International Institute of Social Studies





Climate change and class conflict in the Anthropocene

Inaugural lecture 16 May 2019
Professor Murat Arsel

'Climate change and class conflict in the Anthropocene'

Murat Arsel¹

"The combination of crisis-stricken capitalism externalizing more costs, the reckless use of technology and nature for value realization in the sphere of circulation, and the like, must sooner or later lead to a 'rebellion of nature', that is, to powerful social movements demanding an end to ecological exploitation."

James O'Connor (1988: 32)

"...environmental conflicts...do not always correspond to fights between workers and capitalists. Sometimes they do, like pollution in a factory. But quite often the actors are different... Who are the protagonists of what James O'Connor called 'the second contradiction of capitalism'?"

Joan Martinez Alier (Pellegrini 2012: 349)

"It is much easier to celebrate the class struggle than to analyze it."

Jason W. Moore (2015: 38)

I. The same ship

While recent criticisms have shown that the Anthropocene is not merely a geological concept and that it needs to be apprehended within a historical political economy framework (Bonneuil and Fressoz 2016), contemporary debates around sustainability continue to appeal for united action from humanity as a whole. This is especially the case within the context of climate change. Since dramatic sea level rises are one of its most spectacular impacts, it is not surprising that the metaphor of humanity traveling 'on the same ship' has emerged as a common image. This trope is often deployed to argue that "we are all at risk" and that we will "sink or swim together" (Annan 2009).

The 'same ship' metaphor has been challenged forcefully for two related reasons which show that environmental change cannot be understood without explicit reference to socio-economic inequalities (Schmitz and Scoones 2015). On the one hand, the passengers have differing responsibilities in terms of their roles in creating the problem. This has both a historical dimension (much of the accumulation is due to the greenhouse gas emissions of already industrialized countries) and one of wealth (a billionaire

¹ While academic work seems to be a solitary exercise, it is one deeply embedded in, supported by, and dependent on communities, intellectual and otherwise. One could therefore write a list of thanks that rivals the length of the lecture itself. For the sake of brevity, here I would like to express my gratitude to my family for their unconditional support. I have also been lucky to have many friends and fellow travelers in the world of academia, whose company and intellectual engagement I have enjoyed immensely. Finally, I would like to express my deep appreciation of the ISS community – staff and students of past and present – for challenging me in so many different and productive ways.

from Beijing is responsible for much more emission than a homeless person from New York). On the other, adaptation to climate change is "intrinsically spatial" (Shi et al. 2016: 132). A poor Dutch woman might be better protected than a rich Bangladeshi one given the unevenness in the capabilities of their respective countries. It is of course not only one's national location that matters – gender, race and ethnicity contribute to the inequalities in the vulnerability to the effects of climate change (Adger 2006), as demonstrated in the experience of poor African Americans in New Orleans during Hurricane Katrina (Gutmann 2011). Put simply, the ship might be one, but it certainly has different classes of cabins separated according to the passengers' responsibility for the creation of climate change and the experience of its effects (Martinez-Alier and Temper 2007).

If the genesis of climate change and the distribution of its impacts need to be understood by reference to class, what about societal responses? Do class positions shape politics of climate change? If yes, do responses conform to the orthodox Marxist expectation based around the two-class model that pits the proletariat against the bourgeoisie? The answer is far from clear since there is a fundamental difference between 'traditional' and 'ecological' distribution conflicts, which emanates from the materiality of climate change. Whereas there is no material interest for the members of the bourgeoisie to fight against the capitalist mode of production, they do have a vested interest in overcoming capitalism's environmental blind spots because, without genuine and dramatic changes, the negative impacts of climate change are likely to be catastrophic at a planetary scale. Similarly, contemporary anti-capitalist movements do not have the luxury of "cheering on a superstorm" the way they might a strike or a sit-in (Malm 2018: 207). To take the trope of the common ship one final step, is it possible to expect that the passengers would respond in solidarity since, in the words of the autonomist Marxist Amadeo Bordiga, "if the third class and the crew are not safe, the superior class, that paid stupendous passage fares, is not safe either" (1956)?

For Swyngedouw, thinking beyond class within the context of the environment is unrealistic as starkly illustrated by the example of the Titanic, where a "large number of the first-class passengers found a lifeboat; the others were trapped in the belly of the beast" (2013: 17). In other words, the ship might be one but the politics of the passengers will differ along existing lines of socio-economic inequality. Dipesh Chakrabarty, however, has suggested that such a reading is limited by its over-reliance on outdated concepts and behavioural patterns drawn from the study of societal conflicts relating to capitalism. The cognizance of the gravity of climate change could lead humanity to see past the cabin structure of the ship, to "think of humans on different scales and in different contexts" (2017: 25) and possibly transcend the lines of socio-economic inequality. Thus, Chakrabarty asserts that the "politics of climate change is more than the politics of capitalism" (ibid.) The tension between these two positions points toward one of the fundamental puzzles in the study of the political economy of the environment: Is class relevant for understanding the politics of climate change?

II. Inequality and the environment

If climate change is the pre-eminent environmental challenge facing humanity, inequality is the definitive question economically and is now "at the forefront of public debate" (Atkinson 2015: 1). This is evident from not only a spate of movements around the world such as 'Occupy Wall Street' (Calhoun 2013) and the emergence of the '1 per cent' as a critical signifier (e.g. Stiglitz 2011), but also the remarkable popularity of scholarly works such as Thomas Piketty's (2014) 'Capital in the 21st Century'.

The World Inequality Report of 2018 shows that the emergence of economic inequality as a global concern dovetails the fact that "income inequality has increased in nearly all world regions in recent decades" (Alvaredo et al. 2017: 9). While opinions diverge significantly on how much inequality is desirable and actually feasible, Atkinson is far from alone in his "belief that the present level of inequality is excessive" (2015: 9) and there is general scholarly consensus that excessive inequality can be detrimental to societal well-being economically, politically, and, of course, environmentally (Newell 2005).

The study of the link between socio-economic inequality and climate change politics has taken several different tracks. One literature has focused on the inequality in the experience of the effects of climate change, operationalized in recent years primarily through the concepts of vulnerability, resilience and adaptation and how these differ for various groups, such as women and indigenous peoples (e.g. Adger et al. 2007; Arora-Jonsson 2011; Mearns and Norton 2009). Another has problematized inequality in responsibility for creating the problem of climate change primarily at the international level. This body of work has concentrated on how these differing responsibilities can and should translate to differentiated obligations to suffer the burden of adaptation between 'Northern' and 'Southern' countries within the context of attempts to reach a negotiated international treaty (e.g. Gupta 2016; Parks and Roberts 2010). A third stream combines the concerns of both, looking at how vulnerable groups, such as peasants and indigenous peoples, resist development projects as well as initiatives for adaptation and mitigation because of the inequality of power relations inherent in their planning, implementation and sharing of their benefits and burdens. This is the primary focus of the field of political ecology (Peet and Watts 1996), which has a normative component oriented towards the achievement of 'environmental justice' (Nixon 2011).

This last literature has made socio-economic inequality a central concept in the study of a variety of conflicts that are linked to climate change mitigation and adaptation, such those centred on 'land grabbing' for biofuels (e.g. Borras et al. 2010), REDD+ initiatives (e.g. Milne and Adams 2012), or payments for ecosystem services (PES) programmes (e.g. Muradian et al. 2013). A related body of work similarly sees inequalities as important for understanding efforts towards the construction of alternatives, be it food sovereignty (e.g. Walsh-Dilley et al. 2016), degrowth (Kallis 2011), or 'leaving oil in the soil' (e.g. Arsel 2012) While the primary insight of this literature, that contemporary development and sustainability projects are built on an unrealistic 'win-win' narratives that "reproduce existing inequities and forms of social exclusion" (Corbera 2012: 612) is indeed accurate, the political positionality of different socio-economic groups are not analysed in sufficient depth, especially if the ecological context is one of 'sink or swim together'.

