

15. Meaning ‘skin-winged’, they are the colugos, also called ‘flying lemurs’, although they are really gliders. See also Catchpoole, D., The Colugo Challenge: Perfectly fit for its life in the trees, the colugo just doesn’t ‘fit’ into the evolutionary ‘tree of life’, *Creation* **33**(2):28–31, 2011; creation.com/colugo.
16. Baldi, C. *et al.*, Mutations in two independent pathways are sufficient to create hermaphroditic nematodes, *Science* **326**:1002–1004, 2009.
17. Bloom, J.D. and Arnold, F.H., In the light of directed evolution: Pathways of adaptive protein evolution, *PNAS (USA)* **106**(Supp. 1):9995–10000, 2009.
18. Bloom and Arnold, ref. 17, p. 9999.
19. In order for natural selection to make the ‘first step’ in selecting in favour of a protein capability, a fortuitously pre-existing ‘promiscuous activity’ of the protein must be present. Also, directed evolution is stymied by local fitness peaks, where no further incremental improvement is possible. This can be overcome by ‘not setting the bar too high’ and, specifically, by ‘identifying appropriate intermediate challenges’ (Bloom and Arnold, ref. 17, pp. 9997–9998). By whom? By the experimenter! Otherwise, since evolution lacks foresight, this comparatively mild challenge of irreducible complexity can only be overcome by a set of natural-selection events that, while not fortuitous in themselves, act in fortuitously proper sequence and timing to change natural selection in just the right way to eventuate in a ‘breakthrough’ protein.
20. Charles, C. *et al.*, Modulation of *FGF3* dosage in mouse and men mirrors evolution of mammalian dentition, *PNAS (USA)* **106**(52):22364–22368, 2009.
21. One of the cusps on the molar tooth in hominids.
22. Minguillon, C. *et al.*, *Tbx4/5* gene duplication and the origin of vertebrate paired appendages, *PNAS (USA)* **106**(51):21726–21730, 2009.
23. Stolfi, A. *et al.*, Early chordate origins of the vertebrate second heart field, *Science* **329**:565–568, 2010.
24. Since coming up with the foregoing exercise, I have learned that others have developed more sophisticated exercises that illustrate the nature of irreducible complexity. The irreducible complexity of Chinese Han characters is comparable to that of folds in protein: Axe, D.D. *et al.*, *Stylus*: A system for evolutionary explanation based on a protein proteome model with non-arbitrary functional constraints, *PLoS ONE* **3**(6):e2246, 2008. See also Axe, D.D. *et al.*, A *Stylus*-generated artificial genome analogy to bacterial genomes, *Bio-complexity.org* **3**(2)1–15, 2011.

A lesson in rational thinking

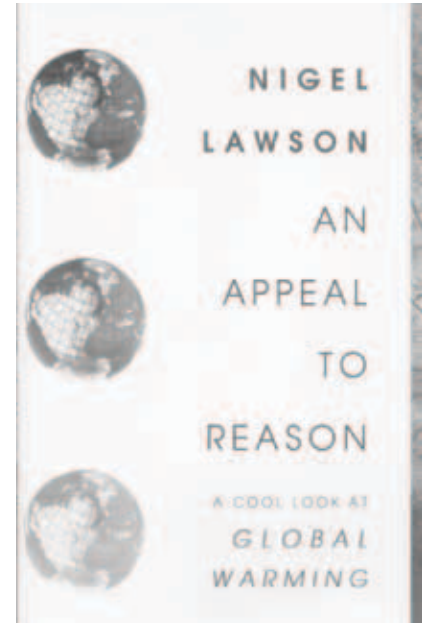
A review of
An Appeal to Reason: A Cool Look at Global Warming
by Nigel Lawson
Duckworth Overlook,
London, 2008

Andrew S. Kulikovsky

Nigel Lawson, or Lord Lawson of Blaby, is probably better known as the father of celebrity television chef Nigella Lawson. However, as a British parliamentarian in the 1980s, he was a significant figure in his own right, serving in Margaret Thatcher’s cabinet as Chancellor of the Exchequer and Secretary of State for Energy.

The book aims to examine the various aspects of the consensus view of Anthropogenic Global Warming, including the science, economics, politics, and ethical aspects. Lawson is concerned about the uncertainties of long-term forecasting and the lack of a real cost:benefit analysis in the policies recommended and advocated by those who demand action on ‘climate change’, especially with respect to the radical change in lifestyle that would have to take place in the developed countries, and the unnecessary burden that would be put on the poorest people in the developing world.

