Global environmental governance in the Anthropocene: breaking out of the enclosures?

Lucy Ford and Gabriela Kuetting

Introduction - setting the (Anthropo)cene

Within the literature on the Anthropocene there are calls for a new kind of global stewardship on planet Earth (Steffen et al, 2011). What would this look like? This chapter, written through the disciplinary lens of IR, reflects on the limitations of current global environmental governance, and how we might move forward.
The Anthropocene has been hailed as a new geological epoch. This has been a controversial claim. Continuities with the Holocene have meant that announcements of a new epoch are possibly premature and certainly contested. Indeed while the social sciences are busy taking up the concept of Anthropocene, the discipline of Geology has not yet embraced it officially (Anderson and Jones, forthcoming/this volume).

Although humans have been around for 200,000 years, the Holocene of the last 11,500 years is the geological period of stability in which humans have flourished, from pre-historical, through feudal to the period of modernity — that historical period in which the enlightenment project broadened the questions of science as well as political philosophy, in which industrial revolution lead to expansion and development, and combined with the birth and development of capitalism and European colonial expansion created an ecologically unsustainable society that continued and expanded the social inequalities of feudal times, drawing the far corners of the globe into its own image and blueprint. While the geological epoch of the Holocene then is defined by its incredible stability that enabled life on planet Earth to flourish, the social, political and economic development during this time has been marked by incredible instability, flux and change, precipitating a convergence of crises, if we think of the financial and economic crises, the energy crisis, the climate crisis, the extinction crisis, the biodiversity crisis, to name a few. Perhaps then these are the interlinked crises of the Anthropocene.

Some of the key features of these crises are the contradictory tensions between sustainability and ecological renewal on the one hand and between the survival and flourishing of human society on the other; that is to say the tension between nature and society, between ecology and socio-political and cultural development. The study of these tensions is not new and certainly pre-dates the emergence of the concept of the Anthropocene. The last 50 years have seen a host of authors such as Rachel Carson (1963) and E. F. Schumacher (1973) highlight these tensions and a global environmental movement has grown around trying to rectify these tensions. While mainstream solutions have continued to try to work within the current structures and institutions that have often focused on ‘end of pipe’ solutions to these problems, classically defined as the ‘problem-solving approach’ (Cox, 1981: 128-9), critical scholars have pointed out that the problem-solving approach in fact constitutes a political and economic enclosure that perpetuates these problems (Ford,

2005). Critical scholars argue that the global economic crisis and global ecological crisis are systematically interlinked, although not irreducible to each other, and that that interlinking takes place within the dominant economic model focussed on infinite economic growth on a finite planet (Daly, 1996; Lohmann, 2009; Sullivan, 2009). Critical scholars, particularly those association with the journal *Capitalism Nature Socialism* and *Ecological Economics*, are pointing out that a finite planet will inevitably highlight the ecological contradictions of capitalist accumulation. Even mainstream epistemic communities highlighted the limits to growth in their report of 1972 (Meadows, 1972). Critical scholars maintain that if we are to resolve these crises and move towards a sustainable and socially just future, we will require a much deeper analysis of the enclosures, including a fundamental re-evaluation of capitalism as a dominant economic and political form.

The Anthropocene is trying to make a point about the 'age of humans' — the age where it has become clear that humans as the dominant species have altered nature — have caused anthropogenic changes with far reaching consequences, and it is humans who must set that right. Lewis and Maslin (2015) argue that inaugurating this new epoch of the Anthropocene will significantly transform the relationship between human society and planet Earth. This signaling of a 'new' geological era (with certain continuities) provides us with a space for reflection upon how humans 'should' take collective responsibility for the damage wrought by human modernity. How do we create better structures for living life on this planet without destabilising the climate, destroying habitat (our own as well as that of millions of other species) and living together in peace? These are not novel questions, but ones that have been posed by philosophers and social scientists for generations. In this light, we ask, what should a global politics for sustainability and social justice look like? Does the Anthropocene provide us with an imperative, a new enlightenment era, where we take seriously the damage that has been done alongside enlightenment and progress for some, where we take seriously the real limitations of planetary boundaries and work together to share Earth's resources equitably while protecting a safe operating space for life on Earth to continue to flourish, including for humans.

This chapter argues that in order to work out such a new programme we need to break out of the enclosures of modernity that have exacerbated the interlinked crises of the Anthropocene. This is a broad, complex and interdisciplinary project. In the first section the paper will intervene in the discourse and practice of global environmental politics, by critiquing dominant global environmental governance approaches. The second section will propose a more holistic, intersectional global political ecological approach. In the final section the paper then argues that strategies for moving forward include acknowledging the intersectional nature of crises, and making links between different movements and communities (for example development, human rights and environment), developing new intellectual spaces for interconnection to contribute to breaking out of the enclosures and building new frames for positive change.

