



Biopolitics

Michael S. Northcott

Requests for use or re-publication of this article should be made (via Shap if necessary) to the writer, who retains copyright. If re-published in part or full elsewhere, the article's publication in *World Religions in Education* 2008-9 should be acknowledged.

The transliteration of specialist terms and the opinions expressed in this article are those of the writer, not of the Shap Working Party.

ABOUT THE AUTHOR

Michael S. Northcott is Professor of Ethics in the School of Divinity in the University of Edinburgh. He is the author of many scholarly papers and books on ecological ethics and theology including *The Environment and Christian Ethics* (Cambridge University Press, 1996) and *A Moral Climate: The Ethics of Global Warming* (Darton Longman and Todd 2007).

Take up weeping and wailing for the mountains, and a lamentation for the pastures of the wilderness, because they are laid waste so that no one passes through, and the lowing of cattle is not heard; both the birds of the air and the beasts have fled and are gone. I will make Jerusalem a heap of ruins, a lair of jackals; and I will make the cities of Judah a desolation, without inhabitant." Who is the man so wise that he can understand this? To whom has the mouth of the LORD spoken, that he may declare it? Why is the land ruined and laid waste like a wilderness, so that no one passes through? And the LORD says: 'Because they have forsaken my law which I set before them, and have not obeyed my voice, or walked in accord with it, but have stubbornly followed their own hearts and have gone after the Ba'als, as their fathers taught them.' (Jeremiah 9, 10 – 14)

The beautiful island of Tasmania is home to the last great eucalyptus rainforest in Australasia. The *Eucalyptus Regnans* is the Earth's tallest hardwood species and mature trees reach 90 metres into the air and are up to 20 metres in girth. The rich moist forest floor and the tree canopy are home to thousands of species of insects, birds and small mammals and to numerous kinds of mosses, lichen and tree ferns, some of which, like *Diksonia Antarctica*, the Tasmanian tree fern, are unique to the island. Gunns, a large timber company, has been clear-felling this rare forest for many years and in the next decade plans to work its way through much of the rest of the island, in the teeth of much local opposition but with the support of both main political parties in Australia (1). Gunns clear-fells 30 hectares of old growth rainforest a day to feed its woodchip and paper pulp factories despite extensive local opposition. Pro-logging lobby groups, and Gunns itself, have considerable influence over the political process in Australia and receive far more media coverage than conservation groups (2). Those who publicly oppose logging do so at considerable risk: the homes and businesses of individuals who have spoken out against the wood chip industry in Tasmania have often been burned to the ground (3). Despite protests from Australian scientists and citizen and faith groups, the timber of this wondrous island is being turned into wood-chip and paper pulp while the remaining forest, once the big trees are harvested, is burned to the ground with napalm and then replanted with a monocrop of eucalyptus trees (4). Around the tree nurseries the company plants blue carrots in the ground which are treated with a lethal toxin so that any



small mammals that survive the burning of the forest are killed to prevent them eating the young trees.

In April 2007, John Howard, the then Prime Minister of Australia, announced that because of the record ten-year drought the government would have to drastically reduce irrigation in the Murray-Darling basin, which is the principal agricultural region of Australia, since otherwise there would not be enough water left for Australia's mostly urban residents to drink. Australia is facing an ecological meltdown from climate change linked to regional land-use changes and to anthropogenic, that is humanly caused, global warming. And yet it continues to be among the heaviest emitters per head of greenhouse gases on the planet, after the United States, Canada, Finland and Iceland (5). Average per head emissions of carbon dioxide stand at 20 tonnes, which is 8 tonnes more per person than even the European average. Australia is also the most fossil-fuel-dependent for its energy production of all developed industrial economies, with renewable energy providing less than 2 per cent of its energy, despite the considerable potential of the interior for solar energy production. And still the Australian government promotes and subsidises the corporate burning and clear-felling of the region's remaining ancient forests, though at time of writing Australia's new Prime Minister has at last signed Australia up to the Kyoto Protocol (6).

