

THE NETHERLANDS SCIENTIFIC COUNCIL FOR GOVERNMENT POLICY

Amanda Machin

RETHINKING POLITICAL CONTESTATION OVER CLIMATE CHANGE

Rethinking Political Contestation over Climate Change

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1 INTRODUCTION

Climates are changing. Much has been written about how the growing atmospheric concentration of greenhouse gases is impacting the *physical* climate; altering weather patterns, average temperatures, sea levels, land masses and ice-sheets.¹ What perhaps is less often observed is the changing *socio-political* climate within which this issue is defined, dissected and discussed. Climate change is no longer an issue confined to the remote conversations of environmental scientists and scientific environmentalists. The socio-political atmosphere around this issue has intensified and diversified; it has heated up and dispersed out, garnering the attention of economists and philosophers, businesses and engineers, politicians and citizens. The world today features climate camps,² climate marches,³ climate ribbons,⁴ climate refugees,⁵ climate summits,⁶ climate engineering (Keith 2013), climate deniers and climate activists.

And yet, puzzlingly, despite the noisy clamour around climate change, actual decision-making about this issue seems to be somewhat muted and muffled. The climate surrounding climate change, then, is simultaneously one of political commotion and policy stagnation; of fierce indignation alongside resigned quiescence.

Why might this situation have arisen? Why are governments around the world failing to tackle this issue despite the apparently huge popular will to do so? It is not simply that elites are too wealthy to want to make a change, or that the poor are too poor to be able to. It is not simply that the science is too complex or that capitalists are too greedy or that voters too stupid or that the impact is too remote or that international treaties are too weak. I will argue that part of the problem in tackling climate change lies rather in the dominant political presuppositions. Climate change has a huge variety of different particular causes, effects and implications and therefore it is, inevitably and ineradicably, a highly contested issue (Szerszynski and Urry 2010). But, as I will argue, it is not plurality and contestation in itself that makes policy making difficult. Rather it is precisely the denial of this plurality and contestation that hinders decision making from the outset. The plurality of perspectives over climate change makes it impossible to present as a succinct issue, an easily solvable problem, a 'non-wicked' issue, with a rational solution amendable to all. This means that attempting to tackle it through emphasising generality, consensus and rationality is at a dead-end. And yet this is precisely the prevalent theme in most environmental policy-making.

In this chapter, I provide a brief overview of some different approaches to climate change: 'magical-technology'; 'economic-market'; 'ethical-individual'; 'greencitizens'; 'deliberative democratic'; 'eco-authoritarian' and 'sceptical' approaches. My aim here is not to assert that all the important research and ideas on climate change can be easily squashed into these categories, but rather to point to the different – indeed, sometimes incompatible – themes and ideas. However, one common assumption of the proponents of these different approaches is that this highly complex environmental issue can only be tackled if disagreement is *overcome*.

This leads me to present a 'radical democratic' approach that turns this dominant presupposition on its head. Rather than attempting to *transcend* or *suppress* plurality and contestation, radical democracy celebrates them and attempts to (re)politicise the issue. It suggests that by engaging the multiplicity and diversity of perspectives available in a plural society, environmental policy-making is reinvigorated. Creative decisions can only be made when new perspectives are seen and heard and when there are real alternatives to choose between. Rather than *impeding* decisive collective action, the embracing of disagreement, I argue, is actually more likely to *secure* it. To have any hope of acting against climate change we *need* to disagree. This disagreement, however, should be contained within democratic structures that try to guard against the possibility that it can erupt into violence and hostility.

2 THE 'MAGICAL TECHNOLOGY' APPROACH

Perhaps the dominant approach to climate change is the turn to technology for a solution. Scientists and engineers are expected to conjure up a timely invention or an artful innovation that can deftly ward off the dangers of rising greenhouse gases, without demanding any dramatic sacrifice in lifestyle. Renewable energy from wind, solar thermal, photovoltaic, geothermal, tidal and hydropower sources, nuclear fission and nuclear fusion, biofuels, carbon sequestration and solar radiation management are all championed as possible technological saviours from a future of environmental catastrophe.

This turn to technology can perhaps most clearly be seen in the apparent emergence of 'climate engineering' or 'geoengineering' as a serious option in climate policy discussions (Hamilton 2014). Geoengineering can be defined as "the deliberate, large-scale intervention in the Earth's climate system" (Grolle 2013). David Keith, a professor of applied physics and social policy, is an advocate of such deliberate intervention in the climate, arguing for a form of 'solar geoengineering' in which the injection of reflective particles of sulphuric acid creates a 'sunshade' for the earth below. He claims that "the underlying science is sound and the technological developments are real" and therefore such solar geoengineering is "a cheap tool that could green the world" (Keith 2013). To be sure, Keith admits that the use of such technology is a hard choice; it is an "extraordinarily powerful tool yet it is also dangerous". Still, he offers a qualified endorsement: "If research shows that these technologies have benefits that greatly exceed the costs, then we should in fact start relatively soon, albeit carefully and with small steps" (Grolle 2013).

