



Article

Future imaginings: organizing in response to climate change

Organization
20(5) 647–658
© The Author(s) 2013
Reprints and permissions:
sagepub.co.uk/journalsPermissions.nav
DOI: 10.1177/1350508413489821
org.sagepub.com



Christopher Wright

The University of Sydney Business School, Australia

Daniel Nyberg

Nottingham University Business School, UK

Christian De Cock

Essex Business School, University of Essex, UK

Gail Whiteman

Rotterdam School of Management, Erasmus University, Netherlands

Abstract

Climate change has rapidly emerged as a major threat to our future. Indeed the increasingly dire projections of increasing global average temperatures and escalating extreme weather events highlight the existential challenge that climate change presents for humanity. In this editorial article we outline how climate change not only presents real, physical threats but also challenges the way we conceive of the broader economic, political and social order. We asked ourselves (and the contributors to this special issue) how we can imagine alternatives to our current path of ever escalating greenhouse gas emissions and economic growth? Through reference to the contributions that make up this special issue, we suggest that critically engaging with the concept of social, economic and political imaginaries can assist in tackling the conceptual and organizational challenges climate change poses. Only by questioning current sanitized and market-oriented interpretations of the environment, and embracing the catharsis and loss that climate change will bring, can we open up space for new future imaginings.

Keywords

Climate change, futures, imaginaries, social imaginary significations

Corresponding author:

Christopher Wright, Discipline of Work and Organisational Studies, The University of Sydney, 2006 NSW, Australia.
Email: christopher.wright@sydney.edu.au

There is something almost surreal in researching and writing about climate change. Every day new, more dramatic data, studies and events create the sense that the ground under one's feet is shifting in fundamental, yet inconceivable ways. The taken-for-granted assumptions of our weather, climate and ecosystem are changing before our very eyes. When we first planned this special issue in 2010, Pakistan had just experienced the worst floods in living memory (directly effecting an estimated 20 million people), and Russia the worst heat-wave and drought it had ever experienced (resulting in the deaths of an estimated 56,000 people) (Trenberth, 2012). By 2011 the US was plunged into the most devastating drought in its history, juxtaposed by massive floods along the Mississippi which matched the 'great floods' of 1927 and 1933 (Masters, 2012). On September 16, 2012, Arctic summer sea ice melted to an all-time low—so significant a decline that scientists suggest that the Arctic Ocean may be ice-free in only a few decades (NSIDC, 2012). In writing this editorial we have been confronted with the powerful images of a flooded New York City in the aftermath of Hurricane Sandy (Barrett, 2012) and devastating bushfires during the hottest summer ever recorded in Australia (so hot that new colours needed to be found for weather charts to document the record heat) (Steffen, 2013).

Indeed, the increasing sophistication of climate science reinforces the catastrophic implications of 'business as usual' for a 21st century world. Projections of 4–6° Celsius global average temperature increases are estimated by the end of the century, with much of this warming locked in as early as 2020–2030 (New et al., 2011; The World Bank, 2012). Such scenarios paint an 'unimaginable' vision of large tracts of the Earth rendered uninhabitable, the collapse of global food production, the acidification of the oceans, significant sea-level rise and storms and droughts of growing intensity; a literal hell on earth (Hansen, 2009; Lovelock, 2009).

And yet despite these ecologically material threats (Whiteman and Cooper, 2011) tangible political action remains limited to rhetorical flourishes against a background of even greater fossil-fuel exploitation. While governments pledge reductions in greenhouse gas (GHG) emissions and businesses promote 'organizational sustainability' (Lash and Wellington, 2007), global GHG emissions have increased to record levels (IEA, 2012). There thus is a clear disconnect between our sensemaking of socio-economic activities and the established body of climate change science (Mann, 2012). This disconnect is also evident in the social sciences which have largely ignored the issue of climate change (Urry, 2011), or emphasized limited adjustments to the economic system through policies of 'mitigation' and/or 'adaptation' (Garnaut, 2008; Stern, 2007). This marginalization of the climate crisis is particularly evident in management and organization studies (Goodsall, 2008). Despite recent journal special issues (Okereke et al., 2012; Wittneben et al., 2012), the critical study of climate change and organizations remains at best a fringe topic within the social sciences academy.

The starting point of our call for papers for this special issue was the realization that climate change is largely depicted in popular and political discourse as an environmental or 'natural' problem that requires 'rational' responses based on scientific evidence. As Jasanoff (2010: 235) put it, climate change is thus imagined as 'an impersonal, apolitical, and universal imaginary ... projected and endorsed by science' and divorced from 'subjective, situated and normative imaginations of human actors'. Yet, we believe there is a need to view climate change as a social and politically embedded phenomenon, fundamentally linked to patterns of production and consumption and the ideological assumptions that underpin the economic system and our collective sensemaking processes. Indeed, we argue that climate change reveals how scientific knowledge interacts with the social imaginaries that stabilize modern societies. In particular, Western liberal democracies (and most developing economies) have embraced the capitalist imaginary of unlimited expansion of production and consumption (Castoriadis, 1987). Just as the successes contributing to this imaginary have been hailed as political, or even ideological, victories (Fukuyama, 1992), so the environmental consequences must also be constructed as political as well as ecologically material threats.