Tropical and subtropical forests in their natural state are rich and wondrous ecosystems which act like natural air conditioning. The microclimate of the forest draws moisture from the ocean and atmosphere and creates updrafts which form rain clouds and as the rain falls it is taken up by tree canopies, fallen leaves, mosses and tree roots, and it seeps deep into the soil before reaching streams and rivers. When the trees are gone the rain at first continues to fall but it falls on bare earth and washes it into streams and rivers. Over time with more deforestation the rains began to dissipate, the clouds no longer form and the land becomes parched. Eventually it is at risk of turning into bare desert, something that is happening all over Australia.

Deforestation is a major contributor to human greenhouse gas emissions. Since colonial times Australian loss of above ground biomass from deforestation has contributed approximately 757 million tonnes of carbon dioxide to the industrial legacy of excess greenhouse gas emissions that scientists now believe are changing the atmosphere of the planet (7). The total of greenhouse gas emissions far exceeds this figure since disturbance of the forest floor and peaty soils emits quantities of methane equivalent to the global warming potential of the above ground carbon: methane has a greenhouse effect twenty times stronger than carbon dioxide. Consequently Australian ecosystems are now net emitters of greenhouse gases, and contribute approximately 7 per cent to the global total of greenhouse gases from nonhuman terrestrial sources (8). The climate of Australia is also changing dramatically. Large areas of the interior are turning to desert and its mainly urban residents will experience a worsening water crisis in decades to come. But the government and corporations of Australia continue to view the forest as a commodity to be turned into bankable wealth despite the effects of deforestation on the climate and hydrology of the region.

Australia is a microcosm for what is happening to planet Earth in the present ecological crisis. The last fifty years of industrial development in Australia have seen the growth of ten large air-conditioned cities, connected by highways and airports, the destruction of ancient forests, and the draining of underground aquifers to irrigate vineyards, citrus and cereal crops and supply the growing urban demand for fresh water. Industrial Australia is now hitting against the biological limits of this once verdant and lush continent, and the Australian government is fast approaching a biopolitical crisis. It will have to rely more and more on imported foods as its agricultural crops fail from lack of rain, and yet the government continues to permit and even subsidise the destruction of the life-sustaining and climate-regulating forests.



Former Prime Minister John Howard used to argue that there was no relationship between climate change and humanly-produced carbon dioxide and hence he refused to sign the Kyoto Protocol which limits the greenhouse gas emissions of industrial countries. He rejected such limits as an undue restraint on economic growth. Recently, and in the light of increasing local climate change, there has been some change of heart and the new Australian government elected in 2007 has not only signed the Kyoto Protocol but is talking about banning the sale of incandescent light bulbs to domestic consumers. But such measures may be too little, too late. The warning signs have for too long been wilfully ignored and the country's ecosystems destroyed by a voracious consumer and corporate economy. With global warming the Great Barrier Reef is now threatened with coral bleaching, raised land temperatures have exacerbated the decade-long drought, the rivers from the red and increasingly desertified heart of Australia are beginning to run dry, and the land lies fissured and exhausted (9).

The Hebrew prophet Jeremiah reflected on a similar geopolitical crisis in the land of Israel in the sixth century BCE. Jeremiah writes in exile from the ancient city of Babylon. In 587 BCE the Babylonians had invaded Jerusalem, destroyed Solomon's great temple, and exiled the leaders of Jerusalem to Babylon to prevent them organising a revolt against their occupiers. These momentous events created a political and theological conundrum for the people of Israel (10). They believed themselves to be the chosen people of God, their society protected by the covenant their ancestors had made with God before they entered the Promised Land. This covenant set the Israelite state apart from the other states of the region since it provided them with a unique standard of justice and a socio-political vision very different from the imperial nations of Egypt, Assyria and Persia. According to the terms of the covenant God would richly bless the people when they fulfilled the commandments of Moses, but he would curse them if they were unfaithful to the commandments. And the Hebrews moreover believed that God was not just a tribal deity but instead the creator of all the Earth, and hence of all the nations. This meant that from an Israelite perspective not only did God direct and sustain Israel but the whole course of history, and hence even those who had occupied the land of Israel.

