

Planet Politics

A Manifesto for the End of IR

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This manifesto is not about politics as usual. We seek political imagination that is not trapped in the thinking, knowledge, and institutions of the past. It is about meditating on the failures that have come before and making the urgent changes needed for future survival. To survive, we must ask questions that are intimately connected to economics and oppression. Global ecological collapse brings new urgency to the claim that “we are all in this together”—humans, animals, ecologies, biospheres. It brings to light that even in the broadest of all challenges to humans on this planet, it is the most vulnerable and historically oppressed peoples, exploited and abandoned by colonialism and capitalism, who will suffer the most in the coming decades and who deserve to have the most say moving forward. Planet politics must become a new way of thought, action, and process, a politics to create a just and sustainable world for all humans and species co-living in the biosphere. Environmental justice and social justice are inextricably bound.

We agree with Timothy Morton, that the global ecological crisis ‘has torn a giant hole in the fabric of our understanding’: a vast ‘tear in the real’.¹ Now our paradigms fail the real; International Relations, as both a system of knowledge and institutional practice, is undone by the reality of the planet. We must be in tension with *status-quo* struggles within our disciplines, and transgress academic boundaries to create conversations with activist networks and movements engaged in struggle against oppressive regimes and systems. This is why we have chosen the polemic and political format of the manifesto.

If International Relations has failed, then so has its scholars. Why have we not engaged with the planetary real? How have we overlooked the pressing problems faced by all people today? In our constant debates about the efficacy of the state, or the effects of globalization, we have missed what we were making: an era now called the Anthropocene. This term represents an unprecedented change in the continued livability of planet Earth caused by the rapacious use of natural resources with no thought for current and future generations of humans, or the millions of other species affected by changing climate conditions. It represents a new kind of power—‘social nature’—that is now turning on us.

¹ Timothy Morton, *The Ecological Thought* (Cambridge Mass. Harvard University Press, 2010), Kindle edition, loc. 203, 412.

Security comes from being more connected, not less. Gone are the days of billiard ball states and national security based on keeping the Other out or deterred. The Other is always already inside, so bound up with us in a common process that it no longer makes sense to speak of inside and outside. Together we cannot survive without accepting the cosmopolitan and enmeshed nature of this new world. We are all guests on this planet. We are an array of bodies connected and interconnected in complex ways that have little to do with nationality. Nations will wither in the coming heat, freeze in the prolonged winters, and be lost under the rising oceans. We will not survive without the biggest and most complex system we know: the biosphere.

Action from this perspective is both more modest and yet more vital. Habits—from what we have eaten or what medical choices are made, from antibacterial soap to organ sourcing—can alter global networks and either improve or inflict harm on communities we might not even know exist. Communicative, anthropocentric, and rights-based ethics can only guide and inform the discussion so far in understanding the challenges and opportunities in the Anthropocene.

There is also no magic bullet, no sudden realization, and no single policy that will “fix” the damage done. We must resist the urge to think we can convince those who refuse to see what is right in front of their eyes. The naysayers will stand in the ruins and tell us *we* are dreaming; that change is not possible. Exxon may grudgingly acknowledge they promoted the climate change denial industry, but this admission will not turn back the clock. Rather, we must begin to imagine the global as an array of bodies and an array of convergent practices we have heretofore called international relations. We must embrace a multi-species, multi-disciplinary action plan. And we must do it now. The scale of the crisis requires a variety of disciplines to investigate conventional and alternative responses. We can not turn back the clock and fix the damage, but we can fight for this planet we call a home. We need to model the future.

What other choice do we have?

And so, knowing that even a ruined planet is worth fighting for, we declare our intentions for facing our failed discipline with new hope and a promise to face the real with an unflinching gaze.

MANIFESTO OF PLANET POLITICS

The Double Crisis

1. *Can we match the planet with our politics?*

After the bombings of Hiroshima and Nagasaki in August 1945, thoughtful writers wondered if the devastation presaged a new international reality that might challenge its institutions, its notions of security, and indeed its very politics. Neils Bohr and other Manhattan Project scientists thought that nuclear weapons overturned the fundamental principles of war and would radically destabilize international relations; Bernard Brodie hoped that war with atomic bombs was unlikely enough to ‘to give society the opportunity it desperately needs to adjust its politics to its physics’.² What resulted was an effort to think about nuclear world government and the banning of the weapons, but

² Bernard Brodie, ‘War in the Atomic Age’, in Bernard Brodie (ed.), *The Absolute Weapon: Atomic Power and World Order* (New York: Harcourt and Brace, 1946), p. 23.

it was short lived; once the major power diplomacy in the UN Atomic Energy Commission failed in 1948, the fundamental irruptive power of the weaponry was left to the vicissitudes of militarism, power-politics and interstate bargaining. Yet even as statesmen, strategists and air forces sought to make the weapons another tool of war, there was understanding of its paradigm-shattering peril: US atomic scientists warned that the H-bomb ‘enters the range of very great natural catastrophes [and] becomes a weapon which in practical effect is almost one of genocide...its very existence and the knowledge of its construction [is] a danger to humanity as a whole’; while at Geneva in 1955 Eisenhower and Marshall Zhukov speculated that a nuclear war, given the prevailing East–West winds, would create ‘fallout [that] might destroy entire nations and possibly the whole northern hemisphere’.³

