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### Theories of Climate Change

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## *Review Essay* **Theories of Climate Change**

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Ulrich Beck, 2010, *Climate for Change, or How to Create a Green Modernity? Theory, Culture & Society* 27(2–3): 254–66.

Anthony Giddens, *The Politics of Climate Change*, 2nd edn (Cambridge: Polity Press, 2011), 272 pp., \$94.95, ISBN 9780745655147 (hbk), \$29.95, ISBN 9780745655154 (pbk)

Max Koch, *Capitalism and Climate Change: Theoretical Discussion, Historical Development and Policy Responses* (Houndmills, Basingstoke: Palgrave Macmillan, 2012), 240 pp., £55.00, ISBN 9780230272514 (hbk)

On the face of it, the climate crisis lends itself to a Marxist analysis, and Max Koch duly interprets it as a stage in the development of capitalism. We see burgeoning greenhouse gas emissions due to relentless accumulation of capital, a powerful lobby protecting its interests at home and exporting its dirty business to poor countries, and governments placing the interests of corporations before those of the vulnerable and powerless. Above all, around the world the response to the existential threat posed by a warming globe has always been to give priority to economic growth, the *conditio sine qua non* for continued capital accumulation. The natural environment becomes no more than the means to the end of capital accumulation.

However, it is not capitalism that has given us the climate crisis but technological industrialism, the essential urge of socialism as well. Environmental damage under socialism has been as bad as or worse than under capitalism. Soviet industrialisation was notorious for its ecological destructiveness. The priority given to growth over environmental protection in the Soviet Union seeped into the thinking of much of the Left in the West, so that for many years parts of the Left were deeply suspicious of the environment movement, seeing it as a fad of middle-class activists burnishing their egos while jeopardising the livelihoods of workers. Preoccupied with the ‘logic of capital’,

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<sup>1</sup>This essay has been substantially improved after comments from Myra Hamilton of the University of New South Wales.

Koch does not grapple with the contradictions the Soviet Union or China presented. Instead half of his book is devoted to 'Fordism' and 'finance capital', lending it an odd 1970s feel.

Socialism can be as environmentally destructive as capitalism because capitalist and Marxist ideologies share foundational beliefs – that the primary practical objective of social progress should be the advance of material wellbeing, wellbeing derived from nature's bounty, and that humans have an unfettered right to take what they need, subject only to the limits of enlightened self-interest. Both claim that human emancipation (which depends first and foremost on freedom from material want) is the ultimate purpose; both are unthinkingly anthropocentric; and, both have a wholly instrumentalist understanding of the relationship between humans and nature. In short, both systems are blue-blooded children of Enlightenment humanism.

A second and more difficult problem for Koch's analysis is the implication that there is a public demand for measures to cut national carbon emissions that is constantly thwarted by corporations exercising political power. For Koch, climate denial is just part of a 'hegemonic struggle between opposing interest groups with different power resources' (p. 43). However, the masses in the West – and especially those whose own lives and whose children's lives are most likely to be blighted and even jeopardised by climate change – do not seem to care enough to vote in governments committed to radical action consistent with the scientific warnings. The reluctance cannot be explained simply by the power of the fossil fuel lobby and the obsession of governments with protecting the economy above all else. The truth is that the broad public is either happy to settle for symbolic actions or downplays climate science.

In the United States, climate science denial is prevalent among rich and poor who place personal 'freedoms', small government, low taxes and national sovereignty before protection of the climate, despite the warnings of impending catastrophe (Maibach, Roser-Renouf and Leiserowitz 2009). It reflects an entrenched worldview fixed not only on a particular understanding of the relationship of the individual to society but on the role of human beings on the planet. The evidence shows that, while climate denial as a political force emerged in the 1990s mainly out of US thinktanks funded by fossil fuel corporations, it has since evolved into a much wider political and cultural movement, the fires of which can still be stoked by Exxon but which cannot be controlled by it (Hamilton 2010, 95–113). So Koch's characterisation of climate denial as a 'hegemonic struggle between opposing interest groups with different power resources' (p. 43) inscribes a complex cultural and social phenomenon with diverse national characteristics into the blunt politics of class. If only it were that simple there would be more reason for hope and less for despair.