A more thorough theoretical engagement with the question of how socio-economic inequalities shape political responses to environmental change has been taking place within the context of the relationship between global capitalism as an economic system and the environment. There is now a vast and still expanding literature on the subject (e.g. Arsel and Buscher 2012; Moore 2015) and the debates are not limited to 'critical' circles, including figures such as Pope Francis (2014) and Sir Nicholas Stern (2006). As evidenced by the tone of the report of the UN Secretary General's High-Level Panel on Global Sustainability, problems such as climate change are seen as demonstrating the existence of a fundamental crisis:

The current global development model is unsustainable. We can no longer assume that our collective actions will not trigger tipping points as environmental thresholds are breached, risking irreversible damage to both ecosystems and human communities. At the same time, such thresholds should not be used to impose arbitrary growth ceilings on developing countries seeking to lift their people out of poverty. Indeed, if we fail to resolve the sustainable development dilemma, we run the risk of condemning up to 3 billion members of our human family to a life of endemic poverty. (2012: 32)

While the Brundtland Report (1987) too drew attention to the existence of an ecological crisis, it is significant that the idea of 'natural limits' is emphasized so strongly in this document as well as in recent debates. From Martinez-Alier's work on the intensification of the social metabolism (2009) to the concept of 'planetary boundaries' (Rockstrom et al. 2009), and to debates concerning the Anthropocene (e.g. Pattberg and Zelli 2016), it is now commonly accepted that the prevailing economic system around the world is out of kilter with ecological realities. As with the specific case of climate change, however, much of the overall literature on capitalism and environmental change has concentrated its efforts on explaining how socio-economic inequalities lead to unequal environmental outcomes.

III. Who are the protagonists of the second contradiction?

This is not to suggest that no attention has been paid to how socio-economic inequalities shape environmental politics. But, class, the most important concept to Marxist analysis, has been conspicuously missing in the study of the global environmental crisis in general and climate change in particular, which is arguably the most potent contemporary threat to the survival of capitalism. It bears repeating that this is not to argue that the absence is critical scrutiny of capitalism's environmental impacts. Rather, what is missing is a disciplined Marxist analysis of the ecological conflicts that are being generated in response to capitalism's (self-) destructive tendency.

While Chakrabarty's (2017) argument can be extended to the global environmental crisis as a whole to suggest that the very survival of 'humanity' is at risk, it is evident that 'humanity' is not responding to the crisis as a political collective. Nevertheless, environmentalism as political praxis has become increasingly vibrant in the past half century and it is certainly set to become even more salient as the Anthropocene continues to reveal its dark sides (Jasanoff 2017). Who exactly are the protagonists of the resulting systemic conflicts? On one side, the 'enemy' is easily discerned: capital, its agents in state mechanisms, and its comprador collaborators in civil society. What is far less clear, especially if we look past site-specific struggles towards broader systemic challenges, is how to conceptualize the actors comprising the opposition.

That these conflicts should be a central concern of Marxist political economy is demonstrated by Martinez Alier's designation of them as ecological distribution conflicts (Martinez Alier et al. 2016). But are these ecological conflicts analytically similar enough to 'traditional' class politics over the distribution of surplus value created by labour so that they too can be subjected to class analysis? While there are some obvious parallels between the uneven and unjust appropriation of value produced by human labour and the value produced by the labour of nature (Parenti 2015), this is primarily true in the sense of 'natural resources' such as timber, oil, and extractive goods in general. However, the picture becomes far more complicated if we introduce ecological 'bads' into the picture (ecological services are

yet another complication). Some of the 'bads', for example the health impacts for an oil spill from a broken pipeline, do accrue to a group such as an indigenous community in the Amazon that could be collectively conceptualized in class-specific terms (Orta Martinez et al 2019). However, others might defy spatial and temporal boundaries to such an unprecedent extent as in the case of nuclear radiation that their impact can evade boundaries of class (Goldblatt 1996).

However, the real difference between traditional distributional conflicts and ecological distribution conflicts emerges when looking at the transformative processes targeting their root causes. Chakrabarty's argument does resonate here since even according to the dictates of neoclassical economists, rational individuals – including members of the bourgeoisie – would be expected to prioritize the survival of the planet (and human species) over the survival of capitalism. Thus, the involvement of distinct classes – including those who are organically implicated in the creation of the very environmental crisis in question – in transformative environmental politics cannot be explained away either as altruism or as a form of environmentalism that is a vehicle to achieve various other political goals (Arsel et al. 2015). The utility of class is, therefore, very much in question when it comes to the other side of ecological distribution conflicts, especially in relation to environmental problems such as climate change that are, or can be construed as being, linked to planetary survival.

In addition to engaging with this hugely significant question, it is also necessary to engage with several of its corollaries. Does class continue to be the 'motor force of history' even within the context of environmental conflicts? If it has lost its analytical centrality, is it because class has lost its purchase altogether because of the nature of the phase of capitalist modernity we are experiencing or because there is something fundamentally unique about environmental politics that render them ungermane to class analysis? Finally, is class still relevant to the study of environmental conflicts but only in a way to emphasize the need for cross-class coalitions?

IV. Class

Any discussion regarding the relevance of class to environmental conflicts has to take place within the context of broader debates regarding the overall utility of class analysis in contemporary social science and discussions regarding its diminished prevalence (e.g. Wright 1996; Grusky and Sorensen 1998; Crompton and Scott 1999; Davis 2013). Responses to this decline, on which there seems to be little doubt, register several commonalities. For instance, there is incredulity that at this stage of late capitalism, where patterns of inequality especially within nations but across the globe as a whole have deepened and seem to be on the verge of ossifying, the analytical tool specifically and normatively built around the elimination of inequality has waned in influence. While debates regarding socioeconomic inequality have reached the mainstream (Deaton 2013; Saez and Zucman 2014; Piketty 2015), attempts at recognizing it structurally as part of the logic of capitalism seem to be lagging far behind. Just as perplexing is the analytical approaches that have come to dominate instead of Marxist class analysis. On the one hand, the hegemony of neoclassical economics, while analytically separate from neoliberal ideology, is clearly propped up by the power of the latter despite the grave misgivings of critical social scientists, including heterodox economists (Akbulut et al. 2015). On the other, post-modern and poststructural approaches, despite paying lip service to broader and historical inequalities unleashed by the rise of capitalism, are seen unable to replace the task carried out by Marxist class analysis.

This latter critique is propelled not from a conviction that race, gender, and ethnicity are not important but by the recognition that their fundamental malleability make them unsuitable for grounded political economy analysis on their own (Chibber 2006). This is especially so since the persistent focus of post-modern and post-structural theory on the limitations of structural explanations unwittingly contributes to accounts that privilege if not the individual than the potentially vacuous concept of community. Shorn off the transformative capability embedded in class analysis, the resulting nature of critical work in this area has been far too content to critique capitalism as a system and demonstrate its class-based violations but unwilling to conceptualize emergent alternatives systematically and concretely (Arsel and Dasgupta 2015). Put differently, the type of approach that has come to fill the void left by class analysis is ultimately apolitical since it fails to apprehend social change through emancipatory, class-conscious collective action.

Nevertheless, it is also important to recognize that environmental studies too benefited from this climate as concern for environment, as with concern for gender, race and ethnicity, was often written off if not as false consciousness then as a second-order concern that could be dealt with once tension between the bourgeoisie and the proletariat was transcended. The response to the shortcomings of 'classical' class analysis has not been to dismiss it altogether but to rearticulate its relevance to encompass broader concerns. In other words, rather than relegating the concept of class to a historical curiosity in order to highlight the salience of identity, there are attempts to transcend the limitations of the class by rejuvenating it through a critical dialogue with 'new' concerns. Efforts in this regard seem especially successful around the issue of gender (e.g. Fraser 2016) and they need to be extended into the study of sustainability in general and environmental conflicts in particular. Doing so, however, would need not be in the shape of an uncompromising defence of class analysis since rethinking class would also involve "understanding the limits of what class can explain" (Wright 1997: 1).