In short, we had glimpsed the gulf between the real and the sensible in the image of our potential extinction. We had glimpsed it but not properly seen it. By the 1980s, earth systems science had shown us how total that extinction could be, with “nuclear winter” studies that showed that even a limited nuclear war would starve most of the human survivors and, in the words of Carl Sagan, ‘represent a severe assault on our civilisation and our species’.⁴ Such a fate would overcome the planet in the hours and months after war; now earth systems science, with its powerful computer models, massive datasets and its complex understanding of ecological systems, shows a future of extinctions that will be slower—playing out over decades and centuries—but is more probable. This future issues not from an exceptional event like war or terrorism, and not from a clash of states, but from the routine and extraordinary rhythms of human life, consumption and industrialisation: from the encounter between humanity and ecology.

Now, as the world is hurtling towards a disastrous ‘four degree world’ affected by irreversible climate change, and the total extinction of marine fish species is predicted by mid-century, we must ask a new question. Can we match our planet with our politics? We are concerned that International Relations, as both a field of knowledge and a global system of institutions, is failing the planet. A state-centric world obsessed with bargaining, power and interests, which talks arrogantly of an atmosphere divided into ‘carbon space’ divided by national borders, and in which the state is the handmaiden of a capitalism which sees nature as mere material in wait of profit, is failing the reality of the planet.

At its most basic, this means that our fundamental image of the world must be revolutionalised. Our existence is neither international nor global, but planetary. Our anthropocentric, state-centric and capitalo-centric image of international relations and world politics is fundamentally wrong; it perpetuates the wrong reality, the wrong commitments and purposes, the wrong ‘world-picture’. In its obsession with power, it fails to understand the true power of a ‘social nature’ that is transforming the living reality of the planet.

³ Richard Rhodes, *Dark Sun: The Making of the Hydrogen Bomb* (New York & London: Simon and Schuster, 1995), Kindle edition loc. 9030; David Holloway, *Stalin and the Bomb* (New Haven and London: Yale University Press, 1994), 332-342.

⁴ Carl Sagan, “Nuclear Winter: Nuclear War would be an Unprecedented Human Catastrophe”, *Global Research*, November 09, 2010. <http://www.globalresearch.ca/nuclear-winter-nuclear-war-would-be-an-unprecedented-human-catastrophe/21840>

‘The end of International Relations—surely not?!’ we can hear the sceptics say, as they point to the hundreds of capitals and ministries, the weapons and militaries, the rituals of diplomacy and trade, and the United Nations’ modernist headquarters in Manhattan, dreaming skyward of a benevolent world order. Yet this is not the real the planet now presses upon us—of industrialised human societies utterly and ever more dangerously enmeshed with the biosphere, the world of things, rivers, forests and animals, whose rhythms and survival are utterly marked by our processes. This is not a world of power politics, or liberal benevolence. International relations is an unreal real; a world that is not of this earth.

2. *Tsunamis are more real than markets, or how is that the Dow Jones gets more headlines than climate change?*

We oppose one discipline—IR—with another: Earth Systems Science. This system of research and knowledge, out of which the very concept of the Anthropocene⁵ emerged, aims to reflect the true scale and systemic complexity of the planet in a way that international relations does not. Its analytical breadth and methodologies underpins much of climate science and now issue a profound warning to global institutions—if they are in any mind to hear. Its ‘planetary boundaries’ model identifies 9 major global ecosystem processes (climate change, ocean acidification, stratospheric ozone depletion, biogeochemical flows, freshwater, land system change, atmospheric aerosol loading, and biosphere integrity/biodiversity) and thresholds ‘within which humanity can exist safely’ for each. A 2009 study stated that three of these thresholds (climate change, ocean acidification, and ozone) had been crossed and a 2015 study that the threshold for biosphere integrity had already been crossed.⁶ This model proposes 350 ppm of CO₂ in the atmosphere as the threshold of safety for climate change (about 1-1.5°C of average warming), yet recorded measurements have now exceeded 400 ppm and international institutions (including the EU and the UN Framework Convention on Climate Change) insist in assuming that 2°C of warming is a safe target. The fifth Assessment Report of the Intergovernmental Panel on Climate Change states that the Earth has endured its warmest 30 years since 1400; observed global warming is already between 0.65 and 1.06°C; and, the oceans have seen a 26% increase in acidification ‘since the beginning of the industrial era’.⁷ Another major earth systems study predicts that ocean acidification, overfishing, and other stressors have been predicted to potentially lead to the extinction of all marine fish species by 2048.⁸

⁵ P. J. Crutzen, “Geology of mankind”, *Nature* 415, 23 (2002). doi: 10.1038/415023a