How then can we imagine alternatives to our current path? Clearly, the physical impacts of climate change, require new forms of ecological sensemaking from all of us (Whiteman and Cooper, 2011). As Bill McKibben (2013: 745) frankly states in this issue: ‘... our climate future doesn’t require much in the way of “imagining”. It’s already here, written down in black ink’. So why are we struggling to respond to the socio-economic and political changes being wrought by climate change? In this introductory essay, we outline some possible answers to this very basic question and reflect on the challenges such answers pose for social science in general, and organization studies in particular. In what follows we will highlight how the different contributions to this special issue relate and contribute to our understanding of future imaginings and climate change. The thread that pulls all these papers together is the realization that climate change presents not only a physical (and ecologically material) threat to our existence but also a conceptual challenge to the way in which we imagine that existence.

Imaginaries and social imaginary significations

One of the major reasons for the startling lack of action in responding to anthropogenic climate change, we believe, is the limited attention paid to the role of economic (Jessop, 2004), social (Gaonkar, 2002; Taylor, 2004) and political (Adams et al., 2012; Bottici, 2011) imaginaries. Climate science, however valuable and important it may be, in and by itself lacks the cultural reflexivity to examine such imaginaries (Yusoff and Gabrys, 2011). Gaonkar (2002) defines a social imaginary as an ‘enabling but not fully explicable symbolic matrix within which people imagine and act as world making collective agents’, and Jessop (2009: 344) refers to an economic imaginary as ‘the semiotic system that gives meaning and shape to the economic field’. As Adams et al. (2012: 5) suggest, a concern with imaginaries points ‘to the centrality, but also the indeterminacy, of meaning and signification, on the one hand, and the motivation for political action, on the other’. The scholars quoted here to a greater or lesser extent all refer back to Castoriadis’s (1987) magnum opus *The Imaginary Institution of Society* (De Cock, 2013). In this book Castoriadis explored how social imaginary significations are central to society as an imaginary institution and thus provide a dominant orientation for how we see, understand and act in that society. One such important social imaginary signification, for example, is the economic notion of progress—that with time, technology and entrepreneurialism we can solve any problem.

For Castoriadis (1987) our current social system holds together because for the majority of people it succeeds, through a set of social imaginary significations, in gaining their adherence to the effective, instituted ways of life of this society. Thus the social imaginary significations represented and embodied in technological optimism, corporate environmentalism, carbon markets and green consumption shape people’s sense of what is permissible, desirable and possible. They create and institutionalize a proper and meaningful world. The signification of progress simultaneously binds together our diverse activities of production and consumption and gives them directions—‘a drive for the society’ (Castoriadis, 1997: 336). However, these imaginary significations are not rational (the continuation of increased GHG emissions would dispute any conceptualization of rationality), nor real in a traditional sense (we can, for example, not touch or observe ‘progress’, ‘entrepreneurship’ and ‘technology’); they are creations of the social imaginary, shared and incorporated by individuals in society. Yet, they determine how we, as citizens, define what knowledge and information is, what relevance we give to it, and how we to respond to it. Thus, above and beyond the scientific evidence, to respond to climate change necessarily means to become engaged in struggles over society’s meaning and significations.

Failing to engage people's imagination and society's social imaginary significations, means people will simply adhere to 'the way things are'. No amount of extra scientific information about climate change can make an impact on their life planning and political choices if their imagination is not engaged, and if our sensemaking abilities are not actively engaged. Indeed, it is the power of our current capitalist imaginary that sustains the carbon extracting, distributing and producing industries, resulting in ever increasing GHG emissions. This social imaginary with its accompanying rhetoric of long-term economic growth, has monopolized the way that the social (and by extension the organizational) is conceived in dominant discourses of climate change. As Yusoff and Gabrys (2011: 517) suggest, it imagines 'humans as either drivers of climate change or recipients of its effects, rather than as a heterogeneous and differentiated social body with distinct desires, constraints, and imaginations'. This in turn has strengthened a particular set of responses to climate change 'based on individual calculation, technology and the development of new markets' (Szerszynski and Urry, 2010: 3). Such responses are structured around the perceived inevitability of capitalism and a market economy as the basic organizational structure of the social and economic order (Newell and Paterson, 2010; Swyngedouw, 2010).

Whilst the broader social science literature on climate change generally agrees that dealing with the problem of climate change is inevitable, few commentators take seriously Urry's (2010: 198) realization that 'to slow down, let alone reverse, increasing carbon emissions and temperatures requires the reorganization of social life, nothing more and nothing less', let alone Gilding's (2011) vision of a cathartic and fundamental disruption of our social and economic order (see also the interview with Paul Gilding, pp. 757–766). Indeed, influential academic commentators such as Giddens (2009) and Beck (2009) see climate change as a global humanitarian cause and envisage a largely peaceful process of reform in which the business and political elites adapt to the requirements of a new sustainable economy within current governance and moral structures. Often this kind of literature displays what Leahy et al. (2010: 864) call 'a kind of "boy scout" willingness to tell us how it can all be fixed'. This is perhaps best illustrated through the current arguments for geo-engineering solutions to mitigate the consequences of climate change (Hamilton, 2013; Klein, 2012). Here, humans as rational 'masters of the universe' are believed to be able to stabilize Earth systems without major unintended consequences to the atmosphere, the oceans, or biodiversity.

