

Civilisation versus the Giant, Winged Lizards – Changing Climates, Changing Minds

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'Modern man is a forest butcher', warned the pioneering science journalist Hugh McKay in 1923. 'He is also an oil-spendthrift and a coal waster', McKay continued, 'recklessly spending his capital of fuel... with never a thought of the tomorrow when he will stand shivering and motionless in the middle of a coal-less, oil-less, treeless, steel-less planet'.²

As if that prospect wasn't alarming enough, McKay concluded his survey of modern civilisation's wasteful ways by imagining life in a future 'treeless age'. The world's great forests, he explained, worked to 'restore oxygen to the air by absorbing carbon from the carbon dioxide poured from a million factory chimneys'. Without trees, carbon dioxide would accumulate in the atmosphere 'till it precipitated an Age of Heat, similar to that of the prehistoric times of the giant reptiles'. Favoured by this 'moist tropic heat', he predicted that earth's reptilian masses would arise once more, forcing the last remnants of humankind to 'retreat to the poles and fight hopelessly... a sun-darkening horde of winged lizards, already rulers of a new heaven and masters of a new earth'. Headed 'Mankind's Last Stand', McKay's article was illustrated with dramatic images of giant reptiles drawn by cartoonist Syd Miller (the creator of Chesty Bond).

Hugh McKay was a 'modest genius' – a journalist, chemist, inventor, poet, and writer of speculative fiction.³ But, as one *Smith's Weekly* colleague recalled, he 'sometimes wearied of everything and everybody and retired into a beery twilight from which his harsh voice might be heard addressing humanity as "Insects! All insects! Insects all!"'⁴ Perhaps McKay's nightmarish vision of reptilian conquest was fuelled by a boozy bout of misanthropy. But his concerns were well-founded. Civilisation's profligate use of fossil fuels and heedless destruction of forests *has* contributed to a rise in the concentration of carbon dioxide in our atmosphere. Sixty years before the implications of this rise would gain widespread public attention, Hugh McKay was warning the Australian people of the dangers of global warming.

While the threat posed by winged lizards rarely features amongst the assessments of contemporary climate scientists, global warming has inspired no shortage of apocalyptic forecasts. In his depressingly persuasive book, *The Weather Makers*, Tim Flannery spells out the consequences should we fail to curb our runaway production of greenhouse gases. 'If we carry on with business as usual', he concludes, 'in all likelihood three out of every five species will not be with us at the dawn of the new century'.⁵ Three out of every five – 60% – of all species would be lost. These are truly terrifying figures, making our well meaning attempts to preserve endangered wildlife seem painfully insignificant. But, of course, humanity itself would not escape the maelstrom of catastrophe. The damage it has wrought upon the globe would be repaid through the increased severity of droughts, more frequent and violent storms, and rising sea levels. Could our social and economic fabric survive this climatic onslaught? If our greenhouse gas emissions continue unabated, Flannery argues, 'the collapse of civilisation due to climate change becomes inevitable' (209).

I've no doubt that such warnings are important, well-documented, and suitably impassioned. But do they work? If the object of all this doomsaying is to provoke the people of the world into action, those of us concerned with the complexities of history and culture might usefully ask whether fear can really change us for the better.

This is not, after all, the first time that scientists have sought to scare the public into line. The use of the atomic bomb to destroy the Japanese cities of Hiroshima and Nagasaki, inspired a vigorous

campaign by scientists aimed at winning public support for the international control of atomic energy. By describing the effects of an atomic war in horrific detail, the scientists' movement deliberately sought to 'scare the pants off' the public.⁶ Humanity's looming fate was symbolised by the clock on the cover of the *Bulletin of the Atomic Scientists* – its hands edging perilously closer to midnight. One of the *Bulletin's* founders, chemist Eugene Rabinowitch, explained that the journal aimed 'to preserve our civilisation by scaring men into rationality' (70).

Tim Flannery's suggestion that civilisation itself might fall apart under the pressure of climate change seems to echo the words of Australian physicist Mark Oliphant, who fifty years earlier warned that in the aftermath of atomic war 'humanity could return to the Middle Ages, and chaos would reign'. Addressing a large crowd in the Sydney Town Hall, Oliphant concluded his litany of atomic terrors by claiming that, paradoxically, 'this desolate and terrible picture holds great hope for peace'. 'We have not given up war for moral reasons', he observed. 'Perhaps we will do so to save our lives, our possessions and the lives and future of our children'.⁷

You can't deny the logic. If human beings can't be relied upon to respond to noble causes, you might at least think that they would act to save their own skins. It seems so logical that historians, sociologists, psychologists and others have been forced to scabble around for explanations as to why it didn't happen. Why didn't the people of the world rise up to demand an end to nuclear terror? Instead of labouring determinedly to ensure their own survival, humanity descended into apathy and denial, punctuated by brief bouts of agitation. Instead of putting an end to war, we accepted the pragmatic bastardry of Mutually Assured Destruction. Instead of limiting the development of atomic weapons, we built enough bombs to destroy ourselves several times over.