Lawson insists on using the term ‘global warming’ rather than ‘climate change’, which he describes as “attractively alliterative weasel words” given that the climate is always changing, and that such terminology can “lead the unwary to suppose that any significant or unusual weather event must be a consequence of global warming, which may very well not be the case” (pp. 2–3).



Intellectual snobbery

Lawson had a very difficult time trying to find a publisher for this work. It was rejected by every British publisher to which it was submitted. One rejection letter stated, “My fear, with this cogently argued book, is that it flies so much in the face of the prevailing orthodoxy that it would be very difficult to find a wide market” (p. ix). This kind of response is all too familiar to creationist writers and researchers! Lawson also rightly points out that peer review “produces a bias in favour of whatever happens to be the conventional wisdom of the time” (p. 6). All this just reinforces Thomas Kuhn’s contention that the scientific enterprise is governed by a prevailing orthodoxy (paradigm) and demonstrates once again that many scientists and editors of scientific publications are less concerned with truth and fact than they are with power, prestige, and sales figures.¹

Lawson readily admits that he is not a scientist, but notes that neither

are most people who pontificate on the matter with far greater certainty. He adds: “[T]he great majority of those scientists who speak with such certainty and apparent authority about global warming and climate change, are not in fact climate scientists, or indeed Earth scientists, of any kind, and thus have no special knowledge to contribute” (pp. 1–2).

Of course, truth in general and scientific truth in particular, is *not* decided by a democratic vote, nor is it declared by an authority (individual or institution). Just because the majority believe something to be true does not make it so. Just because the IPCC (Intergovernmental Panel on Climate Change) declares something to be fact does not mean that it actually is. As Lawson himself points out:

“Scientific truth is not established by counting heads. There are many instances in the history of science in which subsequent evidence has overturned what had hitherto been the conventional wisdom. Nor, incidentally, does the fact that a scientific hypothesis has been published in a ‘peer reviewed’ learned journal provide *ipso facto* any evidence either that the science is ‘settled’, or that the hypothesis in question is likely to be proved correct” (pp. 5–6).

Global warming pseudoscience

Many people—least of all the general public unfamiliar with how the scientific enterprise operates—do not realise or understand that the ‘science’ behind global-warming is not truly empirical, based on hard evidence and testable propositions. Rather, the majority of the ‘evidence’ is based on computer models designed to simulate complex real world systems. As even global warming alarmist James Lovelock admits: “Observations and evidence are out of fashion; most evidence now is taken from the virtual world of computer models” (p. 6)

Mean Temperature Anomalies (Global)

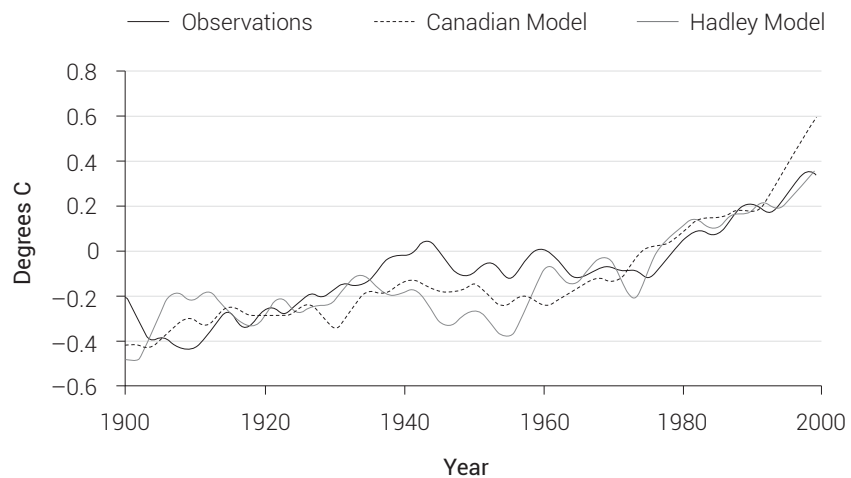


Illustration: Reboelje

Figure 1. Actual temperature observations rarely coincide with the predictions of the climate computer models.

(see figure 1). Sir John Houghton, likewise, admits that “[W]hen you put models together which are climate models added to impact models and to economic models, then you have to be very wary indeed of the answers you are getting, and how realistic they are” (p. 24). Even the IPCC itself has described it as a ‘cascade of uncertainty’. With such uncertainty, how can anyone possibly have any idea what the world’s climate will be like in a hundred years time? To insist otherwise just seems incredibly conceited, especially since current modelling does not even explain the present climate, as global warming advocate Kevin Trenberth admits: “None of the models used by the IPCC are initialised to the observed state and none of the climate states in the models correspond even remotely to the current observed climate” (p. 16). Indeed, the climate models failed to predict the 21st-century standstill, despite the fact that global CO₂ emissions have continued to soar. Yet the Hadley Centre still forecast that global warming would resume in 2009 or thereabouts. Wrong again.

