

# Contesting Capitalist Sorcery: 'Peak Everything' as Apocalyptic Prophecy

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#### Abstract

This position article reflects on the ambiguous relationship between discourses of apocalypse and collapse, focusing on some contemporary writers who are concerned with theorising the unfolding crises (climatological, ecological, energy, economic and resource) and consequent collapse of global industrial civilisation. First, it is asked whether collapse theorists can be characterised as apocalypticists, particularly in so far as they tend to resist utilising the language of eschatology, soteriology and theology, endeavour to advance a robust evidential and scientifically modelled basis for their claims and stress that collapse is (probably) not the end of the world and/or human history. Secondly, through a reading of Pignarre and Stengers' Capitalist Sorcery (2011), an argument is advanced that collapse theorists ought to embrace the rhetoric of apocalypticism. It is noted that, while the end of capitalism has become notoriously difficult to imagine, Pignarre and Stengers elaborate a new pragmatics, wherein activism might be sustained beyond singular socio-political events, albeit only once one begins to think that 'another world is possible.' The proposal advanced here is for collapse theorists to risk a pragmatic apocalypticism specifically as a means of messaging collapse more effectively, affecting socio-political change and resisting the worst possible outcomes of collapse.

Key words: apocalypse, capitalism, collapse, pragmatic, sorcery.

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In this short position article a pragmatic apocalypticism is proposed and, more specifically, a defence of the rhetoric of apocalyptic prophecy is offered as a politically effective resource/technique for challenging what Philippe Pignarre and Isabelle Stengers have evocatively termed 'capitalist sorcery' (2011), or what might be more expansively referred to as the crisis of civilisation.<sup>1</sup> The article begins with a consideration of a certain opposition to apocalypticism, then proceeds to consider some

<sup>&</sup>lt;sup>1</sup> This article was originally presented as a paper at the conference *Don't Panic! The Apocalypse in Theory and Culture* organised by *Skepsi* and held at the University of Kent 25–26 May 2012.



distinctions between the crisis of civilisation, considered here under the heading of collapse theory, and the meaning of apocalypse. The article pivots on a difference in attitudes towards collapse and apocalypse and argues that the language of the apocalypse may warrant adoption, *or rather be pragmatically risked*, by those who theorise imminent collapse, principally in order to acquire more effectively political purchase and achieve some of their aims; aims which typically entail mitigating or simply surviving the worst possible outcomes of collapse.

It should be noted that collapse, in so far as many civilisations of the past have undergone it, is a phenomenon of some significant scholarly interest, ranging from specialist works, such as Joseph Tainter's (1980) The Collapse of Complex Societies, to the more popularist, such as Jared Diamond's (2005) Collapse: How Societies Choose to Survive or Fail. A brief definition of collapse drawn from Tainter and Diamond is deployed here. It is for Tainter 'a rapid, significant loss of an established level of sociopolitical complexity' (1980: 4), while, for Diamond, it is 'a drastic decrease in human population size and/or political/economic/complexity, over a considerable area, for an extended time' (2005: 3). Both Tainter and Diamond measure the timeframe of a civilisation's collapse in decades, adding that the fall of civilisations such as the Mayan and the Roman occurred where there were no immediate competitors to fill the vacuum left by their passing. Contemporary collapse theorists make the further point that, in the capitalist organised, socio-politically networked and technologically interconnected world of the twenty-first century, civilisation is, for all systemic purposes, global and singular in nature. Collapse, therefore, when it occurs, will also be global in scope. Whether such a collapse warrants the description apocalyptic is the subject of what follows.

### 1. Apocalypse Not

In *Apocalypse Not* the social commentator and writer John Michael Greer genealogically deconstructs what he terms the apocalypse meme (2011: xvii–xix). Greer's stated mission here is to highlight how apocalyptic myths and narratives have a history. By drawing on the scholarship of the historian of religions Norman Cohn, Greer makes the point that apocalyptic predictions of global cataclysms, transformations or end of the world scenarios, have, since the time of Zoroastrianism, repeatedly been made and then failed to occur. Delivering an inductively-framed argument, he proposes that one should place no trust in modern or future versions of apocalypticism precisely because they are no different in kind from their ancestors. It makes no difference whether one favours a



Christian Tribulation, a Transhumanist Singularity or a New Age interpretation of the Mayan Long Count Calendar, apocalyptic prophecies have always failed; therefore, so too will these. Greer clearly wishes to provide a tonic for the modern anxieties and also false hopes that surround apocalyptic narratives. He maps the fate of many past apocalyptic beliefs, ideologies and movements and the resulting cognitive dissonance of their failures. His point is fairly simple: step away from the fantasies of supernatural or transcendent apocalyptic events.

