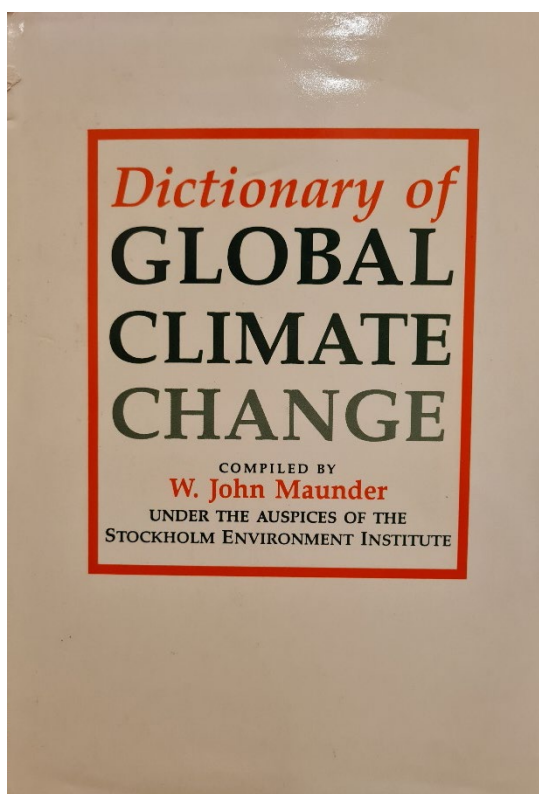


My 1992 'Climate Book of the Year'

Maunder,W.J. (1992) *Dictionary of Global Climate Change*. [1st edn.] London: UCL Press.
240pp.

This essay continues my series of monthly posts in which I select one 'climate' book to highlight and review from one of the 44 years of my professional career in climate research (starting with 1984, my first year of academic employment). The series will end in September 2027, the month in which I shall retire. [See here for more information](#) about the rationale for this series, and the criteria I have used in selecting my highlighted books.

This '1992 essay' can be [download as a pdf](#).



1992 was a watershed year for the international politics of climate change. The UN Conference on Environment and Development, also known as the 'Earth Summit', was held in Rio de Janeiro in June, and emerging from this intergovernmental meeting was the UN Framework Convention on Climate Change. The signing of the UNFCCC marked the institutionalisation of climate change among the world community of nations., following the accelerating high-level political attention given to the topic in the late 1980s and the publication of the IPCC's first scientific assessment in 1990. The required 50 national ratifications for the Convention to come into force were secured by March 1994, and today the Convention has been signed by 198 of the world's nations—that is, by virtually all. It continues to shape the international politics of climate change through its annual Conference of the Parties.

This background context is important for understanding my choice of John Maunder's '**Dictionary of Global Climate Change**' as my **Climate Book of 1992**. The emergence of new understandings about the world—whether in the fields of science, philosophy, art or ethics—always requires the invention of a new language, new words to describe new objects, concepts and institutions. Innovating language allows us to make sense of a changing world, but also brings new worlds into being. And if new understandings are to be shared across the worldwide community, common definitions of new words and concepts are needed for communication to be effective.

The co-occurrence in 1992 of the signing of the UNFCCC with this published dictionary of climate change is therefore significant. Maunder's '**Dictionary of Global Climate Change**'

(henceforth ‘the Dictionary’), had its origins in the Second World Climate Conference held in November 1990 in Geneva, convened by the World Meteorological Organisation (WMO) and co-sponsored by UNEP, UNESCO and ICSU. Maunder was a New Zealand climatologist—the then President of WMO’s Commission on Climatology—and had been approached by the co-ordinator of the Conference, Howard Ferguson, to prepare a lexicon of basic terms necessary for understanding of the new science of climatic change. This lexicon was made available to the 1,400 delegates to the 1990 Conference, coming from 137 different countries, the biggest and most diverse international climate change gathering that had been held. There was also a ministerial meeting appended to the scientific discussions of the Conference, and many attendees would not have been practising climate scientists or climate professionals. The induction of this wider network of stakeholders—politicians, technical experts, planners and policy-advisors—into the new language of climate change was therefore seen as important if the Conference was to be a success.

In 1990, Maunder had been temporarily employed by the Stockholm Environment Institute (SEI), serving within the Secretariat for the Conference. This explains the acknowledgement to SEI on the front cover of the book (see image above). It also emphasises the close association between the WMO and the SEI on the issue of climate change that had been forged during the 1980s, particularly through the efforts of the SEI Director, Gordon Goodman. Following the 1990 Conference, Maunder expanded and edited his lexicon to make it suitable for the 1992 publication; a second revised (paperback) edition was issued in 1994.