Such technical fixes are attractive in part at least because they do not demand any sacrifice or drastic change in lifestyle. For if we can develop and implement the right technology, then surely we can sustain our cake while we continue to eat it. It is exactly this assumption that we find in politicians speeches. For example, in 2007 George W. Bush stated:

"By developing new low-emission technologies, we can meet the growing demand for energy and at the same time reduce air pollution and greenhouse gas emissions. As a result, our nations have an opportunity to [...] reach a consensus on the way forward." (Bush 2007).

In 2014, at the UN Climate Change summit, President Barack Obama makes a similar claim:

"We cannot condemn our children, and their children, to a future that is beyond their capacity to repair. Not when we have the means – the technological innovation and the scientific imagination – to begin the work of repairing it right now [...] Within a decade, our cars will go twice as far on a gallon of gas, and already, every major automaker offers electric vehicles..." (Obama 2014).

The vision of tomorrow conjured up by this approach is of a familiar world, where the vehicles on the motorway may be less polluting, the food may be more organic, the power-stations may be 'greener', but the lifestyles of the affluent consumer remain largely unchanged. The picture projected here is a shiny utopian vision in which tackling climate change is a matter of developing and implementing new technologies. No mention is made at all to a fundamental (or even a superficial) rethinking of the Western 'way of life'. Scientists and engineers thus are given a heavy double burden: they are not only expected to provide accurate predictions about an uncertain future climate, but also to proffer the equipment to be able to cope with it.

Scientists themselves warn, however, that no particular technology is able to offer a simple, single 'silver bullet' (Shepherd 2009). Moreover, the development and deployment of 'green' technologies involve political and ethical questions. This is perhaps most obviously the case with climate engineering; some technologies, for example, can actually *reduce* levels of greenhouse gases in the atmosphere, generating questions of what the 'right' level of atmospheric concentration might be and who might legitimately make such a decision? (Barrett 2008). If the effects of climate engineering technique have a differentiated impact upon different parts of the world then might not those who control it be tempted to implement it in a way that suits themselves but not necessarily others? (Hamilton 2014).

The Royal Society, in its widely cited report on geo-engineering, notes that while there are many *scientific* difficulties and uncertainties "the greatest challenges to the successful deployment of geoengineering may be social, ethical, legal and political issues associated with governance, rather than scientific and technical issues" (Shepherd 2009). Making decisions about climate engineering is not however simply a matter of bringing a plethora of different sorts of experts into the discussion to come to an agreement, for it is likely to involve a "multiplicity and incommensurability of different views and ontologies" (Szerszynski and Galarraga 2013). The very tendency of proponents of climate engineering to project the possibility of a 'global solution' forgets the local differentiation of the issue that is likely to produce disagreement (Hulme 2014).

'Multiplicity and incommensurability' is also exemplified in the deployment of other sorts of technologies. Nuclear power, for example, has been held up as an example of the best means of addressing climate change and, simultaneously, as an example of the worst (Greenpeace). Renewable energy developments such as wind farms have also been the subject of intense, on-going and often entirely legitimate opposition (Aitken 2012). Such opposition and disagreement should not always be seen as a problem. Alternative perspectives and different types of knowledge can contribute key insights into the deployment and problems of technology. Furthermore, without political negotiation between opposing viewpoints, a strong and legitimate collective decision that could underpin technological innovation is missing from the outset. Technology can no doubt play a key role in responding to climate change and we should be hopeful that a package of various innovative technologies might be helpful in stabilising or even reducing the atmospheric concentration of greenhouse gases with few ill side-effects. But perfect global solutions do not emerge cleanly from sterile laboratories, unsullied by the sticky complications of political disagreement. Indeed, political disagreement is needed to release the potential 'magic' of technology.

3 THE 'ECONOMIC MARKET' APPROACH

The magical technology that promises the continuation of western consumer lifestyles also holds the added attraction of offering increased employment and investment opportunities. Green innovation is often presented as an inevitable part of a thriving economy; budding entrepreneurs compete with each other to produce environmentally friendly technology that is required because of the growing expense of environmental damage. The result is a sort of 'promethean' depiction in which human ingenuity is unconstrained by environmental limits (Dryzek 2005). The 'magical technology' account overlaps with the 'economic-market' approach in which action to combat climate change is expected to come about 'rationally' through the market logic of supply and demand. Some sort of state involvement may be required in order to protect the functioning of the market and to put the required policies into place (Dryzek 2005). Yet the climate is saved ultimately because it is good for business.

Further along in President Obama's statement at the 2014 UN Climate Change summit (quoted above) technological innovation is linked to economic growth:

"... these advances have helped create jobs, grow our economy, and drive our carbon pollution to its lowest levels in nearly two decades – proving that there does not have to be a conflict between a sound environment and strong economic growth" (Obama 2014).

