Territories is available from the Government of the Northwest Territories.

In sum, *Finding the Arctic* provides a good basic survey of the history of Arctic exploration and some of the better-known early Euro-American settlers. However, at its base, it is a story about friends united by their mutual love for science and the Arctic. The camaraderie between the men is charming, and while it is at times reminiscent of an old boys' club catching up over a brew post-conference, this is part of its allure. I would recommend this book as reading material for an introductory class on North American Arctic history or to junior scholars for pleasure. The price is reasonable given the quality of the images and maps included in the text and the range of material that it covers. It would make a welcome addition to the libraries of both academics and non-academics interested in the North.

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NORTH BY 2020: PERSPECTIVES ON ALASKA'S CHANGING SOCIAL-ECOLOGICAL SYSTEMS. Edited By AMY LAUREN LOVECRAFT and HAJO EICKEN. Fairbanks: University of Alaska Press, 2011. Distributed by University of Chicago Press. ISBN 978-1-60223-142-9. xvi + 736 p., maps, colour illus., index of authors, index. 55 contributions in 9 sections. Softbound. US\$70.00.

Ambitious by any measure, this book sprouted from studies in Alaska during the 4th International Polar Year (IPY) of 2007–09. It was further refined and amplified by contributions supported by the University of Alaska-based outreach forum entitled "North by 2020" (p. xii). In all, 92 individuals contributed to one or more of its 57 chapters. The collection, divided into nine thematic sections, embraces academic disciplines from natural and social sciences to art and music and fosters trans-disciplinary dialogues. It also attracted a wide spectrum of agency, community, and industry contributors from outside academia.

Events and trends during the 50 years between the 3rd IPY (International Geophysical Year) of 1957–58 and the 4th IPY affected Alaska profoundly. Examples of structural, or "game-changing" developments illustrate this point: Alaska Statehood (1959); discovery of the Prudhoe Bay oilfield (1968); numerous acts of U.S. federal legislation (1968–76) affecting environmental and sociocultural policies (e.g., the Alaska Native Land Claims Settlement Act of 1971); growing awareness of global climate change and holistic, or trans-disciplinary, scholarship (1980 onward); the end of the Cold War (1988–92); and the growing

emphasis on Traditional Ecological Knowledge (mid-1990s onward). How accurately the book's contents portray the state of scholarly and public policy discourse underway in the Alaska sector of the circumpolar North becomes the primary assessment of the book's success. This reviewer's first-level judgment is that the book succeeds. It captures the state of the art in the rapidly developing trans-disciplinary enterprise of understanding, interpreting, and identifying adaptive options for social-ecological systems at Alaska's high latitudes.

Healthy candor weaves through and unites the book's diverse nine sections. Carefully reading Haley et al.'s chapter (6.6) proved pivotal to my own grasp of how this whole collection connects that candor with the book's thematic threads. Haley et al. articulate those connections in a manner that resonates with my own experiences and places a deeper critical assessment of the book's significance within my modest reach. Its title ("Strengthening Institutions...") reflects its prescriptive tone. Its quotation of the National Oceanic and Atmospheric Administration (NOAA) Administrator Lubchenco, who in 2009 called U.S. management of ocean resources "ad hoc and fragmented" (p. 457), exemplifies the book's many thoughtful explorations of tough problems yet to be resolved. Meek's chapter (5.4) likewise examines historical developments leading to modern policies in marine mammal management. Carothers' chapter (5.5) is both candid and moving in its portrayal of the disenfranchisement of subsistence fishers and their culture of sufficiency through legislation that privatized rights to exploit salmon resources ("limited entry"). This "commodification" stems from both the Magnuson-Stevens Act of 1976 (including its reauthorizations and amendments) and amendments to Alaska's State Constitution (p. 379–380). The U.S. Coast Guard's preparedness to carry out its mandates in Arctic waters is cheerfully and candidly scrutinized by Ragone (6.2).