⁶ Will Steffen, Katherine Richardson, Johan Rockström, Sarah E. Cornell, Ingo Fetzer, Elena M. Bennett, Reinette Biggs, Stephen R. Carpenter, Wim de Vries, Cynthia A. de Wit, Carl Folke, Dieter Gerten, Jens Heinke, Georgina M. Mace, Linn M. Persson, Veerabhadran Ramanathan, Belinda Reyers, Sverker Sörlin. “Planetary boundaries: Guiding human development on a changing planet”, *Science*, 347(6223), 13 February 2015. DOI: 10.1126/science.1259855

⁷ IPCC. 2014. *Climate Change 2014: Synthesis Report*. Geneva: Intergovernmental Panel on Climate Change. http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_SPMcorr1.pdf

⁸ Worm, B. Barbier, E. Beaumont, N. Duffy, E. Folke, C. Halpern, B. Jackson, J. Lotze, H. Micheli, F. Palumbi, S. Sala, E. Selkoe, K. Stachowicz, J. Watson, R. 2006. “Impacts of Biodiversity Loss on Ocean Ecosystem Services.” *Science* 314 (5800): 787-790. doi: 10.1126/science.1132294

It is easy to imagine the devastating effect on ocean ecologies and human food security such an extinction event will have. Just three decades away.

These looming events are surely the greatest threat to international security this coming century, whether we think in terms of state security, human security, or ecological security—the security of the common worlds we inhabit and depend upon for survival. Where, in the face of this, are the resolutions of the United Nations Security Council?

Yet, by itself, earth systems science cannot tell us how to achieve social change or how to reconfigure the international, even as the planetary boundaries framework was rightly advanced as ‘a new paradigm that integrates the continued development of human societies and the maintenance of the Earth system (ES) in a resilient and accommodating state.’⁹ In our view, there needs to be an isomorphism between the planetary scale on which earth system science is producing knowledge about the earth, between the planetary scale of actual and potential extinctions, and between an ethical, moral and ontological discourse that might be adequate. This is the crisis facing IR, and the opening for a new paradigm: planet politics. We agree with Frank Biermann that the Anthropocene calls for ‘a new perspective in political science’ and that the new paradigm of ‘earth system governance’ provides a compelling framework upon which to build and innovate.¹⁰ In a project of reconfiguring the global to match the planetary, we must rethink our institutions, our commitments, our rules, and our understanding of membership, rights and participation. We must imagine and create a just ecological politics and governance at every level. It will look very different from the elitist and state-centric global governance that is the handmaiden of extinction.

3. *Diplomacy, as an institution, is failing.*

Long ago, Hedley Bull argued that diplomacy was a key institution of international society, alongside international law, great powers, and war.¹¹ Diplomacy is carried out by official representatives of states and transnational institutions created by states. Corporations have lobbied, bought and bribed themselves into the game. Everyone else is an NGO, or worse, a person, a nothing. And non-human species, oceans, ecosystems—the very living complexity of the planet—have no status at all. Bull’s ‘institutions’ are the action-actor-artefacts of contemporary international society, the subjects and objects that we depend on to solve the planet’s problems. Below we speak of international law; how is diplomacy contributing to acknowledging and addressing the gravity of the imminent ecological collapse?

We have United Nations Framework Convention and the Kyoto Protocol on climate change. These are diplomacy’s sole treaty bulwark against the sixth extinction and a potential climate change future that the International Institute of Strategic Studies asserted would be ‘catastrophic – on the level of nuclear war’. Negotiated in 1997 but not in force until 2005, Kyoto was originally a modest commitment by a small group of countries to cut emissions over four years; it has since been extended to the end of 2020 – just five years away – and has achieved cuts of 29% below business as usual. Yet

⁹ Steffen et. al, “Planetary boundaries”, 736.

¹⁰ Frank Biermann, “The Anthropocene: A governance perspective”, *The Anthropocene Review*, 2014, Vol. 1(1) 57–61. DOI: 10.1177/2053019613516289

¹¹ Hedley Bull, *The Anarchical Society* (London: Macmillan, 1977/2002), xxxii.

global emissions as a whole soared by 40% and have risen to historically unprecedented levels. Current emissions trends are tracking towards an average warming of 3.7-5.5°C over pre-industrial levels. If the earth warms 3 degrees the arctic ice sheet will have melted, triggering a rise in sea levels of 7 metres. Yet leading climate scientists are also warning that international society's assumed ceiling for emissions and 'dangerous' climate change (~1000 GtC or 2uC) will in fact 'spur "slow" feedbacks and eventual warming of 3-4uC with disastrous consequences'. Instead we must limit atmospheric greenhouse gases to ~500 GtC or 350 ppm of CO₂—which means dramatically reducing existing concentrations rather than continuing to emit more. The UNFCCC is apparently reviewing the 2 degree target, but this process appears to be bogged down in political manoeuvring and the 'safe space' target of 1 degree will not shape negotiations later this year in Paris. The Paris meeting presents the world with an opportunity, but there are grave fears that the meeting as a whole will fail, or that it will fail to embed binding targets that prevent dangerous climate change according to the best contemporary advice of earth systems science. Objects in this mirror are closer than they appear.