What are then the conceptual building blocks of class analysis? Inequality, as already mentioned, in terms of assets is certainly one. What exactly is understood by assets, especially in the context of class analysis in relation to environmental conflicts, is a matter for a more detailed debate but that there is a material basis to class cannot be disputed. A basic understanding of class would recognize that differences in material bases of action – social, economic, cultural as well as political – have structural implications. That, in turn, leads to one of the key contributions of Marxist political economy, that appearance of 'free will' can be misleading and that structural conditions can give the illusion that individuals and classes partake in certain relationships that are in fact detrimental to their interests, material or otherwise. The reason why behaviour is channelled against self-interest is a function of dominance, power differentials arising from differing attainment of assets (Adaman et al 2019). Relationships of dominance, structured by unequal ownership of assets leads to exploitation, the very heart of capitalist relationships in which the transfer of surplus takes place without apparent coercion. As this very brief exposition makes clear, Marxist understanding of class is fundamentally relational and classical approaches see this relationship as one geared towards sustaining production and (re)production, with labour – as an analytical concept – emerging as a core site for concern. The economic dynamics surrounding the relationship between labour and capital is a relationship of exploitation, and class analysis is ultimately geared towards explaining its machinations, its implications and, since class analysis does double duty as both an analytical and political tool, its cleavages that can lend themselves to transformative action.

So far this section has approached class from the basic 'two-class' model of the world, which recognizes the bourgeoisie and the working class. While the approach certainly has its limits, its analytical simplicity makes for a convenient base from which to explore the link between class and environmental conflict. In a conventional framework, Marxist class analysis sees an a priori tension between the interests of the two classes, whose resolution is only possible by way of conflict. Therefore, what separates Marxist class analysis from other approaches to political economy is that rather than seeing conflicts as a function of "contingent factors", it apprehends them as a function of the "antagonism of material interests generated by the exploitative character of capitalist class relations" (Wright 1999: 16). This is fundamentally a normative view of the world since the root causes of inequality – of assets and therefore power – are structural, the solutions cannot be seen as a "question of reforming the hearts and minds of propertied people, but rather a question of reducing the dependency and destitution that subject those without property to abject subordination" (Herring and Agarwala 2006: 325).

It is this seemingly irreconcilable interest between the two classes that environmental conflicts problematize. While there are other related concepts in the Marxist toolbox – class formation, class location, class consciousness, etc. – the focus here will primarily be on class interest in order to distinguish the differences and similarities between 'traditional' class conflicts and environmental class conflicts.

V. Capitalism, nature and conflict

As already mentioned, there is no dearth of work on the tension between capitalism and nature. For the sake of brevity, this section therefore focuses mainly on the Marxist (or Marxian) component of the literature, which can be discussed under two broad headings. The first focuses primarily on the logic of capitalism as a mode of production and how its relationship with nature should be conceptualized, especially in relation to the growing awareness that nature can no longer be treated as infinitely abundant (e.g. Burkett 1999). This approach can be described as the political economy of nature. The second is more directly concerned with the impact of capitalism on nature and society and can be subsumed under the rubric of political ecology (e.g. Biersack and Greenberg 2006). It focuses especially on the differential impacts of capitalism on specific spaces, natures and communities as well as how these communities respond or fight back (actor network theory influenced variants of this work also focuses on the agency of non-human entities, e.g. Bennett 2009). While this is a somewhat arbitrary distinction, the first can be seen as a study of capitalism's internal workings vis-à-vis nature and the second of the distribution of its impacts. In different ways, both literatures are concerned with understanding how nature (and society, or for some, socio-natures, e.g. Swyngedouw 2003) is made more amenable for the continuation and deepening of processes of accumulation.

The section does not purport to present a comprehensive discussion of Marxist environmental studies and, as such, it is primarily focused on a few prominent examples to illustrate the contention that this literature does not sufficiently theorize the role of class in environmental conflicts.

a. Political economy of nature

This is arguably the first stream of explicitly Marxist literature on environmental studies, also described by some as 'ecological Marxism' (Kovel 1995; Benton 1998; Burkett 1999). The main thrust of this

literature was to discover the 'green Marx' by re-reading his writings with the fresh set of eyes provided by the post-World War II boom in environmental consciousness or to rework Marxist concepts to suit explicitly environmental analytical ends. James O'Connor's 'second contradiction of capitalism' is emblematic in this regard (1991). The first contradiction is essentially one of overproduction of goods, creating an ever-widening gulf between labour's shrinking ability to consume and capitalism's ever-expanding ability to produce. As this gulf widens, it is expected that the tension would lead to revolutionary change that will result in labour assuming full control of the means of production. O'Connor's second contradiction is one of underproduction, namely the ability of capital to replicate the natural conditions (which includes ecological as well as human foundations of capitalism) that it needs to thrive. As capitalism continues to demand more and more resources both for the production of goods and absorption of 'bads', it undermines ecosystems' ability to reproduce themselves (which is a crisis that is intimately linked to the processes of social reproduction, as richly argued by socialist ecofeminism, e.g. Salleh 1995). O'Connor argues, therefore, that "there may exist a contradiction of capitalism which leads to an "ecological" theory of crisis and social transformation" (O'Connor 1998: 14).

O'Connor's contribution was more in terms of the development of a theoretical postulate, whose precise machinations were left for other scholars to describe. How the crisis would come about was best described by the work of John Bellamy Foster, who revived the concept of 'ecological rift', which was coined by Marx (Foster 1999). What Foster and his collaborators have effectively done is to materially illustrate O'Connor's somewhat nebulous theoretical formulation, giving it analytical purchase by linking actual ecological concepts with economic dynamics. To the extent Foster's conceptual-methodological breakthrough is an essential component in the ecological Marxist toolbox, it concerns the emergence of the material conditions upon which the contradiction would emerge rather than how it would be resolved. To wit, in the eponymous book of 544 pages there are only a handful of direct references to class, none of which actually deal with the social transformation question (Foster et al. 2011). In short, Foster's approach illustrates well the analytical ambitions of the political economy of nature literature, which does not privilege conflicts dynamics. Nevertheless, O'Connor himself is clearly attuned to the significance of the question. After laying out the analytical foundations of the second contradiction, he makes this bold and problematic assessment:

"The combination of crisis-stricken capitalism externalising more costs, the reckless use of technology and nature for value realisation in the sphere of circulation, and the like, must sooner or later lead to a 'rebellion of nature', that is, to powerful social movements demanding an end to ecological exploitation" (1988: 32).

Putting aside the fundamental anthropocentricism of the argument that 'rebellion of nature' is in fact human social movements speaking on behalf of nature (unlike the more recent concept of Anthropocene in which the earth itself emerges as an actant, see Davies 2016 and also Ghosh 2016), O'Connor does not at all specify who would comprise these 'powerful social movements'. Demonstrating perhaps that this puzzle is particularly thorny, his concluding thoughts bypass Martinez Alier's question – who are the protagonists of the second contradiction? (Pellegrini 2012: 349) – to focus instead on who should not be defining the character of the environmental backlash against capitalism. Responding to the seeming contradiction that the emerging political response to capitalism's crisis has taken the shape of the worryingly 'post-class' new social movements, O'Connor is interested mainly in critiquing the post-Marxist thought of Laclau and Mouffe (1985) as well as Offe (1985). Summarily dismissing the significance of new social movements by likening them to "other fringe

movements", he predicts that they are "bound to self-destruct" (1998: 32). What remains from his analysis is the implicit assumption that the "powerful social movements" brought up by the second contradiction would conform to the class-based features anticipated by the first contradiction.

Another problematic aspect of O'Connor's second contradiction thesis is its failure to anticipate that capital (with the assistance of the state) could convert its own crisis into a new accumulation strategy. This is mainly a failure to anticipate that global ecological crisis would become an undeniable fact (the US experience in climate denialism notwithstanding), one that is more convenient to respond to than to ignore. Capital's embrace of the environmental problematic is itself a function partly of the availability of scientific and technological alternatives (e.g. the successful global response to the Ozone layer owes much to the fact that DuPont already had a compound lined up to replace the CFCs, Maxwell and Briscoe 1997) and partly of the regulatory possibilities made possible by the neoliberal turn, whose dominance starting from the late 1970s dovetails the mainstreaming of environmentalism.

