

are used early in the lessons and the student must simply learn to repeat what is said without understanding which words correspond to which. This does force people to begin speaking without trying to analyse everything, but it may also be frustrating to some learners.

In order to understand the grammatical explanations in each chapter and in the appendix, students should have a good grasp of French grammar. This grammar teaching method is not one of the newest methods of teaching a language, but it has its benefit for those who do appreciate this type of explanation.

The tape is clear and the quality of French is good. The manual and cassette tape are divided into 14 lessons with dialogues, which, for the most part, are relatively simple to understand and represent common real-life situations. It is somewhat confusing that the short summary of the dialogue is at the beginning of the lesson on the tape, but at the end of the lesson in the book.

In the foreword, the manual is said to be directed to professionals who are working or who plan to work in an Inuit milieu. The materials are in the two dialects of Nunavik, Tarrarmiu and Itivimiut. These dialects are quite close to those used in the Eastern Arctic and Keewatin regions of the Northwest Territories, so the materials would be useful for learners there also, but dialect differences can cause some problems, especially for new learners. Appendix 2 provides the syllabic version of the lessons, which is useful both in Quebec and the Northwest Territories.

The authors and Inuit who assisted them should be encouraged to continue their efforts in producing Inuktitut learning materials, especially for francophones, as this is an area where there is still a great need.

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**CANADA'S COLD ENVIRONMENTS.** Edited by HUGH M. FRENCH and OLAV SLAYMAKER. Montreal & Kingston: McGill-Queen's University Press, 1993. 340 p., 156 figs. Hardbound. Cdn\$45.00.

Here is a new type of book written by eleven geographically oriented scientists who describe the cold face of Canada from several perspectives in 13 well illustrated chapters. Each chapter has a unifying theme — how the cold affects the physical properties and processes of the land, the elements of the hydrological cycle and the inhabitants of cold environments.

It is necessary to peruse the cover flaps of the book to learn that this work is "aimed at environmental scientists at all levels who need informed overviews of the substantive findings on a range of cold-related topics." Further, in the preface we are told by the editors that their objectives in writing the book are threefold:

The first has been to provide an insight into the ways in which cold affects biophysical processes of change, at a range of

scales. The second has been to provide a biophysical context for an understanding of the human geography of Canada. The third objective relates to predicted global changes which, if they occur, will have a profound and special effect on the cold regions of Earth. (p. xxi-xxii)

This last objective is a prominent and significant theme throughout many chapters of the book. In the Arctic, climate change is a matter to be taken very seriously because of the extensive areas of permafrost, the large bodies of water and a long and exposed northern coastline.

Temperature changes predicted by current atmospheric general circulation models (GCMs) show quite large disparities with the same carbon dioxide enrichment ( $2 \times \text{CO}_2$ ) input scenarios. Therefore, it is premature to become too alarmed by the simulated GCM results presented in Chapter 11, particularly when there have been two recent reports in which the authors cannot see the expected warming over the Arctic Ocean (e.g. Kahl *et al.*, 1993). There is warming elsewhere, but these recent reports put a definite "cooler" on the GCM results. (Note that in this book GCMs are referred to as global climate models.)

Some annoying typographical glitches and technical irregularities occur throughout the book. I will only mention a few. For instance, temperature units appear variously as °K, C° and °C. It is sometimes necessary to use °K (= 273 + °C) in rate equations, but °K was used here on a graph axis. On p. 41, an equation is given in which an operator "d/dt" appears. It is evident that t is time, but we are not explicitly told this; furthermore, the author refers to an "equation 1," but no numbers are attached to any equations in that chapter. In an associated figure on p. 42, we see an axis labelled "degree-days (°C)" which omits the time factor in the equation. In order to understand this, one has to know what degree-days are all about (geographers have invented several types; the reference here is to freezing degree-days). In an equation on p. 145 some of the symbols have been mutilated and a suffix zero looks as if it should have been a sigma. Only by referring to the original reference given in the text is one enlightened.

