorn I (2019) The dialectic of democracy: modernization, emancipation and the *great regression*. *Democratization* 27(3): 1–19.

Brand S (2009) *Whole Earth Discipline*. New York: Viking Press.

Brunkhorst H (2004) Critical Theory and the analysis of contemporary mass society. In: Rush F (ed) *The Cambridge Companion to Critical Theory*. Cambridge: Cambridge University Press, pp.248–279.

Butler J (2016) Rethinking Vulnerability and Resistance. In: Butler J, Gambetti Z and Sabsay L (eds) *Vulnerability in Resistance*. Durham & London: Duke University Press, pp.12–27.

Chakrabarty D (2008) The climate of history: four theses. *Critical Inquiry* 35: 197–222.

Crownshaw T, et al. (2019) Over the horizon: Exploring the conditions of a post-growth world. *The Anthropocene Review* 6(1–2): 117–141.

Danowski B and Viveiros de Castro E (2017) *The Ends of the World*. Cambridge: Polity.

Davies J (2016) *The Birth of the Anthropocene*. Oakland: University of California Press.

De Geus M (1999) *Ecological Utopias. Envisioning the Sustainable Society*. Utrecht: International Books.

Demaria F, Schneider F, Sekulova F and Martínez-Alier J (2013) What is degrowth? From an activist slogan to a social movement. *Environmental Values* 22: 191–215.

Deriu M (2012) Democracies with a future: Degrowth and the democratic tradition. *Futures* 44(6): 553–561.

Dobson A (2016) Are There Limits to Limits? In: Gabrielson T, et al. (eds) *The Oxford Handbook of Environmental Political Theory*. Oxford: Oxford University Press, pp.289–303.

Douthwaite R (1993) *The Growth Illusion. How Economic Growth Has Enriched the Few, Impoverished the Many, and Endangered the Planet*. Tulsa: Council Oak Books.

Dryzek J and Pickering J (2019) *The Politics of the Anthropocene*. Oxford: Oxford University Press.

Dworkin G (1988) *The Theory and Practice of Autonomy*. Cambridge: Cambridge University Press.

Ellis E (2018) *Anthropocene. A Very Short Introduction.* Oxford: Oxford University Press.

Foucault M (1986) *The Care of the Self.* New York: Pantheon.

Fremaux A (2019) *After the Anthropocene: Green Republicanism in a Post-Capitalist World*. London: Palgrave.

Gambrel JC and Cafaro P (2010) The Virtue of Simplicity. *Journal of Agricultural and Environmental Ethics* 23(1–2): 85–108.

Greene J (2014) *Moral Tribes. Emotion, Reason, and the Gap Between Us and Them*. London: Atlantic Books.

Guilluy C (2019) *No Society: la fin de la classe moyenne occidentale*. Paris: Flammarion.

Habermas J (1987) *The Theory of Communicative Action. Volume 2: Lifeworld and System: A Critique of Functionalist Reason*. Cambridge: Polity.

Hamilton C (2016) The Anthropocene as rupture. *The Anthropocene Review* 3(2): 93–106.

Haraway D (2016) *Staying with the Trouble. Making Kin in the Chthulucen.* Durham & London: Duke University Press.

Hausknost D (2020) The environmental state and the glass ceiling of transformation. *Environmental Politics* 29(1): 17–37.

Heinberg R (2011) *The End of Growth. Adapting to Our New Economic Reality*. Forest Row: Clairview.

Horkheimer M (2013) *Eclipse of Reason*. London & New York: Bloomsbury.

Jaeggi R (2014) *Kritik von Lebensformen*. Berlin: Suhrkamp.

Jackson T (2009) *Prosperity Without Growth. Economics for a Finite Planet*. London: Earthscan.

Kahneman D (2011) *Thinking, fast and slow*. London & New York: Allen Lane.

Kallis G (2011) In defence of degrowth. *Ecological Economics* 70: 873–880.

Kallis G (2019) *Limits: Why Malthus Was Wrong and Why Environmentalists Should Care*. Stanford: Stanford University Press.

Kanschik P (2016) Eco-Sufficiency and Distributive Sufficientarianism – Friends or Foes? *Environmental Values* 25: 553–571.

Kant I (1992) *The Conflict of the Faculties*. Lincoln: University of Nebraska Press.

Kant I (2009) *An Answer to the Question: 'What is Enlightenment'?* London: Penguin.

Karlsson R (2018) The high-energy planet. *Global Change, Peace and Security* 30(1): 77–84.

Latouche S (2010) Editorial — degrowth. *Journal of Cleaner Production* 18: 519–522.

Latour B (2011) Love Your Monsters. Why We Must Care for Our Technologies as We Do Our Children. *Breakthrough Journal* 2: 17–25.

Lepori M (2015) There is no Anthropocene: Climate Change, Species-Talk, and Political Economy. *Telos* 172: 103–124.

Lewis M (1992) *Green Delusions. An Environmentalist Critique of Radical Environmentalism*. Duke: Duke University Press.