When Babylon sacked Jerusalem and the House of David fell, this was not then just a geopolitical event but divinely ordained (11). If Babylon's star was rising and Israel's fading this could only mean one thing: God was judging Israel for her unfaithfulness to the Mosaic covenant. The central reason for the fall of Israel that the prophets discerned was that in her imperial projects Israel had abandoned the terms of the Mosaic Covenant. Israel had become too powerful, her rulers too successful in their military enterprises, her elites too wealthy, and her smallholders and the soil were being enslaved in the project of a Greater Israel. Walter Bruggemann draws an analogy between this prophetic reading of the fall of the House of David and the rise and fall of nations and imperial powers in modern history (12). The reason for the fall of the modern great powers – such as the British Empire and the Soviet Union, potentially the United States and even the global industrial economy – is that empires reach heights of political power and territorial expansion which take them beyond the biopolitical limits into a condition of imperial 'overstretch' (13). Just as Jeremiah the theologian reads the fall of the house of David as divine judgment on the imperial ambitions of David's successor kings, so the collapse of modern imperial domains, and the threatened ecological collapse of industrial civilisation, in Australia and right around the world, can be traced to the same hubris, only expressed in the secular frame of biopolitical limits.

The world is faced with a biopolitical crisis which is more momentous than the geopolitical crisis of ancient Israel, or even the fall of the Soviet Union. At the heart of the present crisis is not a conventional empire but the global market empire fashioned by the United States and Europe in the last fifty years as governments have deregulated money and trade, and freed up economic actors and financial markets to enable maximal wealth accumulation by banks and corporations without regard to political sovereignty or territorial limits (14). This has involved an expansion in monetary values in the form of bank credits, paper money, stocks and



financial instruments such as derivatives, futures, and hedge funds, of unprecedented proportions. And the consequent expansion in capital investment and industrial development has been achieved at great social and ecological cost. Traditional working class communities have been torn apart in the North while jobs exported to the poorly regulated South have engineered a new Dickensian enslavement of millions to sweat-shops and factories whose pollutants threaten the health of factory workers and of whole regions in South China, Indonesia, Mexico and elsewhere.

These spatial displacements of the ecological and social costs of a deregulated and growing market empire are now implicated in a potential global collapse in the Earth system. The ten-fold increase in greenhouse gas emissions that this economy without limits has sustained in the last fifty years has sent the planet's climate into overdrive. As the science reveals, and which I review in *A Moral Climate: The Ethics of Global Warming*, human greenhouse gas emissions have displaced the sun and the ocean as the primary drivers of the Earth's climate. Anthropogenic global warming threatens the collapse of whole ecosystems from the poles to the heart of Africa and the extinction of up to 35 per cent of the Earth's species, with a warming above 2 degrees centigrade which we are currently on target to exceed at present rates of growth in greenhouse gas emissions.

Human making has been transformed by industrial capitalism in the past two hundred years and through technology and economic and political artifice the powers of modern humanity have grown to the point that humans are now the strongest biological force on earth. This has made human beings a force of nature in a way that they have never been before. But these new powers have not been accompanied by a growth in moral responsibility over the condition of the planet or between distant peoples. On the contrary, as technology has heightened human power over nature, modern humans are increasingly alienated from the Earth and their fellow creatures. As in Australia, so in many other parts of the world politicians and citizen-consumers defer their capacities for moral and political deliberation to the autonomous procedures of the market and to the automatic machines and monitoring systems which govern so many of the processes of industrial making. People are therefore increasingly poorly equipped – ecologically, morally and politically – to deal with the consequences and dangers of these enlarged powers both for the Earth and for human wellbeing.

The refusal to recognise moral or ecological constraints to mercantile and technological power is also a part of the European Enlightenment and the modern struggle for emancipation from the authority of the Church, tradition and faith, as well as from nature. But the paradox is that in the course of this emancipation, nature and society are increasingly dominated by technological power. Dietrich Bonhoeffer suggested that this is because modern rationalism, science and technology train modern humans not to see the Earth as divine creation. Consequently 'the earth is no longer our earth, and then we become strangers on earth', and from strangers we finally become Earth's subjects: through the power of technology 'the earth grips man and subdues him' (15). Global warming represents the greatest instance of this subduing, since if industrial humans do not find ways of reducing their present forcing of the climate future generations will be committed to dangerous and irreversible climate change.

