a detailed description of these techniques, introducing elegant mathematical solutions to methodological problems. Less attention is given to whether respondents properly understand such complex valuation questions and whether their answers actually reflect their real preferences. Therefore, this book is refreshing because it recognizes that there are significant challenges to be tackled in a stated preference study before the number crunching can begin. Even more refreshing, the author has kept the use of mathematical equations to a minimum; thus, the book will be accessible to a wide range of audiences. In particular this book will be of interest to those who are involved in the application of environmental valuation, providing useful insights and guidance to inform practice. It will also be informative to those who are interested in learning about stated preference methods and how these compare with more deliberative techniques.

The book sets out to demonstrate that answers within stated preference surveys can be sensitive to the information provided to respondents by the enumerator, and that this can be overcome or minimized through the combination of stated preference and qualitative techniques, hence 'mixing methods'. This point is argued through a concise logical narrative and a clear structure, which provide signposts to the reader at each logical point, directing them to, and reminding them of, the important issues. On the whole, the flow of the argument is largely supported by text and there is a noticeable lack of tables and figures to illustrate key points. This does not detract from the quality of the argument, as the writing is concise and ample to enable understanding, but it could have made the job of the reader less onerous.

The book is divided into three main parts, not including the introduction and conclusion. Following the introduction, which describes the rationale behind environmental valuation, Part I identifies and explains the complexities and problems involved in undertaking stated preference surveys, particularly making respondents understand what is being asked of them and constructing a hypothetical transaction such that respondents believe it to be an actual economic transaction. Overcoming these difficulties provides the focus for the remainder of the book. In the final chapter (4) within Part I, qualitative techniques that can be used to improve both the respondents' understanding of their task and resulting judgements are introduced. The narrative provides practical guidance on facilitating focus groups in the context of stated preference methods, providing best practice for researchers.

Part II of the book evaluates the results of studies that have applied the mixed method approach to environmental valuation. This reveals some potential weaknesses with stated preference techniques, identifying studies where respondents have not understood the task and illustrating how mixed methods could have been used to avoid such problems. At times the stated preference techniques appear so defective that the reader could be forgiven for considering stated preference methods of limited use. However, the author points out that the same can be said for many other techniques.

On the whole the book uses a broad range of references to support the narrative and is a good source for those looking for an entry point into the stated preference literature. However, the evidence that supports the analysis in Part II is taken from a small number of studies, although this is largely unavoidable as there is a paucity of studies that have taken a mixed method approach. Nevertheless, this is still a limitation, while at the same time highlighting the novelty of this approach.

Part III considers the application of different group techniques and other alternatives such as the market stall approach and citizen juries, as well as judging how willingness to pay estimates can be improved through the use of expert panels and a multi-attribute utility approach. The conclusion from the book is that there is no panacea for putting values on the environment, no method will give 'the right' answer, if such an answer exists. Although this is not a surprising or novel conclusion, this book provides an insight into how stated preference techniques can be improved, provides better policy support and highlights an emerging role for qualitative methods in environmental economics.

ANDREW ANGUS
Institute of Water and Environment
Cranfield University at Silsoe
Bedford, MK45 4DT, UK
e-mail: a.angus@cranfield.ac.uk

doi:10.1017/S037689290800461X

The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses

EDITED BY MARY E. PETTENGER

xxi + 255 pp., $24 \times 16 \times 1.5$ cm, ISBN 978 07546 4802 4 hardback, US\$ 99.95, GB£ 55.00, Aldershot, UK: Ashgate Publishing Limited, 2007

This volume makes an important contribution by assessing, through social constructionist approaches, how mobilizations of power are linked to production of knowledge(s) on the issue of climate change. The book's two parts approach the theme from different constructivist positions: the first addresses how social constructions contribute to normative (dis)order, and the second focuses on how constructions shape discursive processes. Editor Mary Pettenger states in the Introduction that this book seeks to (1) enhance understanding of climate change, and (2) contrast the two perspectives. Various contributions weave together both theoretical considerations and insights from diverse case studies.

While the theoretical engagements therein link usefully to wider constructivist explorations, the strength of the book lies in its concrete cases. Contributions range from assessments of dominant Western discourses in US American, German and British contexts vis-à-vis international norms (Loren Cass) to explorations of how intersubjectivity shapes climate knowledge in indigenous non-Western Totonac culture (William Smith). While some chapters are more descriptive than analytical, this breadth of perspective carefully grapples with challenges from the everyday to those of the distant future or 'other'.

Moreover, the contributions provide historical richness through detailed descriptions of developments in climate policies and practices. This is particularly prominent in the first section with respect to the Netherlands (Mary Pettenger), Japan (Takashi Hattori), and the USA (Cathleen Fogel). The second section further situates cases through temporal and spatial scales. For instance, Bäckstrand and Lövbrand look at how competing discourses, from ecological modernization to radical resistances, shape the critical post-2012 international climate policy architecture, and Patterson and Stripple examine how discourses of territory shape climate change unfolding discourses and policy alternatives. Through the twin emphases of social constructivist interpretations, the volume provides an expanded and valuable reading of multi-scale relations of norms and discourses from the local hegemon or subaltern to (inter)national climate policy actors.

This is not to say these papers are seamlessly assembled. Disagreement and divergent views within the volume are evident. In her chapter on indigenous voices in climate policy discourses, Heather Smith critiques fellow author Cathy Fogel's failure to 'even

give a nod to indigenous peoples in the so-called North' in her larger body of research. In fact, this collection (or set of explorations) is uneasily situated in international relations conversations (Myanna Lahsen's chapter in particular). Nonetheless, this edgy aspect to the project embodies many of the complex contestations that intersect and move within these issues of power, knowledge, norms, discourses and climate change. I suspect this low-intensity dissonance is by design. While the attention paid to the theoretical divisions within constructivism risks reifying what is operationally often a matter of emphasis, this restlessness in the book works well overall.