It is not only denial of climate science among the masses that Marxist analysis cannot explain. It is mute in the face of the much more widespread phenomenon of evasion, the deployment of strategies to avoid the full implications of climate science (Hamilton 2010, 118–33). Koch acknowledges that 'an adequate understanding of the spread of neoliberal categories cannot be reduced to a notion of indoctrination and manipulation' (p. 190). There is 'a certain readiness for collaboration', he concedes, before quoting Bourdieu to the effect that entrenched social habits, dispositions and modes of living can be

shaken up only by 'a thoroughgoing process of counter-training' (p. 190).<sup>2</sup> But it is hard to know what a program of counter-training would entail, other than a re-statement of well-known facts; and if we have learned nothing else from the debate it is that the most robust facts pale before entrenched cultural beliefs.

Very few, even among those who are fully aware of the facts thrown up by climate science, are intellectually and emotionally able to absorb their meaning. In my experience, most Left intellectuals belong to this camp; as we will see even some of those who write about climate change do not recognise the severity of the impacts and the way in which it challenges some of our most cherished beliefs about the future. Because of Marxism's roots in Enlightenment humanism, and the Enlightenment's detachment of human society from the natural world, those most steeped in Marxism are ill-equipped to understand climate change.

Yet even here, if we concede that the problem of climate apathy is due to cultural hegemony, the whole argument is still carried out within the self-contained world of social analysis that the arrival of the Anthropocene has now shattered. In this new geological epoch, initiated by the industrial revolution, the 'human imprint on the global environment has now become so large and active that it rivals some of the great forces of Nature in its impact on the functioning of the Earth system' (Steffen et al. 2011, 842). It marks the end of the Holocene, the brief 10,000-year period of remarkable climatic stability and clemency that allowed civilisation to flourish. A disturbed climate is the principal signal of the new epoch.

As Dipesh Chakrabarty (2009) has pointed out, with humans now rivalling the great forces of nature, the distinction between human history and natural history can no longer be sustained, and this marks a decisive transition in the evolution of the Earth. It turns out that the stage on which capital and labour played out their great struggle was not timeless and inert. Nature was not a mere backdrop to the human drama. Contrary to all humanisms and subjectivist philosophies, the world stage on which all the men and women are merely players has now entered into the play as a dynamic and largely uncontrollable force. We have returned to the idea that the histories of nature and humans are inseparable, although this time no longer under the aegis of the divine but under the unstable hybrid of the Anthropocene. The convergence of earth and human history destroys the essential humanist belief in autonomous subjects acting out their demands on an inert world.

The most vexing question posed by Koch only at the very end of his book is asked by Ulrich Beck at the outset: 'Why is there no storming of the Bastille because of the environmental destruction threatening mankind, why no Red

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<sup>2</sup>It is perhaps because he recognises the practical implausibility of such a solution (and its Orwellian connotations) that Koch ends his book with a suite of 'practical policies' (p. 189) to promote 'sustainable growth' that mimic those of a soft version of European social democracy, not so different from those put forward by Anthony Giddens. And, as if to highlight the impotence of the Marxist diagnosis, he goes on to suggest that the response to the failure of collective action is to make a 'significant reduction in one's individual carbon footprint. . . [which] need not necessarily mean a lifestyle shaped by austerity' (p. 192), so that urban gardening, for example, can have 'an empowering effect, almost constituting an oppositional act' (p. 192). Oh dear, what would Karl make of that?

October of ecology?’ (p. 254). Beck understands that the ‘greening of society’ would require the public to loosen their attachments to their lifestyles, consumption habits and social status (p. 255). He replies to the question with eight theses, but as each thesis follows the previous one Beck’s path to a new green modernity is left suspended in the air and we are left none the wiser, except for a sinking feeling that modern social science has no answer to this profound threat.

Beck seems to turn the climate crisis into a challenge to modernisation, with its unintended side-effects and risks, only to resort to more modernisation, the reflexive type, to resolve it. The most striking social fact of climate change is the determination *not* to reflect on the evidence of the unintended side-effects and unprecedented risks. The challenge to reflexivity is embedded in the opening question itself. We would expect new conditions to ‘bend back’ on the agent so that agents shape the environment to avoid the threatened harms.<sup>3</sup> Instead of enlightened self-interest, modern societies seem bent on a course of unenlightened self-destruction, a refusal to engage in self-examination and an unwillingness to prepare for future risks. Moderns have their heads down writing their own biographies, doggedly refusing to look up to see what is coming down the road at them.