The oppressive climate of fear that the scientists' movement helped to create may in fact have stirred up feelings of 'helplessness and futility', notes historian Paul Boyer.⁸ The psychologist Robert Jay Lifton argues that the overwhelming threat of atomic annihilation engendered a deep-set 'psychic numbing' that limited our ability to deal constructively with the bomb. We should remember too, that while our fear of death might be powerful, so too is our fear of the 'other'. The arguments of the scientists' movement were lost amidst bluster and paranoia, as the Cold War closed its grip on postwar politics and culture. As global warming takes on the 'war on terror' for attention and commitment, we might wonder how many pressing threats our culture can sustain.

But perhaps it's also the type of fear that matters. Examining the way that fear of the bomb merged with fear of communism, Sheldon Ungar charts a series of dramatic outbursts, or 'social scares', that erupted from the sticky swamp of nuclear dread. These 'scares' were inspired by particular events, such as the launch of the Russian Sputnik satellite, and energised political and public debate in a way that generalised doomsaying did not.⁹ Turning his gaze on global warming, Ungar ponders whether it might similarly take an extreme climatic event – or 'weather shock' – to precipitate large-scale action.¹⁰ It seems we need a focus for our fears.

Might the recent devastating hurricane season be enough, or would it take thousands of deaths in a long and brutal heatwave? Certainly, we're already well practised in connecting our experience of weather with the idea of climate change. As Andrew Ross points out, current fears about global warming 'can be seen as a continuation of historically regional and national anxieties'.¹¹ Every bout of strange weather, over the past century or more, has yielded complaints that the climate is just not what it used to be. 'Are the seasons changing?', asked the Melbourne *Argus* in 1932, 'Every winter appears to be colder than the last, and every summer less warm'.¹² Meteorologists sought to explain away such commonly-held beliefs by invoking both psychology and statistics. It is the outstanding events that frame our memory of weather – those particularly hot summers, or spectacular thunderstorms. But our knowledge of climate is constructed from long-term averages, it smooths out the bumps of individual experience.¹³

In the same way, it's not going to be easy to find an event that clearly demonstrates the dangers of global warming. Hurricane Katrina might provide evidence that rising sea temperatures will produce increasingly violent storms, but we can't say that the hurricane itself was caused by climate change. The proof of global warming is in averages and statistics, not in individual events – no matter how destructive or deadly. 'From the perspective of a human lifetime', Tim Flannery notes, 'global warming is slow'.¹⁴ Gradual increases in average temperature are hidden from our day to day experience by the normal variability which makes our weather what it is. Time plays tricks on us.

Time can be measured with an extraordinary degree of precision; we can standardise it across the globe; we can count backwards and forwards from minutes to millennia, reaching deep into epochs far removed. And yet our actual experience of time has a shape and rhythm that refuses to conform to the grid. Time slows down or speeds up according to our mood or activity. Events may seem close or far away depending on their significance. Elizabeth Eisenstein explores how our attempts to narrate the past immerse us in 'history-book time'. Events are assigned to a series of sequential chapters, developing in texture and detail as we approach the present. But, of course, just as we reach the 'most personally significant, densely packed, fact-crowded final chapter', the narrative suddenly breaks off.¹⁵ We appear on the scene as the story ends, where 'previous experience offers no sure guide'. This is why, Eisenstein suggests, each generation imagines itself facing an unprecedented crisis – positioned at a critical moment in history.