However, anyone that is familiar with Greer's broader corpus of writings will appreciate that there is a possible tension or inconsistency at work in his argument that requires resolution. That is, while Greer is a fierce critic of apocalypticism in all of its diverse forms, he is also one of a growing community/movement of activists, scholars and writers whose primary commitments and energies are directed towards theorising the forthcoming collapse of civilisation and the unfolding ecological catastrophe that we are living through (Greer 2008). Sometimes labelled, dismissed and/or ridiculed as Doomers or Collapseniks, these theorists take their lead from such works as Meadows et al.'s Limits to Growth (1972), William Catton's Overshoot (1982), Tainter's The Collapse of Complex Societies (1980) and Bill McKibben's The End of Nature (1989). They are, first and foremost, concerned with thinking through the consequences of an invidious network of material, political and social limits, processes and trends that are both immanent in the world and temporally imminent or ongoing. These encompass, but are certainly not limited to: economic collapse (to cite Richard Heinberg's latest work, '[e]conomic growth as we have known it is over and done with' (Heinberg 2011: 1)), energy scarcity (most notably peak oil and the decline of other non-renewable energy sources), climate change and global warming (a 4°C to 6°C hotter world by end century), human overpopulation (likely over 9 billion people by 2050), resource scarcity (food and water shortages and ultimately 'peak everything' non-renewable), ecological degradation and the sixth mass extinction of species. The primary messaging of the collapse theorists is fairly explicit and unified: (1) humanity and the world are confronted with multiple crises; (2) these crises are systemic, interrelated and global in nature and scope; (3) they do not permit any easy solutions (that is, they present predicaments and dilemmas, rather than problems that

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are open to simple technofixes or political interventions); (4) there will be a 'long descent' (Greer 2008) or a 'long emergency' (Kunstler 2006) as these crises unfold.<sup>2</sup>

Unfortunately, as one of the leading collapse theorists, Dmitry Orlov, noted recently, 'collapse is the elephant in the room, and that the various specialists [e.g. on late night news and talk shows] are the blind men debating whether it is like a snake or a tree or a wall or a stick or a rope' (2012). For the most part, it seems, the world is either blind to or else in denial about the possibility of collapse; while an apocalypse is an altogether more believable an option for most people. At its most accessible, collapse lies on the fringes of the cultural imagination of the industrialised, neo-liberal nations of the world; while, at its epistemic worst, collapse is unthinkable, existing far beyond the available conceptual frameworks and stories of human progress and limitless economic growth. An apocalypse, though, as Greer is at pains to highlight, is a recurrent and potent feature of the cultural imagination of those selfsame 'modern' sovereign states. A question then presents itself: what is the difference between them, collapse vis-à-vis apocalypse? Can collapse be framed as an apocalypse? Ought it to be? For many people, the said pachyderm in the room would certainly warrant the description apocalyptic. But collapse theorists, such as Greer, are not well-disposed towards the title. Why?

### 2. Predicting Collapse, Prophesising Apocalypse

Are there relevant differences between predicting the collapse of civilisation and prophesising an approaching apocalypse? An easy answer is that, yes, there are a number of explanatory and analytic possibilities. Differences can be deployed by the collapse theorists themselves, by the advocates and members of various apocalyptic narratives and groups, and by the scholarly perspectives of a range of disciplines and academic specialisms. For our purposes, though, it is notable that the collapse theorists are eager to draw some distinctions. First, they tend to advance a robust evidential and theoretical basis for their claims, an approach that is firmly grounded in the physical and social sciences. For example the peak oil community, on which a significant portion of collapse analyses draw, rests on the research of geophysicists, chemists and other earth scientists; while their global warming and ecological degradation predictions draw on a wealth of data and projections from climate scientists and ecologists. These findings, in turn, have been judged and defended in terms of their positive track record. The ground-breaking