Orthodox Global Environmental Governance (GEG) and its limitations

Since the end of the Cold War the discipline of International Relations (IR) has seen some large scale conceptual transformations. While the early life of this relatively new discipline (born in 1919 after the end of the first World War) was overshadowed with a preoccupation of the politics of war and peace amongst nations, the 1990s and the end of the Cold War saw a flourishing of issues, concepts and theories that had hitherto been marginalised and indeed had been seen by many as irrelevant to the high art of global statecraft — issues like development, environment, gender or indeed questions of democracy. Since the 1990s we have seen growth in the analysis of how nations might cooperate globally to deal with pressing issues, such as environmental degradation, poverty or human rights abuses. Within International Relations (IR) a growing literature on global environmental politics (GEP), which has been predominantly focused on building regimes and institutions for sustainable development, highlighting the games states play or the factors that matter in creating institutions, or the obstacles that need to be overcome in terms of rational actor models. The growing discourse of governance that emerged in the 1990s has also been applied to the environment in the form of GEG. What distinguishes discourses of governance from previous international regime approaches is the emphasis on expanding the range of actors by including the role of global civil society (for example Young 1997), a development synonymous with the discourse of global governance in general (Commission on Global Governance, 1995).

More recently, in the light of growing evidence of the dangers we face in breaching planetary boundaries, a discourse of Earth Systems Governance has emerged, asking questions of how we might best deal with the interlinked crises across a broad range of issues while also paying attention to questions of equity, agency, legitimacy and accountability (Biermann and Pattberg, 2012).
However, we argue here that any approaches that do not pay attention to the wider and deeper social structures that the governance structures are embedded in may fail to bring about the changes needed to put us onto a sustainable and just path within ever shrinking planetary boundaries. While much recent literature has been successful in introducing new policy mechanisms and incorporating a multi-actor approach (Biermann and Pattberg, 2012; Selin, 2012; Andonova, 2010; Young, King and Schroeder, 2008), it has not addressed the question of power and hierarchy in a genuinely critical way, skirting the question of who rules.

The recognition of a more traditional pluralist world of actors was co-opted into mainstream governance approaches. Transnational environmental movements and NGOs, as well as transnational corporations (TNCs), were seen as systemically relevant actors in global environmental politics (Princen and Finger, 1994; Wapner, 1996; Keck and Sikkink 1998). With this came the recognition of more complex webs of interdependence and a richer diversity of actors involved in policymaking (Lipschutz and Mayer, 1996; Paterson, Humphreys and Pettiford, 2003). However, at the core of the global governance approach is still the assertion that the best way to pursue wider normative goals is further institutionalization. This can be observed with all the major global institutions and their current processes, be it climate change, biodiversity or desertification among others.

Applying the concept of governance bumps up against at least three sorts of limitations. In the first place, in terms of agenda-setting and policy formulation, policy planning lack coherence. Expectations of concerted action, whether by interest groups, social movements and NGOs, and state and intergovernmental actors, cannot be fulfilled. Policy negotiations limp along with space created for behind-the-scenes lobbying and regulatory arbitrage. Second, institutions themselves are fragmented; actors focus predominantly on inter- and intra-institutional games. Negotiations are concerned with endogenous institutional and managerial (in)stability, coherence, and hierarchical issues, rather than with substantive policy challenges. Third, the results of negotiations or governance frameworks are suboptimal, leading to lowest common denominator, often highly compromised outcomes. Watered-down, ineffective agreements are presented as successes, while implementation and enforcement are left until further compromises—while interest group actors regroup and marshal their forces for the next round.

Critical scholars point out how orthodox, problem-solving environmental governance, rather than being ecologically effective, is more concerned with institutional effectiveness that might actually be stabilising and perpetuating world order (Paterson, 2000; Kuetting, 2000). If the international institutional architecture is embedded in a neo-liberal model that systematically produces socially unequal and environmentally destructive accumulation and growth, as Purdey (2010) argues, then finding solutions to these problems within these very institutions will prove ineffective, no matter how good the intentions.

Rather, in line with critical theory, we need to understand and expose how environmental degradation is enclosed within global hegemony. Hegemony is understood in the neo-Gramscian sense as the way that dominant power relations are maintained by consent predominantly, with the back up of coercion (Cox, 1981; Gill, 2003). We need to question the very parameters of action, the very economic, political and socio-cultural structures that are perpetuating social injustice and ecological degradation (Saurin, 1995, Ford, 2005, Parks, et al, 2008).

In the aftermath of the Cold War and also at the time of the Rio Earth Summit The Ecologist magazine ran an article which employed the concept of enclosure to describe GEG. It ran as follows: 'Enclosure redefines how the environment is managed, by whom and for whose benefit. It inaugurates a new ecological order. It defines power' (*The Ecologist,* 1992:155). We believe and have argued elsewhere (Ford, 2005) that the concept of enclosures is a powerful tool for describing and analysing the ways in which dominant discourses and discursive practices become hegemonic in the neo-Gramscian sense of not necessarily being coercively enforced. GEG is enclosed within dominant economic discourse, which is rooted in capitalist, neo-classical economics that continues to focus on and prescribe economic growth and market based solutions to environmental problems. For example, the capture of the climate change debate at international level by the carbon markets approach has arguably delayed effective strategies and led international efforts up a blind alley (Newell, 2008). Further, as outlined above, GEG is politically enclosed within global political structures that advocate institutionalist responses to global environmental degradation. These two enclosures — economic and political — although often seen as separate, in fact go hand in hand, and operate in tandem.