Nearly two decades after Kyoto, states have yet to agree to binding emissions reductions that are informed by expert scientific opinion and will cumulatively work to prevent dangerous climate change. Diplomacy has in fact embedded a dangerous level of average temperature increase as a goal—at the 2009 Copenhagen meeting of the UNFCCC and in European Union policy. States still talk and think as if their agency matters and is morally unproblematic; as if, clad in the armature of the state and striding purposefully through his own institutions, Cartesian 'Man' can continue to dictate to the planet. This attitude was exemplified by comments by the Indian environment minister after the 2014 Lima Accord, who praised it for providing developing countries 'equitable carbon space to achieve sustainable development' – as if the atmosphere can be divided up according to the principles of state sovereignty, as if there is any atmospheric space left.

The biosphere cannot be traded, divided or bargained away. It is not a product, or a monetary or diplomatic artefact, amenable to state compromises and quantification. While we can count tonnes of emissions and parts per million of CO₂, we cannot count non-linear events and unpredictable feedbacks. Maybe diplomacy is all we have, but as an institution it is failing us because the crisis we face demands fundamental change in the underlying system and commitments of which diplomacy is an epiphenomenon. Diplomacy is the visible hands of a watch running down, when what we need to do is not merely expose its interior workings, but re-imagine our entire structure of social-political time. Yet the planet's watch is ticking ever faster, and the diplomats and statesmen seem deaf to it; deaf to the running down of the world and the voices of those most affected by rising waters and drying continents.

Two Paradigms: the Anthropocene versus IR

4. *We exist in social nature.*

Both the discipline of international relations, and international state practice, are underpinned by a silent Cartesian assumption that humanity and nature are radically separate: that the human is not really an animal, that social affairs go on independent of the biosphere, and that the environment exists to provide services for humanity. Rather, our movement into the Anthropocene forces an ontological shift: human

activity and nature are so bound together that they are existentially indistinguishable, into a complex but singular ‘social nature’.

The concept of the Anthropocene raises fundamental questions for how world politics is now to be understood. Geopolitics can now no longer take the context of the human drama for granted; transformations are afoot that are of humanity's own making. The ‘geo’ is being changed by human activity on a scale that makes it clear that realist assumptions that take the context for international relations for granted are no longer tenable.¹² Nature is increasingly being produced at the largest of scales and political thinking has to come to terms with this new condition. Globalization is, it turns out, a profoundly geophysical process, not just a matter of trade and cultural change networked by communication technologies. In these terms the global economy is the new geomorphic force at work in the biosphere; most of the fertile parts of the land surface of the planet have dramatically new artificial species mixes due to deforestation and agriculture. Political economy is now a matter of political ecology, and given the planetary scale of the transformations underway, effectively a matter of ‘political geoecology’.¹³

The reason that the Anthropocene has become the preferred term for discussion of contemporary transformations is precisely that it suggests a geological scale transformation that has many facets that are changing rapidly and simultaneously, not minor environmental tinkering that might have deleterious local effects or single factors like ozone depletion that are global but have causes that can be localized and be managed by standard international governance regimes of the kind that are familiar to conventional international relations studies.

The Anthropocene isn't just about climate; it is also about other key ecological and geophysical processes. The planetary boundaries framework (Rockstrom et al 2009) has recently been refined (Steffen et al 2015) in light of rapidly evolving scientific analyses of the changing global system. This framework emphasizes that the Anthropocene is also about the rapid reduction of species diversity that the human colonization of most ecological niches has caused. It is also about the artificial changes to nitrogen and phosphorous cycles through the biosphere. The diversion of fresh water to human uses changes hydrologies too. Agriculture and urbanization have moved species around and divided up ecosystems, fragmenting habitat and disrupting migration patterns profoundly. Whole new geological formations, asphalt and concrete systems that we call cities, as well as newly forming plastiglomerates where plastic wastes are forming sedimentary structures on beaches are appearing. Long-lived radioisotopes may end up being the preferred choice of geologists to mark these new geological formations that mark the Anthropocene.

Climate change gets prominent mention in the Anthropocene discussion. The levels of carbon dioxide in the atmosphere are now higher than any in the last million years at

¹² Dalby, S. 2013a “Realism and Geopolitics” in Klaus Dodds, Merje Kuus and Jo Sharp (eds), *Ashgate Research Companion to Critical Geopolitics* (Farnham: Ashgate Publishers, 2013). 33-47.