The literature on neoliberal conservation (e.g. Buscher et al. 2012), responds precisely to the innovative environmental mechanisms that began to emerge in the neoliberal era as nature – pace Polanyi (1957) – is transformed into a highly valuable commodity, which goes beyond the traditionally traded goods such as oil and timber. While the debt to O'Connor is rarely expressed, neoliberal conservation can be read as an attempt to update his work, primarily by showing how the second contradiction fails to materialize. The update is needed precisely because social forces had begun – as discussed in the next section – to rise up to demand meaningful action against an increasingly undeniable global ecological crisis. To a lesser but certainly not an insignificant extent, the mounting of environmental problems also came to be a barrier to further accumulation in certain sectors, demonstrating that just as social actors, capitalists too can display a degree of internal heterogeneity in relation to environmental politics (see, for e.g. Paterson 2001). Thus given these economic and political imperatives to respond to the environmental crisis, capital (and the state) moved from deregulation (of the economy so that environmental impacts could be externalized) to reregulation (of nature so that environmental impacts could be internalised as profit opportunities). This made not only the ability of the atmosphere into a tradable commodity by creating (with the help of the state) tradable emissions markets but also achieved the commodification of environmental services. In all such instances, the creation of new structures of ownership were decisive in the realization of such 'innovations', which, in a climate of neoliberal multiculturalism fed off existing demands for new forms of territorial sovereignty by marginalized communities such as peasants and indigenous groups. The sum of these transformations made environmentalism a source of profit, creating a new breed of entrepreneurs singing the gospel of win-win-win solutions (Arsel and Buscher 2012). Where these solutions failed to achieve results (which was most often) or failed to convince that the solutions were meaningful the promise of future technological breakthroughs continue to be dangled as talismans.

The labour of neoliberal conservation scholars has focused primarily on how these mechanisms were articulated, justified and implemented. Societal responses to them, however, have not been studied systematically. This is not to suggest that conflicts have not been tackled. However, they are treated as case studies demonstrating the unevenness once again of capitalist market mechanisms in creating winners and losers. To the extent that class enters these discussions, it is to suggest (accurately) that neoliberalism is a class project to create renewed domination on labour, peasantry, indigenous people, etc. However, the protagonists are not theorized beyond recording their (usually) negative experiences and describing the shape of their fight to stop or slow down the commodification of their life spaces.

That these struggles are theorized as community-based struggles rather than class-based ones demonstrate the ultimate shortcoming of this literature.

Whereas the neoliberal conservation literature aims to unearth how capitalism's relationship with nature has been evolving to create new and more intensive ways in which the environment could be integrated into the class-project of neoliberal capitalism, Jason Moore's *suis generis* Marxism has opened up an entirely new way to conceptualize the capitalism-nature link. His approach harks back to the earlier generation of ecological Marxism in the sense that Moore is fundamentally concerned with understanding how ecology forms a barrier to capital's future reproduction (Moore 2016). In other words, Moore, much unlike the neoliberal conservation literature whose post-structural undercurrents prevent it from acknowledging the material limits of accumulation, is squarely concerned with them and how these are continuously challenged by transformative social processes. However, departing from first generation ecological Marxists who saw nature as an external constraint on capital, his innovative move is to reject what he sees as a Cartesian dualist separation between ecology and economy. Rather than capital vs. nature, his construction is capital-in-nature, which is itself a class-relationship since labour (and humans as well as other living and non-living components of nature) are implicated on both sides of this unity.

Moore clearly sees a role for class struggle to overthrow the unity of capitalism-nature. This seems to be transmitted via a Polanyian reclamation of the autonomy of society to give nature as well as society's relationship with it meanings that defy the capitalist logic of value, which sees "all elements of human and extra-human nature [as] effectively interchangeable". This is as clear a statement of contemporary struggles – from food sovereignty to land grabbing to commoning – as one could make yet Moore's formulation still does not go far enough in terms of placing class conflict centrally into attempts to transcend capitalism. Moore sees all these conflicts through capitalism's dependence on 'cheap nature' (a theme he develops more extensively with Raj Patel). Here his acknowledgement of ecological limits comes back to haunt his argument because ultimately what he anticipates the fall of capitalism to be is the ecological limits themselves. To the extent that class conflict figures prominently in his non-dualist vision, he seems to be arguing that class conflict will not only be functional to limits being confronted but, ontologically, animated by the limits themselves. While this technically shows a loyalty to an orthodox approach to materialism, it neglects the fact that many of the contemporary environmental struggles are not simply about the material availability of resources but the specific constellation of meanings they are imbued with. Put differently, food sovereignty is not about the availability of sufficient amount of calories but the specific shape those calories take and authority over how they are created, transported and consumed.

This leads to two related problems for Moore's formulation. His vision of a 'rebellion' against the 'value/monoculture nexus of modernity' is too Procrustean to include symbolic struggles over nature. More significantly, his over-reliance on limits to be the driving force not only smacks of unwarranted optimism that capital is unable to find ever new ways to displace its impacts and/or co-opt sufficiently large/powerful communities to secure enough legitimacy. It also is a type of reverse neo-Smithianism in the sense that as dependency scholars falsely saw the rise of capitalism as a function of intensified trade, Moore expects its fall to be an outcome of the inability of the system to keep producing more and more cheap goods.

The contemporary terrain of ecological distribution conflicts, however, are far more complicated than Moore's formulation can capture. Not only the struggles are not necessarily at the edges of systemic limits as such but they also do not necessarily seem to take a class-specific shape. Moore implicitly acknowledges this when he theorizes these struggles as "the struggle over the relation between humans and the rest of nature is necessarily a class struggle. (But not just a class struggle)". The thought in brackets works less as a clarification and more as a contradiction in terms.

b. Political ecology of capitalism

Arguably class is a more explicit component of the now vast literature on political ecology, though this applies primarily to the distribution of environmental impacts and does not yield a class-centred study of resulting conflicts. Its proponents built on the ground prepared by early ecological Marxists as well as scholars from other cognate (sub)fields, be it cultural geography, social anthropology, or environmental history. Explicitly targeting power relations, political ecology concerns itself with more than the 'environmental' in the sense that the literature captures the complex interrelations between ecological change and the political economic dynamics surrounding them. The goal of this approach is ultimately to demonstrate how the creation and maintenance of environmental inequalities within capitalism are fundamentally political and interrelated with the spheres of health, gender, indigeneity, and race.

Increased attention to these attributes within the context of a Marxist framework has certainly done much to correct orthodox Marxism's blind spots. Perhaps in part because of the need to empirically demonstrate how factors beyond class do matter in apprehending the unevenness of capitalist economic dynamics and that they deserve analytical and political support in terms of the conflicts they generate, political ecology has excelled in delivering fine-grained documentation of various conflagrations at the local level. This variegated understanding of capitalism's impact on the ground did also attend to class in addition to race, gender, and ethnicity. However, rather than seeing class as a meta-structure interpenetrating all these attributes, political ecology literature has largely dealt with it as simply another one with no analytical priority.

This reluctance to theorize capitalism's link with nature through class terms also continued in terms of understanding movements of resistance. Here the impact of political ecology's entanglement with both Foucauldian post-structuralism and, more problematically, with post-development thinking has come at the expense of not only willingness to theorize broadly but also ability to recognize structural conditions that animate movements. Instead, political ecology literature took community-level acts of resistance as ontologically coherent entities rather than as part of a greater whole (though there are some notable exceptions, e.g. Martinez Alier et al. 2016). To this end, it is possible to see the common refrain of 'fine-grained' inquiry not simply as a methodological choice but an ideological posture that celebrates each movement as unique. As such, the analytical terrain for understanding counter-movements in the ecological sphere were ceded to the new social movements and resource mobilization theories, both of which are under the sway of North American quantitative turn in political science and are therefore not interested – or able to – conceptualize a Marxist notion of class.

