COP15 and Beyond: Politics, Protest and Climate Justice

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Introduction and reprise

The United Nations Climate Change Conference (COP 15) took place in Copenhagen from 7th to 18th December 2009, at a critical time for planet Earth both physically and politically. Physically, the crisis was well defined, with the climate science of the Intergovernmental Panel for Climate Change (IPCC) indicating that the world must cut greenhouse gas emissions by 80% of 1990 levels by 2050 to limit global warming to 2°C, the widely adopted figure estimated to be ‘manageable’ environmentally. Politically, the challenge was for the environment ministers of 192 countries to negotiate a successor to the 1997 Kyoto Protocol, in force since 2005 but undermined by US failure to ratify. The issues for diplomatic negotiation at COP15 were (limited to) how much industrialized nations were prepared to reduce emissions by, how much emerging economies, particularly

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China and India, were prepared to limit the growth of their emissions, and where finance should come from to assist emerging economies in this endeavor.

Alongside serious concern among scientists that it might already be physically too late to limit global temperature rise, many academics working on climate research feared that COP 15 would not address the complex issues of global climate change, that governments would fail to challenge dominant and entrenched free market orthodoxy, and that negotiations at COP15 would fail to result in anything meaningful. James Hansen of the National Aeronautics and Space Administration (NASA), for instance, questioned the sufficiency of both conventional knowledge-making and representative politics in ensuring that global carbon emissions are effectively curbed:

“The democratic process doesn't quite seem to be working…. What is frustrating people, me included, is that democratic action affects elections but what we get then from political leaders is greenwash…. I'm not surprised that people are getting frustrated. I think that peaceful demonstration is not out of order, because we're running out of time” (quoted in Adam, 2009).

Environmental and social justice groups were also apprehensive of such rhetorical inaction, and grassroots movements from across the world converged on Copenhagen for COP15 to stage alternative fora, meetings and events to voice their concerns. Indeed, over one hundred thousand people placed themselves in Copenhagen to challenge politicians, governments and bureaucrats to take meaningful—and make mandatory—action to reverse the environmental and social impacts already occurring, and which scientific consensus agrees will otherwise continue with increasing frequency and devastating results. The majority of people’s protests were lawful, participating in marches, workshops, networking, debating issues with other individuals/groups and sharing experiences. In line with James Hansen’s remarks, however, some felt that more direct action was required because of the drastic situation and lack of adequate political response in the meetings leading up to COP15.

Academics have long played their part in climate change discourses, from climatologists, physical geographers and natural scientists, to sociologists, political scientists and a range of social scientists. Many also travelled to Copenhagen for COP15 to participate in a variety of workshops, offer talks, disseminate their work and debate with others, most believing that the evidence was overwhelming, that climate change is a key factor in social and environmental injustices, linked through unequal global economic systems and a democratic deficit in politics. Some of us also believed that, as concerned academics and citizens, it was time to take action as academics in solidarity with the direct action taken by the global movement for climate justice. Kenrick and Vinthagen (2008: 164) have called for academics to work more immediately alongside oppositional struggles, developing the strategy of an ‘academic seminar blockade’ (ASB) as part of Faslane 365, a
year-long campaign against Britain’s Trident nuclear missiles and their replacement, arguing that ‘Academics can and should be central to this process of envisioning and realising the kind of society we want’. In an ASB, relevant research papers are presented in publically-staged seminars that simultaneously constitute direct action, grounded in empirical and epistemological rationales. Thus we (Kelvin, Kye and Justin Kenrick) contacted a range of discipline distribution lists as well as relevant non-academic fora, with the following:

*This call for papers/participation is a call to academics to transform the everyday practice of the academy into a creative act of resistance and solidarity with the global movement for climate justice. This session is intended as an 'Academic Seminar Blockade', a form of constructive resistance. We wish to defend academic inquiry and critical reflection on the complex issues surrounding climate change and environmental and social justice by holding a peaceful academic seminar ‘in the street’. Participation in such an academic endeavour is resistance to a culture of governmentality, through positively re-making public space to reflect on the world and reclaim the global and intellectual commons of democratic debate and accountability.*

Taking all aspects of climate change as its theme, in the event, the multi-disciplinary and international seminar served simultaneously as a blockade of a coal-fired power station in Copenhagen and as part of a series of actions coordinated through the Climate Justice Action network (see Mason this issue).