The editor is clearly sensitive to a number of issues as she pre-figures many potential critiques in the Introduction. She writes '...the book cannot contain all possible perspectives...we urge others to learn from our efforts and to generate further studies, comparisons and constructive suggestions. . .'. She is correct. Nonetheless, while her own self-evaluation rightly calls for analyses of other contexts, such as Africa and Asia, I found that biophysical agency was remarkably underconsidered. The book could have benefited from more consistent accounting of this unmistakably vital 'actor'. Moreover, greater attention paid to the varied natural science processes shaping understanding of climate change (along with social, political and cultural factors) in the theatre of discursive structuration would have further strengthened the volume. As it stands, analyses of the variegated role of biophysical processes in the social construction of climate change are awkwardly obscured. While Nicholas Onuf notes this heterogeneity in the Foreword, it is not consistently carried through the book.

In highly contentious neo-millennial environmental challenges such as climate change, social constructionist approaches need to be scrupulous in order to minimize sparking illusory and counterproductive debates. While such interventions seek to enhance understanding of complex and dynamic human-environment interactions, misuse (catalogued voluminously through time) instead can enhance obfuscation.

Amid these dangers, I found that the present collection very successfully navigated around these potential pitfalls by treading that treacherous 'middle ground' between positivism and pure subjectivity, and provided an incisive and illuminating series of papers. Thus, meeting the editor's aforementioned goals many times over, the volume provides highly informative and valuable building blocks for understanding of power-knowledge interactions as they relate to climate change. With a critical edge, these contributions trace shifts in discourses and policy considerations, while they help to anticipate future changes in various contexts and social settings.

MAXWELL T. BOYKOFF

Environmental Change Institute

James Martin Research Fellow

University of Oxford, UK

e-mail: maxwell.boykoff@eci.ox.ac.uk

doi:10.1017/S0376892908004621

Vietnam: A Natural History

BY ELEANOR JANE STERLING, MARTHA MAUD HURLEY AND LE DUC MINH; ILLUSTRATIONS BY JOYCE A. POWZYK

xviii + 423 pp., $23.5 \times 15.5 \times 2$ cm, ISBN 978 0 300 12693 8 paperback, GB£ 11.99, New Haven, USA/London, UK: Yale University Press, 2006

Vietnam is rich in cultural, biological and geological diversity, conjuring images of expansive forests, mangrove deltas, majestic mountains, bustling cities and indigenous people. As a destination or research study site, Vietnam provides incredible beauty, a long and fascinating history and one of the richest biological regions on the planet. Behind these vivid images are highly impacted ecosystems, incomplete knowledge of its biological diversity and increasing threats to its plants and animals. Bringing together the first comprehensive overview of the rich natural history of Vietnam intended for scientists and travellers required the synthesis of widely dispersed sources of knowledge scattered in publications, obscure reports, manuscripts and unpublished information from scientists. This richly descriptive and generously illustrated publication provides a modern overview of the country's biological richness, the historical context of present levels of diversity and the grim reality of the threats to this diversity.

The early chapters provide an overview of Vietnam's natural and cultural diversity and the history of human populations and their relationship with the environment. The authors then explore the origins of Vietnam's diversity within the geological context of the region's dynamic physical environment and provide an overview of the composition of the present-day flora and fauna. The faunal groups present in Vietnam are then described. Three chapters compare and contrast three regions in Vietnam (north: Bac Bo, central: Trung Bo and south: Nam Bo) successfully highlighting the substantial biological and cultural differences between them. Each of these chapters explores the regional topography, climate, ethnic diversity and characteristic habitats, plants and animals, and includes a short listing of recommended areas for the best chance of viewing wildlife. The final chapters provide historical overviews, elucidate modern threats to Vietnam's biodiversity and describe the continuing efforts to mitigate these. Underlying the book is the recognition that Vietnam's biodiversity is incompletely known, and as such, this natural history account is incomplete. Recent discoveries of animals and plants from Vietnam continue to stimulate broad interest in the region's biodiversity. This book is a comprehensive overview of the present state of knowledge of Vietnam's natural history. Hopefully there are plans for revisions as understanding of the biodiversity and region is changing rapidly.

Working from often-fragmentary specimens and cryptic notes, Dr Joyce A. Powzyk beautifully illustrates the book in watercolours of key examples of Vietnam's biodiversity. The well-written and engaging text complements the maps, illustrations and photographs. This book is an effective traveller's guide, an introduction to Vietnam's rich and fragile natural history, providing thoughtful commentary on critical conservation issues and will help raise awareness of the tenuous nature of its biodiversity.

DANIEL HARDER
The Arboretum
University of California, Santa Cruz
1156 High Street
Santa Cruz, California 95060, USA
e-mail: dkharder@ucsc.edu

doi:10.1017/S0376892908004633

Tourism and Climate Change. Risks and Opportunities

BY SUSANNE BECKEN AND JOHN E. HAY

xix + 329 pp., 23.5 \times 15.5 \times 2 cm, ISBN 978 1 845541 066 7 paperback, GB£ 24.95, Clevedon, UK: Channel View Publications, 2007

Most conservationists view tourism with distinctly mixed feelings. It can contribute to rural livelihoods and, through ecotourism,