This admittedly broad-brush picture of political ecology's relationship to class needs to be qualified in two ways. One concerns Martinez Alier and Guha's 'environmentalism of the poor', which is discussed in the next section. The other is the transposition of the concept of class from relationships of production to international distribution of wealth and power. Specifically, in the absence of class as a driving leitmotif in terms of struggles against capital in ecological distribution conflicts, political ecology has transposed it to the global arena. By so doing, rather than apprehending class positions of individuals, political ecology has recognized a class relationship between rich and poor countries in a manner consonant with dependency theory's spatial ordering of the world along centre and periphery. While this view does have much merit in terms of flows of financial resources, corporate ownership structures, and 'othering' of communities and spaces, it cannot substitute 'regular' class analysis. Furthermore, while a robust defence of the concept of periphery is very much possible (Fischer 2015), the division is nevertheless coming under increasing critical scrutiny (as with most divisions that are built around the notion of 'developed' and 'developing' (Horner and Hulme, 2017). For instance, the literature on environmental justice does show that race as well as class in developed countries correlate with certain exposure to environmental harms in much the same way as it does in the developing world (Nixon 2011). Similarly, the arrival on the development scene of countries such as China whose position in this global class relationship are much harder to capture within existing political ecology conceptualizations (Henderson et al. 2013). Ultimately, it is still possible to assert that while political ecology demonstrated the unevenness of capitalism's environmental impacts, leading to the possibility of empirically seeing how class is a central concern, it has not done sufficient analytical labour to show how inequality and class in terms of environmental struggles connect together.

VI. Class, conflict and environmental studies

The failure of ecological Marxism and political ecology to tackle class directly is likely to due to the fact that it is "much easier to celebrate class struggle than to analyze it" (Moore 2015: 38). In the absence of a theoretically consistent treatment of how class fits into transformative environmental movements from ecological Marxism in general and political ecology in particular, there has nevertheless emerged a vibrant discussion regarding class and environmentalism in disparate parts of environmental politics and sociology. While some of these have developed directly in response to one another (e.g. Martinez Alier and Guha's 'environmentalism of the poor' as a critique of Inglehart's post-materialism), others have emerged as part of other debates within the literature (e.g. Beck's reflexive materialism). As such, they represent strands of inquiry into the role of class rather than a coherent literature. For the sake of clarity, it is possible to distinguish between two camps, those who argue class is not important or at least is marginal to contemporary environmental politics, and those who argue that it is, in different ways.

a. Post-class environmentalism

The argument that class is not a salient factor in understanding contemporary politics of societal transformation in relation to environmental problems too can be read in terms of two separate literatures. While both of these focus on the changes wrought by what can be termed 'high modernity' and the consequent rise of a "postmodern world" (Pichardo 1997), one focuses on changes in social structures—ranging from individual self-perception to family ties to state-society dynamics—(e.g. Offe 1985) and the other is primarily interested in how both the materiality of nature and its societal

perceptions have been transformed (Beck 1992). Both literatures point to the rise of 'new social movements' as a decisive moment for political subjectivities under capitalism (Melucci 1988). In so doing, they bundle ecological politics with other critical political processes that similarly challenge the authoritative scripts of Western modernity on various grounds of identity, be it race, ethnicity or gender. Even if it's not explicitly acknowledged, these analyses suffer from the linearity of much of social theory (making such distinctions as 'first modernity' and 'second modernity'). They apply primarily to the industrialized countries in the West, though the popularity of 'new social movements' and the two streams of literature mentioned above have travelled beyond their original geographical settings in Western Europe and the United States (e.g. Veltmeyer 1997; Dwivedi 1999).

The first stream of criticism is part of an intellectual tradition borne out of the intensifying signs that state-centred management of society via bureaucratic and technological interventions had entered a regressive phase, with the idea of progress losing its cachet and coming to stand for "an awful desolation, insecurity and simple nullity" (Latouche 1993: 13). Given the disillusionment with the overall project of modernity, its key institutions, not only the state but labour unions and other established channels for political action, had become decentred from political analysis. Part of this fall from grace of course relates to the inability of the political institutions of modernity to take seriously concerns such as gender equality, persistent racial discrimination, growing ecological degradation and the obstinately centripetal forces of identity formation and fragmentation. Failure to respond to these challenges was seen as systemic – rather than simply a failure of the state or the market – so all major political concepts within this sphere came to be discredited. A corollary of this view was a rejection of the idea that "a single political economic transformation would solve the whole range of social ills" (Calhoun 1993). The diminishing of class and the elevation of various types of identity-based formations can be understood within this context. To reiterate, within this reading, the rise of the environmental challenge to modernity is only one aspect of a process of disenchantment with modernity. The rise of these critiques not only discredited class as a central concept but also opened up new political avenues for political action, which came to be known as 'new social movements'.

The novelty of 'new social movements' therefore emerges not simply from the newness of their demands – e.g. an end to environmental degradation – but also the manner in which they are conceptualized as part of the Western political sphere. As such, their main forms of solidarity are expected to go beyond class both because the onset of a postindustrial economic landscape rendered some of the class-based concerns reduntant but also because the subjectivity of the political actors affected by these issues went across class lines, even if they were to be accepted to persist to a certain extent. These two arguments form a unity when applied to the context of environmental change. The first is tantamount to saying that to the extent that inequalities in material attainment remain in the post-industrial landscape, these are either not so grave to be a central organizing principle for social actors or that their consequences in terms of the attainment of life satisfaction are not especially salient. The second suggests that the environmental changes experienced in these contexts cut across class lines and manifest their impacts in a class-less fashion. Putting these two together would yield an argument that the experience of and, therefore, political responses to environmental degradation is, fundamentally, a post-class dynamic. Thus Beck's famously misguided aphorism that 'poverty is hierarchic, smog is democratic' (1992: 36) summarizes the putative irrelevance of class to environmental political action and, therefore, to social theory.

As the discussion on political ecology has demonstrated, smog and most other manifestations of environmental degradation are not at all democratic and do fall along lines of class as well as race and gender. However, Beck's contribution to this debate goes beyond this unfortunate statement. Focusing more on the manner in which environmental questions arise rather than how they affect the world, Beck has argued that there is a fundamental qualitative difference between environmental problems in the contemporary era, which he designates as 'reflexive modernity' or 'second modernity'. Many of the environmental problems characteristic of this era defy the geographic, temporal and, indeed, class barriers that environmental problems in first modernity adhered to. For instance, in Beck's smog example, air pollution from a coal power plant settle on a reasonably small and clearly delineable area, affect mostly communities in the current or a few future generations, and impact on those who do not have the means to relocate to a healthier location (e.g. labour working in the plant itself). Radioactivity from a nuclear power plant, however, affects a vastly greater geographic area, lasts for countless generations and makes it much harder (or at least much more costly) for the affluent to escape from its (long-term) path. That said, it is important to recognize that the differences between these two types of risks – emerging from different type of technologies characterizing different phases of modernity – are more useful as stylized facts rather than ecological truths (after all, impact of smog can in fact stay in the ground for several centuries).

Beck's argument is essentially a commentary on the institutions underpinning the creation and societal rollout of advanced scientific and technological innovations. Beck argues that given their massive complexity, they defy the institutions that were created to regulate capitalist modernity. Technologies such as nuclear radioactivity and genetic modification operate at such a rarified scientific sphere that existing bureaucratic and political mechanisms to assess their viability, desireability and perimeters of operation simply cease to function in a meaningful manner. For instance, elected members of a national parliament are unlikely to be equipped with the necessary scientific training to be able to design effective and realistic regulation to deal with the potential impacts of biotechnology. The burden of knowledge and skill to assess these technologies would be so high as to render meaningful communication from scientific expert bodies to 'laypersons' extremely unfeasible (Wynne 1994). Taking the argument further, Beck suggests that given the vast time horizons in question and the total and complete annihilation of humanity and all life on earth emerging as a distinct potentiality for the first time in human history, society might not be equipped with the institutional infrastructure and the necessary moral horizon required with dealing with the problems created by 'reflexive modernity' itself.

In practice, therefore, regulation of science and technology under reflexive modernity is primarily a theatre of regulation rather than actual regulation, a situation described by Beck as 'organized irresponsibility'. Within this climate, with science and technology acting as a runaway train, noone is deemed to be safe as the magnitude of risks are far too great to respect class lines. In effect, while Beck's aphorism does not work with smog, his argument holds more appeal if phrased as 'radioactivity is democratic' since it and other similar risks (e.g. risks from 'runaway biotechnology') are expected to defeat the potential material and spatial barriers the affluent classes can erect to protect themselves. As such, there is a certain parallel between Beck's vision and Chakraborty's claim about climate change being beyond capitalism. In both cases, there is the expectation that environmental problems defy class analysis in how society confronts them.

b. Environmentalism as class politics

On the other side of the equation it is once again possible to identify two streams that argue that class is an important factor in environmental politics. The first and arguably the strongest and most influential one is also the one that utilizes a non-Marxist conceptualization of class, the post-materialism thesis of Inglehart (1981; Inglehart and Flanagan 1987). The second stream is essentially built around the response of Joan Martinez and his colleagues who critiqued Inglehart's view of conception of environmentalism (Martinez Alier and Guha 1997; Anguelovski and Martinez Alier 2004).