In some countries the political tide has begun to turn on global warming. Political leaders in Europe, and most recently even in Australia and North America, now acknowledge that global warming is happening, and that it is caused by humanly generated greenhouse gases. By most people the science is no longer treated as a hypothesis but as a convincing explanation of changes which are already observable as climatic events move beyond the realm of natural variability. There is growing recognition that there is a conflict between fossil fuel consumption and the health of the planet, and that future generations, and some present generations in tropical and sub-tropical regions, will experience great hardship if the present generation does not take steps to curtail its addiction to fossil fuel. But few voices in the public debate over



global warming are prepared to suggest that the problem runs deeper than that. The argument goes that once the engines of industrial making and the global market empire are decoupled from growth in fossil fuel emissions and hooked up to more efficient technologies and more renewable sources of energy the problem of global warming will have been solved and the engine can go on working its autonomous magic to deliver a free trade Utopia to all of humanity.

I suggest that this is a serious misreading of the nature of the ecological crisis. Global warming is the Earth's judgment on the global market empire and on the heedless consumption it fosters. The neo-liberal claim is that the 'free' market, combined with technological power, can redeem the peoples of the world from pain and suffering through the autonomous, self-regulating market system. Those who direct the present neo-liberal project of economic globalisation presume that the welfare of people and planet is advanced when the most powerful economic actors – multinational corporations, bankers, investors, engineers – are freed from regulation and taxation to make and sell more 'consumer objects' and accumulate more wealth. But in reality this vast collective project of global wealth accumulation disempowers people in communities of place, and so provokes enormous destruction in the welfare of ecosystems and of human communities (16). Christian Aid estimates there are presently around 163 million internally-displaced persons in the world, more than 100 million of them displaced by 'development' projects such as giant dams, forest plantations, agribusiness, roads, factories, mining and quarrying (17). At the same time, it presages the greatest ecological collapse in the history of the human species. Global warming, in other words, is the global market empire hitting its biopolitical limits.

Those nation-states that seek to direct the market empire – and the United States and the United Kingdom in particular – represent terrorists and other non-state actors who oppose the globalisation project as the enemies of freedom and democracy. And they suggest that the best protection against these enemies is a war of all against all called the 'war on terror' (18). Some also read the problem of global warming in this frame and suggest that it is an equivalent security threat to that of terrorism. National or 'homeland' security is the watchword of this political discourse. But the irony is that the global market empire makes no homeland safe since it requires the constant exchange of vast quantities of goods and materials through ports and airports and along highways. These exchanges often involve coercive and immoral contracts, new forms of human slavery, and grave biological and ecological risks. But corporations and consumers know, or choose to know, little or nothing about the conditions in which the destructive and immoral ways in which goods they purchase are produced. The biggest import-export commodity of the global market empire is not even visible to the naked eye since it is in the form of carbon dioxide, an invisible gas produced in every breath, and by cars, planes, ships, trucks, factories, furnaces and fossil-fuelled power stations in gargantuan quantities.

Is there time to change? Is there the possibility of change? Do we have the resources to finance the change? Well the answer to at least the first and the last of these questions is yes. If fossil fuel emissions peak within the next ten years and then decline by 3 per cent a year till the end of the century, it is possible that greenhouse warming can be held to 2 degrees Centigrade above the median for the past ten thousand years and the planet turned around from meltdown. And as far as resources go, the nations of the Earth currently spend 1 trillion a year on manufacturing weapons. They spend similar amounts on subsidising fossil fuel extraction and power utilities, road and airport expansion, deforestation, and deep-ocean trawling. These public subsidies to destructive activities, if turned to the creation of local and renewable energy sources, public transport systems, and naturally cooled and well-insulated homes, would be more than enough to provide every household on Earth with access to renewable energy, locally sourced food and clothing, and affordable and sustainable public transport. But as to whether these major civilisational changes are possible, the evidence is



still much more uneven. Without a major shift in the moral climate of industrial civilisation, and a recovery of the sense that all human beings are connected, physically, morally and spiritually in their actions and in their lives, we will not see the kind of shift in civilisational priorities that the Earth system is crying out for. And as Jeremiah forewarns, without repentance we may expect that the Earth will judge our political leaders for continuing to lead us down the wrong road, and us for allowing them so to do.