In general, the liberal and neoliberal institutionalist literature, including global governance, is relatively optimistic on the question of whether weaker actors can assert their rights and interests, and views systemic indicators for inequality in a less prominent light. Critical writers, whose main research focus tends to be aligned with environmental justice or structural issues, tend to be much more pessimistic, as in the consumption and the justice literatures. For example, there is a substantial and growing literature that addresses global warming/climate change in these contexts rather than in governance terms, arguing that the forces both enabling and preventing effective action are deeply embedded in neoliberal capitalism and the assumption of the necessity of economic growth.
There are two competing schools of economic thought on the environment and its relationship with global economic integration (Clapp, 2010; Clapp and Dauvergne, 2011). The economic mainstream sees economic growth as a potentially positive development for the environment. Based on an assumption of economic rationality, markets ought to be ideal tools for adjusting environmental problems through market instruments such as emissions trading, cap and trade, etc. Ecological economists on the other hand assume that with a finite resource base on the planet, economic growth cannot be physically and biologically sustainable and therefore cannot lead to lasting environmental improvement (Daly and Farly, 2003; Carmin and Agyeman, 2011). Ecological economists, in contrast, argue that the concept of the market itself is at the root of the problem. Some critics have also raised questions about the environmental impact of inequality (Martinez Alier, 2002). However, it is generally uncontested that overconsumption in rich industrialized countries has increased resource use globally and led to ever higher levels of waste and environmental degradation. Likewise, overdependence on local resources in the form of a subsistence economy has also led to high levels of environmental degradation in many parts of the developing world, and the connections between these trends have become a primary concern for the study of global environmental policy (Okereke, 2008).

As argued above, the economic and political enclosures are not separate, but intertwined and operate in concrete ways through dominant discourses, such as for example sustainable development. Within this orthodox approach the concept of sustainable development has arguably become a central tool for promoting continued economic growth, despite the original emergence of the concept as an alternative. From this point of view international institutions for sustainability have often ended up being more of an empty 'performance' than being really designed to be effective levers for the transformation required (Bluhdorn, 2013). Although sustainable development continues to be a widely contested term, the orthodox view of sustainable economic development has been widely adopted within the global environmental management apparatus. Through the concept of sustainable development an appeasement has taken place between environment and development, and between global North and global South. Yet underneath it all what it has really meant is business as usual. Sustainable development has been adopted by business which is professing to be the champion of environmental protection and is leading to a privatisation of global environmental governance (Clapp, 2010).

Where the study of politics and economics has been intertwined, for example in the area of International Political Economy within IR, orthodox approaches does for the most part

not challenge the separation of economics and politics and does not offer a satisfactory account of environmental degradation as embedded in social, economic and political relations. The concept of 'limits' demonstrates this diversity of problem definition (Meadows et al. 1972; Daly, 1996; Redclift, 1987, 1992; Merchant, 1992; Homer-Dixon, 1991, 1999). The fundamental question of whether the finite nature of many of the world's resources needs to be overcome by cutting back on their usage or transcended through technological progress is deeply divisive, and there is little constructive critical engagement between those who see technological change as offering limitless opportunities, and those who see the excessive use of finite resources (including air, water, atmosphere, etc.) as the root cause of environmental problems and regard technological solutions as a mere 'band aid'. The neoliberal economic order treats the natural environment as if there were an unlimited supply of natural resources, so with the right kind of technological innovation and economic pricing tools, environmental problems will be overcome. Critical writers, on the other hand, focus on the structural problems of modern socio-economic and political systems and address issues of power and inequity which orthodox approaches outlined above eschew. In the next section we want to ask, then, what frameworks might help us better to understand the linkages and develop more effective strategies?

Global political ecology as a framework for critique and pro-action

The limitations above point to a need for a more holistic approach to the converging crises of the Anthropocene which breaks through the separations of disciplines as well as the separation of nature from society and the separation of bounded spheres of local and global, inside and outside or state, market and civil society.

Situating ourselves in the critical camp, means moving beyond a problem-solving approach in the Coxian sense (1981) that takes given structures and institutions for granted. Critical green thought identifies the need for a fundamental transformation of modern socio-political and economic structures and practices, requiring for example a decentralisation of state power, scaling down of economic activity and transformation of capitalist relations of production, a reclaiming of the commons and fighting enclosures (Paterson 2001; Bookchin, 1980; Gorz ,1980). We further want to draw on the work of Converge, which highlights the importance of equity within planetary boundaries.