Rather than challenging the modernism project, as Beck wants, the climate crisis seems to be entrenching it; instead of manifest hazards creating a process of ‘self-confrontation’ in which society becomes both an issue and a problem for itself, the refusal to engage in any sort of critical self-reflection has been its most striking feature. Large majorities accept, or at least do not dispute, the science of climate change – except in the United States where the majority is small – but the change in public and private behaviours is minimal. The gap between the responses necessary if the climate is to be protected and the responses actually forthcoming suggests that reflexivity has little meaning if it is merely a mental process, for other mental processes (wishful thinking, blame-shifting and various other forms of evasion) act to preserve the status quo (Hamilton 2010, 118–33). Declarations of willingness to take voluntary actions to reduce one’s environmental impact only rarely translate into real responses (Hamilton 2010, 79). Instead of the transition to a second stage of modernity, we have witnessed the fierce defence of the first, and not just by conservative activists but by the broad citizenry who will not act collectively to protect themselves. In the end, the climate crisis is the death of reflexive modernisation, shown up as a narrow framework itself based on modernist notions of autonomous rational subjects. Backed into a corner by our stubborn unwillingness to reflect, all Beck can say is that eventually the penny will drop (pp. 260–61).

At times, Beck’s language suggests he is channelling Bruno Latour’s critique of modernism (Latour 2010) – climate change, he writes, represents ‘an ongoing extension and deepening of combinations, confusions and “mixtures” of nature and society’ (p. 256). But he immediately neutralises Latour’s radical challenge to the ‘social-only’ understanding of the world, a pre-Anthropocene world of

<sup>3</sup>McCright and Dunlap (2010, 100) argue that ‘the American conservative movement is a force of “anti-reflexivity” attempting to protect the industrial capitalist order of simple modernization’ by undermining environmental-impact science and the legitimacy of the environment movement.

subjects radically separated from objects. The 'greening of modernity' puts a new coat of paint on modernity in a vain quest to pacify and marginalise nature, quelling the incipient revolt against three centuries of containment.

With nature safely back in the box, Beck (like Koch and Giddens below) can go to the categories he knows best, viz., 'the power and conflict dynamics of social inequalities' (p. 257). And from here it is but a short step to *welcoming* the climate crisis, for it opens up industrial modernity to 'fundamental critique and multiple futures', a process of 'self-dissolution and self-transformation'. The climate crisis becomes an opportunity, finally, to achieve the progressive dream of overcoming 'nation-state narrowness' and cultivating a new 'world public' seized by a 'cosmopolitan vision' (p. 258). This new world order, created out of impending catastrophe, will permit the resolution of conflict among those apparently irreconcilable goals of environmental protection, growing prosperity and global equity (p. 262). Just when we thought the horrible prospect of an unstable and hostile climate would force on us unpleasant trade-offs, Beck concludes that we can, in fact, have it all. In a closing flourish he may live to regret, he imagines the climate crisis as the event that frees the caterpillar of humanity to emerge finally from its cocoon as a butterfly (p. 264).

An epiphany of international brotherhood as the trigger for the storming of the Bastille has a certain utopian appeal. Yet it might be asked why such a worldwide 'cosmopolitan turn' offers a more promising route to the greening of politics than a direct awakening of diverse national citizenries to the reality of the scientific predictions. Rather than societies being greened after a spontaneous international cosmopolitan turn, a more likely route is from the local and national to the international as the impacts of global warming make themselves felt on the ground.

Firmly planted in the terrain of reflexive subjects and their institutions, Beck's world cannot countenance any natural constraints on the program. 'If you see an opposition between modernity and nature, then you see the planet too fragile to support the hopes and dreams for a better world' (p. 263). Earth system scientists – such as those who wrote the landmark 'planetary boundaries' paper in *Nature* (Rockström et al. 2009) – see it the other way around: evidence of the 'fragility' of the planet (or rather its finitude and unfathomable complexity) suggests we ought to rein in our hopes and dreams, not pump them up. Beck's hopes and dreams hover untethered above the earthly facts of planetary boundaries and serve as a last reminder of the Modernist fantasy that the world is a symbolic creation of human subjects.

Anthony Giddens takes a more down-to-earth view of climate politics. Prospects for the emergence of a new world community are shrinking, he writes, and climate change is more likely to promote division and conflict. *The Politics of Climate Change* certainly pricks any idealistic bubbles with its relentless pragmatism. Against Koch's and Beck's contributions, Giddens' study appears to be a less theoretical kind; but the absence of theory does not make his argument any less ideological. It only makes the worldview less transparent.

The conundrum of climate politics, Giddens tells us, is that people are not inclined to respond to a threat that is not tangible, yet by the time it becomes tangible it will be too late. He calls this 'Giddens's paradox' (p. 2). In truth Giddens is not the first to describe this phenomenon, nor is it striking enough to deserve a proper name. And while Giddens does not attempt to explain it,

others have. In recent years, sociologists, political scientists and psychologists have developed a body of evidence to explain why citizens are not storming the Bastille (Kahan 2010; McCright and Dunlap 2011; Norgaard 2010). Giddens seems innocent of this literature.