At the time of its publication, there was nothing equivalent to Maunder’s ‘Dictionary’, a compendium of terms dedicated to climate change. 1992 was before the widespread roll-out of the internet and there was no way of disseminating such material other than through printed books. The IPCC’s First Assessment Report had appeared in 1990, but it contained no glossary of key terms. In fact it was not until the publication of its Third Assessment Report in 2001 that the IPCC included its own glossary in its printed reports, somewhat ironically given that by 2001 there *was* widespread and easy access to the internet and on-line glossaries. (The IPCC glossary of terms has continued to appear in all subsequent IPCC Reports).

The composition of Maunder’s ‘Dictionary’ reflects the strong influence of the meteorological community in shaping the language of climate change in the 1980s and 1990s. In a foreword to the book, Godwin Obasi—the WMO Secretary-General at the time—explained that when the WMO was created in 1950 it inherited the pre-existing International Commission for Climatology which, among its other responsibilities, “had already recognized the need for the definition and explanation of terms used in climatology” (p.vii). Tellingly, Obasi goes on to say that “much of what we now know about climate derives from the scientific and technical programmes – co-ordinated [initially] by the IMO [the International Meteorological Organisation, and the precursor to the WMO] and now, to

a much greater extent, by the WMO". All climate knowledge, it was being asserted, originated as meteorological knowledge.

It is not surprising therefore that 'the Dictionary' has a very meteorological and institutional feel to it. Maunder's selection of terms to include reflects the dominant hand of science on the language of climate change used at the time; his selection also gives much weight to the institutions, programmes and conferences of the United Nations and of international science. This leads to some curiosity in the selection of entries. While the inclusion of the International Geosphere-Biosphere Programme (IGBP) is understandable given its important role in climate data gathering, analysis and modelling, it is not at all obvious why an entry for the International Astronomical Union (IAU) should be included. And the science-heavy nature of 'the Dictionary' is illustrated by the absence of any mention of climate vulnerability, or associated concepts, and a mere two-line entry defining 'Climate adaption' is indicative of just how little institutional attention was paid to climate adaptation in the early 1990s. As a dictionary intended for use by those mostly unfamiliar with 'climate change' terms, its useability was limited by the almost complete absence of cross-referencing between related entries.

The idiosyncrasy of 'the Dictionary' was noted by reviewers at the time. For example, climatologist Allen Perry reviewing the book for *The Holocene* journal wrote, "[It] reflects a bias towards UN and WMO programmes of which the compiler has first-hand experience." Perry says that despite it being...

...quirky, biased and at times infuriating, I suspect that the lack of a ready alternative will mean that this dictionary will find its way on to the desks of quite a large proportion of the diverse community of climate-change researchers. It is perhaps the very diversity of the subject and the wide variety of background of those with an interest in the mechanics and impact of climate change that makes the production of a satisfactory dictionary all but impossible.¹

This reviewer goes on to observe that it is indeed "questionable as to whether a dictionary is the most appropriate source of primary background information in this context." The ideas and concepts of the rapidly surging field of climate change studies could not adequately be captured in a rather static dictionary. Physical geographer Andrew Goudie was also critical and hesitant to give it his endorsement: "Where the dictionary is much more useful and original is in terms of guiding the reader through the minefield of abbreviations and acronyms dreamed up by the ever burgeoning climatic change industry. Had it stuck to that area it might have been more successful".²

¹ Perry, A.H. (1993) Holocene book reviews: Dictionary of global climate change. W.J. Maunder. London: UCL Press, 1992, 240pp., £19.95, hardback. *The Holocene*. 3(4): 377-378.

² Goudie, A.S. (1994) Maunder, W.J. 1992: Dictionary of global climate change. London: UCL Press. *Progress in Physical Geography*. 18(4): 610-611.

'The Dictionary' is of course a product of its time and for this reason it is a noteworthy book. Appearing in 1992 it marks an inflection point when the language of meteorology was being translated into the language of 'Earth System Science' (although this term was not an entry) and the new institutional politics of climate change. Yet it appeared before the wider resonances of climate change as a human, social, cultural and ethical phenomenon had fully taken root within the institutional arena. Maunder's dictionary reads very differently, for example, to the later encyclopaedias of climate change which began to appear early in the twenty-first century. For example, 'The Encyclopedia of Global Warming and Climate Change', edited by the American climate scientist George Philander, and published by Sage Publishing in 2008, has a very different playlist of definitions, themes, topics and concepts amongst its 750 short article entries, which 16 years after Maunder reflect the much greater disciplinary diversity of the topic.³ All climate change knowledge most definitely did *not* originate as meteorological knowledge.

Putting its limitations and idiosyncrasies to one side, the appearance of 'the Dictionary' in 1992 was significant as a marker of the scientific, political and public recognition and salience of climate change as an important feature of the modern world. As noted above, human language and vocabulary always evolves and this is true with respect to climate change as much as any other field of creative human endeavour. Whilst Maunder's dictionary has entries for the three main terms used around 1990 to describe the changing climate—'climate change', 'global warming', 'the greenhouse effect'—there is no mention of course of the more recent neologisms that have proliferated—'climate crisis', 'global weirding', 'global heating', 'climate breakdown', 'climate emergency'. The language we use actively makes and shapes the world we live in.

