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The Fiddle and the Fire

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In 64AD, the city of Rome, mistress of the known world, was ravaged by a ferocious fire. The blaze swept through the crowded alleyways and decrepit housing of the city's poorer districts. All who were caught in its path were incinerated. A vast swath of the city was reduced to ashes and crumbling ruins within days. The Emperor Nero, 'enraptured by what he called the beauty of the flames',[1] gleefully played the fiddle as he watched the citadel that he had been tasked to watch over, sway and disintegrate. This, the greatest cataclysm to befall the city until its sacking at the hands of the Goths 400 years later, was but a single event in a catalogue of persecution and civil war that threatened to bring the mightiest empire that the world had yet seen to its knees. Modern civilisation is, superficially, even more grandiose and almighty than Nero's empire. Its proponents believe that they can conquer all that impedes human progress. Science and technology are capable, it is believed, of moulding the world according to human needs. This age though, supposedly the most daunting in all of human history, has been confronted by an inferno as deep and unquenchable as the fire that wracked Rome. Like the Romans, people of the 21st century have forgotten human frailty; they have considered their potential to be without bounds. But, as in the ancient world, the correction of such assumptions is often swift, shocking, and awful to contemplate.

Climate change, as both its increasingly rapid onset and potential consequences can attest, is the most potent threat to the survival and prosperity of not just the human race, but the natural world. There remains only a small stretch of time available to humanity before the climatic ramifications become inevitable. Should greenhouse-gas emissions ever cause a temperature rise of two degrees, 1.4 degrees more than current warming, the Earth's organisms are expected to cease to absorb carbon dioxide and release it instead.[2] These 'positive feedbacks' greatly increase the possible range of temperature rises and, should the two-degree threshold ever be passed, make rampant climate change inevitable. This natural acceleration of global warming constrains the ability of national governments to defer effective action until a later stage. The potential destruction wrought by global warming has the capacity to undermine many of the ecological foundations of human civilisation. However, public debate does not calculate the ethical or even biological value of the ecosystems that greenhouse gases threaten to annihilate. Instead the dispute is dictated by the relative economic cost of responding to climate change, contrasted with that of doing nothing. The issue remains an economic matter to many in government and the community. To reduce a threat of such acuteness to being merely a question of financial cost is, however, quite simply a betrayal of all, both born and unborn, who will suffer the effects of global warming. The sceptics who consider the scientific evidence to be insufficient reason, to act or argue that economic prosperity is a higher priority, have lost all sense of obligation to both their fellow human beings and the natural world itself. Their pursuit of economic growth has the potential to become so uninhibited that the sacrifice of the ecosystems that maintain human life is accepted as a necessary risk. Wealth founded upon the destruction of others' lives cannot, nor should not, endure. Nero, suspected of having ignited the Great Fire of Rome in order to enable ever greater feats of debauchery, confirmed the impression by having a lavish palace constructed upon the site of the ruins. Within the 'Golden Palace', the Emperor gloried in the privilege that the devastation had wrought, while thousands of Romans lapsed into poverty through want of housing. The Emperor perceived the well-being of others to be of lesser value than his self-indulgence. 'When I am dead, may fire consume the earth',[3] he mocked. Now developed

economies have sought to strip the world's ecosystems of what remains of their riches, while the peoples of the Third World face the horror of global warming's blazes, unleashed by the arrogance of prosperity. But like the fate of Nero, a reckoning is inevitable. The Emperor was deposed, forced to commit suicide, and his hated palace razed to the ground. Nature possesses a primeval power that no species can long resist, and like the Roman mob, is seldom forgiving. As George Monbiot has concluded, 'we inhabit the brief historical interlude between ecological constraint and ecological catastrophe'.[4] If the modern world is to avoid Nero's precedent, it must reconcile itself to the forces of this world that are greater than itself. Climate change is not a purely scientific dilemma, it affects every organism on earth, and hence the problems it poses range across almost every discipline, from ethical to political to technological. They all, however, are grounded in humanity's interaction with both the environment and other human beings. As such it is there that the causes, consequences and solutions to climate change must all clash with the human consciousness.