As in the Blairite politics that made him famous, Giddens approaches climate politics looking to triangulate, to find a ‘third way’ that is distinct from the standard positions of Left and Right and can render them redundant. In a way this is odd because green politics has already triangulated to create a third way far more disturbing to the old Left and Right than any pallid centrism. So challenging is green politics in some countries that the old parties have buried whatever differences of substance remain to gang up on the Greens. Yet Giddens, like Beck, is keen to marginalise environmentalism as a political force.<sup>4</sup> He concedes grudgingly that the green movement deserves a ‘mention’ (in a book on climate politics) (p. 5); but the ‘cross-party framework’ he later urges as a way of finding a long-term solution would exclude the Greens. His unwillingness to take environmentalism as a serious political force is apparent in his commentary on green philosophy, which is peremptory and inept and relies on a single, dated source.

From Australia we naturally obtain a triangular view – we look across the Indian Ocean to Europe and over the Pacific to America, with Asia looming large in between. From our vantage point Giddens’ book appears Eurocentric, both in the sense that the understanding of the political possibilities is rooted very much in the kind of negotiated reasonableness of the European Union and in the sense that it attributes to the EU much greater influence in global affairs than it actually has. Europe’s influence in the climate debate peaked at Kyoto in 1997; since then at each annual conference of the parties the waning sway of Europe has been the source of despair for those who want global action. Yet Giddens writes as if Europe is the model the world will soon follow.

Only from within a Euro-bubble could one write that the climate debate is ‘tinged’ with Left–Right politics (p. 49), a bubble cut off from the raging battle over climate change between Left and Right in the United States (and Australia). It is a battle that has had a paralysing influence internationally. Here we come to the central failure of Giddens to understand the politics of climate change. He declares that climate change ‘is not a left–right issue’ (p. 7), oblivious to the extensive scholarship and commentary attempting to explain how and why it has become a bitterly divisive Left–Right issue (Klein 2011; Maibach, Roser-Renouf and Leiserowitz 2009; Oreskes and Conway 2010). People want to understand, for example, why Democratic and Republican voters, whose views on global warming were indistinguishable in the 1990s, now diverge radically. Giddens seems unaware of this work.

Giddens claims that some on the Left have seized on climate change to attack capitalism and motivate a new radicalism (pp. 48–9). That may well be true; but it does not appear to be within his worldview to concede that perhaps the situation, as set out by the scientists, *demand*s a reshaping of capitalism and a

<sup>4</sup>The Greens’ gloominess offends Beck, but Giddens comes at them like a Victorian anthropologist who has arrived in a dark continent to find a strange new tribe – ‘just what is and what is not valuable in green political philosophy has to be sorted out’ (p. 5) – unaware that countless anthropologists have come before him and have had quite a lot to say on the matter.

new radicalism. The reason is plain. Despite his attempt to explain the science of climate change, in truth he does not grasp the true nature of the warnings.<sup>5</sup> He throws around projections – such as warming of 4°C, the most likely scenario now – without any sense of what they mean for human futures (p. 17).

This blasé approach to well-grounded warnings of calamity is in fact a crucial move in Giddens' argument because it reduces climate change from a threat that is *sui generis*, requiring us to rethink everything, to something within the scope of familiar risks, albeit at the upper end of the normal distribution. Normalising the climate threat allows it to be squeezed into the conventional political framework.

It is a framing buttressed by the way Giddens sets up the science on a spectrum where the reasonable man can take a middle position. At one end are the 'radicals', climate scientists like James Hansen who warn that extreme changes in the climate are now very likely. At the other are the 'sceptics' who cast doubt on the science. They should be taken seriously, he tells us, although the 'deniers' should not. But who are the 'sceptics' identified by Giddens? There are some very familiar names, like Fred Singer and Patrick Michaels, scientists who have been at the very centre of the organised US climate denial campaign from the outset and whose links with organisations funded by the oil industry have been well documented (Gelbspan 2004, 51–4; Hoggan 2009, 105–09, 138–40). He also names as authoritative a number of right-wing newspaper columnists who regularly denounce climate science.