<sup>&</sup>lt;sup>2</sup> A good summation of these crises and their systemic nature can be found in Nafeez Mosaddeq Ahmed's *A User's Guide to the Crisis of Civilization: And How to Save It* (2010).



computer modelling of Dennis and Donella Meadows and Jorgen Randers' *Limits to Growth* (1972), for example, has proved remarkably accurate (despite the storm of controversy it attracted),<sup>3</sup> as have the predictions of peak oil production in countries around the world derived from the pioneering work of M.K. Hubbert. More recently, one might have asked whether the 2008 economic crisis was a 'Black Swan' event as many neo-classical economists claimed. Not at all, reply the collapse theorists. Citing a number of commentators and academics, such as the anti-economist Steve Keen (2011), who predicted these events with some accuracy, they view such events as further evidence of inevitable systemic collapse (see also Heinberg 2011; Martensen 2011). Their claims, they assert, are based on good science and well-entrenched, immanent material, political and social processes, trends and realities, not guesswork, a divine, trans-empirical revelation, supernaturalism or an ontological rupture in fabric of the world. The collapse theorists might hope or wish that they are wrong, but they tend to live with the conviction that the evidence and their models indicate otherwise.

Secondly, it is the eschatological, soteriological and theological language that accompanies and defines much apocalypticism that collapse theorists such as Greer tend to oppose most staunchly. At its heart, Greer argues that the apocalypse meme has always recognised and responded to the point that the things of the world are finite and perish. But it does so by denying that humanity need ultimately be troubled by this. In this sense, apocalypse typically means a transcendence of the world for humanity (Greer 2011: 169– 78). The world ends — yes — but the eschatos, the last times, entail an otherworldly salvation for humankind (or at least for some: the elect, the enlightened, the raptured or those who merge with the AIs at the Singularity). The collapse theorists agree with the apocalypticists here that the crisis of civilisation will not necessarily mean the end of humanity, except in the worst cases scenarios of runaway climate change, but what they do deny is that *the* world ends. The biosphere will persist and human history will continue as one element of the natural history of the planet. The collapse theorists are predicting the end of a world: a world of plentiful energy, technological progress, ever increasing comfort and unlimited economic growth. But humanity will certainly have to continue living in this world. The world is not ontologically or cosmologically completed or enfolded in some divine conflagration, final judgement, omega point or evolutionary

<sup>&</sup>lt;sup>3</sup> For some discussion of the controversy, see for example Ugo Bardi's *The Limits to Growth Revisited* (2011) and Donella Meadows, Jorgen Randers and Dennis Meadows' *Limits to Growth. The 30-Year Update* (2010).



telos. The world will continue, only it is likely to be a hotter and wetter world, a world with reduced biodiversity and far fewer non-renewable resources. This will likely be a world of extreme weather events, mass migrations, resource wars and starvation, not a final battle with the forces of the Antichrist, sentient machines or plagues of flesh-eating zombies. It is perhaps significant (*qua* surprising or puzzling), then, that predictions of collapse have proved to be remarkably less palatable and thinkable for the majority of the population than the many variations of the apocalypse meme, which propose such end of *the* world scenarios. As Fredrik Jameson (2003), Slavoj Žižek (2010) and Mark Fisher (2010) have each wryly observed: *it seems far easier to imagine the end of the world than the end of capitalism*. Paralleling Francis Fukuyama's end of history thesis (1992), capitalism has become the imaginative and historical horizon for human socio-political and economic possibilities. Only apocalyptic end of the world scenarios, with their ancient religious and theological resources and their tendency to locate human salvation outside or beyond the immanent/material plane of human history, seem to retain some potency as imaginative alternatives to the inconceivable end of capitalism.

Where then should we place our own alliances? Is the word apocalypse appropriate only if the world is destroyed? Does one need a supernaturalism, a hierophany or else a transcendent event/rupture/rapture or revelation for the word apocalypse to be legitimate? It is far from certain that one does. The green activist and writer Derrick Jensen begins his own meditation on the problem of civilisation, *Endgame*, by voicing his own resistance to using the world apocalypse, until, that is, a fellow activist pushed the point:

What will it take for you to finally call it an apocalypse? The death of the salmon? Global warming? The ozone hole? The reduction of krill populations off Antarctica by 90 percent, the turning of the sea off San Diego into a dead zone, the same for the Gulf of Mexico? How about the end of the great coral reefs? The extirpation of two hundred species per day? Four hundred? Six hundred? Give me a specific threshold [...] a specific point at which you'll finally use that word. (Jensen 2006: 3).