Climate change is not an anomaly that has emerged due to specific and precise manifestations of human excess. It is the result of a broad psychology that has long been the root of modern economic thought. The great absurdity of capitalist economics is the juxtaposition of infinite wants and needs with limited resources, otherwise known as the 'economic problem'.[5] The concept provides the basic mechanism of determining the price of goods and services through the interaction of supply and demand. Governments and economists focus their energies in satisfying as many of society's wants with the available resources by increasing the efficiency of production. However, economic efficiency is understood in the context of minimising the financial cost of production, rather than investing in long-term sustainability. The price of a good is determined by the cost of the resources used in its production, and by those resources' 'scarcity value', meaning the ease with which they were obtained relative to demand.[6] Suppliers are therefore encouraged to produce goods that are derived from cheaper materials and production processes rather than due to their sustainability. Investment in reducing the length and costs of production and distribution is intended to supplement output and consequently expand profits, not to develop the sustainability of basic resources. Governments have

incorporated this perspective into their policy decisions through their obsession with the costs to economic growth of reductions in greenhouse gases. Global warming can be understood historically as the logical tipping point for modern economic practice. The imminent prospect of catastrophic climate change constitutes the moment in the history of capitalism when the instruments of economic growth threaten to undermine many of the basic natural resources necessary to human existence. The modern economy was never intended to create sustainable conditions for human development, but to reduce the costs of accruing wealth. The competition in trading that helps formulate prices has completely overawed most forms of self-sufficiency, which are currently regarded as inefficient. The logical necessity of achieving a degree of energy self-sufficiency, through the transition to renewable forms of energy, cannot continue to be dismissed as an inefficient alternative to cheaper fossil fuels. Nor can nations simply postpone all difficult decisions until an undefined technological miracle corrects their scars of economic excess without major and philosophical changes having to be imposed. It is, as Tim Flannery has suggested, a question of the human species developing 'a new sense of responsibility'.[7] Technology, although its potential remains truly vast, has contributed to the growing calamity as much as it has sought to abate it. Humanity, in order to resolve the causes of global warming, must reconsider the central economic assumptions that until now it has held sacred. There can be no effective action until human civilisation redefines the essential purpose of its economy.

The contradictions of the modern economy have exacerbated another recent phenomenon, the alienation of humanity from its ecology. The environment has been reduced over the centuries since the Industrial Revolution to being simply another source of economic capital. A deposit of materials required to satiate the ever-expanding appetite of consumerism. This ideology is, however, founded upon the conservative assumption that human progress is the primary biological marvel that this planet has yet produced, and as such earth's ecosystems shall adapt to human circumstances, rather than the other way round. Not only does this arrogant perspective judge human wellbeing to be the main concern of the relationship between humanity and its environment, it ignores the evidence of an equilibrium existing between all forms of life. James Lovelock's 'Gaia

hypothesis' argued that the flora and fauna that inhabit this earth are interconnected and constitute different elements of the single planetary organism of Earth. Every creature is but a cell in the body of Gaia, Lovelock's mythical metaphor for Earth. Lovelock characterised the atmosphere as crucial to the survival of all life forms for it is 'an extension of a living system designed to maintain a chosen environment'.[8] This has been achieved predominantly through the regulation of atmosphere's content of greenhouse gases, particularly carbon dioxide. Humans have been bequeathed a significant portion of this responsibility, purely due to the success of their expansion across the surface of the globe. The abuse of this delicately balanced equilibrium by humanity's economic practices is to the detriment of all species and the majority of human beings, yet the financial benefits wrought by this destruction are monopolised by a distinct minority in human society. Moreover, Lovelock himself notes that the destabilisation of Gaia's delicate equilibrium provokes awful retribution, for 'there must be an intricate security system to ensure that exotic outlaw species do not evolve into rampantly criminal syndicates'.[9] To assume that humanity's inventiveness alone can protect it from the wrath of the entire planet is therefore misleading. Ethically, no species possesses the right to wreck the biosphere, and by implication the future of other species, in the name of its own advancement.

The history of human evolution has endowed the human race with an intellect as of yet unmatched on this earth. This privilege is burdened with responsibilities to a world that has provided the conditions necessary to sustain human existence, and the peoples of the world who are now suffering from the abuse of the biosphere. As human beings claim an ability to understand nature and the processes that sustain its life, they are obliged to use this knowledge to contribute to the stability of the atmosphere, rather than to threaten it. Throughout history, many civilisations have recognised the need to establish and respect an amicable equilibrium with the environment. This is primarily due to the knowledge in many civilisations of their utter reliance on the bounty of nature. The ancient Egyptians were entirely dependent upon their precise predictions of the annual flooding of the Nile. Plague has repeatedly threatened to annihilate societies throughout the ages of human history, and the horrors of drought and famine have often been the source of far-reaching polit-

ical ramifications. The reality of their predicament compelled the members of their civilisations to admit that they were ultimately dependent upon the whims of natural cycles, and not on any aesthetic structures created during their prosperity. In this respect the very success of the modern world threatens to become its doom, for the peoples of Western capitalist nations no longer seem to appreciate the power that nature remains capable of exercising over the destiny of human civilisation. The artificial values and concerns that have long formed a bulwark between humanity and natural ecosystems have deprived the human experience of its sense of vulnerability to events beyond its control. There has arisen a belief that the natural world is a stable entity, both flexible in the face of human excess and unable to undermine the foundations of human prosperity. There is thus a contradiction between modern humanity's reductionist philosophy, which analyses human activities in isolation, and the wisdom of the Gaia hypothesis, and its belief that pollution cannot occur without a price being levied on all of Earth's organisms. However, 'it is the reductionist world view that has brought the present state of climate change upon us'.[10] If climatic catastrophe is to be countered, then modern assumptions concerning human pre-eminence and isolation must be readdressed. Too often societies on the verge of collapse allow themselves to be consumed by their own internal disputes while the peril that threatens to consume them goes unnoticed. Humanity must begin to exercise a certain humility in its examination of the environment upon which it relies, and abandon egotistical views that give preference to mercurial measures of success above all else.