Rather than focusing on world order we need to inquire into the social relations that advance and impede sustainability and social justice. These concepts are part of a battle over interpretations which have material consequences. For example, the Brundtland Report claims to be building on the same two ideals of sustainability and social justice, or a particular appropriation of those terms as 'sustainable development' and 'participation,' an interpretation which is pervasive within orthodoxy. This interpretation, it is argued, is a fundamental part of the reproduction of hegemony. The challenge must take place in theory and practice, of challenging — or reclaiming — the orthodox interpretations as well as orthodox practices. A global political ecology approach is needed in both theory and practice as part of a project for radical social change. Such an approach needs to be able to analyse ecology as tied up with contemporary global hegemony. A broad body of literature on political ecology is bringing together insights from ecology and political

economy which is part of a much wider critical and diverse body of knowledge that deals with important questions regarding ecology and social relations in the late modern world.

Further, green thought does not just stand alone as a body of abstract knowledge, but goes with a vibrant social movement, that is actively seeking to innovate and design permanent alternative systems. While dominant approaches focus on solutions delivered global institutions and actors, including states and market actors, we highlight the important role of social movements. How might they situate themselves so as to break through dominant political and economic enclosures? Our plea for a global political ecology approach is addressed at institutions as well as outside forces.

The key characteristics of a critical global political ecology approach need to pay attention to following aspects:

a.) *Convergence* - the recognition of planetary boundaries and the limitations this puts on our avenues and the recognition that this raises questions of equity — that the two benchmarks of social justice and sustainability go hand in hand. Convergence also pays attention to scale and the recognition of different scales. We identify the need to recognise the converging crises of the Anthropocene have their roots in a globalising hegemony and that this deep structure needs to be recognise and analysed (Maclean 1999), though not necessarily translated into only global response — the analysis needs to be global, though the practical action can take place on many different plains.

b.) *Giving ecology ontological status* — this is the challenge of ecocentrism to anthropocentrism, which has remains central to both the economic and political enclosures. This second point is related to the first point, in that the recognition of planetary boundaries enables us to rethink safe carrying capacity for all life on Earth, and including for future generations of humans and other species.

c.) *Political ecology* — the recognition that ecology and political economy both stem from the work *oikos* (household), a holistic understanding of the relations between society, ecology and economy. The separation of economics and politics into discrete disciplines disables a holistic understanding of the interrelationships. For example, the study of political economy, including international political economy, has forgotten its ecological roots and does not pay attention to the ecological structures that are integral to the political-economic processes (Bernard (1997); Polanyi1957). Likewise the study of politics/IR has focussed on politics and order/world order without paying attention to ecology and where it has, has not paid attention to economics (Lafferiere and Stott 1999). Ecology reminds is of the common root and the base — the material conditions for life on Earth at the heart of economics and politics. The material and the ethical are important parts of the story, neither of which can be left out. Bringing ecology back into political economy allows us to discuss the nature of embeddedness and disembedding — the way in which the economy becomes separated from society in the great transformation to the market society both materially and ideationally in that it changes social relations and reconceptualizes nature as subordinate (Bernard 1997). A critical political ecology also helps us to recognise how ecology has falsely been identified as a commodity. Polanyi (1957) identi-

fied land as a fictitious commodity because it is not produced by the market, just like labour, and yet the separation of nature from society and the false identification as commodity has allowed nature to become commodified. The latest such fictitious commodity, for example, is carbon, which has given rise to a large market, but one which is ultimately unlikely to solve the ecological crisis. Being able to think about ecological limits also links back to Converge – the idea that there are ecological limits to the economy as well as to globalisation and the global political economy, i.e., the expansion of market society. An important part of the work, conceptually, then is the re-embedding of nature/ecology into political economy.

d) *Intersectionality:* a radical critique and praxis would not be complete without attention to gender and feminist analysis, which brings in analysis of power relations and highlights the important notion of intersectionality (Kaijser and Kronsell 2014). Ecofeminists have long pointed out that IR and IPE, while providing a history of states and markets pay no attention to the violence committed against nature in the process (Tickner 1993). The great transformation not only about the ascent of market society but also marked by a particular form of scientific rationality that subordinated the body to the mind, nature to society, or women to men. Feminist theory at heart is an investigation into the workings of power, within social structures and human relations, as well as towards the non-human world. Ecofeminism argues that both the domination of humans over humans and humans over nature need to be overcome simultaneously if we are to achieve an ecological secure and socially just future. Need to build sustainable non-dominating relations with nature and amongst humans. Like overcoming the separation of economics and politics, intersectionality calls for holistic analyses that pay attention to all power relations along race, class, gender lines. Feminism like ecologism is not just a theory, but a vibrant praxis. It is about both the content and process of social transformation. Theory and praxis cannot be separated. Feminism, amongst other critical approaches, asks the deep questions about where the power lies. Fundamentally, that power is not just manifested in concrete relationships and outcomes — these are also discursive practices and behind them is a discourse, which itself holds power and is culturally, socially, economically, politically embedded. And can thus be dislodged. This is what progressive movements are about — have always been about. They are the stimulus and sometimes the agent of change. Radical political ecology is about challenging all discourses as well as institutional structures and practices.