Of course social imaginary significations require strategic agency. As a growing literature has highlighted, the so-called 'climate change denial industry' has been pivotal in delaying and constraining regulatory moves to limit GHG emissions (Dunlap and McCright, 2011). Taking their lobbying blueprint from the tobacco companies (Oreskes and Conway, 2010), the fossil fuel industry has spent considerable money in questioning climate science and seeking to discredit climate scientists (Mann, 2012). These are themes that several of the contributors to this special issue point to. For example, Lê (2013) in her study of the Athabasca 'oil sands', notes how resource companies have no intention of halting the expansion of fossil fuel extraction and concomitant environmental destruction. Where development is seen as limited or curtailed this occurs only where the strategic risks of increased regulation or more profitable alternative activities are identified. Similarly, climate scientist Michael Mann (later in this issue, pp. 748–756) provides a telling example of the lengths climate change deniers, and their allies in conservative politics and the media, are willing to go to in attacking any challenges to business as usual. As McKibben (2012) notes, capturing the public debate and shaping the limits of government regulation is for many of these companies cheaper and less threatening to their business models than meaningfully responding to the challenges of climate change. Indeed, if we are to have a serious chance of limiting global warming to the average 2 degrees Celsius that scientists have argued is essential,¹ this would mean leaving 80% of existing fossil fuel reserves in the ground (Carbon Tracker Initiative, 2012)—within capitalist social imaginary significations, this 'irrationality' makes no sense.²

A more subtle illustration in this special issue of how capitalist social imaginary significations are instituted in terms of climate change is provided by Garland et al. (2013). They explore the role of visual imagery in corporate advertising for more 'climate-friendly' automobiles and through analysis of Toyota Prius car advertisements they show how a utopian, or 'hyperreal' future is presented as achievable through further consumption. In these advertisements our rational mastery over nature is demonstrated through visual imagery where, 'nature is not wild, and it has lost its fractal, non symmetrical patterns, and variations' (Garland et al., 2013: 688). These images re-emphasize a social imaginary in which we can control and tame nature through technological innovations, such as hybrid engines and office recycling. Moreover, the 'solution' to climate change is presented as further consumption, hailing individual choice and brand identities for a 'cleaner and greener' future. Indeed, corporations in embracing the concepts of 'corporate environmentalism' and 'organizational sustainability' create new subject positions for employees and citizens as ethical employees, ecopreneurs, responsible consumers and active citizens. Thus citizenship activities become seamlessly embedded in an imaginary, where 'the only solution to the problems of capitalism is more capitalism!' (Nyberg et al., 2013: 450).

Climate change deniers aside, even if there exists a solid majority among the population who believe that climate change is a real threat, what this means politically or organizationally is uncertain. Indeed, as the contribution by Levy and Spicer (2013) in this special issue demonstrates, different forms of social imagining have emerged in the popular and academic discourses surrounding climate change. Building on Jessop's (2004) concept of 'economic imaginaries', they identify four specific 'climate imaginaries' which they term, 'fossil fuels forever', 'climate apocalypse', 'techno-market' and 'sustainable lifestyle'. Importantly, they find that, while newer imaginaries such as the 'techno-market' and 'sustainable lifestyle' have developed a potential to challenge the traditional fossil fuel value regime, the 'fossil fuel forever' imaginary has maintained its dominance by best connecting with an existing value regime and 'with popular interests and identities, thereby having a broader resonance with people's everyday lives' (Levy and Spicer, 2013: 675). Their work thus highlights the way in which our future imaginings of climate change are tied to existing social discourses and material interdependencies in our economic system.

Indeed, as Swyngedouw (2010: 223) points out, the current mainstream response to climate change 'does not invite a transformation of the existing socio-ecological order but calls on the elites to undertake action such that nothing really has to change, so that life can basically go on as before'. He deplores this 'thoroughly depoliticized imaginary' (Swyngedouw, 2010: 219) which is not articulated within any specific political program or particular socio-ecological trajectories. Leahy et al.'s (2010: 864) interview and survey data empirically support this view in that they highlight 'that people can expect a collapse and yet have no intention to change their conduct to prevent it'. No drastic change to current economic arrangements is conceivable or possible. In short, climate change seems to exhaust the horizon of our aspirations and imaginations, causing a disconnect with our own pasts and futures.

