

The man they love to hate

Bjørn Lomborg is reviled by green activists and has come under ferocious attack from many environmental scientists. Just why does he provoke such strong reactions, and how influential might his opinions become? Jim Giles investigates.



Meeting Bjørn Lomborg for the first time, it's hard to understand what all the fuss is about. For his upbeat assessment of the state of the world's environment, Lomborg has become the bogeyman of the green movement, has been accused of scientific misconduct, and has even been likened in the pages of *Nature* to those who deny the Holocaust.

Yet, in person, Lomborg is far from the ogre that this publicity might suggest. He is calm, friendly and utterly charming. He runs a new environmental research institute in Copenhagen that is disarmingly informal — as I arrived, a member of staff ambled down a corridor, brushing her teeth. Clad in jeans and a T-shirt, Lomborg seems to have more in common with the political liberals that he has so incensed than with the conservative establishment that has eagerly embraced his message.

Lomborg's notoriety stems from his 2001 book *The Skeptical Environmentalist*, a data-heavy assessment of the state of the planet that paints an extremely optimistic picture. The storm that the book generated has been well documented, but just why did the debate become so heated? Will the book, and Lomborg's continuing work, have any lasting influence? And what lessons does the Lomborg affair hold for those who want to promote informed public and political

debate about environmental science?

The roots of *The Skeptical Environmentalist* lie in the work of another man whom the greens love to hate: the late free-market economist Julian Simon of the University of Maryland at College Park. In 1997, Lomborg, then a lecturer applying statistics to problems in political science at the University of Aarhus in Denmark, came across a magazine article in which Simon rebutted many of the doomsday predictions that environmentalists have made about the planet. "When I read the article I thought 'hell, no,'" Lomborg recalls. "I thought that obviously the environment is getting worse. But Simon said one irritating thing: go check the facts."

Challenging task

Lomborg formed a study group among his students to take up Simon's challenge. Describing himself as having a left-wing frame of mind, Lomborg says he assumed that it would be easy to debunk Simon's views as merely the product of conservative American thinking. "We all thought it would just be a matter of how much fun we would have showing he was wrong," he says. But Lomborg says the study group ended up agreeing with many of Simon's claims. Excited by what he was finding, Lomborg persuaded *Politiken*, a left-leaning Danish daily newspaper, to

publish four essays summarizing his findings. Those essays evolved into a book that was released in Denmark in 1998 and eventually published in English by Cambridge University Press as *The Skeptical Environmentalist*.

Lomborg's approach was to use a mass of statistics on issues from species extinction to air pollution, taken from authoritative sources such as United Nations agencies, to gauge the state of the global environment. He concluded that things are not as bad as environmentalists have led us to believe. And although he was careful to say that we must continue to work to protect our environment, he also raised questions about whether current initiatives, such as the Kyoto Protocol on climate change, are the most cost-effective way to do so.

This call of 'crisis, what crisis?' resonated with elements of the conservative media: favourable reviews soon appeared in *The Economist*, *The Wall Street Journal* and British newspaper *The Daily Telegraph*. Not surprisingly, the environmental movement reacted with outrage. The World Resources Institute, an environmental research and policy group based in Washington DC, published a list of "Nine things journalists should know about *The Skeptical Environmentalist*" — arguing, among other things, that Lomborg was selective in the studies that he cited, and lacked the credentials to carry out his analysis correctly.

Since the publication in 2001 of his book *The Skeptical Environmentalist*, Bjørn Lomborg has been the target of vitriolic criticism and has even been accused of pandering to the pro-business lobby. But he maintains that his views are based purely on a dispassionate analysis of available data.

tics but in his selection and interpretation of data. “The book is strong on numbers but weak on analysis,” Grubb says.

In the chapter on climate change, for example, Lomborg chooses to cite Henrik Svensmark at the Danish Space Research Institute in Copenhagen, whose research suggests that variation in solar activity could have a greater influence on the Earth’s climate than has previously been acknowledged. Lomborg argues that the warming influence of greenhouse gases may therefore have been exaggerated. Svensmark is widely respected, but his provocative ideas are not seen as well established. “It wasn’t a balanced account,” says Grubb. “Lomborg chose to highlight one end of the uncertainty.”