The 'post-materialism' thesis of Inglehart, who claimed that concern for environment (as well as other values thought to be similar to it, e.g. human rights) only begin to be expressed once more fundamental, 'material' needs have been fulfilled. The post-materialism thesis argues that an empirical relationship has been uncovered that shows that "...beginning in the 1960s there has been increasing evidence of a shift in the basic value systems of citizens of advanced industrialized nations. Traditional materialist values have been gradually replaced by higher order, non-economic concerns. These post-materialist values involve appreciation for social equality, participation in decision-making, freedom of expression, and the improvement of the quality of life in general" (Goksen et al. 2002). Similar to the discussion above, the post World War II era is seen as a definitive break. Whereas the 'new social movements' literature is built around a notion that declining economic equality and scarcity were matched with the hollowing out of the key institutions of the West, Inglehart's thesis sees the possibility of abundance opening up new political possibilities. Namely, now that distributional issues (at home) are no longer a primary concern, citizens of rich countries can turn their attention to what can also be seen as 'luxury' goals, environmental quality being one of them. The clear implication of this position is of course that it is necessary to be rich before one can meaningfully engage in environmental politics.

Inglehart does not make his argument in terms of class but the more generic and apolitical concept of affluence. Joan Martinez Alier and Ramachandra Guha do not challenge Inglehart's conceptualization per se on Marxist grounds. Rather they seek to make his concept of environmental politics more complicated. They argue that what Inglehart describes as environmentalism is only one type, which obscures another, arguably more progressive movement. Repositioning Inglehart's definition of environmentalism as the 'environmentalism of the rich', they coin another type, which is the 'environmentalism of the poor'. The basic argument is that the defence of productive resources mounted by mostly though not exclusively rural communities, peasants as well as indigenous peoples, is also a form of environmentalism. Their argument can be considered to be the most promising theoretical advance to unite class and environmentalism.

On the one hand, the peasantry and indigenous people engaged in fights to control their forests, lands or other natural resources can be said to be fighting for the control of the means of production. However, unlike traditional class conflicts where labour would fight to control the means of production (e.g. factory), here the peasantry and indigenous communities are too fighting to control their means of production which happen to be bound up with and comprised of nature itself. Unfortunately, just as Inglehart is primarily interested in the political consequences of increased affluence, 'environmentalism of the poor' does not pursue the relational aspect of class relations via economic processes. Rather, Martinez Alier and Guha seem first and foremost interested in political power relations. In other words, while the ecological distribution conflicts within which the poor practice their environmentalism pit peasants and capital (and its representatives in the state) against each other, they do not pursue a thorough analysis of the similarities and differences between the relationships between, for instance,

industrial workers who seek to control the factory within which they labour and indigenous people whose livelihoods are intertwined with a tropical forest.

It is necessary to note that the environmentalism of the poor, with its green on the outside but red inside formulation, is very much a constitutive process of the class that wages it. Put differently, the class position of these actors begins to emerge only when confronted by capital (or its agents in the state) with the threat of transforming existing (possibly non-capitalist) relationship with nature (as it gets transposed into 'natural resources' or 'ecosystem services'). Until this encounter, many such actors exist on the peripheries of capitalism or lead a dual life, where intra-communal relationships are governed by one logic (non-capitalist) and external with another (capitalist). Thus, resistance against the intrusion of capital is not only a resistance against the destruction of nature but also against the logic of capitalism itself. It is this dynamic that Martinez Alier and others have targeted in their analyses rather than a systemic understanding of environmentalism which is necessarily far more complex than a 'indigenous group vs. multinational mining company' framework. The main utility of Martinez Alier's achievement is therefore not to advance class analysis as such but to show that there is indeed class-specific interests that are attuned to environmental goals.

This line of argument has been pursued most effectively by Amita Baviskar (2003), who has argued that urban environmental politics in Delhi have come to be dominated by the interests of the 'bourgeois' or the 'upper class'. Her historicized approach builds on political ecology's central tenet – that sustainability is not an objective, scientific 'fact' but merely a vision that is produced by place-specific combination of forces and structures – to demonstrates not only how contemporary struggles over public space in Delhi connect to deeper dynamics of inequality and marginalization but also how they pit various classes against each other. In terms of putting this approach to work, Baviskar's contribution is exceptionally strong but it does not unfortunately help us answer Martinez Alier's question in the epigraph. This is because she argues that the agenda of environmentalism is not necessarily "antagonistic to working-class interests" (2003: 95).

That the working classes of Delhi have not engaged in explicitly environmental politics due to their economic precarity and political marginalization is an argument that resonates broadly beyond the Indian context (see, for example, Arsel et al. 2017). However, it is unlikely that the working class, if and when it would mount its own environmental campaigns, would advocate a similar notion of sustainability. In other words, a drive to overcome the "economic compulsion of working in hazardous conditions and the political powerlessness of being unorganised, combined with the state's failure to implement labour and environmental regulations" would most likely lead to a different vision of sustainability than that of the type of urban beautification projects pushed forward by the bourgeoisie. To take the issue of open defecation that frames Baviskar's article, where bourgeois environmentalism sees a need for more urban parks for recreation as a high priority need, the working classes would probably call for more public toilet facilities instead. This is not to argue that there are no overlaps between the two views. Clean air would certainly be a potentially post-class demand. However the specific economic mechanisms through which air quality can be secured is likely to pit the bourgeois and the working class against each other. For the former, the preferred choice could be to relocate production to a different state in India or to a different country altogether. The latter, who would lose their jobs in such a scenario, would probably advocate a switch towards greener production processes with the proviso that its costs would need to be borne by the owners of the factories. In other words, whereas the encounter between the poor and the environment might indeed be 'fake' (Ravindran 2006:

116, quoted in Baviskar 2003: 95), there remains a need to attend to the class tension between the upper- and working-classes in terms of their environmentalisms.

VII. In lieu of conclusion: Climate change, class interest and conflict

Who, then, are the protagonists of environmental conflicts? More specifically, is it possible to conceptualize contemporary (or emerging) environmental conflicts in terms of specific class positions? The preceding discussion shows that Marxist scholarship has up to this point not engaged systematically with this important question. Early examples of ecological Marxism, for example the work of O'Connor, has essentially evaded this question. More recently, Moore's interventions on nature and capitalism has pointed towards the unfeasibility of sustaining the cheap provision of certain ingredients that power global capitalism as the source of an eventual systemic transition. However, since protagonists still need to be social actors rather than goods or even nature itself, it is not possible to see natural limits themselves as the drivers of socioeconomic change. It is with Joan Martinez Alier's work that the question has perhaps coalesced into a coherent trajectory, moving beyond the more reactive nature of political ecology literature that studied conflicts more from the vantage point of their root causes rather than their systemic linkages. Nevertheless, Martinez Alier's and his subsequent interlocutors have focused on specific sites of ecological distribution conflicts only to show – rather than analyse in depth – that poor and marginalized groups, to the extent that they can be understood in class-specific positions, can be seen as environmental protagonists. What has remained missing, however, is the linkage between these specific struggles and a broader transformative movement. While scholars such as Amita Baviskar argue that there exists a natural harmony between the interests of labour and environmental sustainability, this assertion remains under-scrutinized.

Nevertheless, in light of the foregoing critique of the ways in which the relationship between class and environmental conflicts are handled by the dominant literature, it is possible to make several broad generalizations about environmental conflicts and the class position of its protagonists. Returning to the core empirical concern of this lecture, this discussion focuses on climate. Climate change is also an ecological phenomenon about which it is still possible to speak about 'natural limits' to the functioning of capitalist dynamics on earth. As such, climate change offers an example that can help look past the particularities of site-specific conflicts, such as those against extractive industries or land grabs. Do climate change conflicts lend themselves to class analysis in terms of the political reactions they engender?