Imaginings and imagination, future and past

Whilst a historical overview of the notions of imagination and imaginary would take us far beyond the scope of this special issue, it is still useful to tease out some important basic features we find in the literature. Of course, one notion of the imagination and imagining concerns utopian fancies, 'a dangerous and demobilizing escapism, and forms of collective or subjective delusion which perpetuate the status-quo' (Haiven and Khasnabish, 2010: ii–iii). The history and provenance we are interested in, however, is 'the ability to imagine the world, social institutions and human (and non-human) relationships *otherwise*' (Haiven and Khasnabish, 2010: ii–iii), as a means for emancipation

and thus critique of what is given, rather than subjection to it. In short, as a source of freedom rather than domination (Bottici, 2011). For example, for Sartre ([1940] 2004) the essential feature of the imagination is that human beings can imagine the world, or any part of it, being different from the way it is. Imagination is therefore inseparable from the notion of freedom:

For consciousness to be able to imagine, it must be able to escape from the world by its very nature, it must be able to stand back from the world by its own efforts. In a word, it must be free. (Sartre, 1940: 185)

As such, imagination makes present to our mind what is not in front of us and provides a counterweight to the actuality of the world.

A second key function of the imagination is to summon the absent into presence, to produce the 'irreal'. As Sartre (1940: 186) elaborates:

...every concrete and real situation of consciousness in the world is pregnant with the imaginary in so far as it is always presented as a surpassing of the real... ... there is always and at every moment the concrete possibility for it to produce the irreal...

In this process something determinate is cancelled, pushed into latency, or derealized in order to release the possibilities inherent in the given (Iser, 1993). As the faculty to make present what is potentially absent, the imagination is at the very basis of the possibility of action. It can make our present waver 'like the vibrations of a heat wave through which the massiveness of the object world—indeed of matter itself—now shimmers like a mirage' (Jameson, 1999: 38). By being mindful of all the other ways the world could be, the imagination always has one foot in the future. Indeed, the capacity to begin something truly new depends on our ability to imagine that things might as well be different from what they actually are, or at the very least less solid and determinate than they appear to be (Bottici, 2011).

Ranci re (2004: 41) picks up on this with his notion of the utopian imaginary as something purposefully 'irreal', 'a montage of words and images appropriate for reconfiguring the territory of the visible, the thinkable, and the possible'. Only where the imagination is not restrained by a concept (given by understanding) or the moral law (given by reason), can it alter our sense of what is real and communicable (Arendt, 1993). Too often people forget that our current socio-economic system came into being because human beings have imagined it, and thus they often feel powerless to intervene. Bringing the dimension of imagination to the fore would mean that society could begin to explicitly question its own institution and its established social imaginary significations. As Castoriadis (1997: 368) puts it:

... what is accomplished thereby is a *shattering of the closure* in and through which the simple living being *is*, an (always imperfect and unfinished) unsettling of one's own world as exclusive ... a being that explicitly puts into question the laws of its own existence and that henceforth *is* in and through this putting into question. (emphasis in original)

Such a move may then create real possibilities for constructing different socio-environmental futures.

It is our belief that the particular social imaginary significations associated with a capitalist growth machine have facilitated an evacuation of the temporal frame of the near future. Jameson (2002: 214) notes in this respect a thinning out of the sense of the 'past and future within the present', with the near future itself primarily something in which one can invest in, very much in the spirit of stock market futures. Such a neutralized future has become 'a kind of new actuarial colonization of the unknown' (Jameson, 2005: 228), with the present—'our way of life'—simply

stretching all the way to infinity, give or take a few new electronic gadgets (think iPhone 7!). Yet, such a future deprived of a proper imaginative dimension can offer us no alternatives, no ways of productively intervening in our current situation. What we are faced with, as Guyer (2007: 416) puts it rather eloquently, are ‘reconfigurations of elements that are well-known already, moved in to colonize particular phases and domains of individual and collective life that have been released from answerability to a more distant past and future’. Future imaginings, as we conceive them, would have to be able to go beyond what is hidden from our current perceptive and temporal frame. For such possible futures to be set in motion we would have to consider ‘imaginative possibilities to become otherwise’ (Yusoff and Gabrys, 2011: 519). In addition, such considerations inevitably involve reflections on social and intergenerational justice and morality, with virtual representatives of other generations able to press their claims against those of the living (Bull, 2012).

Whilst the theme of our special issue concerns ‘future imaginings’, this does not mean we intend to—or indeed can—exclude the past. On the contrary, if we truly want to take seriously the notions of individual imagination and social imaginaries we cannot remain beholden to traditional conceptions of history with its linear notions of historical accumulation and progress. Instead we have to expose and dissipate the illusion of continuity in history and endow the present with its abilities to become other than it is (Weber, 2008). In doing so, we follow Walter Benjamin and Hannah Arendt in their fragmentary historiography; an approach to history that enables us to recover the lost potentials of the past in the hope that they may find actualization in the present and thus keep open the possibility of what is yet to come. In this special issue, Gosling and Case (2013) provide an ideal illustration of the potential for re-appropriating the past to ‘see’ the future. They explore the allegorical parallels between the cultural collapse of indigenous Americans facing the catastrophe of European colonization and the contemporary threat of climate change. Through collective dreaming, a dystopian future was imagined as an alternative which arguably assisted in coming to terms with catastrophe where ‘existentially significant activities are no longer possible’ (Gosling and Case, 2013: 716). Their article raises the question of whether a similar form of collective dreaming might be applied to the current unfolding environmental and social catastrophe of climate change.