It seems an eminently reasonable question to ask: when precisely is the threshold of an apocalyptic event horizon crossed? Does it require annihilation, extinction, omnicide or some other radical transformation of a world's being and/or identity to qualify? Must it, following Lyotard, be a solar apocalypse (1991: 9)? Or, following Ray Brassier, is it a cosmic extinction that demarcates the nihilistic absolutisation of the apocalyptic and the limits of thought (2007)? Alternatively, might a more exotic paradigm shift, tipping point or transition between actual and possible worlds warrant the epithet apocalyptic? The point I want to make here is that Greer and a number of other collapse theorists are



perhaps too confident and hasty in their rejection of the language and rhetoric of apocalypse. The boundary conditions for what counts as apocalyptic are not settled and they have arguably been set too high. At minimum, there may be a pragmatic rationale to embrace the language of the apocalyptic.

A noteworthy recent case of shifting attitudes to apocalyptic rhetoric is that of climate scientists. For many years climate scientists have, as Joe Romm of Climate Progress.org notes, consistently underplayed the risks and dangers of climate change, and this failure of communication has largely been explicable in terms of their general scientific caution/virtue about not stating their results with complete confidence, a grossly mistaken belief that governments would respond appropriately to the facts as they became available and out of a general 'fear of paralysing the public' with those self-same facts. Moreover, this scientific hesitancy at predicting and communicating these future dangers has coexisted alongside two countervailing and well-established media myths: (1) that doomsday messages are being constantly repeated in the media, and (2) that their use is not an effective strategy to adopt to effect change (Romm 2012a). Romm, though, contests both of these claims and counters that an analysis of the climate messages that the public are exposed to in the US mainstream media will quickly reveal that: 'It ain't doomsday. Quite the reverse, climate change has been mostly an invisible issue for several years and the message of conspicuous consumption and business-as-usual reigns supreme' (Romm 2012a). More importantly, the repeated messaging of an appropriately framed emotive subject may be precisely the right strategy to adopt to promote a shift in public opinion and behaviour, just as it is within the domains of advertising, marketing, popular culture and politics. Unfortunately, though, it is only very recently that significant numbers of climate scientists have started to publicly use the language of 'calamity,' 'catastrophe' and 'risk to the collective civilization' (Romm 2012b).

Why are climate scientists now starting to communicate in the register of apocalypse? Because the phenomenon under review constitutes a special kind of risk, an existential and global risk, and increasingly because it is recognised that the point at which one could speak with sufficient certainty to silence the majority of deniers and sceptics would likely be far too late. This is a very similar situation to the one the collapse theorists face with their disavowal of the rhetoric of apocalypse; and, indeed, anthropogenic climate change is one crucial element of the converging crises that they consider in their predictions. Therefore, the time may be near for them to embrace the

language of the apocalyptic, at minimum as a pragmatic strategy, or a speculative hypothesis to be tested, but perhaps especially because apocalypticism can be a spur to social and political action.