We initially planned this Special Issue to be published hard on the heels of COP15, while issues remained current/fresh. On reflection, though, we recognized the need to ensure the integrity of our academic processes, enabling participants time to re/consider seminar debate, write up theoretically-grounded papers and submit through the peer review process. In retrospect, so much was consumed in the widespread melancholia (*not* furore) following COP15 that, had we published quickly, this set of papers may have been entirely overlooked. Moreover, given transpiring political and economic events over the last two years, there is ever more risk that climate change drops (further) down the political agenda: indeed, it seems that the global financial crises have relegated environmental issues to items of ‘any other business’ in government and corporate schema, and that previous failure to connect across social and environmental injustices—highlighted throughout the presentations in Copenhagen and offered here—is being repeated/exacerbated in global recession.

Thus, we believe that this Special Issue remains vital in making explicit links between global warming, economic growth, ‘free markets’, consumerism, social

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2 Though we also recognize the frustrations such a lengthy process causes for those of us/people we collaborate with for whom political expediency and praxis is diminished in such time-consuming peer review!
constructions of nature/environment, and the implications of the contemporary crisis of capitalism. The collection of papers here is an attempt to work through just some of the complex, contested, difficult and plural concerns caught up in climate justice.

**Knowledging the debates**

The original call to participation in the ASB outlined three broad themes: climate justice concerns surrounding environmental and social issues; re-making and re-claiming public space for (radical) democratic dialogue; and the role and responsibilities of academics in working towards a fairer future for the planet, including reflection on the process and experience of putting academic critique into action. We suggested at the outset that these themes are overlapping, and certainly many of the presentations in Copenhagen touched on more than one key topic, attending to their interconnectivities. The collection as written continues to explore such connectivity, building upon the original themes to ask questions of political process, personal action, social structures of inequality, and the construction of knowledge/s.

Central to understanding climate change issues as a web of interrelated social and environmental matters, we must also recognize and engage with difference: difference in opinion and emphasis, across the authors, who draw upon a diverse range of epistemological and theoretical perspectives, as well as empirical and experiential material, highlighting the contested and complicated terrain of climate justice. The point here is that we need to think carefully about the knowledges produced through specific academic lenses. Critical geopolitics foregrounds the need to question institutional conventions of producing the world, and our writing of it requires the same scrutiny: we must be aware of our own academic practices around constructing any narrative around politics, protest and calls for climate justice.

More widely, environmental and social justice activists are not united on what should be considered or tackled as priority, nor the best strategies to effect change through protest. In the environmental field, many call for less consumption of resources, identifying capitalism and an unsustainable economics of continual growth as root cause of climate injustice, while others support the rights of a global majority to develop to levels enjoyed by the global north, and thus a more technological ‘fix’ around nuclear energy, carbon capture and storage (CCS) and other (always contested) engineering means of combating ecological problems. Meanwhile, Buckingham and Kulcur (2010) critique the ‘gendered geographies of environmental injustice’, Clarke and Agyemen (2011) highlight endemic ‘environmental racism’, and Chatterton (2009), who presented at the ASP, links current capitalism to the development of colonial economies embedded in prejudice and privilege, arguing that:

“understanding the problem is not just about being against the market, or being anti-capitalist. A movement against climate change also need
to be anti-authoritarian, anti-racist and anti-patriarchal. This means challenging the domination and oppression of certain groups over others, and tackling the massive gender inequalities and racism that characterise our world.”

Indeed, subtleties in ideological and ontological arguments underpin the contested politics caught up in climate justice activism and campaigning, as highlighted across the papers offered here. By way of introduction to this Special Issue, we would like to briefly outline what we see as three key epistemological fulcra that underlie such tensions.

First, a critical point of debate pre, during and post COP15—and ongoing in climate justice and academic circles—is that of reconceptualizing environment and society as inherently connected. Increasing critique surrounds the construction of nature as separate from humanity, long central within Enlightenment thinking, as enabling ‘its’ objectification and exploitation by ‘us’—as well as the possibility that ‘we’ can repair ‘it’. Many contend that there needs to be closer appreciation that meanings of environment/climate change stem from experienced, embedded cultural positions. As Jasanoff (2010: 233) argues, tensions arise “when the impersonal, apolitical and universal imaginary of climate change projected by science comes into conflict with the subjective, situated and normative imaginations of human actors engaging with nature”. Ongoing work in science and technology studies, and, more widely, drawing upon Actor Network Theory and/or ‘post-humanism’, offers a theoretical framework of co-production, which emphasizes the simultaneous production of the natural and social, and the complicated ways in which “the construction of stable knowledge interpenetrates with the formation of core elements that stabilize society” (ibid.: 236). Yet, such thinking remains marginal in terms of popular and dominant political discourse.