UK Prime Minister David Cameron makes an identical promise:

"There need not be a trade-off between economic growth and reducing carbon emissions... We need to give business the certainty it needs to invest in low carbon... It means championing green free trade, slashing tariffs on things like solar panels" (Cameron 2014).

And in the EU *Climate Action* document, the claim is reiterated: "Early action to develop a low-carbon economy is helping to boost jobs and growth by stimulating innovation in clean technologies such as renewable energy and energy efficiency" (EU 2013).

Like the 'magical-technology' approach, the 'economic-market' approach also conjures up a 'win-win' situation in which dissent is not given a foothold. The absence of any trade-off between economy and environment was supported by the 2006 publication of the *Stern Review*, commissioned by the British government and written a team headed by Sir Nicholas Stern. The review offers a cost-benefit analysis suggesting that the economic benefits in tackling climate change outweigh the costs, calculating the cost of *not* acting to be equivalent to 5 per cent of global GDP each year, and the cost of action at 1 per cent of global GDP each year: "The evidence gathered by the Review leads to a simple conclusion: the benefits of strong early action considerably outweigh the costs. Ignoring climate change will eventually damage economic growth" (Stern 2007).

While climate change is a 'market failure' it is also, apparently, a market opportunity.

This seems a strong argument for climate change action. Yet its 'simple conclusion' has nevertheless been challenged. For example, the Stern Review calculates using a 'zero time discount rate' that treats future generations symmetrically with current generations, but this discount rate has been questioned (Nordhaus 2007). Economic analysis cannot provide one undisputed 'rational' policy; there are ethical and political assumptions at work behind the cost-benefit analysis that can be queried (Jamieson 2008). Climate change cannot be reduced to an *economic* issue that must only be tackled for *economic* reasons.

While this is often acknowledged, however, a more general tendency to rely upon economic policy in tackling climate change is nevertheless rife. The assumption is that if governments put the right economic policies and signals in place and 'putting a price on carbon', the market will do the work (Stern 2009). 'Putting a price on carbon' involves either carbon taxing or carbon trading; a major environmental policy debate today consists in weighing up the merits of the two (Stavins 2008). Carbon taxes produce revenue that can be spent upon environmental measures, vet can be unpopular with voters.⁷ Carbon trading imposes costs upon 'up-stream' polluters, yet is subject to price fluctuations and only targets some industries and sectors.⁸ Although the research on taxes and trading is no doubt crucial, this research is preoccupied by considerations of which particular scheme is best and how it can be made more efficient, and it is simply taken for granted that such schemes have a positive contribution to make (Stephan and Paterson 2012). The narrow focus belies the broader issue of structural change; rather than changing the dominant order of things, these sorts of economic solutions reinforce it (York 2010).

This approach reaffirms the picture of individuals as consumers and producers who are solely incentivised by the 'right prices' (Stern 2009). Putting a price upon carbon thus becomes enough to change behaviour. This forgets that individuals are not only economically minded consumers, but human beings with various ideas, interests, identities and values whose actions don't necessarily fit with the predicted 'rational behaviour'. As Dale Jamieson notices: "people often act in ways that are contrary to what we might predict on narrowly economic grounds" (Jamieson 1992). Behaviour that does not conform to economic self-interest cannot be dismissed as a result of lack of information, certainty or transparency; human beings invariably and inevitably act in non-rational ways for non-rational reasons: "People are creatures of social routine and habit, and of fashion and fad. These patterns of routine and fashion stem from how people are locked into and reproduce many different kinds of social institutions, both old and new" (Szerszynski and Urry 2010). This is not to say that routines and fashions cannot change or be changed, but that this is often for non-rational reasons. The implication is that ongoing clashes of opinions, values and behaviour is inevitable.

It cannot be assumed that society is simplistically moulded through economic policy, and that economic policy is enough to 'green' society. Economic policies may well be crucial in underpinning a shift to a less environmentally destructive world, but they can only work if they are implemented alongside other policies (Green Fiscal Commission 2009). An *explicit* political decision is needed to support them. Instead of a blind trust in the invisible hand of the market, as seems to be increasingly advocated, what is needed is the clearly sighted approval of the play of politics.

4 THE 'ETHICAL INDIVIDUAL' APPROACH

In contrast to the above two approaches, an important alternative approach urges a more fundamental *ethical* transformation of society. Climate change is not a technical problem that can be 'managed' but is a serious ethical issue, perhaps even a 'perfect moral storm' (Gardiner 2011). Such a problem demands a profound reflection upon the values that lie at the very heart of our current ways of life (Jamieson 1992; Singer 2002; Gardiner 2004; Dower 2007). In the highly interconnected, highly populated and highly fragile world of today, traditional conceptions of responsibility seem no longer to function. For Peter Singer:

"The twin problems of the ozone hole and of climate change have revealed bizarre new ways of killing people. By driving your car you could be releasing carbon dioxide that is part of a causal chain leading to lethal floods in Bangladesh. How can we adjust our ethics to take account of this new situation?" (Singer 2002).

