the Smithsonian Oceanographic Sorting Center (Washington, DC), the Antarctic Marine Geological Research Facility and Core Library (Tallahassee), and others could have been considered.

The last 200 items in the volume deal with the sub-Antarctic and other islands between the Antarctic continent with its off-lying islands and 40° S latitude. These are, appropriately, treated separately (rather than being incorporated into the rest of the bibliography), given their different environments. References are listed individually for each island, with sections on geography and flora and fauna, and on history for the more significant ones. For the Falkland Islands, additional sections on the 1982 Falklands war, sovereignty, and periodicals are featured.

The volume concludes with more than 65 pages of index references, with authors, titles, and subjects in a single alphabetical arrangement. Title entries and names of vessels are in italics to differentiate them from authors and subject terms. This typographical device, however, may prove not to provide sufficient contrast, so the reader who would typically look for an author, a subject, or a title will have to work his way through a larger number of entries than if the index were divided into three parts (author, title, and subject), as was done in the volume on the Arctic (World Bibliographical Series volume 99). This is especially true of the subject listing, which would be easier to scan for synonyms or related subjects or for just browsing, if it were separated from the other listings. In any case, the possible inconvenience is slight and does not impair the index, which is professionally crafted, thorough, and well presented.

The stated purpose of the World Bibliographical Series is to serve primarily the general reader or the specialist wishing an introduction to other areas of interest. The compilers have sought to satisfy 'the prospective traveller, the armchair geographer, the Antarctic bibliophile, and the librarian developing an Antarctic collection.' It would be interesting to know (if such statistics were kept) which of these categories of clients will turn out to be the best customers. All types of libraries (whether or not planning an Antarctic collection) should certainly acquire it, and there is sufficient material here for a broad variety of readers. It is to be hoped that the book will receive adequate publicity.

This is more than a bibliography. It does not merely lead the reader to the pertinent literature, but, through its concise but informative, well-formulated annotations, offers a wealth of substantive and fascinating information. By perusing this volume alone the user would be able to acquire considerable knowledge of the subject.

Inevitably, adherence to the general policy laid down for the series to limit coverage mostly to English-language works leads to a certain imbalance in presenting some of the topics. Fortunately, thanks to their knowledge of non-English writings, the compilers were able to convey, directly or indirectly, an idea of the total scope of the world literature. On a challenging task splendidly performed,

they should be heartily congratulated. (Geza T. Thuronyi, 9834 Cherry Tree Lane, Silver Spring, MD 20901, USA.)

POLAR POLITICS: CREATING INTERNATIONAL ENVIRONMENTAL REGIMES Oran R. Young and Gail Osherenko (Editors). 1993. Ithaca, NY: Cornell University Press. xi + 276 p, tables, soft cover. ISBN 0-8014-8069-8. US\$16.95.

During the past two decades, the study of regimes defined in this book as social institutions composed of agreed-upon principles, norms, rules, and decision-making procedures that govern the interactions of actors in specific issue areas — has dominated the literature of international relations. The central question facing international relations specialists interested in the regime theory is how it can be used to explain international cooperative behaviour. In the initial stages of its development, regime theory was principally applied to the international monetary system and the GATT. Since that time, however, regime theory has increasingly been applied to a range of diverse areas. These include marine pollution, international human rights, the politics of food aid, cooperative arrangements dealing with international prohibition and non-proliferation, international telecommunications, the deep seabed, east-west politics, multilateral security arrangements, and, more recently, the environment and resource management. Its proponents do not claim that it provides all the answers, but they hold that by viewing international cooperative mechanisms through regime theory it is possible to gain a much better understanding of what it would take for states to forge cooperative agreements to deal with pressing problems that cannot be solved otherwise, to agree to restrict their sovereign authority, and to abide by new international rules that constrain and channel their subsequent actions.

Oran Young's pioneering contributions in applying regime theory to the Arctic are well known. Polar politics is yet another pioneering attempt to use the Arctic as an important arena for applying existing knowledge of regime formation as well as an attractive testing ground for new ideas about the politics of regime formation. The book is the end product of a multinational research project, in which scholars from the United States, Canada, Russia, and Norway are said to have collaborated in composing a template of hypotheses based on the literature relating to international cooperation and in conducting five comparative case studies of the formation of regimes dealing with Arctic issues to test those hypotheses. The first case study examines the international regime articulated in the North Pacific Sealing Convention of 1911, which remained in place until the 1980s. The next two case studies examine existing Arctic regimes established through the 1920 Spitsbergen Treaty and the 1973 Agreement on the Conservation of Polar Bears, respectively. A fourth case study examines the regime for regulation of stratospheric ozone, which evolved from the framework provisions of the 1985 Vienna Convention to the substantive arrangements set forth in the 1987 Montreal Protocol and the 1990 London amendments; this extends beyond the Arctic but includes all Arctic states. The fifth and final case study investigates the problem of Arctic haze, which still awaits a regime.