¹³ Brauch, Hans Günter, Simon Dalby and Ursula Oswald Spring, “Political Geoecology for the Anthropocene” in Hans Günter Brauch, Ursula Oswald Spring, Patricia Kameri-Mbote, Czeslaw Mesjasz, John Grin, Bechir Chourou, Pal Dunay, Jörn Birkmann (Eds.), *Coping with Global Environmental Change, Disasters and Security Threats, Challenges, Vulnerabilities and Risks* (Berlin-Heidelberg – New York: Springer-Verlag, 2001) 1453-1485.

least. They are well beyond the range for which reasonable predictions of how the planet's climate system will respond can be made. Over the last ten millennia (the so called 'Holocene') or so the planet was in a very unusually stable climate configuration, something that has no obvious analogue through previous episodes of warm interglacial periods. The suggestion from the earth system scientists is that this Holocene 'sweet spot' is the context in which humanity has thrived (Rockstrom and Klum 2015). Its far from clear that we can continue to thrive in a period of rapid and unpredictable climate fluctuations, hence the alarm about transcending the boundaries of what we know to be the 'safe operating space' for civilization. It is especially important to understand that how the earth system will respond to these coming perturbations will in part be about how human actions shape that response. Which species are alive to populate and adapt to dramatically different circumstances matters. How different these circumstances will be is related to how much the rich and powerful among us directly change the atmosphere, and hence indirectly the acidity of the oceans, and how much ice is over the polar regions in coming decades.

The whole point about calling present circumstances the Anthropocene is to make it clear that humanity is now one of the key geophysical forces in the biosphere; adaptation to climate change will shape how climate changes in coming decades and for much longer. As species try to move to respond to climate signals, how they are facilitated or prevented from doing so by human decisions, such as simple matters of specifying some as invasive species, and actively moving plants and animals as a matter of commercial or subsistence agriculture, gardening and adopting animals as pets, and designating certain spaces 'protected' in various ways, will be crucial to future configurations of ecosystems. Nature is being dramatically reshaped by social actions, and who decides on how nature is made social in future is key to the future human condition. So far there is little to suggest that such matters have penetrated into the analysis of the discipline that calls itself international relations. While global environmental politics is getting attention, there has yet to be much recognition in the mainstream literature of just how profoundly contemporary transformations are shaping the future condition for humanity, or how processes of globalization are reshaping the inequities and injustices facing large parts of humanity. Hence the crucial importance of thinking about things in terms, quite literally, of 'planet politics'.

5. *IR is a malevolent ghost of the planetary real.*

What is international relations for? One of us once suggested that in the nuclear age the field of International Relations had a 'vocation': to prevent the destruction of the commons and 'build a cumulative reservoir of knowledge for stewarding an increasingly dense, heavily armed, and persistently diverse world'.¹⁴ In a century preoccupied by world war, genocide, civil war and nuclear holocaust, the architecture and focus of the UN system made some sense, if it is also possible to decry its failure to address those crises adequately in action, policy, or law. Now that ecological catastrophe is unquestionably the gravest security challenge to face this planet, why has IR failed to take on a new, corresponding, vocation?

If IR's institutions are failing to adequately engage the planet's evolving ecological reality, the discipline is also. We do not speak here of the rich literature in

¹⁴ Daniel Levine, *Recovering International Relations: The Promise of Sustainable Critique* (Oxford and New York: Oxford University Press, 2012).

environmental politics or those diverse critical currents capable of seeing this real; they still remain, however respected, at its political and ontological margins. We speak here of IRs dominant paradigms—realism, liberalism, and constructivism—which are determinedly state-centric and accept that Bull’s four institutions are the fundamental building blocks of the international real. They may want more or less from the system, emphasise different causal principles and have more or less hope, but they are unified by an investment in the institution of diplomacy and an anthropocentric ontology in which the field of human agonism, bargaining and conflict works at some distance from nature rather than being deeply, causally, enmeshed in its processes. Important contemporary debates about dissipation of American power, the structure of world order or the rise of China and the BRICs may acknowledge that climate change is a issue of normative significance and diplomatic contestation,¹⁵ but they do not grapple with the gravity of the changes to the biosphere that climate change will wreak or grant the climate an independent agency that will exceed the agency of any state, group, or the state system itself.

Feminism—the fourth great paradigm in IR—has long questioned the ontological and moral centrality of the state and the ethical commitments of international society’s institutions, but remains largely anthropocentric and humanist. Yet in the Anthropocene gender cannot be a primary political or analytical lens: social nature has an equal urgency and claim.

Planet Politics

6. *Coal should a controlled substance*

“There is no question,” says [Joseph Romm](#), an energy expert at the Center for American Progress in Washington DC. “Nothing is worse than fossil fuels for killing people (New Scientist 2011).” It is this fact that that leads us to proclaim that coal needs to be regulated at the international level. It can no longer be used to fuel our power needs and the remainder of the coal reserves must stay in the ground. We agree with Naomi Klein that this moment must be taken to interrogate capitalism—we do not have a coal problem, we have a capitalism problem—and use this crisis as a catalyst and impetus for meaningful change: this threat is also an opportunity. At the grassroots, national, and global level, we must organize to treat coal as the deadly substance it is to human and environmental health. It is toxic at all stages: coal extraction has serious environmental impacts including ecosystem destruction like mountain top removal and groundwater poisoning. Burning coal releases toxins and pollutants into the air including sulfur dioxide, nitrogen oxides, soot, mercury, hydrocarbons, carbon monoxide, volatile organic compounds (VOCs), arsenic, cadmium, lead, and other heavy metals. The toll on human health and ecosystem health is staggering. Broadly, outdoor air pollution, according to the World Health Organization, causes over 3 million premature deaths *each year* (WHO). European coal pollution prematurely kills 22,300 a year with 240,000 years of life “lost in Europe in 2010 with 480,000 work days a year and 22,600 ‘life years’ lost in Britain, the fifth most coal-polluted country” (Guardian 2013). In the US, coals kills 13,000 people a year. The planned expansion of coal burning plants in India will double or triple the amounts of deaths currently at counted between 80,000 and 115,000 a year

¹⁵ Amitav Archarya, *The End of American World Order* (Cambridge and New York: Polity, 2014), Kindle edition, loc. 1747.