Chapter 13 is an unlucky chapter. Only brief mention is made in the text to Figure 13.1 which contains a wealth of interesting information relevant to the book that could have been further discussed. In Figure 13.4 the label "ml × 10" should probably be "ml × 10<sup>3</sup>" and the delta oxygen 18 scale value should be -35‰ instead of -37‰. Also, the caption does not even mention that the isotope data are shown. In Figure 13.5 (p. 321), which really should be the northern hemisphere temperature plot, we are told that "global surface air temperatures (1900-88) are plotted against 1950-79 average." In fact, the plot shows temperature anomalies or departures from the 1950-79 average (set to zero).

It is not an easy matter to agree that this book is suitable for "environmental scientists at all levels." It is certainly a book for geographers, but they should be at a level where the errors do not represent too much of a bugbear. The book would hardly qualify as a textbook, although I think the opportunity was there. It might be a better idea to wait for a second edition in which the glitches are corrected and there is an update on the northern hemisphere climate change situation.

## REFERENCE

KAHL, J.D., CHARLEVOIS, D.J., ZAITSEVA, N.A., SCHNELL, R.C., and SERREZE, M.C. 1993. Absence of evidence for greenhouse warming over the Arctic Ocean in the past 40 years. *Nature* 361:335-337.

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## BOOKS RECEIVED

ALASKA POLITICS AND GOVERNMENT. By GERALD A. MCBEATH and THOMAS A. MOREHOUSE. Lincoln, NE: University of Nebraska Press, 1994. ISBN 0-8032-8149-8. xxx + 365 p., maps, bib., notes, index. Softbound, US\$17.95; Hardbound, US\$47.50.

ARCTIC ADAPTATIONS: NATIVE WHALERS AND REINDEER HERDERS OF NORTHERN EURASIA. By IGOR KRUPNIK. Hanover, NH: University Press of New England, 1994. ISBN 0-87451-632-3. xvii + 355 p., maps, b&w illus., bib., index. Hardbound US\$54.00.

ARCTIC EXPLORATION AND DEVELOPMENT c. 500 B.C. to 1915: AN ENCYCLOPEDIA. By CLIVE HOLLAND. Hamden, CT: Garland Publishing, 1994. ISBN 0-8240-7648-6. xvi + 704 p., maps, bib., indices. Hardbound. US\$125 + \$3.00 s&h.

ECOLOGY OF A POLAR OASIS: ALEXANDRA FIORD, ELLESMERE ISLAND, CANADA. Edited by JOSEF SVOBODA and BILL FREEDMAN. Toronto, Ontario: Captus Press Inc., 1994. ISBN 1-895712-26-2. iv + 268 p., maps, b&w illus., bib., index. Softbound. Cdn\$34.50 + \$3.75 p&h. Orders outside Canada US\$30.00 + US\$5.00 p&h.

IN A CRYSTAL LAND: CANADIAN EXPLORERS IN ANTARCTICA. By DEAN BEEBY. Toronto, Ontario: University of Toronto Press, 1994. ISBN 0-8020-0362-1. xii + 262 p., b&w illus., notes, index. Hardbound. Cdn\$29.95.

K'AIIROONDAK: BEHIND THE WILLOWS. By RICHARD MARTIN as told to BILL PFISTERER. Fairbanks, AK: Publications Center, Center for Cross-Cultural Studies, 1993. ISBN 1-877962-26-0. xii + 294 p., b&w illus., map. Softbound. US\$20.00.

PAINTING IN THE NORTH: ALASKAN ART IN THE ANCHORAGE MUSEUM OF HISTORY AND ART. By KESLER E. WOODWARD. Seattle, WA: University of Washington Press, 1994. ISBN 0-295-97320-X. 159 p., map, colour and b&w illus., bib., index. Softbound, US\$24.95; Hardbound, US\$40.00.