For proponents of this approach, tackling climate change is not only about saving the environment, but about nurturing human integrity, and rethinking our responsibilities to nature, to future generations and to those on the other side of the planet.

How does such a fundamental ethical change come about? One interesting proposal is the utilisation of the concept of the 'ecological footprint'. Andrew Dobson offers an important analysis regarding this concept that measures the impact of individuals upon the environment. Everyone in the world has an ecological footprint, but some have bigger footprints than others. The ecological footprint reveals *material* and *asymmetrical* relations that underpin and thicken environmental responsibilities (Dobson 2006).

However, how is individual ethical awareness translated into social transformation and collective action? There are two problems here: first, once individuals have been made aware of their ecological footprint and the environmental responsibility to reduce it, there is the problem of how it might be ensured that they accept and act upon it.

Second, even if individuals do concur to act to reduce their ecological footprint there is the problem of how it could be ensured that everyone would act in harmony to do so. There are different ways of living sustainably, and it seems possible that the many diverse individual actions might well cancel each other out, or hinder each other, or at least not work as well as if they were co-ordinated from within an overarching polity. For example, while some might pursue nuclear power as an environmentally *friendly* source of energy, others may oppose it for the very reason that it *threatens* the environment. While this sort of ethical-individual approach rejects the economic market based approach, it nevertheless relies upon some sort of 'invisible hand' or rational capacity working to coordinate the actions and lifestyles of individuals into a harmonious green movement to combat climate change. Such an assumption overlooks the crucial role of the political community in supporting and ensuring these individual actions.

As Michael Maniates writes:

"Contemporary environmental action has tilted toward an unpromising politics of guilt focused on the individual behaviour of the many, rather than engaging politics of structural transformation that mobilizes the most committed" (Maniates 2012).

Maniates sees this individualisation of responsibility as an increasingly dominant response to climate change. But such a response is hardly adequate to the call for a restructuring of society:

"When responsibility for environmental problems is individualized, there is little room to ponder institutions, the nature and exercise of political power, or ways of collectively changing the distribution of power and influence in society" (Maniates 2001).

The onus is placed upon the 'good individual' to tackle climate change by carrying out 'small, individual eco-actions' such as recycling newspapers, reusing plastic bags, switching off lights (Maniates 2012). These may well be helpful but they can hardly by themselves 'solve climate change' (Cuomo 2011).

Individuals – *as individuals* – cannot be expected to act strongly and harmoniously to tackle climate change. Individualised ethical responsibility is unable to ensure that the necessary institutional transformation, scientific innovation and lifestyle change to reduce carbon consumption are made. Without political collectives and institutions through which demands for larger, more sustained action can be channelled, individualised conceptions of ethical responsibility can only go so far in actually implementing change. The 'ethical individual approach' crucially draws attention to climate change as an ethical issue and compels an examination of previously unexamined values and behaviour. Such an examination might help underpin a collective call for change. The importance of collective action in coordinating the varied and sometimes contradictory responses of a group of individuals should not be underestimated.

5 THE 'GREEN CITIZENS' APPROACH

All three approaches presented above place the burden upon *individuals* to tackle the problem of climate change separately. The possibility of real social change, however, surely hinges upon a local or national or even international community working together. A promising approach, therefore, is one which shifts the attention from atomistic individuals to 'green citizens'. In this approach, people are not consumers driven by economic self-interest or good individuals guided by personal morality but rather are citizens motivated by concern for the common good. They have environmental obligations that arise not from an abstract global ethic but from a more concrete connection with their community and the environment in which that community is embedded (Barry 2008).

Green citizen approaches tend to articulate a particular understanding of the meaning of 'citizenship' that is distinct from dominant understandings that regards citizenship as primarily a package of *rights* (Marshall 1976). This dominant model is sometimes called 'private' or 'passive' citizenship and is regarded by many for neglecting the important component of citizenship *responsibilities* (Kymlicka and Norman 1994). Such 'passive' citizenship presupposes the priority of private over public. With such an anemic notion of citizenship and community it is "hard to see how such a society could ever summon up the collective will to confront a challenge like climate change" (White 2010).

In contrast to 'private' or 'passive' citizenship, green citizen approaches tend to draw upon 'civic-republicanism', which emphasises the *responsibilities* that go along with citizenship. Civic republicans frequently refer to Ancient Athens where citizens were actively engaged in the daily political decisions of the city (Held 1996). Civic republicans believe that humans are only truly free if they participate in politics, thus rather than an imposition on liberty, the obligation to participate in politics is the only route towards it (Skinner 1992). It is hoped that a renewed look at past understandings of citizenship will not only underpin awareness of environmental responsibilities and virtues but that issues such as climate change can reinvigorate the dominant understandings of citizenship (Smith and Pangsapa 2008). For Stuart White, an advocate of this rethinking of citizenship:

"To be a citizen, in the republican view, is not simply to enjoy a legal status. It is to have a definite moral personality. It is to have an understanding of the society's common good, and a willingness to act to promote this" (White 2010).