Perhaps the most significant criticisms of *The Skeptical Environmentalist* come from those who ought to support Lomborg’s statistics-driven approach. Dan Esty, an expert in environmental law at Yale University in New Haven, Connecticut, is a prominent advocate of the idea that carefully designed and measured indicators of environmental health can be used to assess the impact of problems such as water pollution. It sounds as if he should be one of Lomborg’s biggest fans. “But the sad truth is that what Lomborg got right was lost among what he got wrong,” Esty says.

False economy?

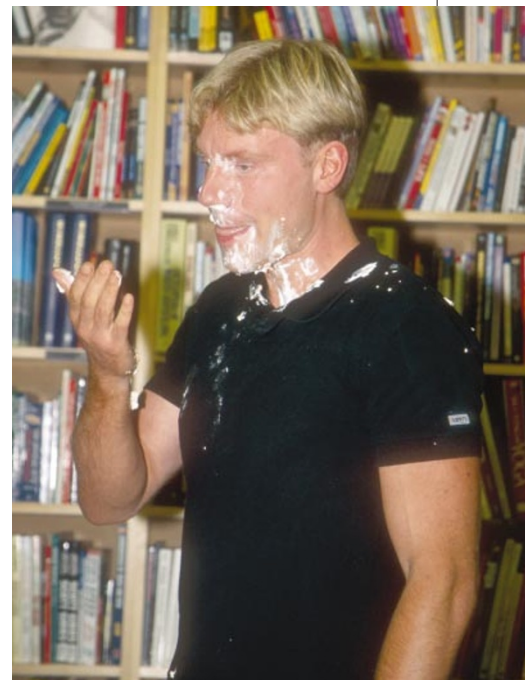
Throughout the book, for example, Lomborg argues that environmental benefits will accrue from increasing prosperity. Esty believes that Lomborg has oversimplified this connection. “I think there is some correlation between economic development and better environmental results,” says Esty. “But the suggestion that environmental development stems from economic development is a misunderstanding.” Indices of environmental health, Esty points out, show that some developing countries, such as Costa Rica, perform well, whereas other, richer nations, including Belgium, score badly. “There are a great number of policy choices to make and priorities to set at whatever level of economic development a country finds itself in,” argues Esty.

Now that the initial furore has died down, most researchers seem to agree broadly with Esty and Grubb: Lomborg has made some

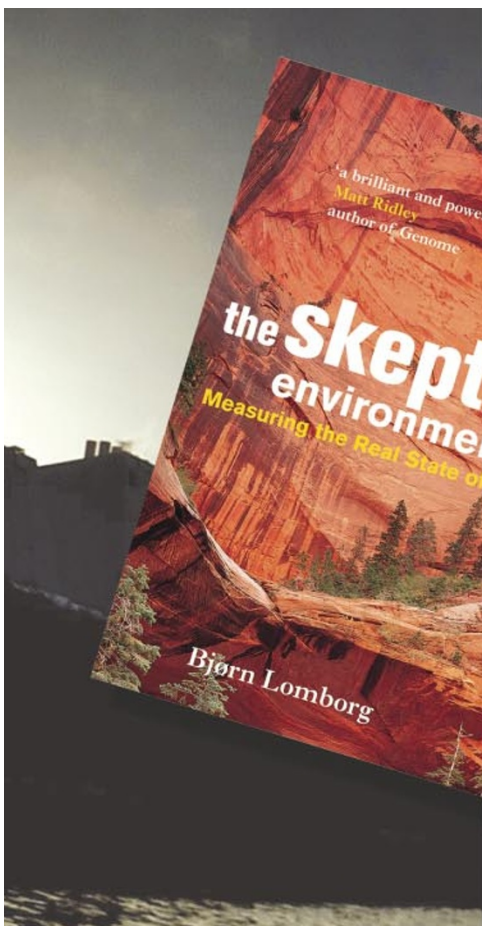
interesting points, but far more thorough analyses of the problems that he tackled can be found elsewhere. Given that other researchers have spent decades addressing the same issues, this conclusion is perhaps unsurprising. And it isn’t as if Lomborg is the first author to cast doubt on the claims made by environmental campaigners. So why did the book generate such a violent reaction?