This is not to argue that institutional change is ineffective. We argue for a multi-pronged approach, working for social change within the global institutional architecture, as well building broader alliances with and amongst movements working outside official institutional channels. This is in line with Convergence calls for paying attention to scale, structure, interconnection of sustainability and social justice. A lot of our hope is placed in the broader social movements working on the ground, outside of the global institutions, which must also be part of the debate, and where the challenge of enclosures also takes place. In discussing the role of social movements in global politics John Maclean once warned that if contemporary social movements do not recognise their own agency within the deep structure of hegemony, they may unintentionally reproduce that very hegemony (Maclean, 1999:4). A key part of the way forward, as outlined, is to recognise the global

enclosures and to find ways of disrupting and challenging them through critical discourse and practice. Amidst increasing calls for more democratic and deliberative forms of politics (Dryzek, 2010) a key way forward given the interlinked crises of the Anthropocene is to build bridges with diverse movements across issues, employing holistic analysis.

We now turn our attention to an example of a movement that is tackling issues of sustainability and social justice in a holistic way. This is, in our minds, an example of a radical political ecological movement that is challenging dominant structures. While some of its ideas may be too radical for mainstream consumption and thus action, it nevertheless provides an important challenge to dominant discourse and practices. And furthermore, it has already made some impact on the discourses of dominant institutions like the IMF and OECD.

The Degrowth movement

Within both the academy and amongst social movements, degrowth has emerged as a discourse which seeks to downsize production and consumption in order to rebalance nature and society. (McKibben 2007; Victor and Rosenbluth, 2007; Jackson, 2009, Kerschner, 2009, Latouche, 2009; Heinberg 2011). At heart it emerged out of ecological economics and the challenge to the dominant neoclassical economic focus on economic growth. Recognising the limitations of one-planet living and the very real ecological limits including planetary boundaries, it argues that exponential economic growth is impossible. It thus serves as a radical critique of dominant economic enclosures.
A degrowth society according to Kallis, Kerschner and Martinez-Alier (2012) would be organised along the following principles: cap and share, zero interest rates, non-debt money and regional currencies, new forms of property and work-sharing. Such an approach is a radical critique of capitalist social relations as it seeks to remove the profit motive from the economy and reduce the emphasis on growth. In addition to this, there is a focus within this movement on well-being. Degrowth authors have argued that actually the focus on economic growth does not necessarily add to well-being, indeed it may actually detract from it (Victor and Rosenbluth 2007; Jackson, 2009). Given the current focus on economic growth and the measurement of well-being in terms of GDP, degrowth presents a radical challenge to the current capitalist, free market economy, and would require a substantial reordering of the economic and political system.

Such a commitment to degrowth would radically challenge all the dominant political networks, alliances, systems and governance structures that are in existence today, because they are oriented around growth strategies (Purdey, 2010). Hence suggesting it as a policy tool would most likely receive not political support. However, there are some examples of inroads into dominant debates. For example, the German Energiewende (energy transformation) shows that under the right circumstances it is possible to challenge structural constraints and policy tools based on reducing material throughput — a corner stone of ecological economics and ultimately the main guiding principle of a degrowth society — are beginning to be possible proposals at local, national and indeed global levels.

For example, the OECD has a program dedicated to measuring material flows and research productivity which engages with the importance of measuring material throughput. Material flow analysis (MFA) is accepted as an increasingly policy relevant and rapidly developing field of research, constituting a tool that can provide a more integrated and holistic measure of resource and material flows in the economy, from which economy-wide material flow indicators can be derived, including on resource productivity and resource use efficiency. The OECD acknowledges that these could parallel labour productivity indicators (OECD, 2008).

The OECD's programme acknowledges the progress that has been made in developing MFA methodologies, not least thanks to international, multi-sectoral joint research efforts across the OECD region including governmental and non-governmental institutions, including the EU institutions such as the European Environment Agency. MFA is now a policy making tool across the OECD. OECD countries that have developed national sets of environmental or sustainable development indicators are building on MFA tools and some of these countries are integrating MFA methodology into their national system of official statistics. Indeed, resource and material flows and related indicators now feature in the activities of most OECD countries (OECD, 2008).

The World Bank, too, sees the limitations of a growth paradigm and argues for material throughputs to take a central place in economic reasoning. Like Victor and Rosenbluth (2007), the World Bank (2004: 115) argued that economic growth and wellbeing are not intrinsically connected:

> [P}reliminary estimates show that many of the most resource-dependent countries, including all the major oil exporters, have low or negative genuine domestic savings. That means that losses of their national wealth caused by depletion of natural capital and damage done by CO2 emissions outweigh the benefits from net domestic saving and education expenditure. Thus it is quite possible that in these countries the aggregate national wealth was actually decreasing, to the detriment of the people's quality of life and these countries' future development prospects. And such unsustainable development might be happening in spite of positive economic growth indicators, which are usually at the center of all governments' attention.