Today, for many, political participation means only an occasional trip to the ballot box in order to ensure government does not invade private rights and freedoms (Kymlicka and Norman 1994). It can be argued this is not because public life is so much more impoverished than that of the Ancient Greeks, but rather because private life has become so much richer (Kymlicka and Norman 1994). Yet such enrichment is due to the normalisation of a materialistic and consumer lifestyle that for many is precisely at the root of environmental problems. Both civic republicanism and environmentalism then oppose the elbowing out of the public citizen by the private consumer. Indeed, as theorist John Barry notices, the ideals of civic republicanism coincide with those of environmentalism:

"Civic republicanism is vitally concerned with the key challenge of sustainability: how to extend the life of a specific historical community and its cherished and hard-won values and practices, especially freedom, in a world ruled by forces beyond full human control. The republican conception of the human condition is, in key respects, the same as the green conception: It acknowledges humans' complex relations of dependence on natural forces outside our control, our limited understanding of those relationships and forces, the (relatively) fixed ecological limits within which human society can flourish" (Barry 2008).

Barry emphasises the importance of active green citizens for the greening of a society and further explains that such green citizens 'are made not born', raising the proposal of a 'compulsory sustainability service' (Barry 2008). He thus emphasises citizenship participation in public deliberations and explains how citizens can come together to arrive at an understanding of a green common good.

Republican notions of citizenship, however, are notorious for restricting the status of citizen to certain types of bodies. As White asks: "Who gets to be a citizen? Classical republicanism typically operates with highly exclusive notions of citizenship. Citizens tend to be white male property-holders in a specific city-state" (White 2010). He answers this question, however, by stating that citizenship status has now been universalized. White notices that the claim of universalism is contradicted by the restriction of citizenship to members of a particular nationstate. Others are more concerned, however, that while the status of citizenship is formally extended to all within the borders of a nation state, there are still significant barriers to entry to the public sphere (Pateman 1980).

Feminists are particularly aware of this problem and therefore offer an important critique of the notion of green citizenship. Sherilyn MacGregor, for example, points out that conceptions of the green citizen demand that individuals give up their free time to participate in the public sphere. And yet not everyone has the free time to give up: "the image of environmental citizens as simultaneously self-reliant and politically active is highly problematic" (MacGregor 2005). The very existence of free time depends upon the supportive work provided by others. The division of labour between the 'public' and 'private' spheres is not as clearly gendered as it used to be, but it nevertheless remains true that not everyone has the leisure time, nor the inclination nor the confidence, to participate in political discussions about the common good. The feminist critique is therefore applicable

more generally: some are more equal than others in their access to, and manoeuvrability within, the public sphere (Young 1989). Those who are excluded have little chance to challenge the 'common good', which is agreed in their absence.

The 'green citizens' approach importantly emphasises the engagement of the political community, rather than the autonomous individual. It respects and enhances the abilities of citizens and it notices the embeddedness of any community in its environment. However, it problematically tends towards the enforcement of *one* 'green common good', one model of the 'good green citizen', upon a plural society in which exists multiple and diverse opinions of what precisely is meant by 'good' and 'green'. How might it be ensured that difference is respected and included?

6 THE 'DELIBERATIVE DEMOCRATIC' APPROACH

One important approach that acknowledges the pluralism of contemporary society and that attempts to create a more inclusive agreement on a common good regarding climate change, is the 'deliberative democratic' approach. This model of democracy is often contrasted to conventional 'aggregative democracy' that suggests that different preferences can be handled in a democratic system by aggregating them through voting or compromise. Individuals are seen as possessors of interests that are fixed prior to any political discussion. Deliberative democracy, however, emphasises the importance of *deliberation* in the formation of political opinions and suggests that inclusive, fair and reasoned deliberation is the very *essence* of democracy (Dryzek 2002). Deliberative democracy is now becoming the new orthodoxy (Smith 2003). The deliberation envisaged is very different to the heckling and rhetoric of self-interested politicians. Instead, it is reflexive communication that is orientated towards mutual understanding and enlightenment:

"Deliberative democrats advocate that democracy [...] should become a learning process in and through which people come to terms with the range of issues they need to understand in order to hold defensible positions" (Held and Hervey 2009).