It is through such a critical reappropriation of the past that we can endow it with relevance and meaning for the present, and make it a source of inspiration for the future (De Cock et al., 2013). Benjamin (2002) thus suggests a presentation of history that ‘leads the past to bring the present into a critical state’ (N7a, 5). By critical state he understands the moment at which history emerges from the dream that it is simply an accumulation and record of progress. As he puts it pithily, ‘Definitions of basic historical concepts: Catastrophe—to have missed the opportunity. Critical moment—the status quo threatens to be preserved’ (Benjamin, 2002: N10, 2). For Benjamin the ‘catastrophe’ then is not something awaiting us in the future, but is simply the fact that everything goes on, and continues to go on, exactly as it does. It is through some kind of rupture in our modern time-consciousness that the past may ‘open up to us with unexpected freshness and tell us things no one has yet had ears to hear’ (Arendt, 1993: 94), thus allowing us to grasp our own present moment in terms of a critical situation in which we are able to intervene in a way that enables us to reclaim the near future. Arendt (1993: 241) also offers an intriguing link between the imagination and intergenerational and inter-geographic justice, as she believes that it is precisely the imagination that enables ‘being and thinking in my own identity where actually I am not.’³

The challenge and possibilities of climate change for studies of organization

We live in an organizational world where ‘Green’ has become good business, a need to be satisfied just like any other human need, and ‘Sustainability’ appears within the confines of traditional management textbooks. Indeed, much public discourse echoes this new vocabulary (Esty and Winston,

2006; Werbach, 2009). As such, concepts such as ‘Green’ and ‘Sustainability’ have followed the fate of so many originally powerful critiques of our socio-economic order, having been assimilated within the value regime of capitalism. This is a dynamic that Boltanski and Chiapello (2005: 27) have explored in the dialectic of capitalism and its critiques; describing at length capitalism’s extraordinary capacity of absorption, or what Latour (2004: 231) described as ‘the famed power of capitalism for recycling everything aimed at its destruction’. In relation to climate change for instance, some corporations uphold an illusion of compromise between the environment and the market by adapting the meaning of concepts such as ‘CSR’ and ‘sustainability’ to fit existing corporate agendas and expand the capitalist imaginary. Irrespective of individuals personal concerns about the environment or climate change (Wright and Nyberg, 2012; Wright et al., 2012), such corporate environmentalism can *only* occur where such practices generate further profit (Nyberg and Wright, 2012). There is thus limited space to challenge the underlying social imaginary significations of economic growth and profitability.

And yet, we believe climate change in its very materiality can offer a genuine challenge for organizational scholars which has moral, epistemic and representational dimensions. What is peculiar about the organizational challenge of climate change is that its most productive debates are concerned with possibilities that are both remote in time and space, and uncertain in outcome. It is therefore thanks to climate change that a body of thought is emerging which positions everyday actions in direct relation to their most distant consequences, and in the process places unprecedented demands on our moral imagination (Bull, 2012). There may exist a disconnect between traditional representations of climate change and our modern systems of experience and understanding, but climate change also offers possibilities through the discordances it produces in established ways of understanding the human condition. It forces us to confront a collective psychic predicament: ‘how can we think in a realistic way about something whose implications are unthinkable’ (Hoggett, 2011: 264)? As such it temporarily burdens the imagination with excess.

Hence, while our encounter with the ensemble of phenomena called ‘climate change’ may tell us things we do not wish to know about organizations, sensemaking and the way we organize, it may also open up opportunities for the field. Given the current path of escalating GHG emissions and with climate change developing faster and with fiercer consequences than predicted, it defies our imaginary of rational mastery and linear thinking. In short, nature is biting back (Barad, 2007). This questions the imaginary significations we cling to, with our continuous failures forcing us to make sense of the world differently (Gilding, 2011; Whiteman and Cooper, 2011; Whiteman et al., 2013). While this requires us to file away the effects of climate change in our normative economies of representation, it also conversely allows us to make ‘play of the world’ and preserve a fidelity to the ecologic materiality of events we are witnessing from afar or experiencing first hand. It also means we have to conceptualize climate change as an ethical, organizational and material problem that poses new questions and reconfigures established socio-economic imaginaries.

Climate change thus puts into question society’s organization, in the broadest and most profound sense of the word ‘organization’, shattering in part a certain representational-cognitive closure (Castoriadis, 1997). It is not enough that our research simply leads us to an awareness of ‘the state of the planet’; it has to produce simultaneously a double effect: ‘the readability of a political signification and a sensible or perceptual shock caused ... by that which resists signification’ (Rancière, 2004: 63). Or as Yusoff (2010: 94) put it more viscerally, ‘[C]limate change must force new images full of loss and rage that scream through our aesthetic orders’. In other words, we must allow the increasing disruption of the physical (material) experiences of climate change to truly disrupt us, and not simply become an accumulation of experience that mimics those that are sold in the marketplace; ‘to not look away and to acknowledge with that look both responsibility and

violence' (Yusoff, 2010: 89). Ranci re (and Yusoff) talk about a 'redistribution of the sensible' in this respect which may open up a 'generative space of unknowing'. In other words, a space for future imaginings.

