book review

Climate change mapped

The Atlas of Climate Change: Mapping the world's greatest challenge, 3rd edition, by Kirstin Dow & Thomas E. Downing, 2011. University of California Press, 128 pp. $21.95 (Hardback) / £14.95 (Paperback) ISBN: 9780520268234; http://www.ucpress.edu/

A good atlas is more than just a book of maps. By that criterion alone, the third edition of *The Atlas of Climate Change* scores well. It is a rich and colourful collection of charts, data, case studies and clear text that explains the main topics that make up the many faces of climate change.

The authors know their stuff—both are members of the Intergovernmental Panel on Climate Change (IPCC). In a sense their *Atlas* serves to communicate clearly the key findings of the IPCC's periodic assessments of the scientific literature. This is something the IPCC has failed to do well in the 24 years since it was set up. The *Atlas* helps to fill that gap.

But it is more than just a science book. It also covers climate policy—from the international negotiations under the UN Framework Convention on Climate Change and its offspring, the Kyoto Protocol, to climate finance and carbon trading. The book further connects science to society with sections on public and personal action to address climate change.

Dow and Downing present their information in two-page spreads, each of which has a few paragraphs of text and associated graphics. Topics include 'the greenhouse effect', 'shrinking glaciers', 'renewable energy', and 'building capacity to adapt.'

By and large, these spreads are easy on the eye but in some there is a little too much information. On pages 26-27, for instance, I struggled to know where to start. As well as the main text, the choices included a world map with 16 blow-out boxes and five photographs, a bar chart backed by another photo and another bar chart with nine sub-charts, each overlain on a map. Most of the spreads, though, manage to strike a fine balance between the amount and variety of information whilst leaving some clean white thinking space on the page. And the colour graphics and photos breathe life into every spread.

In each two-page spread, the authors are able to explain the key concepts in just a few words. There is no doom and gloom narrative here – just a clear presentation of the facts as we know them and an acknowledgement of where the uncertainties remain. This is one of the book's strengths. For readers who wish to delve deeper, there is an extensive list of sources, most of which are peer-reviewed scientific papers.

While the text is very clear, it is also in places somewhat dry. Sentences are of a similar length, which can take the rhythm out of reading. Some are studded with unfortunate nominalisations that will slow some readers down. But this is forgivable. The atlas is, after all, a reference, not a reading book. As an aside, see how journalist Justin Gillis uses compelling narrative to treat many of the same topics in his Temperature Rising series for the *New York Times*[1]. Eleven of the first 12 articles hit the front page of the newspaper and so reached an audience of millions[2].

Climate change is a moving target and there is a risk that anything written about it will soon be outdated. Despite this, Dow and Downing's introduction is strong and solid. It provides an excellent overview of what climate science means for society – and what has been and can be done about this challenge. This text alone is a valuable read for anyone who is either new to the topic or needs a succinct refresher.

Something that future editions could perhaps feature would be some supplementary online information, which could be easily updated

1. Gillis, J. 2010-2012. Temperature Rising series. *New York Times.* http://topics.nytimes.com/top/news/science/series/temperaturerising/index.html

2. Brainard, C. 2012. Q&A: The NYT's Justin Gillis. Columbia Journalism Review. http://www.cjr.org/the_observatory/qa_the_nyts_justin_gillis.php?page=all

to reflect new research. Something else that would round out the *Atlas* would be more from the social sciences, such as information on how people's attitudes to climate change vary with geography. There's a growing body of such research that examines how and why people think what they think on climate change. This includes Max Boykoff's work on media coverage of climate change in the United States (see Boykoff 2011) and the BBC World Service Trust's 2010 report[3] into attitudes to climate change across Africa. As scientists are increasingly expected to communicate with lay audiences, those who work on climate change would benefit from such an overview.

In any kind of science communication, what matters most is the audience. And while the back cover of the *Atlas* calls it "an essential resource for policy makers, environmentalists, students and everyone concerned about this pressing subject", there is a risk that in trying to reach such a range of readers, the book will be ideal for none of them. Despite this, the *Atlas* manages to be an excellent introduction to the many dimensions of climate change—one that will engage and inform a wide range of readers. For two groups in particular, this book will be especially useful. First, for students and their teachers. And second, for journalists who increasingly have to grapple with the complexities of climate change and need a handy source of facts and figures they can use in their stories. In a crowded market of 'introductions to climate change', the *Atlas* stands out for its clarity, range of topics and appealing presentation. It is much more than just the sum of its maps.

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References

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3. BBC World Service Trust. 2010. Africa Talks Climate: the public understanding of climate change in ten countries. http://www.africatalksclimate.com