The World Bank acknowledges that it has been common to assume that indicators of sustainable development have a high substitutability among different components of a country's wealth. For example, it might be assumed that the incomes derived from depletion of natural resources could be invested in the building up of human capital, such as for example education, or physical capital, such as for example new enterprises. However, the World Bank argues that actually there needs also to be some reduction in energy and material throughput for the criteria of sustainable development to be met. So in actual fact, such 'compensatory' investments would also need to lead to investment in new technologies and the use of renewables rather than non-renewables for example, solar energy instead of oil.

Thus the recognition of degrowth, or at least a critical engagement with the concept of growth, is not a debate that takes place solely between ecological economists or critical political ecologists but it is also a debate that has squarely arrived in policy-making centres. However, it is unlikely that the very structures of capitalist global political economy will be challenged head on by organisations like the World Bank or OECD. This is where the focus on the movement working both inside the corridors of power as well as outside in society becomes paramount. Working inside to diffuse norms that run counter to the dominant ideologies that perpetuate environmental degradation and social injustice is a slow process and one that is likely to be met with significant resistance and which also runs the great danger of being watered down and co-opted. However, the challenge also takes place outside of the dominant institutions within society, within grassroots movements campaigning for de-growth strategies, amongst others, societal forces working on the ground to transform the economy and society to pay attention to convergence — that is to the linked issues of social justice and ecological sustainability and renewal within planetary boundaries, as well as to paying attention to the question of scale and the relationship between the local and the global, as seen for example in the very real power of global institutions to set global policies that need to be challenged at global as well as local levels. At least the de-growth's underlying assumptions are ecocentric, which is to put humans back in their place as being part of nature, rather than separate from it. Key ecological economic and political economic principles are built into this movement. Intersectionality seeks to break down the question of social justice to look at the deeper relations of power, paying attention to race, class and gender and how these play out within society. These are key issues that must also be at the heart of the de-growth movement. The de-growth movement is a broad movement and within it has paid attention to feminist issues, for example in looking at fair distribution within care work (D'Alisa et al, 2015). This is a growing and diverse movement, posing important challenges to core political, economic and social principles upon which our currently unsustainable societies are based on. It is thus fundamentally a movement of the Anthropocene.

Conclusions

This chapter has argued that if there is anything new about the Anthropocene, it is that we are faced with a convergence of crises. And while this realisation is not new, indeed, scholars have sought to highlight many of these crises for decades, perhaps we have arrived at a critical point in time, where the stability of our climatic conditions for a thriving Earth can no longer be denied, and this helps to focus the mind. We also argued that while the Holocene has provided well for humans and other species in terms of climatic stability, the same cannot be said for social conditions on Earth, where the dominant mode has been conflict, flux and change. Whether the arrival of the Anthropocene may not immediately help humans to overcome their enmity with nature and with each other, we nevertheless find that a critical political ecological approach helps us to identify some of the limitations of the past. The paper outlined the dominant approaches within one particular academic discipline, that of IR, which is the natural homeland for the study of GEG. We sought to show how dominant economic and political frames form powerful

enclosures on the solutions proffered to global environmental problems, where neoliberal market based and institutional solutions dominate. Instead, we made a plea for a more holistic approach that pays attention to limits and planetary boundaries as well as questions of justice, that addresses questions of scale and seeks to overcome conceptual and disciplinary separations that have at heart a separation of humans and nature and within that to pay attention also to the power relations amongst humans and between humans and nature. We applied this to one promising case study of the de-growth movement, which seeks to recognise the limitations of current economic models, while not compromising on human well-being, but rather recasting well-being in a more holistic light, something that is perhaps central to our future survival through the Anthropocene.

Bibliography

Andonova, L. (2010) Public-private Partnerships for the Earth: Politics and Patterns of Hybrid Authority in the Multilateral System. *Global Environmental Politics*, vol. 10, no 2, pp 25-53.

Anderson, V. and Jones, A.W (forthcoming?) 'Anthropocene: Journey of a concept', this volume.

Bernard, M. (1997) 'Ecology, political economy and the counter-movement: Karl Polanyi and the second great transformation', in S. Gill and J. Mittelman (eds) *Innovation and Transformations in International Studies*, Cambridge:CUP, pp. 75-89.

Biermann, F, K. Abbott, S. Andresen, K. Backstrand, S. Bernstein, M.M. Betsill, H.Bulkeley, B. Cashore, J. Clapp, C. Folke, A. Gupta, J. Gupta, P.M. Haas, A. Jordan, N. Kanie, T.Kluvánková-Oravská, 18 L. Lebel, 19 D. Liverman, 20, 21 J. Meadowcroft, 22 R. B. Mitchell, 23 P. Newell, 24 S. Oberthür, 25 L. Olsson, 2 P. Pattberg, 1 R. Sánchez-Rodríguez, 26, 27 H. Schroeder, 15 A. Underdal, 28 S. Camargo Vieira, 29 C. Vogel, 30 O. R. Young, 31 A. Brock, 1 R. Zondervan (2012) 'Navigating the anthropocene', *Science*, 335, 16 March 2012: 1306-1307.