Notes

1. However, leading climate scientist James Hansen has convincingly argued that this politically agreed 2 degree global warming limit is in itself 'a prescription for disaster' (Hansen and Sato, 2012: 21). Based on a study of the paleoclimatic records going back 50 million years, he and colleagues have demonstrated that CO₂ concentrations of 450 ppm (synonymous with 2 degrees of pre-industrial warming), are sufficient to initiate feedback mechanisms in the Earth's climate such as the thawing of permafrost and resulting methane emissions.
2. Some business groups have called for a more fundamental reimagining of the economic order. For example, the World Business Council for Sustainable Development (WBCSD), have provided more provocative commentaries. As their President, Peter Bakker (2012), recently argued: 'In Vision 2050 we firmly believe that *business can be the major provider of solutions for this multi-facetted crisis we face*. But let me be very clear, this vision cannot be reached by mere incremental change, it requires a *radical transformation* of everything: demand, production, and the measures of success' (emphasis in original).
3. It is of interest we believe to put the quote in its context: 'I form an opinion by considering a given issue from different viewpoints, by making present to my mind the standpoints of those who are absent; that is, I represent them. This process of representation does not blindly adopt the actual views of those who stand somewhere else, and hence look upon the world from a different perspective; this is a question neither of empathy, as though I tried to be or to feel like somebody else, nor of counting noses and joining a majority but of being and thinking in my own identity where actually I am not' (Arendt, 1993: 241).

References

- Adams, S., Smith, J. and Straume, I. (2012) 'Political Imaginaries in Question', *Critical Horizons* 13(1): 5–11.
- Arendt, H. (1993) *Between Past and Future: Eight Exercises in Political Thought*. New York, NY: Penguin Books.
- Bakker, P. (2012) *Speech at the Prince's Accounting for Sustainability Forum*, 13 December 2012. Retrieved from <http://www.accountingforsustainability.org/wp-content/uploads/2013/01/Peter-Bakker-speech-Dec-2012.pdf>
- Barad, K. (2007) *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC: Duke University Press.
- Barrett, P.M. (2012) 'It's Global Warming, Stupid', *Bloomberg Businessweek*, 1 November, 2012. Retrieved from <http://www.businessweek.com/articles/2012-11-01/its-global-warming-stupid#r=hp-ls>
- Beck, U. (2009) *World at Risk*. Cambridge: Polity Press.
- Benjamin, W. (2002) *The Arcades Project*, trans. H. Eiland and K. McLaughlin. Cambridge, MA: Harvard University Press.
- Boltanski, L. and Chiapello,  . (2005) *The New Spirit of Capitalism*, trans. G. Elliott. London: Verso.
- Bottici, C. (2011) 'From Imagination to the Imaginary and Beyond', in C. Bottici and B. Challand (eds) *The Politics of Imagination*, pp. 16–37. London: Birkbeck Law Press.
- Bull, M. (2012) 'What Is the Rational Response?', *London Review of Books* 34(10): 3–6.
- Carbon Tracker Initiative (2012) *Unburnable Carbon: Are the World's Financial Markets Carrying a Carbon Bubble?* London: CTI.
- Castoriadis, C. (1987) *The Imaginary Institution of Society*. Cambridge: Polity.
- Castoriadis, C. (1997) *The Castoriadis Reader*. Oxford: Blackwell.
- De Cock, C. (2013) 'Imagination and Organization: A Review of the Imaginary Institution of Society', *Scandinavian Journal of Management*, forthcoming.