Notes

- (1) Flanagan, Richard (April 21, 2007) *The Telegraph Magazine*. See also McGhee, Karen (November-December 2004) 'Logging Van Diemen's Land: Is there a green light for more sustainable forestry in Tasmania?' in *Ecos*, 122, pp 26-7; and Davey, S. M., Stuart, M., Hoare, J. R. L. et al (2002) 'Science and its role in Australian Regional Forest Agreements', *International Forestry Review*, 4, pp 39-55.
- (2) Hollander, Robyn (December 2006) 'Elections, Policy and the Media: Tasmania's Forests and the 2004 Federal Election', *Australian Journal of Political Science*, 4, pp 569-584
- (3) Flanagan, Richard (April 21, 2007) *The Telegraph Magazine*
- (4) The Wilderness Society of Australia has used Google Earth and Gunns' published logging plans to show the extent of clear-felling thus far, and the planned extent over the next ten years at <http://www.wilderness.org.au/>.
- (5) International Energy Agency, *Earth Trends Data Tables: Energy and Resources: Energy 2005*, http://earthtrends.wri.org/pdf_library/data_tables/ene1_2005.pdf.
- (6) The latest 'sustainable forestry' initiative reveals an extensive array of government subsidies to logging and wood-chipping activities, and to the creation of new eucalyptus plantations on old growth forest land: Australian Government, Department of Agriculture, Fisheries and Forestry (May 13, 2007) *A Way Forward for Tasmania's Forests: The Tasmanian Community Forest Agreement* at http://www.daffa.gov.au/forestry/national/cfa/info/a_way_forward_for_tasmanias_forests.
- (7) Barrett, Damian J., Galbally, Ian E., and Graetz, R. Dean (2001) 'Quantifying uncertainty in estimates of C emissions from above-ground biomass due to historic land-use change to cropping in Australia', *Global Change Biology*, 7, pp 883-902.
- (8) Wangi, Ying Ping, and Barrett, Damian J (2003) 'Estimating regional terrestrial carbon fluxes for the Australian continent using a multiple-constraint approach: Using remotely sensed data and ecological observations of net primary production', *Tellus* 55B, pp 270-289
- (9) For a fuller account of climate change in Australia see Flannery, Tim (2005) *The Weathermakers: The History and Future Impact of Climate Change* London: Allen Lane.
- (10) Brüggenmann, Walter (2007) *The Theology of the Book of Jeremiah* Cambridge: Cambridge University Press
- (11) Brüggenmann, Walter (2007) *The Theology of the Book of Jeremiah* Cambridge: Cambridge University Press
- (12) Brüggenmann, Walter (2007) *The Theology of the Book of Jeremiah* Cambridge: Cambridge University Press
- (13) Kennedy, Paul M. (1987) *The Rise and Fall of the Great Powers: Economic Change and Military Conflict From 1500 – 2000* New York: Random House
- (14) The idea of the global market as empire is elaborated in Hardt, Michael and Negri, Antonio (2000) *Empire* Cambridge, MA: Harvard University Press
- (15) Bonhoeffer, Dietrich (1959) *Creation and Fall: A Theological Interpretation of Genesis 1 – 3*, London: SCM Press, p 38
- (16) Polanyi, Karl (1945) *The Great Transformation: The Political and Economic Origins of Our Time* London: Victor Gollancz
- (17) Christian Aid (May 2007) *Human Tide: The Real Migration Crisis* London: Christian Aid, p5
- (18) For a critique of this phrase and the larger imperial strategy behind it see Northcott, Michael (2004) *An Angel Directs the Storm: Apocalyptic Religion and American Empire* London: I. B. Tauris.