It is clear why many greens have regarded deliberative democracy as the answer to motivating and sustaining a reaction to climate change. This approach suggests that through debate in the political realm, those with very different perspectives can be brought into discussion to learn about this issue and become more community orientated. Deliberation incorporates the important insights from both expert and local knowledge. It exposes self-interested and environmentally unsustainable practices to public scrutiny (Smith 2003). It is sensitive to the communications that emanate from nature and make an environmentally outcome more likely (Dryzek 2002). In this way, it is hoped, democracy can be 'greened' and made more conducive to climate friendly decision making.

Unlike 'green-citizenship' there is no 'thick' understanding of the common good. But deliberative democracy aims to educate participants, overcome differences and arrive at the best possible decision with which everyone can agree. While classic deliberative theorists saw full consensus as a guiding ideal (Habermas 1996), it has been conceded in more recent work that this may be unrealistic (Smith 2003). Yet 'reasoned agreement' nevertheless remains the operating principle and ultimate goal of deliberation (Dryzek 2002).

The problem with this ideal, however, is that despite its recognition of differences it ultimately tries to overcome them. There are two issues here: first, the issue of equality. Formulations of deliberative democracy assume that all participants have equal access to and equal manoeuvrability within the discussion. But the inevita24

ble power relations at play in political negotiations make an equal and inclusive forum difficult to achieve: "even communication situations that bracket the direct influence of economic or political inequality nevertheless can privilege certain cultural styles and values" (Young 1996).

However, even if all voices were given equal status, an agreement is nevertheless unlikely because the complexity and contested nature of this issue. This is the issue of difference. Deliberative democracy ultimately underestimates the incommensurability and incompatibility of different perspectives on climate change. As I argue elsewhere, climate change can be understood to be a parallax, something that can only be seen indirectly from particular perspectives, never in one 'right' way (Machin 2013). In Mike Hulme's words:

"Depending on who one is and where one stands – the idea of climate change carries quite different meanings and seems to imply quite different courses of action. These differences of perspectives are rooted much more deeply than (merely) in contrasting interpretations of the scientific narrative of climate change" (Hulme 2009).

7 THE 'ECO-AUTHORITARIAN' AND 'SCEPTICAL' APPROACHES

If a multiplicity and diversity of views and values regarding climate change are ultimately irreconcilable, then there appear to be two options. On the one hand, if climate change is understood as an overriding catastrophe that threatens the future of human society, then the only option might be to disregard dissenting voices and to enforce environmentally friendly policies upon a resistant public, for their own good. On the other hand, if climate change is understood to be a matter over which there is no ultimate truth, then the only option might be to disregard the issue of climate change and to focus upon other social goals.

For some concerned environmentalists, it is simply too risky to entrust the issue of climate change to our contemporary democratic systems. The general population has seemingly revealed itself as too stupidly self-interested to prioritise the issue, and therefore the only option is to overrule democracy and enforce environmentally friendly policies. 'Eco-authoritarianism' was advocated the 1970's in relation to the need to curb exponential growth of the human population (Hardin 1968). This sort of strategy has recently had a revival in response to climate change (Gilley 2012). Scientist James Lovelock, explicitly states: "orderly survival requires an unusual degree of human understanding and leadership and may require, as in war, the suspension of democratic government" (Lovelock 2010). The founder of the Planet Prosperity Foundation Roger Cox, asserts that "the democratic order is under siege and it is time for the judiciary to step in" in order to "depoliticise the climate issue" (Cox 2012). Democracy is thus seen now commonly as an 'inconvenience' that is "identified as the culprit holding back action on climate change" (Stehr 2013).

Approaching this dilemma from precisely the opposite direction of 'ecoauthoritarianism' is the 'sceptical' perspective. Here the resolution to the apparent clash between democracy and climate change is not the suppression of democracy and plurality, but rather the rejection of the significance of climate change. Bjørn Lomborg, as a self-described 'skeptical environmentalist' has challenged the notion that catastrophe is looming on the horizon for humanity, or what he calls 'the Litany of our ever deteriorating environment' (Lomborg 2001). He does not deny that anthropogenic climate change is taking place, but he does deny that it should take priority over other more urgent problems. He also claims that we should be equally concerned by the effect of drastically reducing carbon emissions. Lomborg thus dismisses the claim that climate change is an urgent problem and recommends that "we should not spend vast amounts of money to cut a tiny slice of the global temperature increase when this constitutes a poor use of resources and when we could probably use these funds far more effectively in the developing world". Lomborg importantly recognizes that decisions are always needed regarding which issues should be given priority. However, climate change, he believes, has become a problematic 'trump card' that overrules other issues and impedes informed democratic decision making. Lomborg concludes, then, by firmly stating that climate change is *not* 'what matters'. As he puts it:

"the world as a whole would benefit more from investing in tackling problems of poverty in the developing world and in research and development of renewable energy than in policies focused on climate change"

Yet as this quote illustrates, Lomborg presents the issue of climate change as a homogeneous global issue, using global statistics. What this does is obfuscate the local differentiation of the effects and perspectives and denies the importance of democratic debate *about* and *within* climate change.