In part, the outcry may reflect an element of panic about the way in which the conservative media seized upon Lomborg’s book. Many campaigners feared that his arguments would be used as justification by politicians who oppose environmental legislation — a worry that was heightened in the United States by the Bush administration’s apparent disdain for environmental issues. “The book was getting very positive reviews,” says Allen Hammond, a senior scientist at the World Resources Institute. “We wanted to warn people that we had problems with it.”

But Lomborg’s background and character were also important factors. Simon and most other prominent critics of the green movement have been right-wingers, preaching to those who are already ready to reject environmentalists’ claims. Lomborg, however, comes from one of Europe’s most liberal nations and was even a member of Greenpeace as a student. What’s more, he has an engaging manner — exemplified by his good-natured response to the Oxford pie protest — and a rare ability to quote statistics without losing his audience. “He has a verbal and mathematical sharpness — you don’t often get that combination,” says Toger Seidenfaden, editor-in-chief of *Politiken*.



Pie-eyed: this custard-based assault on Lomborg epitomizes the ire that his views have provoked.



Campaigners in Oxford, UK, set up an anti-Lomborg website to bring together the burgeoning mass of critical comments. And in September 2001, before a debate at an Oxford bookstore, one activist pushed a pie into his face. “I was stunned,” says Lomborg. “But at least the pie tasted good.”

Environmental scientists also weighed in against Lomborg. In January 2002, *Scientific American* carried sharply critical articles by four environmental researchers. An accompanying editorial note described the book as a “failure”. *Nature* had earlier published a scathing review by Stuart Pimm, a conservation biologist at Columbia University in New York, and Jeff Harvey, an ecologist at the Netherlands Institute of Ecology in Heteren, accusing Lomborg of ignoring research that failed to support his view and of referring to secondary sources, rather than the primary literature (S. Pimm & J. Harvey *Nature* 414, 149–150; 2001).

Some of Lomborg’s critics entered into a series of rebuttals and counter-rebuttals that soon became bogged down in a mire of statistics. “Some discussions have got lost in the details of the details,” says Michael Grubb, a specialist on climate change and energy policy at Imperial College, London. But, like many observers, Grubb believes the real weakness of Lomborg’s book lies not in sloppy statis-



A. KIM/POI

Trash cans: Lomborg's institute has questioned Denmark's devotion to aluminium recycling.

Some of Lomborg's opponents would dearly love to be able to portray him as a stooge of the political right. But that won't be easy. He seems entirely genuine about his stated position of having formed his views simply through unbiased statistical analysis. "I believe I have looked at the important indicators," says Lomborg. "If I sat down with dispassionate researchers, most of the time we would come up with conclusions that are close to mine."

Lomborg does, however, acknowledge that his position has provided succour for polluting industries, and for right-wing groups that are opposed to environmental legislation. "I know people use me for their political ends," he says. And he has been criticized for his decision in October 2001 to speak to members of the US Congress at a briefing organized by the Cooler Heads Coalition, a Washington DC-based group that campaigns against the Kyoto Protocol. Lomborg argues that his message is the same, whatever the circumstances. "I say the same things at oil-company meetings and ecology meetings. If researchers refrain from saying things that could be used politically, then they start acting as politicians," he says. Nevertheless, he has turned down some offers, including one from a plastics-industry organization that wanted to sponsor a lecture tour of the United States.

So what, in the long term, will be Lomborg's influence on the debate about the state of the planet? In Denmark, at least, he is continuing to make waves through his role as director of the country's Environmental Assessment Institute, which was established

in January 2002 by the country's newly elected centre-right government. With 17 researchers and an annual budget of US\$2 million, its primary aim is to conduct cost-benefit analyses of environmental issues that are important to Denmark.

The institute has, for example, already challenged environmental advocates by questioning whether the money invested in recycling aluminium cans is well spent, and is now working on issues such as soil pollution and waste incineration.