### 3. 'Another World is Possible': Towards a Pragmatic Apocalyptic

We turn here for support to Philippe Pignarre and Isabelle Stengers' (2011) Capitalist Sorcery: Breaking the Spell. Taking their lead from the protests in Seattle 1999, they are concerned to develop and elaborate a new pragmatics, wherein activism might be sustained beyond singular socio-political events, albeit only once one begins to think that 'another world is possible.' They ally themselves here with Marx, theirs is a pragmatic Marx, and they are not weighed down by questions of authentic readings. As they note, '[t]o inherit a pragmatic' Marx is not to pretend to inherit the 'true Marx'. Rather, '[i]t is a pragmatic risk to be evaluated by its consequences' (Pignarre and Stengers 2011: 17). While agreeing with the previous pro-Marxist commentators, Jameson, Fisher and Žižek, that the end of capitalism has become difficult *per impossible* to imagine, they propose a novel re-conceptualisation of capitalism, specifically as a system that depoliticises the decisions of the state. For them, capitalism exists as 'something the very functioning of which kills politics' (Pignarre and Stengers 2011: 15). It functions by producing 'infernal alternatives', choices that seem to be no choice at all ("of course the banks must be saved", "of course you must pay for it ... don't you want growth?"). But there is certainly no coordination or structure at work here, only the labour of many tens of thousands of minions; and it is the efforts of these minions, 'on a very small scale', of which the 'infernal alternatives are an overall result' (Pignarre and Stengers 2011: 31). Capitalism is not some supremely rational machine or mechanism, rather the reverse, Pignarre and Stengers liken it to a 'system of sorcery without sorcerers (thinking of themselves as such)' (2011: 40). Capitalism is not sustained and produced primarily by an obfuscatory ideology or alienation; it operates primarily through a culture of 'spells', 'capturing' us, immobilising thinking. It is affective, energetic and irrational, just as much as it is social, systemic and economic. The way to break out, Pignarre and Stengers propose, is with 'counter-magics' that can open spaces for thought, new possibilities and alternative worlds.

The use of the term sorcery to characterise the functioning of capitalism is crucial to Pignarre and Stengers' analysis. Sorcery is no mere metaphor here but takes seriously the manner by which one might be enthralled, enslaved and held by a system of 'infernal



alternatives'; it is a means of thinking one's vulnerability to capitalism in ways that permit one to both encounter it and resist it. What must be avoided here is a simple conflation of sorcery with the supernatural or something that has been overcome in the past. They note the long history of that which:

manages to produce a coincidence between enslavement, the putting into service, and subjection, the production of those who do freely what they are meant to do. It is something whose frightening power and the need to cultivate appropriate means of protection against is known by the most diverse of peoples, except us moderns. Its name is sorcery (Pignarre and Stengers 2011: 35).

In order to think otherwise than capitalism, one must understand one's capture within this sorcerous system and the need for protection from the hold of the spells it deploys. In so doing, Pignarre and Stengers consider a heterogeneous mix of examples of individuals and collectives that have demonstrated some successes in their local encounters with capitalism. Their key point is that a political pragmatics, a pragmatic Marxism, might bypass the tired old agency vs. structure frameworks of understanding and affect a transformation of the world. Moreover, an embrace of the apocalyptic rhetoric of prophecy may operate especially well within this context, at least in certain struggles; the aim is for an affect that can open up thinking and praxis, as the merely or purely rational will not suffice. That is, the language of apocalypse (another world is not only possible but imminent) and its possible affects (perhaps most notably fear, although Pignarre and Stengers consider such evocative alternatives as *yearning*) may be precisely what is needed to create openings for political change in periods of existential risk and/or social paralysis.

One might quickly denounce this strategy because of the dangers of deploying fear to motivate political changes or interventions. Too easily can one point towards the consequences of a culture and a politics of fear that can legitimate warfare abroad and various forms of repression at home, elevate social anxieties over security and promote a distrust of otherness and strangers (Altheide 2005; Furedi 2002; Gardner 2009; Glassner 2009). In opposition to this, though, one can also stress the evolutionary and survival value of emotions such as fear. Moreover, it is notable that one of the major obstacles to motivating people to engage with abstract and temporally distant threats, such as global warming, peak oil/energy, resource scarcity, species extinctions and ecological degradation, is their limited ability to connect with those threats emotionally; and any successes may necessarily be reliant on the capacity of people to forge or manufacture such connections. Systemic hazards, which lack a human face and intentionality,