Climate change threatens the prospects of the entire human race. However, its effects, at least in the immediate future, are not evenly distributed among the nations of the world. The vast majority of emissions have been and continue to be released by Western capitalist states. Indeed the carbon emissions per person of China, 2.7 tonnes per annum, and other newly developed economies remain a fraction of those in Western nations, such as Britain, which emits 9.5 tonnes per head, while the United States produces 20 tonnes.[11] Despite this, the climatic repercussions of global warming are being, and it seems shall continue to be, endured by many of the poorest people on Earth. In effect, the greed and excess of the wealthiest societies in

human history are being atoned for by those who do not possess the means to protect themselves from the variations of their climate. The population of Bangladesh, which faces the prospect of mass flooding, and of Ethiopia, where famine is an inevitable consequence of a drier climate, as well as many other millions of human beings, shall continue to suffer for the policies and extravagance of societies whose wealth will, temporarily, shield them from the consequences of their indulgence. The challenge that climate change poses to the modern world is therefore not simply one of environmental ethics, but one of social justice. It is therefore misleading to argue that polluters must cut their emissions in order to save the environment. They must also do so to save human lives.

The extent of the projected transformations of local ecosystems and their obvious ramifications to the communities living nearby ensures that this is no longer a scientific or a political issue: it is a humanitarian emergency. Many of the responses to the problem have not, however, acknowledged this in their calculations. Potential solutions to global warming are commonly analysed in economic terms, concentrating upon the financial expenses of reducing greenhouse-gas emissions compared with the costs of allowing climate change to proceed unhindered. This equation, whatever its political benefits, is not only unethical, but symptomatic of the flaws in contemporary perceptions of climate change. The disintegration of the world's ecosystems and the human beings that they support is an ethical issue, yet it is treated as an economic one. By assessing its impact in purely financial terms, analysts estimate the anguish of other human beings according to economic logic. George Monbiot, when examining the Stern report, commissioned by the British Government to evaluate the economic implications of global warming, has found that should the costs of tackling climate change ever exceed the long-term benefits, 'we would then find that it makes economic sense to kill people'.[12] The members of modern capitalist societies should therefore cease disputing the precise evaluations of the financial sacrifices levied upon their personal and public wealth by the effort to reduce greenhouse gases. For by doing so they intrinsically focus upon the small constraints to their own prosperity and ignore the lives that would be saved if they accepted some regulation of their behaviour. Every voter in Western developed nations should consider

the impact of their privileges upon individuals whose experience of life is utterly different to their own, and yet are at the mercy of the excess of Western nations. The battle against climate change is therefore not a question of budgets and taxes, but of whether any material wealth is of equal value to a human life. The vast majority of people throughout the developed world know of the existence of climate change and its likely impact upon communities across the globe. There is therefore no ethical justification for not attempting to reverse global warming, for by failing to do so Western society would be tacitly accepting the suffering wrought by climate change, and Western civilisation's own role in the origins of humanity's misery.

Governments around the world have now been forced to acknowledge the existence of climate change and propose policies to address it. In December 2008, the Rudd Government announced its strategy for reducing greenhouse-gas emissions. The government promised to cut 5% of 2000 emissions by 2020, although this would be raised to 15% in the event of a major international agreement to conduct joint action against global warming. This undertaking is by no means enough. Many scientific observations imply that the scale of the problem is greater than previously imagined. Moreover, the Rudd Government has committed itself to the adoption of an emission trading scheme, in the hope that the market shall facilitate the transition to more renewable forms of energy generation. This can only be at best partially successful, for emission-trading schemes are ineffective unless accompanied by harsh reductions in greenhouse-gas emissions, which the Rudd Government has thus far refused to contemplate. The Government has further dampened the scheme's potential by, in order to make the policy more politically palatable, granting free pollution permits to the most vulnerable industries. The size of these subsidies is vast and ongoing. Business shall receive almost half of the total permits available for free by 2020, while two of the highest polluters in the economy, agriculture and petroleum, will not be included until at least 2015 and 2013 respectively.[13] This, in addition to the fact that the Rudd Government intends to use the profits of the scheme to reimburse households and business, completely dilutes the motivation for polluters to change their energy practices. Despite the increasingly desperate tone of scientific findings, the conservative government policies of Western capitalist

