Available online at www.sciencedirect.com
SCIENCE DIRECT®
Environmental Science & Policy 6 (2003) 543–546
Environmental Science & Policy
www.elsevier.com/locate/envsci

Discussion

Myths of skeptical environmentalism

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The furore surrounding *The Skeptical Environmentalist* (Lomborg, 2001) raises uncomfortable questions about environmental debates in the West. Rarely have passion and reason been effectively combined in discussing its issues. A credulous reception and shrill condemnation both risk obliterating its main useful insight. The recent finding by the Committees of Scientific Dishonesty of the Danish Research Agency that Lomborg's work was dishonest will not calm the affair; the Committees are now under attack from Lomborg's allies (DCSD, 2003; Frank, 2003; The Economist, 2003). *Nature* criticised the Committees for basing their work on existing attacks on Lomborg, arguing they should have sought fresh opinions (Anon, 2003). The Danish Committees' decision, however, was based not just on the published critiques but on a separate correspondence between Lomborg and those who criticised him.[1] The weight of the evidence does suggest that their decision was reasonable. But it is questionable whether fresh investigations could have dampened the polarisation of opinion; it is in the nature of environmental controversy in the West to encourage it.

The book is deeply flawed. Most prominent is want of scholarship. Few references are peer-reviewed journals, and, more seriously, the author inadequately interrogates his sources. Lomborg relies on flawed news articles and research reports without going to the original work (Pimm and Harvey, 2001; Schneider, 2002a). He misleadingly quotes authors to strengthen his arguments (Rennie, 2002a). He does not present all aspects of his issues, for example, only discussing waste in terms of its volume and omitting toxic, hazardous, or radioactive substances (Burke, 2002). He sets up straw men; for example, spending too much time pointing out that the increase in cancer death rates just reflects a larger and older population. He takes on perpetrators of a litany of environmental scare stories but in the process sometimes conflates people and institutions, serious scientists and scaremongers (Holdren, 2002a). He also underestimates the role of policy (Grubb, 2001; Neumayer, 2001). He advocates human ingenuity, but appears to interpret this as technological innovation, not clever policies. The repeated impression from diverse experts is that Lomborg simply does not have an adequate grasp of his material to offer credible pronouncements about the environment. He does not say things that are ridiculous, rather the common charge is that he champions one opinion where several are possible, offering certainty where he should report debate. Experts frequently commented that he had not understood the problems he was discussing, whether climate, waste, or water (Chadwick, 2002; Gleick, 2001; Grubb, 2001; Holdren, 2002a; Mahlman, 2001; Schneider, 2002a).

There are flaws too in his social science. For example, he repeats the fallacy that people in the Third World are too poor effectively to care for their environments (p. 106). He shows little awareness of the importance of local knowledge and agricultural expertise in the Third World (Richards, 1985). Lomborg's discussion of the relationship between growth and inequality was also inadequate. He argued that Kuznet's curves show that countries with the highest growth rates have less inequality than countries with medium rates of growth, inferring that inequality decreases with advanced development. But even basic economic textbooks point out that this relationship is questionable (Ray, 1998). In Lomborg's subsequent discussion (pp. 72–73) he cites just three references in an incredibly fertile and contested field. He does not communicate the uncertainties involved. Inequality is, after all, inevitable. Our economies are presaged on it, all being split into those who own the means of production and those who sell their labour. Whether or not inequality is decreasing is only part of the story, there are more important questions to ask. For example, what sustains high levels of inequality, how do the disadvantaged resist it, and why do they fail to change the situation? Lomborg, in his eagerness to point to a positive story misses important questions.

It is hard to avoid the conclusion that the knowledge that he presents has not been adequately tested, and inexpertly

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[1] Lomborg responded to the initial complaints, his crtics replied to his response and Lomborg offered a final rejoinder: Pimm and Harvey to Danish Committees of Scientific Dishonesty 15th March 2002; Lomborg to the same 25th April 2002; Pimm and Harvey to the same 20th May 2002; Lomborg to the same 30th May 2002.

1462-9011/$ – see front matter
doi:10.1016/j.envsci.2003.08.001

handled. Lomborg is not therefore wrong, but we are left with little reason to believe his analysis. He was found to be dishonest because he could not meet the standards of scientific practise but yet presented his work as scientific and true. The Committees' opinion was that he had not wilfully misled his readers, he was simply unable to lead them properly. The editor of Scientific American was right, the book is a failure (Rennie, 2002b).

But this creates a further problem: that the errors in this volume may discredit the necessary task of debunking environmental scaremongering. The faults of unwarranted gloom are no less for the flaws of one critic. There are many examples of inadequate knowledge and poor scholarship driving environmentalist fears which Lomborg did not detail. Garett Hardin's immensely influential article about overpopulation invoked a model which has misrepresented the commons (he was in fact describing open access resources), but which remained an inspiration about them for decades (Hardin, 1968; Ostrom, 1990; Ostrom et al., 1999). The Himalayas' monolithic degradation story, powerful in the 1970s and early 1980s, had little factual basis and has now given way to a much more nuanced account of environmental change and management (Ives and Messerli, 1989; Thompson et al., 1986). There are several other cases of environments which experienced less degradation as population has increased, despite fears to the contrary (Lambin et al., 2001; Mortimore, 1998; Tiffen et al., 1994). Conservation organisations promote wilderness preservation in Africa on the basis of misleadingly representations of Reserves' social and environmental histories and without sufficient mention of the costs of conservation (Brockington, 2002). In the same vein de Waal has found that humanitarian disasters have been exaggerated by the relief agencies for fund-raising purposes (De Waal, 1997).