- De Cock, C., O'Doherty, D. and Rehn, A. (2013) 'Specters, Ruins and Chimeras: Management and Organizational History's Encounter with Benjamin', *Management and Organizational History* 8(1): 1–9.
- Dunlap, R. E. and McCright, A. M. (2011) 'Organized Climate Change Denial', in J. S. Dryzek, R. B. Norgaard and D. Schlosberg (eds) *The Oxford Handbook of Climate Change and Society* pp. 144–60. Oxford: Oxford University Press.
- Esty, D. C. and Winston, A. S. (2006) *Green to Gold: How Smart Companies Use Environmental Strategy to Innovate, Create Value, and Build Competitive Advantage*. Hoboken, NJ: John Wiley & Sons.
- Fukuyama, F. (1992) *The End of History and the Last Man*. New York, NY: Free Press.
- Gaonkar, D. P. (2002) 'Toward New Imaginaries: An Introduction', *Public Culture* 14(1): 1–19.
- Garnaut, R. (2008) *The Garnaut Climate Change Review: Final Report*. Melbourne: Cambridge University Press.
- Giddens, A. (2009) *The Politics of Climate Change*. Cambridge: Polity Press.
- Gilding, P. (2011) *The Great Disruption: Why the Climate Crisis Will Bring on the End of Shopping and the Birth of a New World*. New York, NY: Bloomsbury Press.
- Goodall, A. H. (2008) 'Why Have the Leading Journals in Management (and Other Social Sciences) Failed to Respond to Climate Change?', *Journal of Management Inquiry* 17(4): 408–20.
- Gosling, J. and Case, P. (2013) 'Social Dreaming and Ecocentric Ethics: Sources of Non-Rational Insight in the Face of Climate Change Catastrophe', *Organization* 20(5): 705–721.
- Guy, J. I. (2007) 'Prophecy and the Near Future: Thoughts on Macroeconomic, Evangelical, and Punctuated Time', *American Ethnologist* 34(3): 409–21.
- Haiven, M. and Khasnabish, A. (2010) 'What Is the Radical Imagination? A Special Issue', *Affinities* 4(2): i–xxxvii.
- Hamilton, C. (2013) *Earthmasters: Playing God with the Climate*. Sydney: Allen & Unwin.
- Hansen, J. (2009) *Storms of My Grandchildren: The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity*. New York, NY: Bloomsbury.
- Hansen, J. and Sato, M. (2012) 'Paleoclimate Implications for Human-Made Climate Change', in A. Berger, F. Mesinger and D. Sijacki (eds) *Climate Change*, pp. 21–47. Springer Vienna.
- Hoggett, P. (2011) 'Climate Change and the Apocalyptic Imagination', *Psychoanalysis, Culture and Society* 16(3): 261–75.
- Garland, J., Huising, R. and Struben, J. (2013) "'What if Technology Worked in Harmony with Nature?'" Imagining Climate Change Through Prius Advertisements', *Organization* 20(5): 679–704.
- IEA (2012) 'Global Carbon-Dioxide Emissions Increase by 1.0 Gt in 2011 to Record High', *International Energy Agency News*, 24 May, 2012. Retrieved from <http://www.iea.org/newsroomandevents/news/2012/may/name,27216,en.html>
- Iser, W. (1993) *The Fictive and the Imaginary. Charting Literary Anthropology*. Baltimore, MD and London: Johns Hopkins University Press.
- Jameson, F. (1999) 'Marx's Purloined Letter', in M. Spinker (ed.) *Ghostly Demarcations: A Symposium on Jacques Derrida's Specters of Marx*, pp. 26–67. London: Verso.
- Jameson, F. (2002) *A Singular Modernity: Essay on the Ontology of the Present*. London: Verso.
- Jameson, F. (2005) *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso.
- Jasanoff, S. (2010) 'A New Climate for Society', *Theory, Culture and Society* 27(2–3): 233–53.
- Jessop, B. (2004) 'Critical Semiotic Analysis and Cultural Political Economy', *Critical Discourse Studies* 1(2): 159–74.
- Jessop, B. (2009) 'Cultural Political Economy and Critical Policy Studies', *Critical Policy Studies* 3(3–4): 336–56.
- Klein, N. (2012). 'Testing the Waters', *The New York Times*, October 27, 2012. Retrieved from <http://www.nytimes.com/2012/10/28/opinion/sunday/geoengineering-testing-the-waters.html>
- Lash, J. and Wellington, F. (2007) 'Competitive Advantage on a Warming Planet', *Harvard Business Review* 85(3): 94–102.

- Latour, B. (2004) 'Why Has Critique Run out of Steam? From Matters of Fact to Matters of Concern', *Critical Inquiry* 30(2): 225–48.
- Lê, J. (2013) 'How Constructions of the Future Shape Organizational Responses: Climate Change in the Canadian Oil Sands', *Organization* 20(5): 722–742.
- Leahy, T., Bowden, V. and Threadgold, S. (2010) 'Stumbling Towards Collapse: Coming to Terms with the Climate Crisis', *Environmental Politics* 19(6): 851–68.
- Levy, D. and Spicer, A. (2013) 'Contested Imaginaries and the Cultural Political Economy of Climate Change', *Organization* 20(5): 659–678.
- Lovelock, J. (2009) *The Vanishing Face of Gaia: A Final Warning*. New York, NY: Basic Books.
- Mann, M. (2012) *The Hockey Stick and the Climate Wars: Dispatches from the Front Lines*. New York, NY: Columbia University Press.
- Masters, J. (2012) '2011's Billion-Dollar Disasters: Is Climate Change to Blame?', *Weatherwise* 65(2): 12–19.
- McKibben, B. (2012) 'The Reckoning', *Rolling Stone* 1162: 52–58, 60.
- McKibben, B. (2013) 'Don't Imagine the Future—It's Already Here', *Organization* 20(5): 745–747.
- New, M., Liverman, D., Schroder, H. and Anderson, K. (2011) 'Four Degrees and Beyond: The Potential for a Global Temperature Increase of Four Degrees and Its Implications', *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369(1934): 6–19.
- Newell, P. and Paterson, M. (2010) *Climate Capitalism: Global Warming and the Transformation of the Global Economy*. Cambridge: Cambridge University Press.
- NSIDC. (2012) 'Arctic Sea Ice Extent Settles at Record Seasonal Minimum', *National Snow and Ice Data Center*, 19 September, 2012. Retrieved from <http://nsidc.org/arcticseaicenews/2012/09/arctic-sea-ice-extent-settles-at-record-seasonal-minimum/>
- Nyberg, D., Spicer, A. and Wright, C. (2013) 'Incorporating Citizens: Corporate Political Engagement with Climate Change in Australia', *Organization* 20(3): 433–453.
- Nyberg, D. and Wright, C. (2012) 'Justifying Business Responses to Climate Change: Discursive Strategies of Similarity and Difference', *Environment and Planning A* 44(8): 1819–35.
- Okereke, C., Wittneben, B. and Bowen, F. (2012) 'Climate Change: Challenging Business, Transforming Politics', *Business and Society* 51(1): 7–30.
- Oreskes, N. and Conway, E. M. (2010) *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. New York, NY: Bloomsbury Press.
- Rancière, J. (2004) *The Politics of Aesthetics: The Distribution of the Sensible*, trans. G. Rockhill. London: Continuum.
- Sartre, J.-P. ([1940] 2004) *The Imaginary: A Phenomenological Psychology of the Imagination* London: Routledge.
- Steffen, W. (2013) *The Angry Summer*. Canberra: Climate Commission.
- Stern, N. (2007) *The Economics of Climate Change: The Stern Review*. Cambridge: Cambridge University Press.
- Swyngedouw, E. (2010) 'Apocalypse Forever?: Post-Political Populism and the Spectre of Climate Change', *Theory, Culture and Society* 27(2/3): 213–32.
- Szerszynski, B. and Urry, J. (2010) 'Changing Climates: Introduction', *Theory, Culture and Society* 27(2/3): 1–8.
- Taylor, C. (2004) *Modern Social Imaginaries*. Durham, NC: Duke University Press.
- The World Bank (2012) *Turn Down the Heat: Why a 4°C Warmer World Must Be Aoided*. Washington, DC: The World Bank.
- Trenberth, K. (2012) 'Framing the Way to Relate Climate Extremes to Climate Change', *Climatic Change* 115(2): 283–90.
- Urry, J. (2010) 'Consuming the Planet to Excess', *Theory, Culture and Society* 27(2/3): 191–212.
- Urry, J. (2011) *Climate Change and Society*. Cambridge: Polity Press.
- Weber, S. (2008) *Benjamin's Abilities*. Cambridge, MA: Harvard University Press.
- Werbach, A. (2009) *Strategy for Sustainability: A Business Manifesto*. Boston, MA: Harvard Business Press.

