and the complex task of ground data processing and dissemination are also discussed. The illustrations provided are plentiful, relevant and clear, although it is a pity that the publishers were apparently unwilling to reproduce some of the computer images in their original, glorious (and helpful) technicolour.

Part 2 consists of a comprehensive compendium of past, current and planned satellite systems relevant to polar studies. It is remarkable in its thoroughness, and, combined with the lengthy bibliography associated with Part 1, provides a valuable source of reference material for the aficionado and novice alike. The volume is a must for all self-respecting glaciological and Remote Sensing research groups. However, the £39.50 price tag may limit its appeal to individual researchers and students. (Christopher Rapley, University College, London, Mullard Space Science Laboratory, Holmbury St Mary, RH5 6NT.)

SOUTHERN VOLCANOES

VOLCANOES OF THE ANTARCTIC PLATE AND SOUTHERNOCEANS. LeMasurier, W. E. and Thomson, J. W. (editors). 1990. Washington, American Geophysical Union (Antarctic Research Series 48). 487 p, illustrated, hard cover. ISBN 0-87590-172-7.

The Antarctic Research Series began in 1963 with funding from the US National Science Foundation. Its publications, now familiar to all who work in Antarctica, have maintained over the years a consistent standard of wellconsidered and superbly edited monographs and symposia, generally based on topics in which the US Antarctic effort is prominent, but including work by many foreign authors. This is just such a volume, presenting in the words of its editors ' ... a comprehensive overview of the south polar and subpolar volcanic provinces, and summary data on the status of knowledge of each volcano or volcano group'. It arose from a proposal put forward in 1978 by the Working Group on Antarctic Vulcanology of the International Association of Vulcanology and Chemistry of the Earth's Interior, to replace handsomely the 1960 Antarctic Catalogue of Active Volcanoes. The result, involving many active field-workers, is a personal triumph to all concerned in its production.

The work starts with a preface outlining the intentions and organization, defining terms and systems of approach. There follows an overview of Antarctic vulcanism by joint editor Wesley LeMasurier, drawing attention to Antarctica's several points of tectonic uniqueness. Well illustrated with maps and alkali/silica diagrams, this provides an overall guide to the area, its provinces and its volcanoes. In the main text seven sections cover the volcanic provinces of Antarctica and the subantarctic islands: the McMurdo group; Marie Byrd Land; Alexander Island, Palmer Land and Ellsworth Land; Graham Land and the South Shetlands: the South Sandwich Islands: Oceanic islands on the Antarctic plate (including isolated Gaussberg); Subantarctic volcanoes of the Pacific plate (the New Zealand southern islands and Macquarie Island). Each section is preceded by an overview, and made up of individual summaries of volcanoes or volcanic groups numbering almost 100 in all. These, the work of 38 contributing authors, form the bulk of the book. Each section ends with its own bibliography, and the volume as a whole is rounded off with a solid index. A worthy contribution to an excellent series. (Bernard Stonehouse, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

ICELAND IN DECLINE

NATURE AND POLICY IN ICELAND 1400–1800: AN ANTHROPOLOGICAL ANALYSIS OF HISTORY AND MENTALITY. Hastrup, Kirsten. 1990. Oxford, Clarendon Press. 367 p, illustrated, hard cover. ISBN 0-19-827728-8. £35.00.

This remarkable book, based on fieldwork as well as on archival research, analyses the interaction between environment and epistemology at the utmost northern margin of Europe. Here the Arctic reduces a European system of production and its worldview to their most precarious. The picture given of this period is one of unremitting isolation and decline. The settlers from Scandinavia had brought with them an ideology which placed settled farming at the centre of their social system while despising and marginalising fishing. Yet the $b\dot{u}$ or free farming household had by now become associated with a low rate of marriage and exchange with other households. Thus there was a retreat from active engagement between social units.

This was matched by a retreat from engagement with the natural environment, as fences collapsed, fields were overrun and the wilderness expanded into inner social space. This inner social space represented permanence and social order. But while the bú retained its central role, more and more people were excluded from the ownership of land which it presumed, and thus from the realm of the fully human. Their own mobility and disorder made much of the population merge into the wild. So the Icelanders' sense of history split into two: in their external relations they shared in the processes of early modern Europe such as witch-hunting, trade and capitalism, while their internal sense of history is characterised by Hastrup as a Uchronia, analogous to Utopia, meaning a timelessness in which the heroic past was more vivid and powerful, more 'eventrich', than the present. The decreasingly representative ideal of the unmoving farmstead 'alienated the Icelanders from their own actual history — a history so full of fish and movement' (p.294)

At the beginning of the book, the author states her aim of contributing to the anthropological theory of change and dynamism in human society. It is impossible in a short review to do justice to the imagination, scholarship and rigour with which Hastrup pursues this aim, as she interweaves the discussion of culture, social experience, collective representations, causality and causation. Few studies set in the North have made a deep impression on professional anthropology at large. But this is historical anthropology at its best, a magnificent book which requires to be read both by anthropologists in general and by specialists in any aspect of humanity in the Arctic. (Piers Vitebsky, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER)

HERDING IN PERSPECTIVE

THE WORLD OF PASTORALISM: HERDING SYS-TEMS IN COMPARATIVE PERSPECTIVE. Galaty, J. and Johnson, D. L. (editors). 1990. London, Guilford Press and Belhaven Press. 436 p, illustrated, hard cover. ISBN 1-85293-176-0.

