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**Editorial** 

# The elephant in the room: Capitalism and global environmental change

### 1. Why capitalism?

Capitalism forms the context in which most of the world now responds to global environmental change. It produces (and is produced by) particular types of environmental change, and forms the basis of the political institutions and social relations which define our collective ability to effectively respond to environmental change. And yet curiously students of global environmental change rarely refer to capitalism directly.

Capitalism is ever present, yet largely unsaid, in many academic debates on global environmental change. This is increasingly at odds even with establishment rhetoric and policy debates about a new green deal, the 'greening' of capitalism or calls for an altogether different capitalism: one less prone to crisis and instability and consistent with tackling climate change for example (Porritt, 2007). A survey of article titles in this journal reveals none that referred to capitalism and only two in another leading journal in the field, Global Environmental Politics (Humphreys, 2003; Özler and Obach, 2009). It is not the case that capitalism is not there, but it most often appears in other guises, as 'globalisation' (Sonnenfeld, 2008), or in relation to specific features of capitalism such as 'growth' (Pelletier, 2010), 'property rights' or 'consumption' (Spaargen and Mol, 2008). Clearly there is a great deal of important work on issues such as payments for ecosystem services, attempts to value and commodify water, carbon and forests (Bakker, 2004; Corbera and Brown, 2008), or about more generic attempts to 'marketise' environmental governance (Newell, 2008). But the mainstream global environmental change community rarely writes openly about capitalism and ecology. There are of course many critical and radical journals that have no such inhibitions (Capitalism, Nature Socialism and Antipode being two obvious examples) and some disciplinary journals devote greater attention to the analysis of capitalism, such as Geoforum or Transactions, but again only a handful of articles explicitly address the relationship between capitalism and ecology in those terms. There are also large bodies of work, cited below, which look at the relationship between capitalism and ecology in generic terms but, thus far, they have remained outliers in the orthodox study of global environmental change. Why is that and does it matter?

# 2. The sound of silence

Let me suggest a few explanations for this striking neglect. Firstly, there are disciplinary biases: the tendency towards site specific socio-ecological research in Development Studies and Geography, where connections to broader structures of political

and economic power are often either under-played or absent from the analysis, except in work such as political ecology, as noted below. This is matched by the failure of many International Relations scholars to follow through to particular sites and socionatural relations the consequences of power in global governance that they describe in systemic terms (such as hegemony and world order). It might also be a function of the tendency among some Geographers to fetishize scale and space in a way which makes these connections to larger systems harder to forge. Secondly, there is the unpopularity and hostility towards Marxism and historical materialism in academia that derives from an (often misplaced) association with the failed political project of state communism. Many environmental scholars and activists are rightly critical of the environmental track-record of state socialism or critical of 'industrialism' in general, whether organised along capitalist or socialist lines, for its tendencies to under-value natural resources and externalise pollution. Thirdly, is the fact that capitalism is taken as a background 'given': an irredeemable fact and seemingly irreversible reality of contemporary social and economic life whose implications it hardly seems worth naming, let alone systematically examining in relation to particular (human) ecologies. But are we missing the opportunity to connect disparate literatures and forms of expertise about the distinct manifestations and practices which embody capitalism's relationship with nature by failing to name the elephant in the room?

Marxist-inspired critiques of the compatibility of capitalism with sustainable development, as well as projects to articulate an ecological Marxism, have produced many useful insights (Kovel, 2002; O'Connor, 1994). There is also a large body of work on specific sites and practices of commodification and strategies of accumulation (Bumpus and Liverman, 2008; Castree, 2003; Prudham, 2009), as well as empirically rich studies on the social and developmental consequences of specific attempts to create markets for ecological services such as water or carbon, including many contributors to this journal. But could there be value in placing site specific work in comparative and historical perspective by connecting it with these broader debates in order to understand both how and why capitalism produces different natures in different places and how different socio-natures (Castree and Braun, 2001) enable or create specific forms of capitalism and what this might tell us about its ability to protect as well as destroy the environment upon which it depends?

Objections to this suggestion are likely to include the idea that foregrounding capitalism is to pre-judge its significance or primacy as a driver of environmental change over other drivers such as modernity, population change, cultural values and diverse political

systems. In other words, there would be understandable misgivings about privileging capitalist social and political relations at the expense of those produced by race and gender, for example, which also have a critical bearing on the uneven patterns of contribution and exposure to (global) environmental change (Newell, 2005). Others may question the conceptual value and utility of a focus on capitalism given the varied and complex forms it takes, a point I return to below. Many also feel uncomfortable invoking the label capitalism to describe the relationship between ecology and economy because it feels ideological in tone: that by naming it you immediately align yourself against it, though clearly this need not be the case.

## 3. Building bridges

Studying this most critical feature of global environmental change should not be left to those writing within a political economy tradition. Different strands of historical materialism provide an invaluable resource for understanding the implications of different alignments of social and economic power at the national and international level for efforts to challenge dominant thinking and build coalitions around transitions to sustainability. They help to understand how and why powerful actors resist environmental action and when and where opportunities for creating positive change may emerge which challenge this power (Levy and Newell, 2005).

But beyond this there is much about the construction, enacting, and day to day operations of markets and market economies which is being usefully explained by people working within cultural political economy. Science and Technology Studies and Actor Network Theory, for example (cf. Best and Paterson, 2010; Callon, 2009; MacKenzie, 2009). Markets are shaped and configured by everyday acts of brokering, dissent and subversion. Creating and maintaining markets often requires the assembling and mobilisation of elaborate rituals of accounting and performance, settling conflicts over property rights and legal customs, and implies the agency of a multitude of actors and actants. There are a variety of tools and disciplines that can help to make sense of the growing use of markets to respond to global environmental change and the social and ecological consequences of this strategy that might embellish, extend or challenge more conventional politicaleconomic readings such as those listed above.