Eco-authoritarians and climate change sceptics sit upon polar opposite sides on the issue of whether climate change is a problem or not. Yet they are united by the assumption that dissent and disagreement is incompatible with acting against climate change. Whereas eco-authoritarians assume that timely democratic agreement regarding climate change isn't possible and therefore democracy should be suspended, climate change sceptics start from the same premise but conclude that concern about climate change should be put on hold. Both these approaches presuppose that disagreement hampers collective action to tackle climate change. It is precisely this presupposition that is challenged in the next section.

8 THE 'RADICAL DEMOCRATIC' APPROACH

The approaches above all contribute important insights on climate change. However, an assumption running through them all is that they are mutually incompatible with other approaches, and that action on climate change presupposes overcoming or suppressing disagreement. Is there a way of harnessing both the insights of these approaches *and* – crucially – the *disagreements* between and within them? This is where the radical democratic approach comes in. Radical democracy, as I understand it here, suggests that disagreement is fundamental to a real politics of climate change. This is for five (connected) reasons.

First, disagreement over climate change is *inevitable*. Such a complex, 'wicked' issue can only be understood diversely across and within different communities and approaches. There is no one correct perspective from which to see the issue fully, neutrally and objective. Climate change is an issue that will have a multiplicity and diversity of meanings (Hulme 2009). Communities with different life-styles and livelihoods, with different priorities and principles, in different parts of the world, will understand the causes and the consequences of climate change in distinct ways, although communities are heterogeneous and opinions will vary within them. For some climate change is already happening, for some it lurks malevolently in the future, for others it might even be viewed as a potential opportunity. Particular perspectives may not only be divergent but incommensurable and irreconcilable.

Second, disagreement is *generative*. The political realm is the place where those with clashing or overlapping views compete and negotiate and it is here where alternative models and norms of society are explicitly contrasted with the status quo. As radical democratic theorist Chantal Mouffe summarises: "conflict and division are inherent to politics" (Mouffe 2009). Therefore to close down disagreement is to close down politics. It is to shut out alternative depictions that may contribute new invaluable understandings of the multi-faceted issue of climate change. To assume that disagreement can be *overcome* is to marginalise these perspectives from the start. To acknowledge disagreement on the other hand is to open the fecund opportunities of the political realm.

Third, disagreement is *passionate*. The clash of opinions in politics should not be dismissed as the instrumental combat of rational actors motivated by self-interest, but the clash of non-rational affects and identifications that may actually be constituted through their differences to each other. By allowing the play of different perspectives such passions can revitalise the political realm. By construing climate

change as an issue for which there is only one right solution (either already decided or imminent) other approaches fail to engage the participation of actors and to sustain that engagement.

Fourth, disagreement is *legitimate*. By prohibiting the expression of different opinions, the danger is that the only alternative are the extremist viewpoints that define themselves in opposition to the assertion of the consensus of and by elites. The result is the polarisation of the debate and the passionate climate change denial that is strengthening at the same time as the emphasis upon consensus. Rather than occurring *despite* the increasing calls for consensus, it could be argued that climate scepticism becomes more inflamed precisely *because* of the assertion of consensus by scientists, experts, politicians and other elites.

Fifth, disagreement *underpins decision-making*. Making a decision involves choosing between valid alternatives. Decisive policy making is not weakened, but on the contrary is actually strengthened by the existence of real options to choose between. Without options there can be no choice. This means that no political decision can ever satisfy everyone. However, this does not necessarily inhibit collective action; democracy works precisely because citizens agree to go along with decisions even if they disagree with them.

An important question arises here: does this not then imply that disagreement presupposes agreement? Does not radical democracy actually rely upon the existence of something it rejects? Radical democracy does indeed rely upon some sort of agreement, but not a *substantial* agreement about climate change or other types political issues. What is needed is rather an agreement on the importance and validity of democracy. Mouffe's important concept of 'conflictual consensus' involves the common allegiance to democracy alongside disagreement over what democracy actually means:

"Consensus is needed... about the ethico-political values that should inform the political association. There will always be disagreements, however, about the meaning of these values and how they should be implemented. In a pluralist democracy such disagreements, which allow people to identify themselves as citizens in different ways, are not just legitimate but necessary; they are the stuff of democratic politics" (Mouffe 2000).

In this way the violent potentiality of disagreement and conflict is *sublimated* into a form of adversarial conflict in which opponents respect each other's opinion, despite sometimes fundamentally and irresolvably disagreeing with them. In Mouffe's terminology, 'antagonism' is transformed into 'agonism'. Conflict still exists, and there is always the possibility that it will turn violent and antagonistic; the job of democratic institutions and values is to guard against this possibility: "acknowledging the ineradicability of the conflictual dimension in social life, far from undermining the democratic project, is the necessary condition for grasping the challenge to which democratic politics is confronted" (Mouffe 2005). A political decision is needed regarding the form of institutions that best serve democratic decision-making.