(Greenpeace). Coal is also an enormous contributor to climate change: in 2013, coal was responsible for 43% of global emissions, and from 1870 the burning of coal has contributed an incredible 87 ppm of CO₂ into the atmosphere, 81% of the total aggregate increase in atmospheric greenhouse concentrations. Coal is, in short, the black demon of the Anthropocene.¹⁶

Coal must be phased out and replaced with renewable energy. To this end, we argue that coal should be regulated like any other toxic substance. This cannot happen at the state or regional level, but must be controlled by an international treaty outlawing and regulating coal. We advocate a new treaty instrument—a Coal Convention—to ban the mining and burning of coal, analogous to the Chemical and Biological Weapons Conventions, on the basis that coal is a profound and ongoing threat to global health and security.

7. *Legal frameworks need to incorporate enmeshment with other species and ecologies to better protect us all*

The Deepwater Horizon offshore drilling accident in the Gulf of Mexico in 2010 remains a continuing ecological disaster. Four years after the spill, the cleanup has not been completed. Reports of death and sicknesses in multiple species due to the explosion and spill continue to surface in the news. In March 2014, the 2012 ban on oil exploration in the Gulf was lifted after BP's successful lawsuit, and the US government will allow the company to bid for contracts and expand their drilling presence in the Gulf.

Planet oriented politics hopes to open new discussions on corporate accountability, animal rights, environmental justice, and ecological security. By way of example, focus on the plight of the Atlantic bottlenose dolphin in the Gulf. In recent years, unprecedented numbers of dolphins are dying and sick—what scientists are calling an “unusual mortality event.” This is most severe in a known heavily impacted area of the Gulf, Barataria Bay, Louisiana. The dolphins play a key role in Gulf's ecosystem as apex predators, a draw for tourists, and most importantly as the Gulf's residents. Dolphins are intelligent, speak a complex language, form long-term relationships, and have distinct cultures that should be recognized. Many marine experts, ethicists, and animal rights activists are pushing for international rights for cetaceans, of which dolphins are a part. Given this situation how can our legal frameworks respond to an injustice of this magnitude? While this tragedy affects humans and their health and livelihood, the plight of nonhumans and damage to their ecosystems is an urgent matter in its own right.

We do not have to waste time arguing about the moral individuality of particular nonhuman animals. We need to creatively think about what group rights could apply and how we penalize violence against nonhuman communities and ecologies. This avoids the current problem of criminalizing individual animal deaths with all the attendant problems (intent, moral status) and allows the focus to become a legal and ethical one: can the death of groups of dolphins be understood as a something akin to

¹⁶ Global Carbon Budget, highlights.

<http://www.globalcarbonproject.org/carbonbudget/14/hl-full.htm>; Slide “The cumulative contributions to the Global Carbon Budget from 1870”, Global Carbon Budget 2014, 21 September 2014.

http://www.globalcarbonproject.org/carbonbudget/14/files/GCP_budget_2014_lowres_v1_02.pdf

genocide or a crime against humanity? How might a pod of dolphins be seen as analogous to a nation or ethnic group in international law? It is time to imagine a category that includes “crimes against biodiversity”: to expand international human rights law to take in precious species and ecosystems, and criminalise avoidable activities that do them grave harm.

If we are to prevent harms to the “worlds” that make our common existence possible, it is time to extend a program of planetary governance reform to questions of membership and the creation of new standing global institutions. It is time to consider whether major ecosystems—the Amazon basin, the Arctic and Antarctic, the Pacific Ocean, etc.—should be given the status of nations in the UN General Assembly and other bodies, or new organisations established with the sole purpose of preserving their ecological integrity. We note that members of the Earth System Governance research alliance have suggested the creation of a new World Environment Organization and a UN Sustainable Development Council.¹⁷ We would argue that simply trusting states to discharge their responsibilities in such bodies, according to the old bargaining rituals of diplomacy and global governance, is not enough. We suggest the creation of an ‘Earth Systems Council’ with the task of action and warning—much like the current UN Security Council—that would operate on the basis of majority voting with representation of earth system scientists, major ecosystems, species groups, and states.

8. *Mass extinction is a problem of global ethics*

In late 2014, the Worldwide Fund for Nature (2014) reported a startling statistic: according to their global study, 52% of species had gone extinct between 1970 and 2010. This is not news: for three decades, conservation biologists have been warning of a ‘6th mass extinction’, which, by definition, could eliminate more than three quarters of currently existing life forms in just a few centuries (Barnosky et al, 2011). A possible (and likely) mass extinction event threatens all life forms on earth – humans included – whether through direct extinction or through its effects (for instance, the collapse of food chains). It does not simply involve the *death* of organisms or the ‘disappearance’ of ‘species’, even in very long numbers. Rather, it entails the irreversible destruction of their lifeways, histories, worlds and the possibilities of their being. Moreover, it challenges the basic possibility of survival, providing its fundamental boundary condition.