It is firstly important to recognize that there is no 'climate change' as such but a myriad of its interconnected manifestations. Therefore, before thinking whether the protagonists of anti-climate change struggles conform to class lines, it is important to decompose the problem into specific issues. Some of these would certainly create a response that is class-specific. Rising sea levels would mean something very different for affluent residents of coastal cities, for instance, than its poor residents. Whereas the rich would risk losing their expensive seafront homes, they might consciously or unconsciously reconcile themselves to this eventuality since they could easily escape to higher ground (or for that matter, sail away on their yachts!) The poor, on the other hand, could literally get stranded and drown as water rises under their feet. As such it is possible to expect that the poor – from Miami to Lagos to Chittagong – could act along class lines (whether they do, of course, depends on other dynamics including the development of class consciousness).

It is of course possible to picture climate change impacts so dramatic – for example if the Gulf Stream would get shut down and cause a new ice age in Europe – that both the rich and the poor might line up against the elimination of certain environmental liabilities, the ways in which different classes might seek to overcome them might differ dramatically along class lines. On the one hand, given the bourgeois' interest in furthering capitalist accumulation, market-friendly solutions that mainly serve to postpone more dramatic adjustments, such as the REDD+ mechanism, might further marginalize peasant and indigenous communities, creating deeper inequalities within them. On the other, more dramatic adjustments in the capitalist economy such as the transition from oil to electric energy (ostensibly a salubrious choice) might shift the ecological burdens of capitalist markets from oil-rich countries to copper-rich ones. Furthermore, some of these new mining jobs might never materialize as rising prices might lead to the automation of much of extractive industries, leading to further marginalization in rural areas.

If the two-class approach adopted here for convenience were to be relaxed, the above example would also demonstrate that there would be intra-class tensions for the proletariat when dealing with specific manifestations of climate change. Such tensions are likely to multiply if the interrelationship between climate change and other pressing socio-environmental issues were to be tackled together. For instance, the need for achieving food sovereignty while addressing the emissions of greenhouse gases might not necessarily lead to solutions that are simultaneously favourable to all segments within the working classes, creating possible splits along the lines of rural-urban, formal-informal, and primarily food producing vs. industrial proletariat just to name a few.

In light of this brief engagement with climate change, it is possible to reach a few conclusions. Firstly, while cross-class alliances are possible, these would necessarily be partial and cannot incorporate the totality of working-class interests. Secondly, to the extent that a working-class unity is to be envisioned against climate change, this can only be possible if the material interests of the working classes are secured in the first place before a comprehensive movement against climate change can materialize. Short of this requirement, alliances between segments of bourgeois and working classes (who would either gain from the specific environmental improvements or economic gains) are likely to continue to emerge, making a unified working-class stance a more distant possibility. To the extent that the material needs of the working classes are ensured – in other words, to the extent that exploitation and domination of the working classes are eliminated – this would only be a partial revolution. This is because a non-capitalist economic order would not naturally get rid of natural limits even after radical redistribution. To that end, the protagonists of the revolt against capitalism will not only need to fight for a post-capitalist world but one that is ecologically sound. What is less certain however is whether these fights can – and, indeed, should – be fought simultaneously and, if not, which should take precedence.

References

Adaman, F., Arsel, M., & Akbulut, B. (2018). Neoliberal developmentalism, authoritarian populism, and extractivism in the countryside: the Soma mining disaster in Turkey. The Journal of Peasant Studies, 1-23.

Adger, W. N. (2006). "Vulnerability." Global environmental change 16(3): 268-281.

Adger, W. N., S. Agrawala, M. M. Q. Mirza, C. Conde, K. o'Brien, J. Pulhin, R. Pulwarty, B. Smit and K. Takahashi (2007).

Alvaredo, F., L. Chancel, T. Piketty, E. Saez and G. Zucman (2017) World inequality report 2018. The World Inequality Lab.

Anguelovski, I. and J. M. Alier (2014). "The 'Environmentalism of the Poor' revisited: Territory and place in disconnected glocal struggles." Ecological Economics 102: 167-176.

Arora-Jonsson, S. (2011). "Virtue and vulnerability: Discourses on women, gender and climate change." Global Environmental Change 21(2): 744-751.

Arsel, M. (2012). "Between 'Marx and markets'? The state, the 'left turn'and nature in Ecuador." Tijdschrift voor economische en sociale geografie 103(2): 150-163.

Arsel, M., B. Akbulut and F. Adaman (2015). "Environmentalism of the malcontent: anatomy of an anticoal power plant struggle in Turkey." Journal of Peasant Studies 42(2): 371-395.

Arsel, M. and B. Büscher (2012). "Nature™ Inc.: Changes and continuities in neoliberal conservation and market-based environmental policy." Development and Change 43(1): 53-78.

Arsel, M. and A. Dasgupta (2015). "Critique, rediscovery and revival in development studies." Development and Change 46(4): 644-665.

Atkinson, A. B. (2015). Inequality, Harvard University Press.

Atkinson, W. (2007). "Beck, individualization and the death of class: a critique." The British journal of sociology 58(3): 349-366.

Baland, J.-M., P. Bardhan and S. Bowles (2007). Inequality, cooperation, and environmental sustainability, Princeton University Press

Barca, S. (2012). On working-class environmentalism: a historical and transnational overview. Interface: a journal for and about social movements.

Baviskar, A. (2003). "Between violence and desire: space, power, and identity in the making of metropolitan Delhi." International Social Science Journal 55(175): 89-98.

Beck, U. (1992). Risk society: Towards a new modernity, Sage.

Beck, U. (2007). "Beyond class and nation: reframing social inequalities in a globalizing world." The British journal of sociology 58(4): 679-705.

Beck, U. (2010). "Climate for change, or how to create a green modernity?" Theory, Culture & Society 27(2-3): 254-266.

Beck, U. (2015). "Emancipatory catastrophism: What does it mean to climate change and risk society?" Current Sociology 63(1): 75-88.

Bennett, J. (2009). Vibrant matter: A political ecology of things, Duke University Press.

Benton, T. (Ed.). (1996). The greening of Marxism. New York; London: The Guilford Press.

Biersack, A. and J. B. Greenberg (2006). Reimagining political ecology, Duke University Press.

Borras Jr, S. M., P. McMichael and I. Scoones (2010) "The politics of biofuels, land and agrarian change: editors' introduction." Journal of Peasant Studies 37(4): 575-592.

Burkett, P. (1999). "Natural Causes: Essays in Ecological Marxism." Monthly Review 50(9): 47-48.

Büscher, B., S. Sullivan, K. Neves, J. Igoe and D. Brockington (2012). "Towards a synthesized critique of neoliberal biodiversity conservation." Capitalism nature socialism 23(2): 4-30.

Calhoun, C. (1993). ""New social movements" of the early nineteenth century." Social Science History 17(3): 385-427.

Calhoun, C. (2013). "Occupy wall street in perspective." The British Journal of Sociology 64(1): 26-38.

Chakrabarty, D. (2017). "The politics of climate change is more than the politics of capitalism." Theory, Culture & Society 34(2-3): 25-37.

Crompton, R. and J. Scott (1999). "Introduction: the state of class analysis." The Sociological Review 47(S2): 1-15.

Davies, J. (2016). The Birth of the Anthropocene, Univ of California Press.

Davis, M. (2013). "Rethinking class: The lineage of the Socialist Register." Socialist Register 50(50).

Deaton, A. (2013). The great escape: health, wealth, and the origins of inequality, Princeton University Press.

Dwivedi, R. (1999). "Displacement, risks and resistance: Local perceptions and actions in the Sardar Sarovar." Development and Change 30(1): 43-78.

Fischer, A. M. (2015). "The end of peripheries? On the enduring relevance of structuralism for understanding contemporary global development." Development and Change 46(4): 700-732.

Foster, J. B. (1999). "Marx's theory of metabolic rift: classical foundations for environmental sociology." American journal of sociology 105(2): 366-405.

Foster, J. B., B. Clark and R. York (2011). The ecological rift: Capitalism's war on the earth, NYU Press.

Francis, P. (2015) Encyclical Letter, Laudato Si'. Libreria Editrice Vaticana, Rome.