Second, much climate justice action pivots on building solidarities across diverse groups and concerns, aiming for consensus while not erasing difference, especially across local groups for global impetus. Feminist thinking that re-envisages ‘scale’ is critical here, to develop more attuned understandings of the ways in which individuals are embodied in place, living everyday lives that are inherently relational across a range of spaces and places. Connecting across such sites and working across difference and similarities offers a direct, further challenge to (hard) science’s erasure of local specificity and denial of the role of social and cultural constructions of environment outlined above. Furthermore, feminists call for examination of power and social agency, and there is an emerging body of work paying attention to ongoing processes of climate justice activism in a framework that recognizes struggle and hegemony in evolving and embodied ways. Also important to consider is feminist work recognizing the materiality of the body within the politics of representation—a ‘politics on the ground’ (Pratt 2004)—as part of both re-scaling climate justice issues and reconceptualizing society and nature.
Third, and resonating through both previous points, is the issue of democratic politics—how climate justice may be challenged and addressed is inexorably caught up in processes of social relations and circulations of power. Many climate justice activists are frustrated by the lack of global political consensus or will regarding climate change, not only difficult to achieve due to its effects and causes as spatially and temporally unbounded, but also due to contemporary post-political or post-democratic condition (Ranciere 2006, Mouffe 2005). Understanding the ways in which this post-political frame sutures capitalism as inevitable, and the market economy as the global structure of social order for which there is no alternative, is crucial to extricating the dominant power relations and discourses enabling neoliberalism. For example, Swyngedouw (2010) interrogates a ‘new cultural politics of capitalism’, in which management of fear is central to shutting down challenges to this dominant political economy, in which the ‘fetishization of CO₂’ has been centralized in normative discourse which restricts resistance/activism as limited within governance structures. For Swyngedouw, and others, the crisis is of democracy and its meaning, the forestalling of space in which to name and construct different socio-environmental futures.

Given these tensions, we are acutely conscious of gaps and omissions, at both the ASB as well as in this publication. In particular, those emotional, emotive and affective realms threaded through our engagements in the ASB and as ‘scholar activists’ more broadly (see Brown and Pickerill 2009) are largely absent here—though Chris High’s video contribution is an important attempt to share some of the performative aspects of standing in front of the discomfiting high metal gates of a power station on an extremely cold day, constantly under observation and on several occasions confronted by riot police, as central to our personal experiences of the seminar. Moreover, his work explores the wider actions, and reactions, across Copenhagen over the period of COP15, and offers the ‘reader’ more visceral connection to protesters’ feelings as motivating public struggles against the social and environmental injustices fomented through climate change and global capitalism.

And, despite some effort in sending round the initial call for participation in Copenhagen across diverse disciplinary lists, the three conveners are social scientists and embedded in social rather than physical science networks. Unsurprisingly, this has impacted the knowledges considered, produced and represented here. There has long been debate within geography, in particular, around the need to develop closer links and engage in critical dialogue across its human and physical sub-disciplines, and there are examples where this occurs (see Donovan et al., 2011). Yet such debates do not appear to translate into how we enact our knowledge-making publically, we suggest, certainly in terms of more action-oriented challenges to dominant discourse and structures. This is not to deny the public engagement of science scholars in public media (see our thoughts on ‘action and words’ below), but, given the central importance of how ‘we’ as society
think about the physical world outlined above, we strive for ever more effort to work across this gap.

We offer, then, a partial, emergent Special Issue that aims to both resume and contribute to ongoing dialogue regarding one of the most critical issues faced by contemporary society. Before outlining the specific contributions, however, we first wish to briefly address the matter of our role as academics, and why we convened such an ASB at COP15.

**Actions and words: Academia’s role in addressing climate change**

The ‘relevance’ of The University has long been a topic of great debate, while more recently there has been an increasing focus across the social sciences, in particular, around the notion of ‘public scholars’ or ‘public intellectuals’. Discussion in the literature has critically questioned the epistemological and ideological underpinnings of wider public engagement, what exactly such activity might involve, how it plays out practically beyond the university, and the diversity within and across academia surrounding ‘our’ responsibilities and roles (see Burawoy, 2005; Fuller, 2008). Central to many issues is the increasing neoliberalism within academia, and the ways in which managerialist controls and quantifying accountancy practices impact upon our abilities to engage beyond the academy in meaningful ways, or work towards transformative social change (Askins, 2008; Giroux, 2005).