This is a useful compendium of information on pastoral systems in all ecological zones, from African cattle to Andean camelids. It is a good textbook for anthropologists and geographers and the authors pay particular attention to the development dimension.

The article likely to be of main interest to polar readers is Hugh Beach's on 'Comparative systems of reindeer herding', covering Fennoscandia, Alaska, the USSR, Greenland and Canada. Beach discusses common denominators and local variations, covering both the environment and the ethnic and political struggles which have arisen at the margins of powerful industrial states, as well as conflicts with industrialisation and the decline of recruitment and the trend towards the cash economy. Much of the general discussion applies only to Fennoscandia, though this is not always made clear, and the author's experience and sources come largely from this region.

The article's weakness as a comparative survey lies in its coverage of the Soviet Union, which contains nearly 80% of the world's domesticated reindeer and where reindeer form the foundation of vast regional economies. Without Russian, Beach has relied on a very limited range of sources, as well as on a visit to a state farm in Yakutia. But the debates and policy dilemmas which he understands well in Fennoscandia are inaccessible without extensive reading in the large and controversial Russian literature; while it would help the reader to be told that the farm he visited is a showpiece to which foreigners are often escorted and is far from typical. On the basis of longer fieldwork in the region, it is hard to agree unequivocally that 'reindeer herding faces its brightest future in the Soviet Union', that extractive industries there have not pressed herding to the wall, or that the state is working to remedy the drop in recruitment.

However, the general discussion and the picture of reindeer herding given for the other countries are very helpful and there is an excellent classified entry in the index under 'reindeer' which occupies almost three columns. (Piers Vitebsky, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

BRIEF REVIEWS

NORTHWEST PASSAGE: THE QUEST FOR AN ARC-TIC ROUTE TO THE EAST. Struzik, E. and Beedell, M. 1991. London, Blandford Press. 152 p, illustrated, hard cover. ISBN 0-7137-2246-0. £16.95.

Struzik is a journalist, Beedell a photographer: both have ample first-hand experience of the Passage, and their joint account of it is a delight. The text is a blend of history, natural history, anthropology, geography, personal stories and good yarns from the past. The photographs — 60 in colour and almost as many in black and white — are quite superb. A marvellous book to give anyone as an after-Christmas present.

SAAMI CULTURAL RESEARCH IN SWEDEN 1990. Kvist, R. 1991. Centre for Arctic Cultural Research, Umeå University (Miscellaneous Publications 11). 57 p, soft cover. ISSN 0283-9687.

READINGS IN SAAMI HISTORY, CULTURE AND LANGUAGE II. Kvist, R. 1991. Centre for Arctic Cultural Research, Umeå University (Miscellaneous Publications 12). 158 p, illustrated, soft cover. ISSN 0283-9687.

Two publications from a lively Swedish source. The first, a catalogue of one-page summaries of current or recentlycompleted Swedish Saami cultural studies, will be of interest to anyone involved in similar studies in the humanities, social sciences, physical anthropology and theology. The second is a collection of articles in English on Saami culture, history and language, with perspectives on culture and research: four of the articles are on archaeology and the remaining six from ethnology, history, anthropology and linguistics: subjects range from the prehistoric use of pitfalls in Åsele Lappmark to a Saami strategy for language preservation. Obtainable from the Centre, University of Umeå, S-901 87, Umeå, Sweden.

THE STATE OF THE ARCTIC ENVIRONMENT. Prepared by Nenonen, M. 1991. Rovaniemi, University of Lapland. 405 p, illustrated, soft cover. ISBN 951-634-231-0.

Arising from a series of meetings between scientists from the Arctic countries, this volume presents six state-of-theenvironment reports on aspects of international cooperation in environmental protection. Articles cover manmade acidification (Nenonen), heavy metals (Melnikov), underwater noise (Davis and others), oil pollution (Futsaeter and others), organochlorines (Jensen) and radioactivity (Paakkola). Obtainable from the Arctic Centre, University of Lapland, PO Box 122, 96101 Rovaniemi, Finland.

BACK FROM THE BRINK: THE ROAD TO MUSKOX CONSERVATION IN THE NORTHWEST TERRITO-RIES. Barr, W. 1991. Calgary, University of Calgary (Komatik Series 3). 127 p, illustrated, soft cover. ISBN 0-919034-67-5. Can\$23.00 including postage.

A detailed account of the decline of muskoxen under hunting pressures during the 19th century, and their subsequent recovery under protection. Formerly widespread on most of the Canadian Arctic islands and across the mainland between Anderson River in the northwest and Rae Isthmus and Churchill in the east, they were hunted commercially for meat, hides and furs. Mainland populations, reduced to a few hundred by 1917, have now recovered to over 13,000. The author tells their story within the context of Canadian history, relating — among other curious events — how threats to the species led to the establishment of a Canadian presence in the high Arctic, and