Locke J (1988) *Two Treatises of Government*. Cambridge: Cambridge University Press.

Marcuse H (2002) *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*. Abingdon & New York: Routledge.

Marx K (2000a) Theses on Feuerbach. In: McLellan D (ed) *Karl Marx: Selected Writings*. Oxford: Oxford University Press, pp.171–174.

Marx K (2000b) On the Jewish Question. In: McLellan D (ed) *Karl Marx: Selected Writings*. Oxford: Oxford University Press, pp.46–70.

Meadows D, et al. (1972) *The limits to growth: A report for the club of Rome's project on the predicament of mankind*. New York: Universe Books.

Meyer J (2016) Politics in—but not of—the Anthropocene. In: Emmett R and Lekan T (eds) *Whose Anthropocene? Revisiting Dipesh Chakrabarty's 'Four Theses'*. Munich: Rachel Carson Center Perspectives, pp.47–53.

Mill JS (2008) *Principles of Political Economy*. Oxford: Oxford University Press.

Mill JS (2015) *On Liberty, Utilitarianism and Other Essays*. Oxford: Oxford University Press.

Milligan B (2013) Space-Time Vertigo. In: Ellsworth E and Kruse J (eds) *Making the Geologic Now: Responses to Material Conditions of Contemporary Life*. Brooklyn: Punctum Books, pp.123–130.

Mol APJ, Sonnenfeld D and Spaargaren G (2009) *The Ecological Modernisation Reader*. London: Routledge.

Morton T (2013) *Hyperobjects. Philosophy and Ecology after the End of the World*. Minneapolis & London: University of Minnesota Press.

Mythen G (2004) *Ulrich Beck. A Critical Introduction to the Risk Society*. London: Pluto Press.

Nordhaus T and Shellenberg M (2007) *Break Through. From the Death of Environmentalism to the Politics of Possibility*. Boston: Houghton Mifflin.

Paulson S, Kallis G, D'Alisa G and Demaria F (2020) *The Case for Degrowth*. Cambridge: Polity.

Pichler M, Brand U and Görg C (2020) The Double Materiality of Democracy in Capitalist Societies. Challenges for Socio-Ecological Transformations. *Environmental Politics* 29(2): 193–213.

Princen T (2005) *The Logic of Sufficiency*. Cambridge: The MIT Press.

Raffnsøe S (2016) *Philosophy of the Anthropocene: The Human Turn*. New York: Palgrave Macmillan.

Reichel A and Perey R (2018) Moving beyond growth in the Anthropocene. *The Anthropocene Review* 5(3): 242–249.

Revkin A (2014) Exploring Academia's Role in Charting Paths to a 'Good' Anthropocene. In: *Dot Earth (blog)*, *New York Times*. Available at: https://dotearth.blogs.nytimes.com/2014/06/16/exploring-academias-role-in-charting-paths-to-a-good-anthropocene/ (accessed 9 December 2020).

Romano O (2019) *Towards a Society of Degrowth*. London: Routledge.

Rorty R (1999) *Philosophy and Social Hope*. Penguin: London.

Rousseau JJ (1984) *A Discourse on Inequality*. London: Penguin.

Semal L (2015) Anthropocene, catastrophism and green political theory. In: Hamilton C, Bonneuil C and Gemenne F (eds) *The Anthropocene and the Global Environmental Crisis*. London & New York: Routledge, pp.87–99.

Srniceck N and Williams A (2017) *Accelerate Manifiesto: For an Acceleracionist Politics*. Gato Negro: Mexico DF.

Steffen W, et al. (2011) The Anthropocene. From Global Change to Planetary Stewardship. *Ambio* 40(7): 739–761.

Steffen W, et al. (2018) Trajectories in the Earth System in the Anthropocene. *Proceedings of the National Academy of Sciences of the United States of America* 115(33): 8252–8259.

Stengers I (2015) *In Catastrophic Times: Resisting the Coming Barbarism*. London: Open Humanities Press & Meson Press.

Susen S (2014) Emancipation. In: Gibbons M (ed) *The Encyclopedia of Political Thought*. Malden: Wiley-Blackwell, pp.1024–1038.

Symons J (2019) *Ecomodernism: Technology, Politics, and the Climate Crisis*. Cambridge: Polity Press.

Vetlesen A (2015) *The Denial of Nature: Environmental Philosophy in the Era of Global Capitalism*. London: Routledge.

Virilio P (2007) *The Original Accident*. Cambridge: Polity.

Vogel S (2016) *Thinking Like A Mall. Environmental Philosophy After the End of Nature*. Cambridge: The MIT Press.

Weiss M and Cattaneo C (2017) Degrowth – Taking Stock and Reviewing an Emerging Academic Paradigm. *Ecological Economics* 137: 220–230.

Zalasiewicz J, Waters C, Williams M and Summerhayes C (2019) *The Anthropocene as a Geological Time Unit. A Guide to the Scientific Evidence and Current Debate*. Cambridge: Cambridge University Press.

Žižek S (2014) *Event*. London: Penguin.