Genuinely scientific theories make predictions that can be confirmed or falsified by observational evidence from the real world. Yet Lawson notes that it is not clear what observational

evidence could change the minds of global warming alarmists, especially given the fact that their predictions routinely turn out to be wrong.

Because of the lack of hard empirical data and observational evidence from the real world in favour of dangerous and human-caused global warming, scientists and other believers in dangerous anthropogenic global warming have tended to ‘cherry-pick’ data that appears to illustrate their predetermined catastrophic alarmist narrative. Moreover, the alarmists do nothing to discourage the media from attributing any and every uncomfortable weather event to global warming. But as Lawson points out, natural disasters have always occurred and always will, so causes other than global warming cannot be ruled out for current disasters either. The same could be said in regard to the existence of drought, hunger, and disease—none of which can be attributed to climate destabilisation.

Another example of the cherry picking of data and facts is the focus on atmospheric carbon dioxide as the cause of global warming. Yet, two thirds of the greenhouse effect is caused by water vapour. Atmospheric H₂O is by far the biggest contributor to global warming with carbon dioxide a distant second.

Lawson points out that the cherry picking also extends to historical records. The medieval warming period was a time when temperatures were probably at least as high as, if not higher than, they are today and the temperature was even warmer during the Roman period, when vineyards flourished in north-eastern England.

Lawson also points out some of the equivocation and misrepresentation that occurs when discussing climate science. A common example is the absurdity of describing atmospheric carbon dioxide as ‘pollution’ despite the fact it is a naturally occurring substance that is essential for life. This is like saying clouds are a form of pollution! People who use such language are misrepresenting the science in order to mislead.

Lawson goes on to ask:

“... is it really plausible that there is an ideal average world temperature, which by some happy chance has recently been visited on us, from which small departures in either direction would spell disaster? ... In any case, average world temperature is simply a statistical artefact. The actual experienced temperature varies not only between day and night and between summer and winter. It also varies enormously in different parts of the globe” (p. 27).

No one disagrees with the basic science behind the greenhouse effect. The disagreements, however, are about the significance of the contributions made by human beings. This is far more complicated and far less certain, and the approaches used by leading climate scientists seem fundamentally flawed. Lawson rightly criticises the lack of falsifiability of the climate simulation models and their predictions. These models continue to be used as a basis for predictions and, as a consequence, government policy, even though they fail to meet the most basic test of a theory to be considered within the domain of science.

Lawson also rightly criticises the IPCC and argues that its processes have become seriously flawed. Despite the comprehensive debunking of the Michael Mann ‘hockey stick’ by Ross McKittrick and Steven McIntyre, the IPCC has refused even to acknowledge the hockey stick error or to review, let alone change, the faulty procedures which failed to detect the deficiencies in the research. Proper procedures would never have allowed Mann’s research to have been published in the first place. All the IPCC has done is quietly drop the hockey stick from its 2007 report.

The central issue that must be adhered to, according to Lawson, is

“... what has been the rise in global mean temperatures over the past hundred years; why we believe this has occurred; how much, on this basis, are temperatures likely to rise over the next hundred years; and what are the consequences likely to be.[sic] It is only after answering these questions that we can begin to decide rationally what can or should be done about global warming.” (p. 19)

Although Lawson believes the science of global warming is far from settled, he assumes an overly cautious position, believing it is better “to err

on the side of caution”. Therefore, for the rest of the book, he works under the assumption that the anthropogenic global warming theory is correct as reported by the IPCC’s 2007 report.

Mitigation vs adaption

Lawson exposes the vacuousness of the current policy responses to global warming. His sharp economic insight into the inherent unworkability of ‘emissions trading schemes’ should be a wake-up call for those governments that have put so much faith in them. He also derides all those ‘carbon offsetting’ schemes employed by many individuals and companies as little more than a modern version of the medieval Catholic practice of buying and selling ‘indulgences’. He also correctly highlights the sham of producing ethanol to reduce our consumption of fossil fuels given that ethanol consumes more energy to produce than it offers in return. Indeed, the reality is that current policy responses incur huge costs. E.g. to fill one SUV tank with ethanol, the corn required would feed a man for a year. Thus it will be the poorest people around the world who will suffer the most. Advocates of global warming mitigation may present themselves as saviours of the planet,



Illustration: Reboelje

Figure 2. The Dutch adapted to their environment in the 16th century by building dykes—earth walls—to keep out the North Sea.

but, in practice, they are the enemies of poverty reduction in the developing world.