To sum up here, the aversion to conflict which features across the various accounts of climate change stifles political participation, aggravates the passionate denial of climate change and hinders decision and environmental policy-making. The radical democratic approach, however, suggests that democratic disagreement is crucial in underpinning a revitalised environmental politics. In this approach disagreement is not tacitly forgotten, explicitly denied or actively suppressed. For the radical democratic approach, political disagreement is regarded as inevitable, generative, passionate, legitimate and as the basis for decision-making in climate change policy. But alongside this celebration of disagreement there is the acknowledgment that it can become violently hostile. On the one hand, this possibility should be guarded against. On the other hand, however, it should also be acknowledged that without allowing the expression of political conflict, there is the possibility that alternatives dismissed as irrational or immoral or wrong, become channelled into antagonistic extremism. Radical democracy perpetually negotiates the line between political disagreement and antagonistic enmity.

9 CONCLUSION

I have argued that approaching climate change should not be a matter of closing down but rather the opening up of political disagreement. A radical democratic approach acknowledges the heated, contested socio-political climate surrounding climate change and attempts to put it to use in contemporary environmental policy making. This approach advocates the *celebration of alternative perspectives* rather than the suppression of opposition. To dismiss outright any opposing perspectives as 'irrational' is to stupidly preclude the democratic expression of disagreement and to risk enhancing extremist anti-democratic viewpoints. Instead of the dominant technocratic focus upon the scientific and economic 'solutions' to climate change, emphasis should be placed on the conditions in which to secure the expression of diverse opinions and the legitimate disagreements between them.

The radical democratic approach suggests that proponents of the different approaches described and assessed above may never come to any sort of mutual agreement, shared understanding or political compromise. Nevertheless, this does not mean that they should not be accorded an agonistic respect in which they are aligned as adversarial opponents rather than hateful enemies. This is why it is important to nurture a sort of 'environmental conflictual consensus' in which differences are celebrated rather than suppressed. Climate change is seen from this perspective as an issue that has no one single cause, nor one single solution.

It thus might be more useful to focus upon the multiplicity of *local disagreements* instead of *global agreement*. To assert climate change as one homogeneous global problem is to misrepresent the specificity of the different connected facets of this complex issue. In her research on climate change and the region of the South Pacific, Bronwyn Hayward notes: "climate change is not a uniform global phenomenon... Local communities will experience impacts in differing ways and at different times" (Hayward 2008). *Local* conversations are therefore crucial to establish what is at stake and what might be an appropriate response. Such local conversations could be linked together and to transnational discussions but should not be globally conflated. Yet it is important to acknowledge that communities are not homogeneous units, and that perspectives and values are likely to differ within them. Local disagreements could revitalise the making of climate policy.

The intensity of the socio-political climate surrounding climate change is not necessarily an obstacle to decisive and effective policy making. Instead of trying to smother the heated disputes, or to push them to the margins, the radical democratic approach suggests using such important disagreements to revitalise the politics of this potent, unique and contested issue.

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NOTES

- The most prominent of reports about climate change is produced by the Intergovernmental Panel on Climate Change. Its latest report on the Physical Science Basis of climate change was published 2013. Its next synthesis report is due to be published later in 2014. http://www.ipcc.ch/report/ar5/wg1/
- 2 http://www.tni.org/organisation/camp-climate-action
- 3 http://peoplesclimate.org/
- 4 http://theclimateribbon.org/
- 5 http://www.climaterefugees.com/Home.html
- 6 http://www.un.org/climatechange/summit/
- For analysis of carbon taxes see: Green Fiscal Commission (2009) 'The Case for Green Fiscal Reform: Final Report of the UK Green Fiscal Commission'. Policy Studies Institute; Nordhaus, W.D. (2007b) 'To Tax or Not to Tax: Alternative Approaches to slowing Global Warming' in *Review of Environmental Economics and Policy*. 1 (1); Pearce, David (1991) "The Role of Carbon Taxes in Adjusting to Global Warming" in *The Economic Journal*. 101 (47). 938-948. Metcalf, Gibert (2009) 'Designing a Carbon Tax to Reduce Greenhouse Gas Emissions' in *Review of Environmental Ethics and Policy*. 3 (1). 63-83
- 8 For analysis of emission trading see: Schuppert (2011) "Climate change mitigation and intergenerational justice" in *Environmental Politics*. 20 (3). 303-321; Wara, M. (2007) "Is the Global Carbon Market Working?" in *Nature*. Vol. 445. 595-596; Convery, F.J. (2009) "Origins and Development of the EU ETS" in *Environmental & Resource Economics* 43(3): 407. Reyes, Oscar & Gilbertson, Tamra (2010) "Carbon trading: how it works and why it fails" in *Soundings*. No. 45. 90.

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