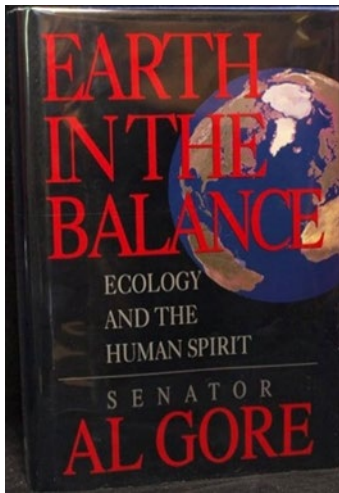
© Mike Hulme, October 2024

Other significant climate books published in 1992

Gore,A. (1992) *Earth in the Balance: Ecology and the Human Spirit*. Boston, MA: Houghton Mifflin. 407pp.; and in the UK as: Gore,A. (1992) *Earth in the Balance: Forging a New Common Purpose*. London: Earthscan. 407pp.

Al Gore has been the most prominent of the American politicians of the past 40 years who have engaged with the question of climate change. Elected to the House of Representatives in 1977 and to the Senate in 1985, he was appointed Vice-President to Bill Clinton in January 1993. During the American election year of 1992, Gore published a *tour de force* about the

³ Philander,S.G. (ed.) (2008) *Encyclopedia of Global Warming and Climate Change: 3 Vols*. London: Sage Publications. 1552pp.



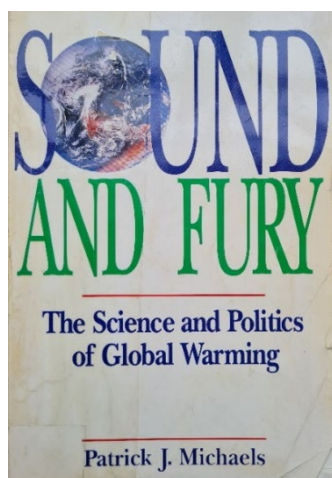
state of the global environment and what should be done about it, titled '[Earth in the Balance: Ecology and the Human Spirit](#)'.

The book was a *New York Times* best-seller and in subsequent years went through several editions, as Gore's prominence in American politics and public life waxed strong. 'Earth in the Balance' was written at a time of emotional strain for Gore, his son recovering slowly from a near-death accident. Gore wears his heart on his sleeve in the book, and he also is clear about his personal Christian faith and the spiritual dimension of what he sees as the Earth's crisis condition, hence the sub-title.

(Interestingly, this sub-title was changed to 'Forging a New Common Purpose' in Earthscan's UK edition from the same year).

The book says little about climate science and indeed has a broader scope than simply climate change. His final section proposes a 'Global Marshall Plan' to address current ecological issues, with five core elements: stabilise global population; innovate and disseminate appropriate technologies; re-write economics as eco-nomics; negotiate international environmental agreements; and initiate a worldwide environmental education programme. The early 1990s was a time of great optimism in world affairs. Gore's 1992 manifesto for 'balancing the Earth's ecology' reflected the mood of the times and his own unshakeable faith in the human spirit. From the perspective of 2024 his hope seems almost quaint, if nevertheless admirable.

Michaels, P.J. (1992) *Sound and Fury: The Science and Politics of Global Warming*. Washington DC: Cato Institute. 196pp.



By the late 1980s, it was clear that the increasing attention being paid to the human causes of climate change, and to the emerging proposals for public policies to limit these causes, would open up new political conflicts. What is surprising is that in my corpus of over 3,000 climate books in the English language, it was not until 1992 that the word 'politics' first appeared in the title of a book about climate change. This was '**Sound and Fury: The Science and Politics of Global Warming**', written by American climatologist Pat Michaels (1950-2022). As with a growing number of later climate books—such as Dessler and Parsons' multi-edition, 'The Science and Politics of Climate Change'—Michaels was also the first author to twin 'science' and 'politics'

together in his title. Michaels would later identify strongly with the American climate sceptic movement, notably through his involvement with the Cato Institute a conservative and libertarian think-tank, which published this 1992 book. But Michaels' was a

conventionally trained climatologist and became a research professor of Environmental Sciences at the University of Virginia, as well president of the American Association of State Climatologists. The book's target was less the science of climate change—his summary of the state of science was relatively mainstream for the time—but more the apocalyptic rhetoric that he saw accompanying climate science's public communication and associated policy proposals such as a carbon tax, which cut across what the Cato Institute saw as traditional American principles of limited government and individual liberty. Michaels' book was presaging what was to become a lively American battleground in the years to come.