

Resource reviews

ROOTS OF CLIMATE CHANGE DENIAL

Review article by David Selby

George Marshall (2014) *Don't Even Think About It: Why our brains are wired to ignore climate change*, New York: Bloomsbury

Naomi Klein (2014) *This Changes Everything: Capitalism vs. The climate*, London: Allen Lane

In *Don't Even Think About It*, George Marshall devotes very little space to the science of climate change. What science there is appears in a four-page add-on chapter at the very end of his 260-page book. His motive here is to underscore that the climate change challenge is not primarily technoscientific but rather psychological. The book is also remarkable in its lack of references, citations and footnotes (though he does provide a regularly updated online set of references for each chapter: <http://climateconviction.org/refs.html>), his clear intention being to convey that the conventional apparatus of academe is neither fit for purpose nor effective in bringing people to seriously confront climate change. For similar reasons, the reader is also spared graphs and diagrams. His thesis is that, across efforts to have climate change taken seriously, there has been too great a recourse to scientific data that alert our brains to the existence of the climate threat but are insufficient by way of stimulus that galvanises our emotional brains into action.

In a dizzying procession of thirty-nine short chapters, Marshall deals with the psychological barriers and processes that foster climate change avoidance and denial. He discusses *confirmation bias*, i.e. the tendency to cherry-pick and assimilate data that fit comfortably with our existing knowledge, attitudes, assumptions and beliefs. Climate change, being multivalent, resistant to neat categorisation, lacking a clear beginning and

end and lacking geographic specificity, readily lends itself to confirmation bias. He covers *availability bias*, i.e. the tendency of people to make up their mind on the basis of what evidence is most readily to hand. He looks at *pluralistic ignorance*, i.e. the process whereby false consensus is created within a group through individuals suppressing their views, resulting in the group overestimating adherence to its position (something that can affect climate activists as much as deniers and drive both further apart). He explores why we are so poorly evolved to deal with climate change in that our psychological evolution has attuned us to respond to short-term personal and/or group threat, abrupt threat, threat that leaves us repulsed or disgusted, and immediate danger. Climate change, Marshall says, more or less fails to match these long-conditioned threat prompts. ‘The psychological tools we have evolved to cope with previous challenges may turn out to be inappropriate for this threat’ (48).

But, for Marshall, of greatest relevance to our response to climate change is the emerging understanding in evolutionary psychology that we have two parallel information-processing systems that he, for purposes of brevity, calls the *rational brain* and the *emotional brain*. The former is analytical, logical, the source of definition and description. The latter draws on personal experience, is driven by emotion and communicates through story and image.

“Because the emotional brain is poorly suited to dealing with uncertain long-term threats of the kind that constitute climate change, the rational brain sometimes actively intervenes, using its abstract tools of planning and forward thinking ... And this is exactly what we do with climate change, both personally and culturally. The theories, graphs, projects, and data speak almost entirely to the rational brain. This helps us to evaluate the evidence and, for most people, to recognize that there is a major problem. But it does not spur us to action” (49-50).

To excite the emotional brain, the approach has to be multidisciplinary, going much beyond the rational brain redoubt of science. ‘The view held by every specialist I spoke too’, he adds, ‘is that we have still not found a way to effectively engage our emotional brains in climate change’ (*ibid*).

So, advocates for climate change action have to do everything they can to speak to both brains in tandem. Climate change understanding has to be fostered by translating data into forms that ‘will engage and motivate the emotional brain using the tools of immediacy, proximity, social meaning, stories and metaphors that draw on experience’ (*ibid*). There needs to be an alchemical turning of ‘base data into emotional gold’ (50). Marshall seeks congruence with what he recommends by telling stories. While there is little science as such there is a succession of stories and anecdotes emanating from encounters and interviews with scientists as well as with psychologists and other academics, climate skeptics, homespun-tone Tea Party activists, climate change and environmental activists, and corporate executives.