Chapter one introduces the template of hypotheses, to be tested by the various case studies in the book. The authors of this chapter, Gail Osherenko and Oran Young, briefly review the current theories on regime formation, and group the major arguments explaining the determinants of success or failure in forming issue-specific regimes into four broad categories. First are power-based hypotheses, in which the basic premise is that institutions, including international regimes, are structured by and reflect the distribution and configuration of power in international society. Second are interest-based hypotheses, the basic premise being that social institutions, including international regimes, arise from the interaction of self-interested parties endeavouring to coordinate their behaviour to reap joint gains that may, but need not, take the form of public goods. Third are knowledge-based hypotheses, the basic premise being that shared perceptions, beliefs, and understandings of causal mechanisms among the relevant parties as well as identifiable communities, including epistemic communities and advocacy organizations, that arise to propagate this knowledge are important determinants of regime formations. And fourth are contextual arguments, the basic premise being that national and world circumstances and events seemingly unrelated to the issue area under consideration play a major role in determining if and when international cooperation to address a particular problem or issue area occurs and in shaping the content of any regime that forms.

Chapters two through six contain the five case studies and convey both the richness and diversity of the institutional arrangements pertaining to the formation of international regimes. The authors here deserve praise for the skill and vigour with which they apply the theoretical template to their respective case studies and empirically test the principal hypotheses dealing with the process of regime formation. No less commendable is the analytical presentation of well-researched and thoroughly documented information in each of these self-contained case studies.

Among the most noteworthy findings of the case studies, summed up by the editors towards the end of the book, at least two deserve special mention and comment. First, none of the case studies shows strong support for the proposition that success in regime formation depends upon the participation of a single dominant party, a hegemon, using its superior material resources to obtain and/or impose its preferred outcome. Individual self-interest does play a part, but global or community concerns also influence state behaviour. The only exception noted is the case of ozone, where there is evidence of what the author calls issue-specific hegemony — the American negotiators using the dominance of the United States in scientific research, diplomatic competence, and both production and consumption of CFCs to impose its preferred

outcome. One of the most interesting results of investigations in the book with regard to power-based hypotheses arises from the role of surrogate negotiators in the Svalbard case. Although Singh and Saguirian cannot confirm the existence of a hegemon or hegemon group in this case they do show how a power configuration in which the victors (with members of the Spitsbergen Commission) acted as surrogates for the other interested powers played a vital role in the negotiation and formation of the Svalbard regime. The search by the authors in the book for different configurations of power that may have come into play in the course of regime formation does set out an interesting agenda for future research on the question of the potential role of middle powers in this regard. The questions raised by the editors are pertinent indeed: is the role of surrogates a mere aberration, occurring only in the unusual circumstances following the Great War? Or does the case of Svalbard offer a useful model for the future? They also rightly claim that these questions are most relevant today as the United Nations Security Council assumes a higher profile in tackling international problems.

The second noteworthy finding is that all cases strongly underline the utmost significance of contextual factors as determinants of regime formation. Identification of natural as well as human factors and events that unfold outside the issue area to which the regime in question pertains but that appear to affect nonetheless its negotiation and formation, is one of the most valuable contributions of the book. As the editors point out, these contextual factors create windows of opportunity in which regimes may form. By focusing on the contextual factors, an observer of the Arctic can better explain both successes and failures in efforts to establish international regimes in the past, and can speculate about the prospects for success in current efforts to forge agreement on the terms of regimes to deal with various issues.

This valuable and timely contribution to the theory and practice of regime formation should inspire the students of regime theory to continue to test the template of hypotheses, as devised and tested in this book, in the post-Cold War Arctic. Now that the hegemonic east-west conflict is over — a conflict that embraced the entire range of interests and all points of contact between the Arctic Rim states during the Cold War and disallowed individual issue-areas to remain outside the conflict realm — the Arctic political agenda is characterized by various new issue areas as well as bold initiatives. Most notable of these (either mentioned in passing or not mentioned at all in the book) include the Rovaniemi Process, the establishment of the International Arctic Science Committee (IASC), the Northern Forum, the proposed Arctic Council, and the Euro-Arctic Barents Cooperation. One would like to see, for example, the results of bringing power-based, interestbased, and knowledge-based factors (called social driving factors by the authors) to bear on the more recent Barents Region cooperation, termed by its architects as a 'young political project.' Also, because even though the Barents