The rationale for seeking to reinvigorate debates about capitalism and global environmental change are several fold. Firstly, perhaps more than any other environmental issue, climate change has forced centre stage the question of the compatibility of capitalism's structural requirement to grow with efforts to keep global warming within tolerable limits. Rhetoric about the green new deal and 'climate compatible development' builds on earlier work within ecological modernisation which argues that capitalism can be made to work for the environment (Mol. 2003). Solutions range from efforts to de-couple energy use from growth, to Keynesian public investments in green stimulus packages, through to improved methods of accounting for 'prosperity without growth': welfare enhancing growth that does not diminish the planet's resource base (Jackson, 2009). These ideas require critical assessment about whether, for example, low carbon 'climate capitalism' is a contradiction in terms (Newell and Paterson, 2010).

Secondly, the financial crisis which has engulfed the key centres of the global economy has raised profound questions about the wisdom of relying on financial markets to tackle issues such as climate change and forest degradation. Terms such as 'sub-prime carbon' or 'toxic carbon' employed by activists capture well the anxiety about trying to ally finance capital to environmental goals. The tendencies of market actors to engage in collusion, corruption,

gaming and anti-competitive behaviour have all now been observed in carbon markets, the most advanced and global of the experiments in markets for 'environmental services'. And yet we are left with the dilemma of how to use the undoubted power that actors such as banks, institutional investors and insurance companies wield in this phase of contemporary capitalism. Responses to environmental change that fail to identify viable accumulation strategies for these and other powerful economic actors are unlikely to gain much traction and time is not on the side of those who would rather overhaul the existing system as a precondition for achieving sustainability.

Thirdly, if the scale of finance required for climate mitigation and adaptation, or for efforts to reverse the loss of biodiversity, is to be achieved, the private sector has to be involved. The recent UN meetings on biodiversity in Nagoya Japan suggested billions of dollars will be required annually to 'rescue the natural economy' as UN Secretary-General Ban Ki-Moon put it. By some estimates while climate change mitigation costs in developing countries could reach US\$140–175 billion a year by 2030, current flows of mitigation finance averaging US\$8 billion a year to 2012 pale in comparison (World Bank, 2010). Public reserves are just not up to the job, particularly in a context of fiscal austerity and cuts in public spending. This requires urgent attention to the conditions in which private capital can be mobilised and levered towards these goals. The opportunities and contradictions that this dependency represents demand further scrutiny.

We are left then with the challenge of trying to manage both the spectacular power and resources of capitalism and its tendencies to (re) produce inequalities and, left to its own devices, environmental devastation. The governability of capitalism then becomes key. What forms of regulation and governance might be appropriate, effective and enforceable for harnessing the power to do good while restraining the destructive potential of global capitalism? Critics will point to the fallacy of assuming that state elites will be willing to regulate the capital upon which they depend for taxation, jobs, political support and party funds. A globalised economy raises the stakes amid fears of carbon leakage and pollution flight. Others suggest, however, that the greening of the state is both viable and imperative (Eckersley, 2004).

## 4. Capitalism's ecologies and the ecology of capitalism

What I am proposing here is neither novel nor revolutionary. Early renditions of political ecology went some way towards forging connections between 'micro' ecological and social practices and broader structures of political and economic power (Blaikie, 1985). In so doing the familiar charges of determinism and economism were invoked. Despite this, in very different ways, work on urban political ecology, commodity chain analysis and global environmental justice across scales and struggles, for example (Agyeman et al., 2003; Heynen et al., 2005; Newell, 2007), has continued this tradition by researching and explaining the intimate connection between material and ecological flows and the socio-political relations which create them and are shaped by them.

In many ways this is a call to consolidate what we already know, to form connections across areas of existing work, moving across disciplines and theoretical traditions to build research agendas around issues of pressing contemporary importance. It is a call that has been made before in this journal (Sunderlin, 1995). But rather than calling in an open ended way for greater collaboration across disciplines, the suggestion is perhaps a more modest one. That we would benefit from the fusion of inter-disciplinary collective thinking on capitalism and (global) environmental change. The aim would be to realise fruitful potential to explore the extent to which and the ways in which different (social) ecologies and capitalisms

interact in the production of global environmental change. For example, why are some resources or ecosystems harder to incorporate into global circuits of capital than others? Work on water, the 'uncooperative commodity' (Bakker, 2004), is useful here, as is Boyle's work (2002) on waste issues in Ireland which emphasises 'the agency that socio-nature itself possesses', under a particular set of capitalist social relations. Research on how specific institutional arrangements affect the ability of poorer groups to realise gains from payments for ecosystem services (Corbera and Brown, 2008) or on varieties of environmental capitalism might yield further promising insights. They suggest heterogeneity in patterns of engagement and resistance to capitalism's relationship to nature which can lead to discussion of alternatives.

Our understanding of how to live with and shape global environmental change in equitable and sustainable ways may well be enhanced by such forms of enquiry. One thing is clear. Hegemony is never complete, but the extension and deepening of the logics of capitalism to new geographical and ecological areas of the planet appears to be unprecedented. This process needs to be adequately understood as a political and economic phenomena with important social and environmental consequences of interest both to scholars of global environmental change and to all of us as citizens who, some more than others, will live with the benefits and problems it brings.

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