POLITICS AND SUSTAINABLE GROWTH IN THE ARCTIC. Edited by JYRKI KÄKÖNEN. Brookfield, VT: Dartmouth Publishing Company, 1993. ISBN 1 85521 333 8. xi + 112 p., index. Hardbound. Price not given.

THE CORNERSTONE ON COLLEGE HILL: AN ILLUSTRATED HISTORY OF THE UNIVERSITY OF ALASKA FAIRBANKS. By TERENCE COLE. Fairbanks, AK: University of Alaska Press, 1994. ISBN 0-912006-57-9. xii + 393 p., maps, b&w illus., appendices, notes, bib., index. US\$35.00.

THE CREE LANGUAGE IS OUR IDENTITY: THE LA RONGE LECTURES OF SARAH WHITECALF. Edited, translated and with a glossary by H.C. WOLFART and FRED A. AHENAKEW. Winnipeg, Manitoba: The University of Manitoba Press, 1993. ISBN 0-88755-629-9. Text in Cree and English translation. xiv + 160 p. Softbound. Cdn\$16.95.

THE CRYSTAL DESERT: SUMMERS IN ANTARCTICA. By DAVID G. CAMPBELL. Boston, MA: Houghton Mifflin Co., 1992. ISBN 0-395-68082-4. 308 p., map, bib., index. Softbound. US\$16.95.

THE NOICE COLLECTION OF COPPER INUIT MATERIAL CULTURE. By JAMES VANSTONE. Chicago, IL: Field Museum of

Natural History, 1994. ISSN 0071-4739. *Fieldiana*, Anthropology New Series, No. 22. iii + 71 p., map, b&w illus., bib., index. Softbound. US\$17.00.

THE UNITED STATES AND THE COLD WAR IN THE HIGH NORTH. By ROLF TAMNES. Brookfield, VT: Dartmouth Publishing Company, 1991. ISBN 1 85521 223 4. 384 p., maps, notes, bib., index. Hardbound. Price not given.

WORKING THE NORTH: LABOR AND THE NORTHWEST DEFENSE PROJECTS 1942-1946. By WILLIAM R. MORRISON and KENNETH A. COATES. Fairbanks, AK: University of Alaska Press, 1994. ISBN 0-912006-72-2. xiv + 270 p., map, b&w illus., bib., index. Hardbound, US\$30.00; Softbound, US\$20.00 + \$3.00 p&h.

## PAPERS TO APPEAR IN ARCTIC

KEY, J., MASLANIK, J.A., PAPAKYRIAKOU, T., SERREZE, M.C., and SCHWEIGER, A.J. On the Validation of Satellite-Derived Sea Ice Surface Temperature.

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DORÉ, A.G. Barents Sea Geology, Petroleum Resources and Commercial Potential.

LANDINO, S.W., TREACY, S.D., ZERWICK, S.A., and DUNLAP, J.B. A Large Aggregation of Bowhead Whales (*Balaena mysticetus*) Feeding near Point Barrow, Alaska, in Late October 1992.

BARR, W. The Eighteenth Century Trade between the Ships of the Hudson's Bay Company and the Hudson Strait Inuit.

## LETTER TO THE EDITOR

Dear Editor:

Thank you for publishing a review of TOWARDS NEW HORIZONS — JOHN HALLER, 1927-1984 in the March 1994 issue of *Arctic*. In the publishing information accompanying the review, you state that the book is available from the publisher in Zürich, Switzerland. Please inform your readers that the book is more easily available from me via Mrs. Solomon for US\$54.00 (10% discount) plus \$5.00 shipping and handling. Orders should be directed to Mrs. P. Solomon, Harvard University, Department of Earth and Planetary Sciences, 20 Oxford Street, Cambridge, MA 02138; (617) 495-3637; Fax (617) 495-8839.

With kind regards,  
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