Having defined this spurious spectrum Giddens presents himself as the level-headed man weighing up the claims. But in fact he has been duped by the denialists (who of course prefer the heroic mantle of 'sceptic') who set out to create the impression that such a spectrum exists (Oreskes and Conway 2010). It is the naivety of one determined to be no one's fool. So he writes that 'sceptics are right to criticize those who invoke climate change to explain every weather event' (p. 20) when in truth climate scientists, by nature cautious professionals, are notable for their *reluctance* to attribute major weather events to global warming (Ball 2007; Hansen 2007). Sceptical thinking abounds in climate science, and constantly causes reassessment and revision, but activists like Singer and Michaels are deniers masquerading as mavericks, willing to stand up to the establishment but never with enough time to do any publishable research.

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<sup>5</sup>Any wide-ranging analysis of the complex problem of climate change requires familiarity with a number of disciplines and what they have to say about it. But Giddens' discussion of the science is marred by a catalogue of mistakes and misunderstandings. The claims that 'Higher temperatures produce more acidity in the water' (p. 13) and that average temperatures in the Arctic have risen by seven degrees are incorrect. The definition of carbon dioxide equivalent and the explanation of El Nino are also wrong. The discussion of economics is amateurish – 'Emissions trading can only work if the price of carbon is capped, and at a demanding level' he tells us (p. 4), hopelessly mixing up carbon taxes that fix the price of carbon emissions with emissions trading that fixes the quantity. Many statements are erroneous – the precautionary principle does not mean 'Don't interfere with nature' (p. 6); conservationism is not a green philosophy meaning a 'return to nature' (p. 5). Some are just bamboozling – 'The desire to protect animal species from extinction might also be a worthy one, but its only connection to climate change is if extinction threatens the ecosystems that help reduce emissions' (p. 54).

Yet we can see where all of the rewriting of science and history is headed. Giddens sets up the climate debate so that he can take a ‘pragmatic’ position in between. So he finds a middle position on an imagined spectrum of science; he dismisses – with a simple ‘we must disavow’ (p. 55) – all philosophical concepts that suggest the conventional understanding is inadequate; he marginalises the green movement as politically irrelevant so that climate change can be owned by the mainstream; he ignores the way in which climate change has become enmeshed in a titanic political-cultural struggle in the United States; and he confines the parameters of the debate to the narrow range of gentlemanly agreement in the European Parliament.

This all leads to the banalisation of climate politics, immersing it in a lukewarm broth of third way platitudes. So when it comes to solutions Giddens talks of the ‘enabling state’, ‘partnerships with business’, a ‘win-win approach’, ‘emphasising the positive’, ‘proactive adaptation’ and so on. At times he breaks into Blair-speak, as in this passage (with a little paraphrasing):

We must create a positive model. It won’t be a green vision, but one driven by political, social and economic thinking. A mixture of the idealistic and the hard-headed. No quick fix. It’s going to be a slog. The prize is huge. There is another world waiting for us out there if we can find our way to it (p. 8).

It’s dispiriting to realise that one of Europe’s foremost political scientists can inscribe the unique and momentous threat of climate change – surely an event that must call all of our old worldviews into question – into the shop-worn apologetics of 1990s centrism. If humanity has entered into a new geological epoch in which the foundations of modernist political ideals – continued growth, a stable Earth, global peace and the power of technology – are now in question, one would expect a thorough rethinking of political theory in a way that is consistent with the new science of Earth systems. It is true that such a rethinking has only just begun and will take perhaps two decades to work itself through. But if Giddens is so attuned to the ‘paradox’ of our refusal to take the threat seriously then we might expect him to be alert to the possibility that he too is a victim of it.

In the end Koch’s retro-Marxism, Beck’s utopian internationalism and Giddens’ climate third way cannot come to grips with the planetary scale and millennial lifetime of climate disruption. In the Anthropocene, political analysis can no longer be grounded in an environment that can be taken for granted, a natural world that provides a mere backdrop for human achievement. The environment is no longer the *Umwelt*, that which surrounds us but is always ‘over there’.

The ‘social-only’ reflex of modernism handed down from Enlightenment philosophy cannot understand the new hybrid world, the convergence of human and geological history – the imbroglio of all imbroglios, as Latour might say (Latour 2010). Beck comes closest to recognising it: ‘If “the environment” only includes everything which is not human, not social, then the concept is sociologically empty. If the concept includes human action and society, then it is scientifically mistaken and politically suicidal’ (p. 255). Capitalist modernisation undermines its own foundations, he writes, before invoking climate change as *further proof* of the reflexive modernisation thesis. Faithful children of the

Enlightenment, Koch, Beck and Giddens are convinced that the answer to the climate crisis is a greater application of rationality. Yet one cannot help thinking that as the Earth stirs from its slumber and we see rising before us ‘an ornery beast which overreacts even to small nudges’ (Broecker 1995, 212–13), no amount of reason will pacify it.

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