This does not mean that the world is beautiful. Even if disasters are not as bad as portrayed, they are still grim. The investment in environmental improvement following population increase can be accompanied by exclusion of people from land (Murton, 1999; Rocheleau et al., 1995). The Himalayan degradation fears have been replaced by a more complicated story of a mosaic of degradation and sustainable change. Where optimism is possible, it can only be more cautious and careful than Lomborg's.

But these nuances are also absent from the debate about *The Skeptical Environmentalist*. The book's reception seemed unable to rise above the book's quality. Much was meaningless froth—fawning press reports and equally unenlightening condemnation. Lomborg's footnotes may not always have led to reliable sources, but at least they made his claims much more falsifiable. This was noticeable by its absence among his critics. Given its numerous flaws and popularity it attracted surprisingly rare detailed refutation and much blank dismissal.

What the debate has lacked in detail it made up for with invective. An unusually unhelpful example was the review in *Nature* by Pimm and Harvey (2001). They made many substantial points, but had some surprising weaknesses. They criticised Lomborg's use of proportional statistics of starvation rates because this concealed the numbers of people involved, but they ignored his argument as to when absolute numbers or proportions were appropriate measures of these data. They pointed out severe weaknesses in his treatment of biodiversity, but displayed no caution when extending their dismissal to the rest of the book. Other reviewers were more careful beyond their fields. Pimm and Harvey also referred readers to an anti-Lomborg website which would not normally merit the attention of *Nature's* readership, after having criticised Lomborg for citing web resources.[2] And their characterisation of much of Sub-Saharan Africa as a 'hellhole' is something they ought to regret. This was an angry piece, which is not in itself wrong (science can be passionate), but its tone, combined with its flaws, and the fact that it saw itself as part of a broad alliance of rebuttals, meant it came across as partisan. It was a shrill contribution to a shrill debate.[3]

The vitriol in environmental controversy demands explanation. Holdren argued that public rebuke is necessary when people try to short circuit the normal means to credibility (Holdren, 2002b). But this is unlikely to be the only reason. Scientists are often not just researchers, but also activists—their knowledge demands action. Some subjects (extinctions for example) do not lend themselves to personal detachment. It is, therefore, difficult to respond to books like Lomborg's in a measured fashion. Passion for nature underpins our interest in it in ways which are not easily acknowledged, especially in scientific debates where reason and emotion tend (unreasonably) to be opposed (Milton, 2002).

There is also the suspicion that this hostility reflects the value of environmental concern in driving research funding. It is clear that environmental optimism is politically valuable. Harvey's submission to the Committees on Scientific Dishonesty details how Lomborg's ideas have been championed by lobby groups.[4] Pessimism is similarly wielded. Schneider, who exposed considerable flaws in Lomborg's work on climate change, has argued that scientists face a double ethical bind, requiring them to be both effective in communicating to a broader public (which may mean speaking in media soundbites) and honest (Schneider, 2002b). Myers notes that his originally high estimates of extinction were made in order to put them onto 'scientific and political agendas' (Myers, 2001). Scientific knowledge is not neutral. It is actively used by those who possess it to shape public opinion and funding agendas.

[2] Pimm and Harvey's contributions elsewhere have been more useful. For example their paper for the Union of Concerned Scientists http://www.ucsusa.org/publication.cfm?publicationID=395 viewed 20th January 2003) and their complaint to the Committees of Scientific Dishonesty.

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[4] Harvey to Committees of Scientific Dishonesty 20/5/2002.

In more public arenas passion reflects the complexity of the issues and our inevitable involvement in them. Our knowledge of environmental threat is confusing and worrying. Causes of crime and economic change are similarly complex, but we are less caught up in them, whereas simply switching on lights instantly implicates us in environmental change. There is also a widespread public sense that we simply do not understand the nature of our impact on the environment (Beck, 1992). Current use of the precautionary principle in risk assessment by numerous official bodies fails to deal with the incompleteness of our knowledge and places the burden of proof on those worried about the impact of new technologies not on those introducing it (Grove-White, 2001; Hoffmann-Riem and Wynne, 2002; Scott et al., 1999). A more cautious approach will beg the sceptics' question (are things that bad?) and it will risk spending money unwisely (Pearce, 2001). But many environmentalists would argue that the risks deserve the expense and passion is necessary to mobilise inert publics.

These forces in science and society encourage a confrontational tone in both environmental optimism and pessimism. There appears to be an accepted role for people to be strident and shrill and others smugly to accept the necessity of degradation. These are fault lines that exist beyond print.

But perhaps the deeper explanation lies in the way we approach these issues. I have argued elsewhere that environmentalism seems to belong to that group of ideas where popular concern is rooted in myth not fact (Brockington, 2002). Myths here do not mean views of the world which are false or made up. Myths in this sense are the great ideas by which we organise our lives and make sense of the world; other examples are nation, community, cultural progress and indeed science itself (Hobsbawm, 1992; Kuhn, 1962; Said, 1978). It is a property of such myths that they are not judged or questioned by fact, rather facts and theories about the world are assessed by their accordance with our myths. This is not at all to suggest that environmentalisms are founded on nonsense, just that it may be rather hard to discern what is good sense, and what not, from the debate resulting.

There is therefore little likelihood of environmental issues being discussed in other than passionate terms. And this is something else that Lomborg missed. He believed that there was a true view of the environment that will win out in the end (p. 5). The flaws of *The Skeptical Environmentalist* meant it could only generate more heat than light. But the confusions over these issues, the passion they arouse and their sensitive nature for research agendas and funding suggest that it would be difficult for any book, or Committees' judgement, to exert a sobering influence.

Acknowledgements

Thanks to Bill Adams, Kathy Willis, Lauren Rickards and two anonymous reviewers for their comments on earlier drafts of this paper.

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