More generally, few would argue that Lomborg's book has won over many hearts and minds. The Bush administration's policies on Kyoto and other environmental issues were largely formed before the book was published, and green activists continue to campaign using the same arguments as before. But some experts argue that the affair contains valuable lessons for environmental scientists: specifically, they argue that it shows how counterproductive it can be to respond to misleading claims with anything other than reasoned scientific argument. The tone of the scientists' attacks on Lomborg was often emotive, and they were sometimes seen as political. "I've yet to see a peer-reviewed response to Lomborg," points out Roger Pielke, an expert on science and technology policy at the University of Colorado at Boulder.

Pimm and Harvey's *Nature* book review, for instance, contains the following statement: "The text employs the strategy of those who, for example, argue that gay men aren't dying of AIDS, that Jews weren't singled out by the Nazis for extermination, and so on." And the series of critiques in *Scientific American* is subtitled: "Science defends itself against *The Skeptical Environmentalist*", as if science itself was under attack.

Gripe hype

Presenting Lomborg as an enemy of science may indeed have been hyperbole, and it certainly seemed to boost his profile. Chris Harrison, publishing director for social science at Cambridge University Press, who handled the book, says that sales quadrupled in the month following the appearance of the *Scientific American* articles — although he stresses that stirring up controversy was not a deliberate marketing strategy.

Perhaps the most surprising development in the affair was the move by a group of scientists, including Harvey, to report Lomborg to the Danish Committees on Scientific Dishonesty, an official body that is responsible for examining accusations of scientific misconduct. Even more surprising, to some observers, was the committees' decision to investigate. In a highly confusing judgement released in January, the committees' deemed *The Skeptical Environmentalist* "to fall within the concept of scientific dishonesty", because of its allegedly biased presentation of data, although the report conceded that there was no evidence

that Lomborg had actually intended to deceive his readers (see *Nature* 421, 195 & 201; 2003).

The investigation has been heavily criticised for relying on published critiques of the book, in particular the *Scientific American* articles. Lomborg issued a lengthy rebuttal on his website and lodged complaints about the investigation with the Danish parliamentary ombudsman and the government. "He never, ever said anything but what he believed the data showed," says Kenneth Thue Nielsen, a member of Lomborg's original study group who was until recently a researcher at the Environmental Assessment Institute.

Nevertheless, Lomborg loses a little of his calm when discussing the investigation — it is evidently one of the few events over a turbulent couple of years that have really rattled him. "They simply said that if the four critical scientists in *Scientific American* said I was an idiot, then I must be," he complains. Fearing that the publicity surrounding the ruling was damaging the Environmental Assessment Institute's standing, its board of governors launched an independent review of all of the reports it has produced. Board members hope that the review, which should be ready in August, will provide a vote of confidence.

The real loser from the incident may, however, be the Danish Committees on Scientific Dishonesty, which now faces a review of its remit by the Danish government. And the committees' report definitely served to propel Lomborg and his controversial ideas back into the headlines at a time when interest had at last begun to wane. Whereas some news articles simply said that Lomborg had been found guilty of misconduct, others portrayed him as the victim of a witch-hunt.

Harvey has taken part in public debates with Lomborg on several occasions, and his opinions on the book have not changed. But looking back, he acknowledges that the venom with which Lomborg was attacked may have been counterproductive. "The affair has taught me to be more calm and measured," says Harvey. "We should have let the empirical evidence undermine Lomborg."

Harvey's comment illustrates an important lesson to be learned from the affair. *The Skeptical Environmentalist* is packed with facts and figures, yet it was the emotional response that it inspired that will be best remembered. The whole controversy, Pielke laments, is now perceived to have been about politics rather than science, and everyone has been tarred with the same brush: "Scientists are seen as the same as everyone else." ■

Jim Giles is Nature's associate news and features editor. Additional reporting by Nature intern

Hannah Hoag.

Lomborg's website

♦ www.lomborg.com

Anti-Lomborg

♦ www.mylinkspage.com/lomborg.html

Danish Environmental Assessment Institute

♦ www.imv.dk