International relations has utterly failed to take account of extinction. As one of two disciplines concerned explicitly with *survival* (biology is the other), IR cannot continue to ignore its limiting condition and ultimate horizon. Within IR theory, there is simply no conceptual framework for confronting extinction. Cold-war era concepts such as ‘nuclear winter’ (Sagan 1983), ‘omnicide’ and genocide each refer to the possibility of large-scale harm that could lead to extinction. However, they do not attempt to explain what extinction is, but simply treat it as a form of death writ large. In contemporary IR discourses, extinction has been subsumed within security discourses, where it is bracketed as a ‘business as usual’ problem of scientific management and biopolitical control (Aradau and Munster 2011; Evans and Reid 2014). These approaches are ultimately futile: extinction is an *ontological* event that concerns the destruction of possibilities of being; it cannot be managed through the manipulation of

¹⁷ Biermann, “The Anthropocene: A governance perspective”, 50.

life and death processes. But as long as this belief persists, mass-mediated scare stories about extinction can only bolster and enhance biopolitical power.

Instead, extinction and mass extinction need to be understood in onto-ethical terms. This means acknowledging that extinction involves an ontological rupture – that is, the destruction of modes of existence – and confronting the ethical implications of this. Just as the concept of genocide was created to confront the seemingly unthinkable – the total destruction of peoples – we need ethical concepts, frameworks and sensibilities that can address the enormity of extinction. This means asking what it means to lose or destroy a life form.

The question of what is ‘lost’ in extinction has, since the inception of the concept of ‘conservation’, been addressed in terms of financial cost and economic liabilities (see, e.g., McAfee 1998; Sullivan 2010). The dominant neoliberal international political economy of extinction has radically reduced and distorted perceptions of ‘what is lost’: not capital or profit, but distinctive, irreplaceable worlds, and the diverse possibilities of being embodied in each life form (Grosz 2011). Beyond reducing life forms to capital, currencies and financial instruments, it homogenizes understandings of extinction, imposing a globalizing, Western secular worldview on a planetary phenomenon. Along with this worldview comes a range of assumptions – that humans are separate from other beings; that life forms can be counted and accounted for as clearly-defined ‘species’; that protecting other life forms needs to be rooted in anthropocentric forms of ‘value’. To address the enormity of mass extinction, we need to draw on multiple worldviews – including those emerging from indigenous and marginalized cosmologies that understand the relations between humans and other beings in profoundly different ways. Doing so not only allows us to understand better what is at stake in extinction, but will also multiply the repertoires of responses.

At the same time, even within the Western secular framework (which dominates IR), we need to think more clearly about the ethical implications of extinction. The current escalation of extinctions is in large part a result of anthropogenic causes – global warming, habitat destruction, direct killing and the transportation of species around the earth. Since human action is involved, we can think in the ethical terms that apply to it. For instance, we can trace the forms of violence that contribute to these trends, as well as the chains of exploitation and oppression that underpin them. We can also begin to frame extinction in terms of harm – or, if it proves to exceed existing concepts, to develop new normative frameworks for responding to it. In either case, it is crucial and urgent to realize that extinction is a matter of *global ethics*. If it does not fit within the existing parameters of global ethics, then it is these boundaries that need to change: (Mass) extinction carries an ethical weight and force that humans can no longer ignore.

9. *We need a worldly sensibility towards politics, and a political sensibility towards worldliness*

Humans are worldly – that is, we are fundamentally and inextricably part of a world. It is not ‘our’ world, as the grand theories of international relations have it – an object and possession to be appropriated, circumnavigated, instrumentalized and englobed (Sloterdijk 2014). Rather, it is a world that we share, co-constitute, create, destroy and inhabit with countless other life forms and beings.

To be worldly is to be *entangled*. We can interpret this term in the way that Heidegger (2010) did, as the condition of being mired in everyday human concerns, worries and anxiety to prolong existence. But, in contrast, we can and *should* reframe it as authors like Karen Barad (2010) and Donna Haraway (2008) have done. To them and many others, ‘entanglement’ is a radical, indeed fundamental condition of being-with – it suggests that no being is truly autonomous or separate, whether at the scale of international politics or of quantum physics.

Being worldly, and being entangled, means being plural – more specifically, being ‘singular plural’ (Nancy 1997). Beings-in-worlds co-constitute one another, so that all beings are a multitude. At the same time, *world* itself is singular plural: what we refer to as ‘the’ world is a multiplicity of worlds that intersect, overlap, conflict, emerge and dissolve. Worlds are not ‘just’ places, and they are not the same as planets. Planet Earth fosters a multiplicity of worlds at multiple scales and across various time scales – from the current multiplicity of social, technical and economic natures-cultures to the extinct worlds of deep time.