Accepting the international consensus on the reality and seriousness of climate change, and given the epistemological concerns alluded to above, what can we as academics do to address climate issues? Research into the myriad aspects of climate justice is central, together with developing and sharing theoretical tools across the academy to understand what we ‘observe’: a key raison d’etre of our roles. But how are we (re)presenting such knowledge-making in the wider world? Engaging with policy-makers and government at a range of levels is necessary, if often frustrating, and not our focus here. We are interested in and committed to utilizing our positions as also members of publics, as part of civil societies, to work more directly as academics and activists, as conceptualized by The Autonomous Geographies Collective (2010). A key question for us is how, in our positions as researchers, writers, teachers, administrators, can we facilitate, encourage and be catalysts for change?

We recognize that making ourselves and our work relevant may take myriad forms, that writing, teaching, supervising students, etc is vital in the bigger picture. This resonates with research into activism that outlines banal activities within more ‘traditional’ activism, and the incorporation of ‘everyday acts of defiance’ within broader action for social change (Martin et al. 2007). Indeed, much empirical evidence across social science suggests a denial of any binary between activist and non-activist, in analyses that draw upon feminist, poststructural and postcolonial perspectives, specifically through shifting, multiple and embodied identities in political struggle (Bobel 2007). In this vein, we conceive ourselves as academics
belonging to a broad group, in which there is a continuum of approaches and resistance to inequalities of many kinds. Our argument here is not against words (publishing in mainstream media, speaking on radio or television, giving public lectures or indeed many aspects of teaching), but rather to encourage more action alongside our stream of words.

Struggles are also more than contingent: while academics are both placed and place their actions, many work across such geographies too, thus we need to consider the relationality of our work and actions in line with feminist thinking, which, as outlined above, has long advocated a need to reconsider the issue of scale (see also Askins, forthcoming). A second critical question for us, then, is how can we better organize/liaise to make our voices, actions and research—and the array of people we research with—count? We believe that, as co-producers of knowledge on any issues related to climate justice, we have a responsibility as academics to act in our capacities as academics in the struggle against inequity. The ASB is one potential action amongst an array of activities that scholars can instigate to challenge what we see, from our research and knowledge making, as unjust processes that damage peoples and natures across our world.

Contributions

We need to be clear that some participants at the ASB have been unable to offer written versions of their seminar papers due to ongoing (professional and personal) commitments, while other people were supportive of the ASB and engaged in e-mail debate before the event, but were unable to attend at the time, and participate here in writing. In addition, what transpires in this publication is also informed by linkages between ASB participants (speakers and non-speakers) and other events, marches, workshops that took place in Copenhagen, as well as elsewhere, pre- and post- COP15, and the multiple solidarities and positionalities held by them. Thus we are very pleased to include Stories from the cauldron: Protest around the COP15 negotiations (http://www.youtube.com/watch?v=EW3E3IqNzfI), a video contribution from Chris High which – literally – frames this Special Issue. It explores the mobilization of activists and academics, portraying a spectrum of actions and interventions, putting the ASB into context. Interviews with activists and footage of actions illustrate a commentary that looks at methods and motivations for protest which, we hope, starts to give some sense of the affective and emotional aspects to what occurred across the city in that timeframe. More broadly, video-as-publication challenges normative academic dissemination practices, which privilege the written word, and in so doing parallels some of our ethos in holding an ASB: to resist dominant politics and practices that produce inequality.

The written contributions begin with two papers concerned with politics, ideology, decision-making and engagement with/in climate change movements.

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3 Recognizing also that many academics do not share our ideological views!
First, Kelvin Mason revisits some of the passionate exchanges in the lead up to COP15, specifically around the ideological differences within the climate justice movement. Participants in the ASB process engaged in discussions, mainly via email, regarding the most appropriate form of action and the ‘proper place’ of academics in social movements: at issue was where, how, when and with whom to act. Before taking public action, then, academics had our own politics and strategies to debate, which evolved to encompass an analysis of the strategies of one of the principal activist networks, Climate Justice Action, and its decision-making processes. Notable tensions emerged around ‘radical’ versus ‘reformist’ approaches, and the extent to which such tensions can be productive and detrimental to actions. Drawing on the concepts of militant particularism and convergence spaces, Mason offers a theoretical context for academics acting together politically, crucially acknowledging difference, and suggests the mutual possibilities offered by more committed collective participation in social movements (see also Routledge 2011).