Region cooperation was initiated by Norway as a topdown political project, the organization of this cooperation is expected to have a strong footing on the regional and local level. The key actors here are the nation-states, the European Union, and the eight directly involved administrative regions of Norway, Sweden, Finland, and Russia. What are the prospects of regime creation with regard to the Barents Region? What kind of 'social driving factors' are involved here? With what measure of success can the findings of *Polar politics* be applied to a case study where the interests of nation-state(s) may come to clash with local and regional interests and where issues are essentially geopolitical, relating to natural resources and economics? The difficulty of disentangling connections between power and knowledge may also surface. After all, the relationship between power and knowledge is far more problematic than is allowed by the regime theory, and 'social driving forces' cannot be entirely divorced from wider regularizing collectivity called a discourse. The texts of various discourses are not free-floating innocent contributions to an objective knowledge, but are rooted in 'power/ knowledge' serving the dominant interests of particular groups in society and help to sustain and legitimize certain perspectives and interpretations. Accordingly, the possibility cannot entirely be ruled out that regimes, being social institutions, may also serve the dominant discourse and lead to the institutionalization of asymmetrical, hierarchical power relations.

The book provides a rare insight into the complexity of regime formation and suggests in a thought-provoking way certain lessons for the practitioners engaged in the dialectics of institutional bargaining at the international level. It is therefore of immense value to those interested in the politics of regime formation, especially in the Arctic. (Sanjay Chaturvedi, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

BEFORE THE HEROES CAME: ANTARCTICA IN THE 1890s. T.H. Baughman. 1994. Lincoln and London: University of Nebraska Press. xi + 160 p, illustrated, hard cover. ISBN 0-8032-1228-3. £19.95.

This book is a study of events in, and relating to, Antarctica during the years 1885 to 1901, the year of the departure of the *Discovery* expedition. The author contends that this period has been neglected by historians and that only by understanding the ventures, real and potential, of that time and of the political milieu that underpinned them, can the expeditions of the 'heroic' era, 1901–1922, be placed in context. Stress is laid on the activities of two men in particular: Carsten Borchgrevink, the first man to set foot on Antarctica and whose *Southern Cross* expedition was the first to winter on the continent, and Sir Clements Markham, the guiding influence with regard to plans for expeditions on behalf of the British establishment.

After a brief introductory chapter on the early approaches to Antarctica, culminating in the Challenger

expedition, the work starts with an analysis of contemporary scientific interest in the south and of the different proposals for expeditions that were mooted. The British official approach is characterised as 'exploration by committee,' and different aspects and stages of it, including the ever-present problems of securing finance and of the balance between exploration and science, are detailed throughout the book, with Markham, committee man par excellence, prominent. His efforts, of course, resulted in the Discovery expedition.

As counterpoint to this discussion, accounts are given of the actual expeditions that were mounted or were proposed by other bodies or individuals. These included the Dundee whaling expedition of 1892, on one vessel of which W.S. Bruce travelled as surgeon; the *Jason* expedition; and the *Antarctic* expedition, during the account of which the personality of Borchgrevink emerges. The climax of that expedition was the landing of Borchgrevink and others at Cape Adare on 23 January 1895. All of these projects failed in their primary purpose, the catching of whales, but they served to keep interest in the Antarctic alive for future efforts.

The discussions in London continued while Adrien Victor de Gerlache's Belgica expedition — in which Roald Amundsen and Frederick Cook participated wintered in the ice in 1898, and while the German Valdivia expedition conducted a programme of deep-sea research. Borchgrevink, on the return of Antarctic in 1895, determined to return south and spent three fruitless years engaged in the same activity as was taking up much of Markham's time, namely, fund-raising. He finally had a spectacular success by convincing the well-known publisher Sir George Newnes to support his plans. The result was the Southern Cross expedition, during which a base was established at Cape Adare for the winter of 1899, and which achieved a farthest south at the Bay of Whales on 17 February 1900. Soon after the return of Southern Cross to Britain, Discovery sailed and the 'heroic' era started.

This book, which is based upon detailed archival research (notes, references, and bibliography cover 30 pages out of a total of 160), is successful in weaving together the different activities and personalities described, so that a coherent and integrated whole is presented. The writing is concise and the style pleasant. This serves to make the book difficult to put down, and, as it is so short, it is easily read at a single sitting.

The illustrations, however, leave much to be desired. There are four maps, none of which has indications of longitude or latitude except for the South Pole. The second, 'Antarctica,' is merely a reprinted version of the first, 'Antarctica in context,' at a slightly larger scale, with an inset showing Ross Island and the area immediately round it. This is of limited relevance since, of the expeditions described in the body of the work, only *Southern Cross* visited that area and then only for a very short time. The third map, entitled 'Cape Adare,' actually covers the area from the west of Admiralty Range to the Bay of