Each world emerges from, and consists in, the intersection of diverse forms of being – material and intangible, organic and inorganic, ‘living’ and ‘nonliving’. World emerges from the poetics of existence, the collision of energy and matter, the tumult of agencies, the fusion and diffusion of bonds. These are the conditions of *worldliness*.

Because of their worldliness, ‘worlds’ are not static, rigid or permanent. They are permeable and fluid. They can be created, modified – and, of course, destroyed. Indeed, concepts of violence, harm and (in)security that focus only on humans ignore most of what constitutes the harm: the destruction and severance of worlds (Mitchell 2014). Indeed, the destruction of worlds is what separates the concepts of genocide (see Nancy 1997) and ecocide (Higgins 2010) from other forms of violence. To destroy worlds is to sever the conditions of worldliness.

To respond to worldliness, and to our own role in its destruction, we need a politics that is worldly, and a worldliness that is political. This requires acknowledging these basic *ontological* features of worlds, and transforming them into ethical principles that make us responsive to our basic condition of worldliness.

First, we can acknowledge and embrace the conditions of worldliness. Being worldly means understanding that we are nurtured, threatened, nourished and harmed by profound forces – and that our movements, responses and poetics make a difference to worlds. We also need to understand that being-worldly means being-vulnerable along with the other co-constituents of the worlds we inhabit and traverse. Instead of attempting in vain to escape this co-vulnerability, as the global rich attempt to insulate themselves from the worst effects of global warming suffered by the poor – we need to acknowledge its inescapability. Specifically, we need to think about how our world-vulnerability can be embraced as a source of positive solidarity, rather than simply the, fearful, clinging, negative solidarity (Braidotti 2013) forged by survival anxiety.

This means acknowledging that being worldly is not an *option* or a *choice*, nor is it an obstacle to human ‘progress’ that can be overcome, whether through major projects of terraforming or emerging projects of space colonization (Mitchell, forthcoming). Instead of confronting worldliness with resentment that prompts nihilistic violence or apathy (Connolly 2011) – or, on the other hand, the instrumentalizing optimism of eco-modernism (Ecomodernist Manifesto, 2015) – this ethico-politics would embrace

the conditions, possibilities and limitations of being-worldly. This does not mean that humans can never leave the *Earth*, but we are always-already in worlds (whatever planet they appear on). Being-*other*-worldly – whether on Earth or on other planets – means respecting and nurturing the multiplicity and unicity of worlds instead of imposing a ‘master world’ upon them.

Second, we can cultivate *gratitude* for worldliness and the gifts it confers upon us. We can learn from Nigel Clark (2011) and other post-Levinasian thinkers, who urge us to acknowledge that humans owe their existence to chains of beings stretching back to the Big Bang (and beyond), and outwards in every direction, across the boundaries of species and all other categories. And, in turn, we can attempt to give back – to inhabit, protect, nurture, and, yes, kill and consume other beings and worlds – without expecting them to conform to our demands, or exacting promises from them. Being-worldly means embracing the collective risk of being: engaging in this complex and ultimately finite project with gratitude, attention, resolution and, above all, *amor mundi*.

Other references

- Barad, Karen, 2007. *Meeting the Universe Halfway*. Durham, NC: Duke University Press.
- Braidotti, Rosi, 2013. *The Posthuman*. Cambridge: Polity Press.
- Clark, Nigel, 2011. *Inhuman Nature: Sociable Life on a Dynamic Planet*. London: Sage
- Connolly, William, 2011. *A World of Becoming*. Durham, NC: Duke University Press.
- Haraway, Donna, 2008. *When Species Meet*. Minneapolis: University of Minnesota Press.
- Heidegger, Martin, 2010 [1953]. *Being and Time*. Trans. Joan Stambaugh, revised and with a foreword by Dennis J. Schmidt. Albany: State University of New York Press.
- Nancy, Jean-Luc, 1997. *The Sense of the World*. Minneapolis: University of Minnesota Press.
- Sloterdijk, Peter, 2014. *Globes: Spheres II*. Los Angeles: Semotext(e).
- Aradau, C and Munster R (2011) *Politics of Catastrophe*. London: Routledge.
- Anthony D. Barnosky, Nicholas Matzke, Susumu Tomiya, Guinevere O. U. Wogan, Brian Swartz, Tiago B. Quental, Charles Marshall, Jenny L. McGuire, Emily L. Lindsey, Kaitlin C. Maguire, Ben Mersey & Elizabeth A. Ferrer, 2011. "Has the Earth's Sixth Mass Extinction Already Arrived?" *Nature*, Vol. 471, pp. 51-7.
- Evans, B and Reid, J (2014) *Resilient Life: The Art of Living Dangerously*. Cambridge: Polity.
- McAfee, K. (1998) "Selling Nature to Save It? Biodiversity and Green Developmentalism" *Environment and Planning D: Society and Space*. 17: 133-54.

Sullivan, S (2013) "Banking Nature? The Spectacular Financialisation of Environmental Conservation" *Antipode* Vol. 45, No. 1, pp. 198-217.