Next, David Featherstone argues that climate change politics must be critically situated squarely in relation to the crisis of neo-liberalism, warning against the dominant/common understandings of the politics of climate change which remove such politics from the wider disputes surrounding social and environmental relations. He outlines how debates around climate change often isolate ‘environmental bads’, such as carbon emission and global warming, from the unequal social and environmental relations upon which neo-liberal globalization depends. And, concomitantly, the ways in which movements opposing mainstream government and corporate responses to climate change are constructed as marginal within contemporary politics. Critiquing some established commentators’ lack of engagement with the ongoing resistance to neo-liberalism, regarding the economic crisis, Featherstone argues for the importance of strategies associated with movements such as Via Campesnia, who have made direct and innovative connections between challenging neo-liberalism and climate change politics.

The following two papers move on to consider issues caught up in climate change processes and discourse: the material degradation of earth’s resources to feed continual ‘economic growth’; and the controversial debates surrounding the ‘problem’ of human reproduction and population increases, often uncritically linked to greater pressure on the Earth’s resources. On the former, Anders Sandberg and Lisa Wallace note that climate change debate is typically about carbon emissions from burning fossil fuels, with mitigation trumpeted as the major solution, and key measures for reform including lower consumption of carbons, substitution of renewable sources of energy, green technologies, and carbon markets. The authors highlight that an ever expanding global economy with unequal distribution of benefits is often overlooked, as are the requirements necessary to expand and maintain the infrastructure for such growth, namely road networks, suburban housing, super-scale dams and so on. Drawing on political
economy and Actor Network Theory frameworks, they outline how the unique physical characteristics of sand, gravel and stone tie into corporate aggregate industry’s strategies – as well as local and translocal resistance against mining and extraction. Case studies across the world are used to elucidate this industry’s social, political and environmental effects, its links to global capitalism, but also the potential ways in which such extractions may themselves be exploited in resistance strategies to promote more democratic ways of living.

Bertil Egerö observes that throughout the 20th century, population-development studies have struggled to avoid/resist cultural and political influences on western thinking in which, since the 1950s, a ‘neo-Malthusian’ framework has underpinned calls for a technical fix—‘family planning’—to facilitate fertility decline. Thus, he argues, Western-financed ‘population control’ policies were instigated across less developed countries around the world, ostensibly in support of poverty reduction, while primarily prompted by perceptions surrounding the threat of rapid population increase in ex-colonies to their own interests. He observes that the ‘population card’ was resurrected prior to COP15, drawing on dominant (but disputed) scientific discussion that mirrors earlier neo-Malthusian arguments, in which politicians see family planning among poor communities as a low-cost option to reduce carbon emission. Egerö traces the development of this debate, drawing out the myths and misleading tenets invoked, and calls for a social science of demography unhitched from the eugenic movement of the early 20th century and its neo-Malthusian successor—one that examines the complexities of population changes with regards to environmental effects, critically including consideration of differential impacts related to lifestyle and opportunities.

The Special Issue then turns to interrogate the complex, contested and emergent notions around environmental citizenship and democracy. Justin Kenrick critically questions global environmental discourses and their potential to empower individual changes in behavior, perception and (implicitly) political action. At the ASB, Kenrick’s paper focused on how climate change discourses encompasses three key forms of denial: the denial of hope (‘it is too late to stop climate chaos’); the denial of despair (‘governments and corporations will act to save the environment’); and the denial of power (both ‘we have no power to act autonomously’ and ‘our resistance will not be blocked’). Drawing connections through these, he argued that climate change is not itself the problem, rather, like world poverty and resource depletion, it is a symptom. The problem is the dominant socio-economic system, which extracts resources with least environmental consideration, produces commodities at cheapest labor cost, and induces unnecessary needs—a capitalist economy that is also entrenching social and environmental inequalities. Kenrick contended that the best possible outcome in this precarious situation is through establishing a tacit alliance between three (apparently) mutually contradictory strategies. In the paper included here, he extends this discussion to ask whether a deeper change is now underway, evident in 2011’s wide-scale resistances underpinning the ‘Arab spring’ and the Occupy
movement, which in the UK themselves build upon peace camps, the G8 Gleneagles gathering and climate camps. Central within this change, he suggests, the key move is not to demand change but to assert our autonomy and recover our responsibility.

