

Sea Treaty, Svalbard, and Arctic tourism. Polar bears, seals, walruses, and invasive species from the South, and their impact on the Arctic ecosystem, are covered in the section on animals. The next section, "Oil and Ships," focuses on the high stakes battle for Arctic oil and the effects of sea-ice change on shipping. It ends on a gloomy note by arguing that current international treaties are likely to be insufficient. Each of these sections can only cover a few of the major issues causing change in the Arctic, and, while neglecting some important matters, they provide a helpful overview of the people, institutions, and issues influenced by such change.

Anderson's ambitious goal is to provide a broad sketch of significant recent developments in the Arctic. He has accomplished this objective without being encyclopedic. In his conclusion, the author, like many of us who study the Arctic, affirms that great change is coming to the region but remains uncertain about the exact contours of this change. Minor flaws aside, the book is well worth reading—for both scholars of the Arctic and, especially, lay people or students who wish a short, readable introduction to this important region.

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***Anthropology and Climate Change: From Encounters to Actions.* Edited by Susan A. Crate and Mark Nuttall. Walnut Creek, CA: Left Coast Press, Inc., 2009. 416 pp.**

There are many books, articles, and journal issues appearing these days addressing climate change, and with only so much time in the day, why read this one? This collection is one of a still small number of monographs devoted to anthropology and climate change (see also Strauss and Orlove, eds. *Weather, Climate, Culture* [2003] or Cruikshank, *Do Glaciers Listen?* [2005]). It is an important addition to the literature on the human dimensions of climate change in its scope, contributions, and theme. Crate and Nuttall have successfully brought the local to bear upon the global with their selection of essays; the research and questions are timely and abreast of the most recent theoretical and interdisciplinary literature; and the collection takes as a central theme the possibilities for anthropologists to not only investigate the human dimensions of climate change, but also to act.

The collection is structured into three parts. The chapters in Part One, "Climate and Culture," survey the existing literature, examine the opportunities provided by anthropological research to recognize

how different cultures understand, value, and interact with weather and climate, and assess the significance of displacement as central to the social experience of climate change. Part Two, "Anthropological Encounters," presents eleven case studies of the past, present, and anticipated impacts of climate change upon vulnerable communities across the globe (found in Tuvalu, Papua New Guinea, the United States, Botswana, Australia, Bangladesh, the Arctic, the Andes, and the Alps). Part Three, "Anthropological Actions," offers examples of and reflections upon interventions in policy and climate change responses undertaken by anthropologists. For those interested in northern studies, it is worth pointing out that six of the twenty chapters in Parts Two and Three draw on examples from the Circumpolar North.

Overall, the structure of the book is intelligently conceived and comprehensive. The editors have assembled all the right pieces and ordered them in a very effective fashion. The conceptual groundwork laid in Part One introduces the themes necessary for a sophisticated reading of the case studies and anthropological actions. The case studies show the breadth of impacts upon subsistence, spirituality, and political engagement for diverse communities across the globe. The actions offer opportunities to assess and learn from the concrete impacts of anthropological research.

The real intellectual contributions of this collection lie in the synthetic work that it performs in presenting the depth of our understanding of the recent human experience of climate change. As a historian reading this collection in its entirety, it became clear to me that we have a history of anthropogenic climate change dating back to the 1970s. Bolin describes over a decade of "climatic extremes here and elsewhere in the Andes [which] have contributed to floods, catastrophic droughts, heat waves, and cold spells" (235). Jacka began his fieldwork in Papua New Guinea in the late 1990s, in the immediate aftermath of massive fires in the tropical rain forests of Indonesia. As several of the authors in this collection acknowledge, there is also a much longer history of human relations with weather and climatic variability (ancient, for example, or from the Little Ice Age). Typically, however, contemporary discourse is marked by scepticism about the relevance of distant examples when dealing with the exceptional scale and pace of, and the role of human responsibility for, the climatic changes presently underway. This collection dispels such wilful ignorance by demonstrating that the disasters of contemporary climate change lie not in some ambiguous, uncertain future, but in the past and the present.