states fail to accurately reflect the measures that must be taken to temper the potentially catastrophic repercussions that await civilisation. This reticence is, however, the nature of democratic government. Politicians' primary concern remains their desire for re-election rather than the integrity of the biosphere. The Rudd Government is consequently compelled by the political process to appeal to the sentiments of what it perceives to be the majority of the electorate. The policy was intended to give the impression that steps were indeed being taken to undermine global warming, without overtly threatening economic security during the onset of a likely recession. As Paul Daley has noted, the '5% target should not be seen as a policy about climate change at all. It is foremost a policy for winning a second term'.[14] The measures taken by the Rudd Government, and indeed all democratically elected administrations, must be understood in a political context rather than an environmental one. The same dilemma blights international efforts to reach an accord for reversing climate change. Global warming is a phenomenon that affects every region of this planet, and therefore it requires a truly global solution. National governments are not enamoured to international initiatives for they exist to pursue their national objectives. However, as Waleed Aly has concluded, 'the environment does not respect our national borders, and national polities are not designed to have global horizons'.[15] By creating a multilateral treaty to oversee immediate restrictions imposed on carbon emissions and bestowing it with sufficient authority to achieve its purpose, national governments would be acquiescing to the infringement of their own sovereignty. Governments would only accept this if there already existed a groundswell of political support for such an action within their polities. The Rudd Government's emissions policy is evidence of the fact that governments do not believe that such political will is apparent among the electorate. This political will must be created and harnessed, however, and it is the responsibility of every citizen of a democratic state to do so, for governments are not proactive and only alter their policies when they are faced with the possibility of electoral defeat. In George Monbiot's words, 'governments will pursue this course of inaction — irrespective of the human consequences — while it remains politically less costly than the alternative',[16] and the notion of political capital is one that every political activist must

appreciate, regardless of the moral case of their cause. The public must be prepared to re-evaluate the purpose of their government and whether there can be any national imperatives and prerogatives in an increasingly globalised world. Without this introspection and a determination to change their own outlook, Australian citizens can expect little action by either their own government or the world in restraining global warming.

Nero's empire would survive his death by more than four centuries and reach ever greater heights of splendour and magnificence. There are many civilisations throughout the ages that once appeared timeless, but fell due to the might of powers beyond their control. Jared Diamond has argued that the depletion of resource bases is a primary reason for the collapse of highly developed and well structured societies such as the Maya . The erosion of the world's ecosystems raises a similar spectre for modern civilisation. Indeed, failure to act could undermine the capacity of Earth to sustain the rising human population, which is already severely overburdening the planet's resources. If the world's human population equals nine billion by 2050, as is expected, humanity will be consuming the equivalent of double Earth's resources.[18] However, sheer self-preservation, although perhaps the most potent, is not the only reason to campaign for major action against climate change. There is a web of obligations that compel every polluter to take substantial action to mitigate the effects of their inefficiency. The welfare of millions of human beings and the future of many other species are in the hands of the most economically powerful nations on Earth. It is the responsibility of the citizens of those countries, including Australia, to redress the greed that has given rise to the disintegration of the world's ecosystems, and force political action through widespread activism. This is particularly significant, for without the desire to atone for their pollution through accepting major changes to their lifestyle, all the knowledge and predictions available will do nothing to resolve the crisis. Those outraged by the timid policies of the Rudd Government and others should not constrain their beliefs and restrict their opinions to private, but speak out and campaign for a better and safer planet for future generations. In the absence of this willpower, the current generation will have bequeathed the vilest of legacies to their descendants. For centuries Western civilisation has

been engulfed by its many internal concerns. It has been unable to perceive that its evolution involves ramifications that resound far beyond the limits of its cities and the chimneys of its factories. Without 'accepting that we no longer possess the powers of angels or of devils',[19] Western civilisation shall be rocked by the very fumes of its success. The ecological nemesis shall fall upon humanity's wanton hubris. As the Romans discovered amid the chaos and madness of their empire's collapse, 'by virtue of its unbounded aggression, Roman imperialism was ultimately responsible for its own destruction'.[20] Over the millennia humanity has conquered. Now it may fall.

Endnotes

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10 Flannery, T. (2005). *The weather makers,* Melbourne, Australia: Text Publishing.
11 Energy Information Administration, International Energy Annual 2003, 2005, Table H. 1cco2(World Per Capita Carbon Dioxide Emissions from the Consumption and Flaring of Fossil Fuels, 1980–2003): http://www.eia.doe.gov/pub/international/iealf/tableh1cco2.xls, as cited in Monbiot, G., op. cit.
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17 Diamond, J. (2005). *Collapse: How societies choose to fail or succeed*. New York: Viking Books, New York, 2005, as cited in Flannery, T. (2005), op cit.
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