The book offers a wide array of examples of *cognitive dissonance* among politicians and corporate leaders whereby they rhetorically attest to the seriousness of climate change, on the one hand, while enacting policies inevitably increasing CO₂ emissions, on the other. It is equally strong in demonstrating cognitive dissonance with respect to climate change across our everyday utterances, decisions and actions. There is an important chapter for educators, titled ‘The Power of One’ that critically examines the emphasis that has been put by environmental organisations and champions over the last fifteen years on personal responsibility for climate change. Emphasis on personal behaviour change has often led to a critical mismatch between diagnosis of problem and proposed curative steps. Al Gore’s film, *An Inconvenient Truth*, posits climate change as an existential threat but, in a damp squib ending, offers changing light bulbs and driving somewhat less as fit-for-purpose responses.

The emphasis on individual action diverts attention from structural causes and takes the heat off government, business and the fossil fuel

companies. It is also bad, says Marshall, for both those accepting of climate change and those stubbornly resistant to its importance. For the former, one or more small good deeds (such as installing energy-efficient light bulbs) often allow them to transfer moral license to other areas (such as leaving the lights on much longer or rewarding ‘good behavior’ with vacation travel to the other side of the world). For the latter, emphasis on personal responsibility is perceived as a blame game on the part of those who would subvert their lives, so further fuelling their sectarian prejudices. There are big messages in all of this for classrooms around the globe where children are encouraged to measure their ecological footprint but structural aspects of climate change are left unaddressed.

It is only in the last three main chapters that Marshall proffers solutions to climate change avoidance and denial, the final chapter setting out some fifty ‘ideas for digging our way out of a hole’. In answering the question posed by his sub-title, he responds that we are ‘not inherently “wired” to ignore climate change’ and that the majority around the world accept it as a major threat and might well be prepared to support the necessary transformations but ‘currently feel isolated and powerless’. ‘Human history’, he observes, ‘provides so many examples of social movements that have overcome apparently impossible obstacles that we know we should be capable of meeting this challenge’ (230).

On the cover sleeve of *Don’t Even Think About It*, Naomi Klein describes Marshall as ‘one of the most interesting, challenging and original thinkers on the psychology of our collective climate denial’. Her own book, *This Changes Everything*, likewise focuses on the psychology of climate change denial but is primarily concerned with showing how the neoliberal capitalist agenda stokes denial and with revealing the machinations of rightwing think tanks, neoliberal lobby groups and corporate elites as they seek to debunk climate science and devitalise climate change action and activism.

Early in the book, Klein is at pains to underline the deep psychological underbelly of climate change denial. ‘We deny’, she writes, ‘because we fear that letting in the full reality of the crisis will change everything. And we are right’. The threat is such that it is hard to keep it in one’s head for long. Even the climate-concerned are susceptible to ‘on-again-off-again ecological amnesia’ (4). Denial has led to obfuscation and procrastination at the highest level. The annual UN climate summit which she describes as ‘the best hope for breakthrough on climate action’ has ‘started to seem less like a forum for serious negotiation than a very costly and high-carbon therapy session, a place for the representatives of the most vulnerable countries in the world to vent their grief and rage while low-level representatives of the nations largely responsible for their tragedies stare at their shoes’ (11). The situation has come to such a pass that a deep realisation is dawning that ‘our leaders are not looking after us’, that ‘we are not cared for at the level of our very survival’ (12). Even the globally agreed objective of not allowing surface temperatures to rise above 2.0°C – a level seen by many scientists as neither achievable nor livable with – has not been arrived at out of concern for the wellbeing of the global majority but rather to ensure minimisation of economic disruption.