Biermann, F. and Pattberg, P. (2012) Global Environmental Governance Reconsidered. New Actors, Mechanisms, and Interlinkage. Cambridge, MA: MIT Press.

Blühdorn, I. (2013): The governance of unsustainability: ecology and democracy after the post-democratic turn, Environmental Politics, 22:1,16-36

Bookchin, M. (1980) *Towards an ecological society*, Montreal: Black Rose Books.

Brand, U. (2012) Green economy – the next oxymoron? *Gaia*, vol.21, no.1, pp.28-32.

Carmin, J. A. and Agyeman, J. eds (2011) *Environmental Inequalities beyond Borders.* London: Routledge.

Carson, Rachel (1963) *Silent Spring*, London:Hamish-Hamilton.

Clapp, J. (2010) 'Environment and Global Political Economy'. In Kütting, R. ed *Global Environmental Politics—Concepts, Theories and Case Studies.* London: Routledge), pp. 42-55.

Clapp, J. and Dauvergne, P. (2011) *Paths to a Green World: The Political Economy of the Global Environment*. Cambridge, Massachusetts: MIT Press.

Cox, R. W. (1981) Social Forces, States and World Orders. Millennium, vol.10, no.2, pp.126-151.

Commission on Global Governance (1995) *Our Global Neighbourhood*. Oxford: OUP.

D'Alisa, G., Demaria, F. and Kallis, G. eds (2015) *Degrowth: A vocabulary for a new era*. London:Routledge.

Daly, H. (1996) *Beyond Growth: The Economics of Sustainable Development*. Boston: Beacon Press.

Daly, H. and Farly, J. (2003) *Ecological Economics: Principles and Applications*. Washington, D.C.: Island Press.

Dryzek, J. (1997) *The Politics of the Earth: environmental discourses.* Oxford: Oxford University Press.

Ekins, P., Meyer, B. and Schmidt-Bleek, F. (2010) 'Reducing Resource Consumption. A Proposal for Global Resource and Environmental Policy'. In Angrick, M., A. Burger and H. Lehmann, (eds), *Factor X: Strategies and Instruments for a Sustainable Resource Use*. Berlin: Springer, pp. 249-273.

Ford, L.H. (2005) 'Challenging the global environmental governance of toxics', in D.L. Levy and P.J. Newell (eds) *The business of global environmental governance*, Cambridge Massachusetts:MIT Press, pp.305-328.

Foster, J. B. (2010) *The Ecological Revolution: Making Peace with the Planet*. New York: Monthly Review Press.

Gill, S. (2003) *Power and Resistance in the New World Orde*r. Basingstoke: Palgrave.

Gills, B. K. ed (2000) *Globalization and the Politics of Resistance*. Basingstoke: Macmillan.

Gorz, A. (1980) *Ecology as Politics*. London: Pluto Press.

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

Homer-Dixon, T. (1991) On the threshold: Environmental changes as causes of acute conflict'. *International Security*, vol. 16, no. 2, pp.76–116.

Homer-Dixon, T. (1999) *Environment, Scarcity and Violence*. Princeton: Princeton University Press.

Jackson, T. (2009) *Prosperity without Growth*. London: Earthscan.

Kaijser, Anna and Annica Kronsell (2014) 'Climate change through the lens of intersectionality', *Global Environmental Politics*, 23(3):417-433.

Kallis, G., Kerschner, C., Martinez-Alier, J. (2012) The Economics of Degrowth. *Ecological Economics*, Vol 84, pp. 172-180.

Keck, M. and Sikkink, K. (1998) *Activists beyond Borders: Advocacy Networks in International Politics*. New York: Cornell University Press.

Kerschner, C. (2009) Economic de-growth vs. steady-state economy. *Journal of Cleaner Productio*n, vol.18, no.6, pp.544-551.

Kovel, J. (2007) *The enemy of nature: the end of capitalism or the end of the world?* London: Zed Books/Fernwood Publishing.

Kütting, G. (2000) *Environment, Society, International Relations*. London: Routledge).

Kütting, G. (2010) *The Global Political Economy of Environment and Tourism.* Basingstoke: Palgrave/Macmillan.

Lafferiere, E. and P.J. Stoett (1999) *International Relations Theory and Ecological Thought :Towards a Synthesis*, London :Routledge.

Latouche, S. (2009) *Farewell to Growth*. Cambridge: Polity.

Lewis, S. L. and Maslin, M.A. (2015) Defining the Anthropocene. *Nature*, 519: pp.171-180.

Lipschutz, R.D. with J. Mayer (1996) *Global Civil Society and Global Environmental Governance*, Albany: State University of New York.