- Whiteman, G. and Cooper, W. H. (2011) 'Ecological Sensemaking', *Academy of Management Journal* 54(5): 889–911.
- Whiteman, G., Walker, B. and Perego, P. (2013) 'Planetary Boundaries: Ecological Foundations for Corporate Sustainability', *Journal of Management Studies* 50(2): 307–36.
- Wittneben, B. B. F., Okereke, C., Banerjee, S. B. and Levy, D. L. (2012) 'Climate Change and the Emergence of New Organizational Landscapes', *Organization Studies* 33(11): 1431–50.
- Wright, C. and Nyberg, D. (2012) 'Working with Passion: Emotionology, Corporate Environmentalism and Climate Change', *Human Relations* 65(12): 1561–87.
- Wright, C., Nyberg, D. and Grant, D. (2012) "'Hippies on the Third Floor": Climate Change, Narrative Identity and the Micro-Politics of Corporate Environmentalism', *Organization Studies* 33(11): 1451–75.
- Yusoff, K. (2010) 'Biopolitical Economies and the Political Aesthetics of Climate Change', *Theory, Culture and Society* 27(2/3): 73–99.
- Yusoff, K. and Gabrys, J. (2011) 'Climate Change and the Imagination', *Wiley Interdisciplinary Reviews: Climate Change* 2(4): 516–34.

Author biographies

Christopher Wright is Professor of Organisational Studies at the University of Sydney Business School. His research focuses on the diffusion of management knowledge; identity, emotion and justification in organizational life; and the role of consultancy in organizational change. He is currently researching how businesses and managers interpret and respond to climate change. *Address:* The University of Sydney Business School, Sydney, NSW, 2006 Australia. Email: christopher.wright@sydney.edu.au

Daniel Nyberg is Professor of Sustainability in the International Centre for Corporate Social Responsibility (ICCSR) at Nottingham University Business School. His research focuses on political activities in and by organizations. He has pursued this interest in projects on how organizations respond to climate change, adaptations of sickness absence policies and the implementation of new technologies. *Address:* Nottingham University Business School, Nottingham NG8 1BB, UK. Email: daniel.nyberg@nottingham.ac.uk

Christian De Cock is Professor of Management at the University of Essex. He has a long-standing interest in the role of the arts, literature and social theory in thinking about organization. His current research concerns the imaginary institution of organizations. *Address:* Essex Business School, University of Essex, Colchester CO4 3SQ, UK. Email: cdc@essex.ac.uk

Gail Whiteman is Professor of business-society management and holds the Chair in Sustainability and Climate Change at Rotterdam School of Management at Erasmus University. Her academic network spans many disciplines including the natural sciences, and she is also active in innovative business sustainability training and education. Her current research focuses on tipping points in key planetary boundary processes and a project to evaluate the economic costs of lost climate services from a melting Arctic. *Address:* Rotterdam School of Management, Erasmus University, Rotterdam 3062 PA, Netherlands, gwhiteman@rsm.nl