ecological and nonhuman dangers, which do not immediately violate moral sensibilities or promote a visceral response, slow and temporally dispersed harms, which bypass perceptual and epistemic filters, these are the phenomena which homo sapiens sapiens are ill-equipped to recognise or address (Gilbert 2007), and they are also the primary forces which drive the collapse of civilisations. Any concerted action in the face of such crises, then, arguably needs to be fuelled, in part, by evolutionarily well-entrenched emotions such as fear. The options are, admittedly, unlikely to be as stark as between an impartial and objective rationality, or a partial and subjective emotionality. There are many emergent disciplines and research programmes examining the role of emotion and psychology in politics, with discussions shifting ever further towards such topics as neuropolitics, political physiology, political affect and affective cognition.<sup>4</sup> Some recent discussions in the climate change community are indicative of this movement, with some serious consideration of how many 'Pearl Harbour type' climate events it will take to stimulate climate action (Romm 2012c). The implicit understanding here is that a strong emotional connection with the phenomenon of global warming is required in order to motivate an appropriate political response to the climate crisis (i.e. a war footing level of expenditure, organisation and restructuring). Similarly, there has also been some interesting discussion of 'hugging the monster', a term derived from the US Air Force, whereby fear can be recognised and channelled productively towards positive survival outcomes (Romm,2012b). Just as it is unlikely that reason alone will save one's physical body in moments of imminent danger, it seems improbable that it will provide sufficient responses in the national or international body politic to address systemic and global threats. Consequently, evolutionarily potent emotions and uncomfortable narratives may need to be evoked and risked as potentially valuable resources for individual and collective survival in the future.

### 4. Breaking the Spell

The upshot of the preceding points is that an engagement with and deployment of fear and other powerful emotions, arguably the stock-in-trade of apocalypticism, may be warranted in certain political and social circumstances. This may be construed as a pragmatic risk in Pignarre and Stengers' political philosophy, an experiment to be

<sup>&</sup>lt;sup>4</sup> Two recent examples are John Protevi's synthesis of the Deleuzean and Spinozan philosophies of affect with complexity theory, developmental systems theory, neuroscience and political theory (Protevi 2009) and Chris application of neuropolitics along the fault lines of Republican and Democrat attitudes to science (Mooney 2012).



attempted as a technique of transformation, an element in a recipe for breaking the hold of capitalist sorcery. But strategies like these seem especially relevant to the collapse theorists and their attitudes towards the language of apocalypse. That is, the crises that concern them most, for example, the realities of 'peak everything' and the consequent decline of non-renewable resources, such as fossil fuels, on which capitalist civilisation is wholly dependent, may benefit considerably from being communicated and messaged in apocalyptic terms. This is because the political and social affect of apocalyptic language may prepare people for the end of *this* world, and the transition to another world that must follow it, far more effectively than the business-as-usual, 'infernal alternatives' of capitalism. By emotionally connecting with collapse through a rhetoric of apocalypse, the likelihood of politically shaping a future world for the better arguably increases dramatically.

#### Bibliography

- Ahmed, Nafeez Mosaddeq. 2010. A User's Guide to the Crisis of Civilization: And How to Save It (London and New York, NY: Pluto Press)
- Altheide, David L. 2005. Terrorism and the Politics of Fear (Walnut Creek, CA: AltaMira Press)
- Bardi, Ugo. 2011. The Limits to Growth Revisited (New York, NY: Springer)
- Brassier, Ray. 2007. Nihil Unbound: Enlightenment and Extinction (New York: Palgrave Macmillan)
- Catton, William R. 1982. *Overshoot: The Ecological Basis of Revolutionary Change* (Urbana and Chicago, IL: University of Illinois Press)
- Diamond, Jared. .2005. Collapse: How Societies Choose to Survive or Fail (London: Allen Lane)
- Fisher, Mark. 2009. Capitalist Realism: Is There No Alternative? (Ropley: Zero Books)
- Fukuyama, Francis. 1992. The End of History and the Last Man (London: Penguin)

Furedi, Frank. 2002. Culture of Fear: Risk Taking and the Morality of Low Expectation (London: Continuum International Publishing)