Fraser, N. (2016). "Contradictions of capital and care." New Left Review(100): 99-117.

Ghosh, A. (2016). The great derangement: Climate change and the unthinkable, University of Chicago Press.

Goldblatt, D. (1996). Social theory and the environment, John Wiley & Sons.

Grusky, D. B. and J. B. Sørensen (1998). "Can class analysis be salvaged?" American journal of Sociology 103(5): 1187-1234.

Gupta, J. (2016). "The Paris climate change agreement: China and India." Climate Law 6(1-2): 171-181.

Henderson, J., R. P. Appelbaum and S. Y. Ho (2013). "Globalization with Chinese characteristics: Externalization, dynamics and transformations." Development and Change 44(6): 1221-1253.

Herring, R. J. and R. Agarwala (2006). "Introduction: restoring agency to class: puzzles from the subcontinent." Critical Asian Studies 38(4): 323-356.

Horner, R. and D. Hulme (2017) "From International to Global Development: New Geographies of 21st Century Development." Development and Change.

Inglehart, R. (1981). "Post-materialism in an environment of insecurity." American Political Science Review 75(4): 880-900.

Jasanoff, S. (2017). "A History of Scales and the Scales of History." Development and Change 48(3): 613-622.

Kallis, G. (2011). "In defence of degrowth." Ecological Economics 70(5): 873-880.

Kovel, J. (1995). "Ecological Marxism and dialectic." Capitalism Nature Socialism 6(4): 31-50.

Laclau, E. and C. Mouffe (1985). Hegemony and socialist strategy: Towards a radical democratic politics, Verso.

Latouche, S. (1993). In the wake of the affluent society: An exploration of post-development, Zed Books.

Lipschutz, R. (2017). "Can Climate Change Us?" Development and Change 48(3): 623-635.

Lo, A.Y. (2016) "National income and environmental concern: Observations from 35 countries." Public Understanding of Science 25(7): 873-890.

Martinez-Alier, J. (1995). "The environment as a luxury good or "too poor to be green"?" Ecological economics 13(1): 1-10.

Martinez-Alier, J. and R. Guha (1997). "Varieties of Environmentalism: Essays North and South." London: Earthscan: 109-127.

Martinez-Alier, J., L. Temper, D. Del Bene and A. Scheidel (2016). "Is there a global environmental justice movement?" The Journal of Peasant Studies 43(3): 731-755.

Mawdsley, E., D. Mehra and K. Beazley (2009). "Nature lovers, picnickers and bourgeois environmentalism." Economic and Political Weekly: 49-59.

Maxwell, J. and F. Briscoe (1997). "There's money in the air: the CFC ban and DuPont's regulatory strategy." Business Strategy and the Environment 6(5): 276-286.

Mearns, R. and A. Norton (2009). Social dimensions of climate change: equity and vulnerability in a warming world, World Bank Publications.

Melucci, A. (1988). Social movements and the democratization of everyday life.

Milne, S. and B. Adams (2012). "Market Masquerades: uncovering the politics of community-level payments for environmental services in Cambodia." Development and Change 43(1): 133-158.

Moore, J. W. (2015). Capitalism in the Web of Life: Ecology and the Accumulation of Capital, Verso Books.

Moore, J. W. (2015). "Cheap food and bad climate: From surplus value to negative value in the capitalist world-ecology." Critical Historical Studies 2(1): 1-43.

Muradian, R., M. Arsel, L. Pellegrini, F. Adaman, B. Aguilar, B. Agarwal, E. Corbera, D. Ezzine de Blas, J. Farley and G. Froger (2013). "Payments for ecosystem services and the fatal attraction of win-win solutions." Conservation letters 6(4): 274-279.

Newell, P. (2005). "Race, class and the global politics of environmental inequality." Global environmental politics 5(3): 70-94.

Newell, P. and M. Paterson (2010). Climate capitalism: global warming and the transformation of the global economy, Cambridge University Press.

Nixon, R. (2011). Slow Violence and the Environmentalism of the Poor, Harvard University Press.

O'Connor, J. (1988). "Capitalism, nature, socialism a theoretical introduction." Capitalism Nature Socialism 1(1): 11-38.

O'Connor, J. (1991). "On the two contradictions of capitalism."

O'Connor, J. R. (1998). Natural causes: Essays in ecological Marxism, Guilford Press.

Offe, C. (1985). "New social movements: challenging the boundaries of institutional politics." Social research: 817-868.

Orta-Martínez, M., Pellegrini, L., & Arsel, M. (2018). "The squeaky wheel gets the grease"? The conflict imperative and the slow fight against environmental injustice in northern Peruvian Amazon. Ecology and Society, 23(3).

Parenti, C. (2015). "The 2013 ANTIPODE AAG Lecture The Environment Making State: Territory, Nature, and Value." Antipode 47(4): 829-848.

Paterson, M. (2001). "Risky business: Insurance companies in global warming politics." Global Environmental Politics 1(4): 18-42.

Pattberg, P. and F. Zelli (2016) Environmental Politics and Governance in the Anthropocene: Institutions and Legitimacy in a Complex World, London: Routledge

Parks, B. C. and J. T. Roberts (2010). "Climate change, social theory and justice." Theory, Culture & Society 27(2-3): 134-166.

Peet, R. and M. Watts (1996). Liberation Ecologies: Environment, Sustainability, and Environment in an Age of Market Triumphalsism. London, Routledge.

Peet, R., P. Robbins and M. Watts (2010). Global political ecology, Routledge.

Pellegrini, L. (2012). "Joan Martinez-Alier." Development and Change 43(1): 341-359.

Pichardo, N. A. (1997). "New social movements: A critical review." Annual review of sociology 23(1): 411-430.

Piketty, T. (2017). Capital in the twenty-first century, Harvard University Press.

Polanyi, K. (1957). The great transformation:(The political and economic origin of our time), Beacon Press.

Ravindran, K. (2000). "A state of siege." Frontline 17(25): 9-22.

Roberts, J. T. (2001). "Global inequality and climate change." Society & Natural Resources 14(6): 501-509.

Rockström, J., W. Steffen, K. Noone, Å. Persson, F.S. Chapin III, E. Lambin, T.M. Lenton, M. Scheffer, C. Folke and H.J. Schellnhuber (2009) "Planetary boundaries: exploring the safe operating space for humanity." Ecology and society 14(2)

Saez, E. and G. Zucman (2016). "Wealth inequality in the United States since 1913: Evidence from capitalized income tax data." The Quarterly Journal of Economics 131(2): 519-578.

Salleh, A. (1995). "Nature, woman, labor, capital: Living the deepest contradiction." Capitalism Nature Socialism 6(1): 21-39.

Schmitz, H. and I. Scoones (2015). Accelerating sustainability: why political economy matters, IDS.

Shi, L., E. Chu, I. Anguelovski, A. Aylett, J. Debats, K. Goh, T. Schenk, K. C. Seto, D. Dodman and D. Roberts (2016). "Roadmap towards justice in urban climate adaptation research." Nature Climate Change 6(2): 131-137.

Stern, N. (2007). "The economics of climate change: the Stern report." Cambridge, UK.

Stiglitz, J. (2011). "Of the 1%, by the 1%, for the 1%." Vanity fair 11(64): 156-111.

Swyngedouw, E. (2013). "Apocalypse now! Fear and doomsday pleasures." Capitalism Nature Socialism 24(1): 9-18.

Walsh-Dilley, M., W. Wolford and J. McCarthy (2016). "Rights for resilience: food sovereignty, power, and resilience in development practice." Ecology and Society 21(1).

Wright, E. O. (1997). Class counts: Comparative studies in class analysis, Cambridge University Press.

Wright, E. O. (1999). Foundations of class analysis: A Marxist perspective. annual meeting of the American Sociological Association, Chicago.

Wright Erik, O. (1996). "The Continuing Relevance of Class Analysis." Theory and Society 25: 693-716.

Wynne, B. (1994). May the Sheep Safely Graze? A Reflexive View of the Expert-Lay Knowledge Divide in Lash, S. Bronislaw, S. and Wynne, B.(eds) Risk Environment and Modernity: Towards an New Ecology, London: Sage.