Lohmann, L. (2009) 'Climate Crisis: Social Science Crisis', Der Klimawandel: sozialwissenschaftliche Perspektiven, VS-Verlag.

Maclean, J. (1999) 'Towards a Political Economy of Agency in Contemporary International Relations'. In Shaw, M. ed P*olitics and Globalisation:Knowledge, Ethics, Agency*. London:Routledge.

Martinez-Alier, Joan, (2002). *The Environmentalism of the Poor.* Cheltenham, UK: Edward Elgar Publishing.

McKibben, B. (2007) *Deep Economy*. Oxford: Oneworld Publications.

Meadows, D. *etl.al.* (1972) *The Limits to Growth*, Universe Books : New York.

Merchant, C. (1992) *Radical Ecology: The Search for a Liveable World*. London: Routledge.

Newell, P. (2008) The political economy of global environmental governance. *Review of International Studies*, vol.34, no.3, pp.507-529.

OECD, (2008). Measuring Material Flows and Resource Productivity, Volume III. Inventory of Country Activities, Paris.

Okereke, C. (2008) J*ustice and Neoliberal Environmental Governance: Ethics, Sustainable Development and International Co-operation*. New York: Routledge

Park, J., Conka, K. and Finger, M. eds (2008) *The crisis of global environmental governance*. London: Routledge.

Paterson, M. (2000) *Understanding Global Environmental Politics*. Basingstoke: Palgrave.

Paterson, M., Humphreys, D. and Pettiford, L. (2003) Conceptualizing Global Environmental Governance: From Interstate Regimes to Counter-Hegemonic Struggles. *Global Environmental Politics*, vol. 3, no. 2, pp.1-10

Pattberg, P. and Wideberg, O. (2015) Theorising Global Environmental Governance: Key findings and future questions. *Millennium Journal of International Studies*, vol.43, no.2, pp.684-705.

Princen, T. and Finger, M. (1994) *Environmental NGOs in World Politics*. London: Routledge.

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

Purdey, S. J. (2010) *Economic Growth, the Environment and International Relations: The Growth Paradigm.* London: Routledge.

Redclift, M. (1987) *Sustainable Development: Exploring the Contradictions.* London: Routledge.

Redclift, M. (1992) The meaning of sustainable development. *Geoforum,* vol. 23, no. 3, pp.395–403

Saurin, J. (1995) 'International Relations, Social Ecology and the Globalisation of Environmental Change'. In Vogler, J. and Imber, M. (eds.) *The Environment and International Relations*. London: Routledge, pp. 84-107.

Schumacher, E.F. (1973) *Small is beautiful: a study of economics as if people mattered,* London: Blond and Briggs.

Selin, H. (2012) Global Environmental Governance and Regional Centers. *Global Environmental Politics*, vol. 12, no. 3, pp. 18-37.

Steffen, W., A. Persson, L. Deutsch, J. Zalasiewicz, M. Williams, K.Richardson, C. Crumley, P. Crutzen, C. Folke, L. Gordon, M. Molina, V. Ramanathan, J. Rockstrom, M. Scheffer, H. Joachim Schellnhuber and U. Svedin (2011), The Anthropocene: From Global Change to Planetary Stewardship. *Ambio*, 40 (7), pp.739-761.

Stevenson, H and Dryzek, J. (2014) *Democratizing global climate governance*. Cambridge: Cambridge University Press.

Sullivan, S. (2009) Green capitalism, and the cultural poverty of constructing nature as service provider. *Radical Anthropolog*y, Vo.3, p.18-27.

The Ecologist*,* (1993) *Whose Common Future?Reclaiming the Commons*, Earthscan, London.

Tickner, J. Ann (1993) 'States and Markets: An Ecofeminist Perspective on International Political Economy', *International Political Science Review*, Vol. 14, No. 1, pp. 59-69.

Trudeau, H., Duplessis, I., Lalonde, S., Van de Graaf, T., de Ville, F., O'Neill, K., Roger, C., Dauvergne, P., Morin, J-F., Oberthuer, S., Orsini, A., Biermann, F., Ohta, H. and Ishii, A. (2013) Insight from Global Environmental Governance: Forum. *International Studies Review*, vol.15, no. 4, pp. 562-589

Victor, P. and Rosenbluth, G. (2007) Managing without Growth. *Ecological Economics*, vol.6, no.1, pp.492–504.

Wapner, P. (1996) *Environmental Activism and World Civic Politics*. Albany: SUNY Press.

World Bank (2004) *Beyond Economic Growth*. Washington DC: World Bank.

Wright, E. O. (2010) *Envisioning Real Utopias.* London: Verso.

Young, O., King, L. and Schroeder, H. eds (2008) *Institutions and Environmental Change: Principal Findings, Applications and Research Frontiers.* Cambridge, Mass.: MIT Press.

Young, O. ed (1997) *Global Governance: Drawing insights from the environmental experience*. Cambridge, Massachussetts:MIT Press.