Following on from these issues, Beth Bee highlights the ways in which knowledge and relations of power, specifically those of gender, contextualize knowledge production, resource distribution, decision-making and thus, adaptation to climate change at the local level. Combining feminist standpoint theory, geographic conceptualizations of social reproduction, and adaptive capacity literatures, she argues that strategies to enhance adaptive capacities must understand how gender affects differential access to resources and decision-making in the context of socio-ecological uncertainty. Drawing on fieldwork conducted in two rural communities in Mexico’s semi-arid highlands that explores the significance of gender in the provisioning of resources, the valorization of labor and the different ways that households cope with climate change, she foregrounds the ways in which situated knowledge and social reproduction are useful theoretical tools for analyzing how women’s daily activities and social locations shape what they know and how they respond to social and environmental stressors. This kind of critical engagement between feminist and adaptive capacity approaches opens up a conceptual space for reflection and encounters that move the debates closer toward addressing the challenges that climate change presents.

The final paper returns to the specific role of academia within climate justice and global justice movements and actions. Raising issues surrounding responsibilities to and relationships with a range of publics at a variety of scales, and understandings of positionality and affect, Stellan Vinthagen highlights the potential and space for different interventions, from the global scale work of international dialoguing to ‘closer in’ research and lobbying. He addresses why “climate” is a matter of global justice (the relationship between world capitalism and climate change), a matter of solidarity between the Global South and North (the links between the climate justice movement and the global justice movement), and the role of academics in this process, proposing an academic social science equivalent to the IPCC.

Exceptionally for ACME, this Special Issue includes a book review because we feel both the book and the review’s inclusion perfectly illustrate the responsibility we have outlined for academics to act in our capacities as academics in the struggle against inequity. Who’s Carrying the Burden: The chilly climates of the global environmental dilemma, is edited by two participants in the ASP, Anders Sandberg and Tor Sandberg. Mark Whitehead’s review picks out the book’s core tenet that climate change is not simply about environmental science but a question of social justice and human dignity. Including contributions from environmental activists, journalists and politicians, Whitehead admires the collection for its engaged pragmatism, accessibility, urgency and intent. Contributions highlighted include the editors’ ethnographic narrative of COP15, Killoran-McKibbin’s
account of the *World People’s Conference on Climate Change and the Rights of Mother Earth*, the insights into the world of climate refugees presented by Saad, and Naomi Klein’s analysis of the dimensions of climate debt.

**Conclusion**

COP15 took place in the wake of the global financial crises of 2008, and it failed miserably, producing the all but meaningless Copenhagen Accord. Though the COP process dwindles along, the emerging global consensus is that there can be no global consensus of politics as currently constituted. Regardless of the glaring inappropriateness of the scale of response, climate change remains the domain of individual nation states. This is unlikely to be much in most cases, because by 2011 we were in the midst of yet another financial crisis: economic growth is every state’s preoccupation, and climate change on ice (sic) for governments and social movements, concerned with cuts in employment and public services (see Schnews 2012). Physically, the environmental crisis is undiminished, indeed prognostications have worsened. The planet is going to get much hotter, by 3°C or more according to IPCC models; sea level will rise many metres (studies of the past million years suggest that each 1°C rise in the global mean temperature eventually leads to a 20 metre rise); there will be more floods and droughts. Post COP15, we no longer talk of mitigation but of adaptation, resilience and adaptive capacity.

While the actions associated with these adaptive approaches may not be incompatible with climate justice concerns, we think it matters whether the key organizing principle for society is vulnerability or hope, an active, ecotopian hope that brings us together as humans, non-humans and socio-ecological hybrids to imagine, contest and construct an equitable Earth, fit for all. In this endeavor, we suggest natural scientists should take the contribution of the social sciences as seriously as social scientists are taking physical analyses of climate change. Repeated insistence that ‘something must be done’, ignoring the economic and political structures which are antithetic to effective action, is doomed to ring hollow. As Sheila Jasanoff argues, institutions such as the IPCC produce climate change as knowledge detached from social meaning. Societies, however ‘demand not only objectively claimed matters of fact but also subjectively appreciated facts that matter’ (Jasanoff, 2010: 248). As part of the world we study and seek to make better, academics need to work together in word and deed, though not of course without vital debate and disagreement!

**References**