So, Klein asks, ‘what is wrong with us?’ (18). The answer she regards as relatively simple: ‘we have not done the things that are necessary to lower emissions because those things fundamentally conflict with deregulated capitalism, the reigning ideology for the entire period we have been struggling to find a way out of the crisis’. Very little has been written, she asserts, about ‘how market fundamentalism has, from the very first moments, systematically sabotaged our collective response to climate change, a threat that came knocking just as the ideology was reaching its zenith’ (19). In the all-pervading neoliberal climate, the climate change and environmental movements have ‘wasted precious decades attempting to make the square peg of the climate crisis fit into the round hole of deregulated capitalism, forever touting ways for the problem to be solved by the market itself’ (20). In those precious decades, too, multinational corporations have been freed of constraints that would have curbed global

warming. At the heart of the matter is a choice between accepting levels of climate disruption that ‘will change pretty much everything about our world’ or, alternatively, changing ‘pretty much everything about our economy to avoid that fate’ (22). Tweaking the status quo is no longer an option. ‘The thing about a crisis this big, this all-encompassing’, she concludes, ‘is that it changes everything. It changes what we can do, what we can hope for, what we can demand from ourselves, and our leaders. It means there is a whole lot of stuff that we have been told is inevitable that simply cannot stand. And it means that a whole lot of stuff we have been told is impossible has to start happening right now’ (28).

The book is divided into three sections. The first, ‘Bad Timing’, explores the unhappy coincidence of the apogee of neoliberalism and the quickening onset of climate change. It looks at climate contrarian responses from within those espousing market fundamentalism (sometimes shockingly self-serving and cynical) and pinpoints reasons humanity is failing to rise to the climate moment, i.e. because of the inherent challenge to the hegemonic economic paradigm, the myths those in especially Western cultures feed on (e.g. separation from and superiority over nature), the threat ‘changing everything’ carries for what we see as our identity (‘I shop therefore I am’), and the fact that rising to the climate change challenge would lead to the dwindling then extinction of some of the richest and most politically powerful industries.

In the second section, ‘Magical Thinking’, Klein unpacks and deconstructs technical fixes for climate change including geo-engineering schemes that are manna to the neoliberal table. Some are eye-widening horror stories. She recounts attending a geo-engineering conference at a stately home in England at which ‘plausible and promising’ technologies for cooling the Earth going under the title of ‘Solar Radiation Management’ were considered. These involve deflecting or dimming the sun’s rays using space mirrors, spraying seawater into the sky to increase cloud cover and spraying sulfuric acid particles into the stratosphere. The entire three-day conference seemed oblivious to the fact that we do not understand the workings of the

Earth well enough to so play with fire. A simpler way forward, it would seem, would be to leave carbon in the ground.

A more hopeful tone pervades the third section, ‘Starting Anyway’, in which Klein deals with movements that are emerging in a variety of contexts and forms to challenge the neoliberal order. In a long chapter, for instance, she describes ‘Blockadia’, a new style of environmental activism in which people block the appurtenances of the extractive industries from entering natural regions that are under threat from fossil fuel extraction. What seems problematic about this section is that Klein fails to examine examples of no-growth, slow-growth and steady state economic systems and relationships that are emerging and being practiced in increasing numbers. Instead she focuses on local struggles against environmental damage and exploitation. The weighting is very much towards forms and struggles of resistance, important as they are, rather than processes of rebuilding.

The two books are essential reading for educators concerned with the threat of runaway and devastating climate change. For development educators as such – as well as those in contiguous fields – they highlight some important to-dos:

- Ensure that the message goes out that climate change is for cross-curricular treatment; it is neither the exclusive nor primary province of the science educator;
- Develop curricula and curriculum materials enabling learners to decode and deconstruct climate change avoidance and denial; in this regard determine what skills, knowledge, conceptual tools and lexicon learners need to unpack and challenge climate denial;
- Develop learning approaches that motivate the emotional brain such as climate justice stories, the sharing of personal experience, metaphorical learning activities, image-making, imaginative learning journeys, somatic learning, action learning experiences in the immediate community;

- Ensure that learning programmes and modules examine how the neoliberal growth agenda and mindset have fomented and quickened climate change and how it is holding back effective, fit-for purpose climate change action.

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