History is littered with discarded crossroads, with crucial decisions that were never made, with new eras that were never born. 'Humanity is at the cross-roads', the Rev. Dr Clifford Norman Button warned his Ballarat congregation on the Sunday following the first use of the atomic bomb, 'This is a turning point in history, perhaps the most solemn turning point of all history'.¹⁶ Like Button, many commentators argued that this 'new age', the Atomic Age, confronted humankind with a choice between progress and destruction – a choice it could not ignore or escape. But, sixty years later, we inhabit neither a nuclear wasteland nor an atomic utopia. The choice was never made. Instead we stumble along the easiest path, as our expectations of change are consumed by inertia and expediency. But next time, of course, it will be different! '[E]ach generation discovers that earlier turning points have failed to turn after all', Eisenstein notes, 'while remaining convinced that the *real* "great divide"... is occurring in its own day and age'.¹⁷

If we are to grapple with the complexities of global warming we must become more aware of our own passage through time. The idea that we are facing something new is itself extremely old. By focusing on the 'new' challenges wrought by climate change, on the critical juncture we face, there is a danger we will merely replay familiar rituals of accommodation and denial. We will hide behind our faulty memories and watch as the world burns around us.

But why worry? A solution is sure to be found... in time. While the past seems to leave us on the precipice of history, the future promises to solve all our problems. The idea of progress invites us to gaze with confidence upon an 'open horizon', an empty future into which we can shovel all our unpleasant, stinking messes for disposal. We imagine that time itself will dispel our dilemmas, time will give us the answers we lack. We colonise the future as an 'extended present' to free us of any uncomfortable sense of urgency – we have all the time that we need!¹⁸

The assumption of linear progression implicit in modern western culture has bestowed upon us a timescape that inhibits our ability to respond to environmental challenges.¹⁹ And so, global warming looms as an unprecedented crisis, when it is an expression of our long love affair with growth and materialism. Even as we find in it our latest turning point, we break the chain of consequence that would lead us back to examine our culture's sordid history of environmental exploitation. Answers are sought, not in fundamental change, but in the hope that the future will

grant us redemption. We pile up our shit and roll it ahead, like an army of frenzied dung beetles.

My fear is that visions of a climatic apocalypse might simply bring about more of the same. Those who are already sympathetic to the cause may well be inspired to action. Tim Flannery's impassioned account of the coming environmental holocaust has certainly landed a well-aimed kick upon the cushioned quarters of my own complacency. But how many will instead fall back upon familiar habits of forgetting and denial? No doubt, as with the nuclear threat, we will experience cycles of awareness and activity – but what will really change? Instead of real choices we will be presented with limited, short-term policy responses, in which biodiversity ultimately loses to economic growth. As temperatures rise, large-scale engineering schemes will provide the illusion of security, while adding to the profits of multinational corporations. While the world's climate system teeters on the brink, the rich will find ways to insulate themselves (both literally and figuratively), leaving the poorest nations and the poorest people to bear the cost of our hunger for power. Imagine Hurricane Katrina on a global scale – those with resources will flee to safety, leaving the poor and marginalised to defend themselves against the climate's growing fury.

If we are going to rescue the future from our recklessness, if we are going to discover new ways to live, if we are going to save at least some of the species that are scheduled for extinction, then we have to learn to change our minds. Scientists have warned us of the scale of the task ahead, now we have to translate the threat into action and belief. We have to understand the culture of climate change.

Such an analysis might usefully begin with an exploration of time and space. How do we comprehend the dimensions of global warming? The cultural complexities of global space have already been brought into focus by the onwards, grinding pressure of globalisation. Andrew Ross notes that while the threat of climate change might encourage a greater sense of 'global awareness', we still have to consider who sets the rules for participation in the framing of global solutions.²⁰ Questions of global equity also concern Clive Hamilton who argues for new 'legal and ethical relationships between nations' based on the principles of 'contraction and convergence'.²¹ Global space demands a global ethics.

But surely questions of equity and responsibility must also be applied to time. Barbara Adam describes a 'global present' that 'requires personal and collective responsibilities that span not just election cycles... but hundreds of generations'.²² Instead of turning our backs on the past and claiming the future as our own, we have to learn to share the consequences of our actions across the boundaries of time. Just as any effective action to limit greenhouse gas emissions must involve cooperation between the nations of the world, so we must find ways to cooperate both with generations past and generations yet to come. We are all in it together.

It's about making connections – connecting our decision whether to walk or drive to the shops with the fate of an alpine frog; connecting the comforts of our homes and lifestyle with a history of environmental pillage; connecting what we do today with the fate of the earth in a hundred years. Scientists must continue to warn of the catastrophe we have brought upon ourselves. But we need more. We need to connect to times and places distant, we have to embrace our responsibilities, and rediscover our hopes. This is more than a change in the weather – global warming challenges us to question our preoccupation with crossroads and crises, to pursue the meaning of progress, to undo our assumptions about time itself. Those of us concerned with the analysis of culture can help negotiate the roadblocks of apathy and denial. We can take up the fight against the giant, winged lizards and imagine a future with a future.

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