What, then, can we learn from the anthropological encounters of the last quarter century with climate change? First, the essays in this collection apply and elaborate upon the key concepts—most notably *adaptation*, *vulnerability*, and *resiliency*—necessary to assess how communities deal with and could foresee a future in a changing climate. When it comes to questions of adaptation, the collected essays demonstrate that a key issue is not just realizing what communities can do, but also how they understand the changes they face. This is a point raised most provocatively by Marino and Schweitzer, who highlight the divergent responses elicited from Inupiaq in northwestern Alaska, depending on whether they were asked about changes in the local environment rather than “climate change” and “global warming.” Such divergence led these authors to conclude that “perhaps anthropology’s best contribution to understanding global climate change will come when, as anthropologists, we stop talking about it” (216). The point here is twofold: first, contemporary climate change comes with its own conceptual framework, which is distinct from climate changes in the longer course of human history. The two need to be investigated separately. Second, climate change is not just about climate, but is tied up with broader environmental changes and the global transformations of place.

Contributors make this latter point, regarding the broader environmental character of climate change and its impacts, seem at once obvious and overwhelming. Most striking is the significance of water impacts—drought, flooding, storm surges, and scarcity—upon human communities. These impacts demonstrate how climate change is ultimately indivisible from the wider context of late twentieth and early twenty-first century ecological decline. Such connections are made explicit, as in Button and Peterson’s examination of a participatory research action project underway in Grand Bayou, Louisiana. Here, the destruction of freshwater marshes, combined with the sinking of coastal Louisiana, has undermined natural defences against destructive storms, such as Hurricane Katrina (331–2). The fact that climate change and its impacts will not be confined to experiencing colder or warmer weather, but will rather reverberate through all aspects of local and regional environments, highlights the importance of anthropological research, which has long provided theoretical concepts and methodologies that focus on the “dynamic interface of natural and human systems under change” (176).

Similarly, the anthropological emphasis upon place is central to the discipline’s perspective on climate change. This collection resonates with the significance of the loss of places, as well as life, resulting from climate

change (see chapters by Oliver-Smith, Crate, Colombi, and Bartlett and Stewart). Crate emphasizes the transformation of “spaces, symbolic forms, and places” as a consequence of global climate change. “It follows that the result will be great loss ... of the very human-environment interactions that are a culture’s core” (148). With this emphasis in mind, it was disappointing that several chapters in Part Three, both from the United States and the Arctic, did not give adequate attention to the fact that their analyses were indeed situated in very specific places and that the peculiarities of those places “that affect global climate change” are as important as the uniqueness of “the affected” (399).

The concluding chapter, by editors Crate and Nuttall, makes a strong case for the importance of interdisciplinarity between the natural and social sciences. Anticipating and dealing with global climate change and its impacts demands not only understanding the complex details of local and regional climates, but also understanding regional lifeways and socio-economic circumstance (397). Anthropologists and others from the social sciences and humanities need to be much more involved in conversations about policy and responses. Does interdisciplinary collaboration then follow? The very strengths of this collection suggest the answer is “not necessarily.” At the level of larger syntheses, or policy documents, the case for anthropological (and other social science) contributions is clear. But the chapters in this collection do not make the case for interdisciplinary research collaboration. Rather, they highlight the particular strengths of an anthropological approach, which, with its attention to human interrelationships with the environment and its emphasis upon advocacy and politics in the present, has much to teach us about contextualizing the human experience of climate change.

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Aleut Identities: Tradition and Modernity in an Indigenous Fishery. By **Katherine L. Reedy-Maschner**. Montreal & Kingston: McGill-Queen’s University Press, 2010. xxii + 314 pp. Bibliography, index.

This is a timely book on a relatively neglected group and economy within the anthropological literature: the Aleuts of Alaska and their fisheries livelihoods. Katherine L. Reedy-Maschner takes early issue with the tired stereotype of Alaska Natives as timeless indigenes practising a “traditional” subsistence culture. In contrast to “subsistence absolutism,” the Aleuts have been part of the modern global economy since the Russians arrived