- Gardner, Daniel. 2009. The Science of Fear: How the Culture of Fear Manipulates Your Brain (New York, NY: Plume Books)
- Gilbert, Dan. 2007. 'Dan Gilbert on a Capricious Culture' *Pop Tech: PopCasts* <a href="http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech.org/popcasts/dan\_gilbert\_poptech\_2007>">http://poptech\_2007<">http://poptech\_2007>">http://poptech\_2007"</poptech\_200"">http://poptech\_200""/>http://poptech\_200"
- Glassner, Barry. 2009. The Culture of Fear: Why Americans are Afraid of the Wrong Things (New York, NY: Basic Books)
- Greer, John Michael. 2008. *The Long Descent: A User's Guide to the End of the Industrial Age* (Gabriola Island, BC: New Society Publishers)
- 2011. Apocalypse Not: Everything You Know About 2012, Nostradmaus and the Rapture is Wrong (Berkeley, CA: Viva Editions)
- Heinberg, Richard. 2011. The End of Growth: Adapting to Our New Economic Reality (Forest Row: Clairview)
- Jameson, Fredric. 2003. 'Future City', *The New Left Review*, 21, May–June <a href="http://newleftreview.org/II/21/fredric-jameson-future-city">http://newleftreview.org/II/21/fredric-jameson-future-city</a> [accessed: 5-Jun-14]
- Jensen, Derrick. 2006. Endgame. Volume I. The Problem of Civilization (New York, NY: Seven Stories Press)
- Keen, Steve. 2011. *Debunking Economics: The Naked Emperor Dethroned* (London and New York, NY: Zed Books)
- Kunstler, James Howard. 2006. The Long Emergency: Surviving the Converging Catastrophes of the 21st Century (London: Atlantic Press)
- Lyotard, Jean-François. 1991. *The Inhuman: Reflections on Time*, trans. by Geoffrey Bennington and Rachel Bowlby (Stanford, CA: Stanford University Press)

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- Martensen, Chris. 2011. The Crash Course: The Unsustainable Future of Our Economy, Energy and the Environment (Hoboken, NJ: John Wiley & Sons)
- McKibben, Bill. 1990. *The End of Nature: Humanity, Climate Change and the Natural World* (London: Bloomsbury Publishing)
- Meadows, Donella H., Jurgen Randers, Dennis L. Meadows and William W. Behrens III. 1972. *Limits to Growth* (New York, NY: Signet)
- Meadows, Donella H., Jurgen Randers and Dennis L. Meadows. 2010. *Limits to Growth. The 30-Year Update* (London and Washington, DC: Earthscan)
- Mooney, Chris. 2012. The Republican Brain: The Science of Why They Deny Science And Reality (Hoboken, NJ: John Wiley & Sons)
- Orlov, Dmitry. 2012. 'From Alpha to Omega Podcast', *Cluborlov* < http://cluborlov.blogspot.co.uk/2012/05/from-alpha-to-omega-podcast.html> [accessed: 5-Jun-14]
- Pignarre, Philippe, and Isabelle Stengers. 2011. *Capitalist Sorcery: Breaking the Spell*, trans. by Andrew Goffey (Basingstoke and New York, NY: Palgrave Macmillan)
- Protevi, John. 2009. *Political Affect: Connecting the Social and the Somatic* (Minneapolis, MN: University of Minnesota Press)
- Romm, Joe. 2012a. 'Apocalypse Not: The Oscars, The Media and the Myth of "Constant Repetition of Doomsday Messages" on Climate', *Climate Progress* (Feb 26th) <a href="http://thinkprogress.org/climate/2012/02/26/432546/apocalypse-not-oscars-media-myth-of-repetition-of-doomsday-messages-onclimate/>[accessed: 19-Dec-12]</a>
- 2012b. "'Hug the Monster": Why so Many Climate Scientists Have Stopped Downplaying the Climate Threat', Climate Progress (May 7th) <http://thinkprogress.org/climate/2012/05/07/478984/hug-the-monster-why-so-many-climate-</p>
- scientists-have-stopped-downplaying-the-climate-threat/> [accessed: 19-Dec-12] 2012c. 'What Are the Near-Term Climate Pearl Harbors? What Will Take Us from Procrastination To Action?' Climate Progress (December 7th) <http://thinkprogress.org/climate/2012/12/07/1299681/what-are-the-near-term-climate-pearl-harborswhat-will-take-us-from-procrastination-to-action/> [accessed: 19-Dec-12]

Tainter, Joseph A. 1980. *The Collapse of Complex Societies* (Cambridge: Cambridge University Press) Žižek, Slavoj. 2010. *Living in the End Times* (London: Verso)

#### Further reading

- Heinberg, Richard. 2005. The Party's Over: Oil, War and the Fate of Industrial Societies (Forest Row: Clairview)
- 2007. Peak Everything: Waking Up to the Century of Decline in Earth's Resources (Forest Row: Clairview)
- Orlov, Dmitry. 2008. *Reinventing Collapse: The Soviet Example and American Prospects* (Gabriola Island, BC: New Society Publishers)