Whatever the possible adverse impacts of global warming, Lawson prefers adaption to mitigation. He suggests that the world's time and energies would be far better expended by embarking on a policy of adapting to a warmer climate. Indeed, human beings have already done this in many ways. Despite the huge variation in temperature between summer and winter and in different parts of the globe, human beings have managed to colonise all kinds of areas with varying climates.

Lawson argues that the IPCC's most serious flaw regarding the impact of global warming is its failure to consider the importance of adaptation. According to Lawson, the IPCC systematically underestimated the benefits of adaptation. The IPCC report claims to take into account both costs and benefits yet it devotes much space to the costs and almost none to the benefits:

“Perhaps the single most serious flaw in the IPCC's analysis of the likely impact of global warming is the grudging and inadequate treatment of adaptation, which leads to a systematic exaggeration of the putative cost of global warming” (p. 39).

As an example of adaption to the possibility of sea level rise, he points out that the Dutch managed to keep the sea at bay with only 16th-century technology, and their adaptations have remained in place for almost 500 years (figure 2).

Lawson argues that adaptation is more pragmatic and offers superior cost effectiveness (pp. 42–43):

1. None of the adverse impacts of global warming are new. Drought, hunger and disease and flooding have long plagued many parts of the developing world.
2. Adaptation will substantially reduce the adverse impact of any future global warming that may occur.

3. Adverse impacts of global warming are subject to considerable local variation. Adaptation allows tailored responses to problem areas.
4. Adaptation allows us to pocket the benefits of global warming while diminishing the costs.
5. Beneficial results of adaptation will arise far more quickly than what is even theoretically possible from emissions reductions.
6. Adaptation requires largely local action. There is no need for any global agreements.

This final point is key. There is virtually no hope of getting any global agreement in regard to carbon pricing—especially from emerging power economies like China, India, and Brazil, as well as the rest of the developing world. “... anyone who believes this to be a politically realistic way forward need not bother about saving the planet: they are already living on a different one” (p. 95).

The new green religion

The book ends with a warning about the dangers of the environmental movement, calling it the ‘new religion of eco-fundamentalism’ (p. 104) and claiming that “we appear to have entered a new age of unreason” (p. 106).

With the collapse of Communism, ‘green’ has become the new ‘red’. Totalitarians have flocked to support this new ‘moral’ cause. Global warming is now being used as a basis by those who seek power and control to interfere with everyone's lives. It provides a licence to intrude, interfere and to regulate.

Lawson also rightly points out the influence of secularism and the rejection of traditional religion (i.e. Christianity) on the global warming debate:

“I suspect that it is no accident that it is in Europe that eco-fundamentalism in general and global warming absolutism in particular, has found its most fertile soil; for it is Europe that has become the most secular society

in the world, where the traditional religions have the weakest hold. Yet people still feel the need for the comfort and higher values that religion can provide, and it is the quasi-religion of green alarmism and what has been well described as global salvationism ... which has filled the vacuum, with the reasoned questioning of its mantras regarded as little short of sacrilege” (p. 102).

However, numerous churchmen—in a bid to be ‘relevant’, no doubt—have happily made common cause with the new religion of climate change and become co-belligerents with the global warming alarmists. The Archbishop of Canterbury, in his typical self-righteous manner, recently told British politicians that they would face ‘a heavy responsibility before God’ if they failed to act to curb global warming, and described the lifestyle of those who allegedly contribute most to global warming as ‘profoundly immoral’ (p. 103).

Lawson concludes by noting that the reason he can write this book is that his own career is behind him. Indeed, many other qualified scientists who publicly question the conventional wisdom have retired. However, this is not possible for young, up-and-coming scientists or even established scientists still actively involved in research. For such scientists to come out publicly against global warming alarmism or even to offer a more cautious and sceptical opinion would jeopardise their employment and/or career aspirations. As Lawson puts it:

“The PC at the heart of the IPCC, as it were, is the most oppressive and intolerant form of political correctness in the Western world today” (p. 105).

References

1. See Kuhn, T.S., *The Structure of Scientific Revolutions*, 3rd ed., University of Chicago Press, Chicago, IL, 1996.