Not many readers will find the time to read and annotate this book from cover to cover, then revisit marginal notes and underlined passages. Having done so, however, allows me to assure others that the overview of the whole volume (Lovecraft and Eicken, chapter 1.2) accurately identifies goals the editors pursued, and suggests how their long-term success could eventually be judged. Annotating also made me appreciate the unexpected "gems" of both new and older wisdom assembled in this collection. One new gem (Leigh et al., chapter 2.9) outlines components of a curricular experiment by educators and performing artists at an urban Alaska charter school, where 90% of the students are Native Alaskans in middle-school grades. Their course unites science and creative expression within the theme of climate change. Another gem is Kamerling's chapter (8.8) on collaborative ethnographic filmmaking. This author develops and illustrates perspectives on work that he and colleagues completed 35 or more years earlier: "...a film's authenticity can only be judged by how it is used over time" (p. 675).

Upon reading "There is no tradition here of multiple user groups coexisting," I bookmarked the page (p. 459) and returned to it later. "Here" encompasses Alaska's coastal communities bordering the Chukchi and Beaufort Seas. Haley and co-authors understandably seek to emphasize the likelihood of vastly more intense and extensive petroleum extraction, marine transportation, and perhaps fishery activities than this region has experienced in recent decades. Yet this region actually claims an especially long tradition of coexistence by multiple user groups. Moreover, generations of Iñupiat and Euro-American collaboration here should lend weight to authors' arguments that successful coexistence requires patience and effort. They might have cited mid-19th to early 20th century intensive commercial Yankee whaling coexisting with Iñupiat communities (Bockstoce, 1986). The region's transitions, from Yankee whaling to reindeer husbandry and stewardship over petroleum reserve lands (Brower, 1942) illustrate adaptive social-ecological system responses to change. The establishment of the U.S. Navy's Arctic Research Laboratory at Barrow in 1947 expanded U.S. Arctic research coexistence in the only community within U.S. territory where research took place during the first IPY in 1881-83 (Ray, 1885). Coexistence, adaptation, and collaboration between Iñupiaq culture and Western scientific culture continue today (Albert, 2001). A generation ago, the Arab Oil Embargo of 1973 led the Nixon Administration to seek U.S. independence from imported petroleum by 1980 (Emmerson, 2010:229). "Project Independence" motivated the U.S. Department of Interior (USDOI) and the State of Alaska to lease offshore acreage for petroleum exploitation, especially tracts close to onshore Arctic Slope oilfields. Between 1974 and 1983, at the request of USDOI, the NOAA accelerated a program of environmental studies, known as the Outer Continental Shelf Environmental Assessment Program (OCSEAP). Investigations dealt with Arctic marine and coastal ecosystems; fashioned technology, development, and regulatory scenarios and multidisciplinary syntheses; and even incorporated some local concerns and indigenous knowledge in their interpretations (e.g., Barnes et al., 1984).

Attempting to rationalize non-acknowledgment of long-standing and well-documented traditions of coexistence, I determined that 36 of 45 citations (80%) in Haley et al.'s chapter were published in calendar years 2000–10. Tabulating dates of publication for all 920 literature citations in the entire volume showed that 695 (74.8%) were published between 2000 and 2010. Thus, only 25% of the works cited were published more than a decade before this volume was assembled. For comparison, Emmerson's (2010) circumarctic analysis of Arctic futures, based on trends within each of the member nations of the Arctic Council, relied on post-1999 sources only 38.9% of the time (475 of Emmerson's 777 literature citations, or 61.1%, were published before 2000).

Emphatically, these observations invalidate neither *North by 2020* as a snapshot of rapidly evolving enterprise uniting scholarly and public policy developments, nor the

book's already cogent prescriptions for effective institutional democratization. Veterans of OCSEAP's heyday of Arctic investigations should nevertheless wonder that their contributions to some of these ideas from the 1970s and 1980s are not cited. Thurston's graphic analyses of the pace of Arctic oil and gas activities from 1960 through 2010 (chapter 7.2) suggest that petroleum industry activities in the U.S. Arctic reflect volatility in the price of crude oil. By 1985, the post-1973 embargo spike in prices had subsided, and much of the exploratory enthusiasm in the U.S. Arctic had deflated (Fig. 7.2.2:505). Perhaps this exploratory hiatus explains the disappearance of OCSEAP's contributions from institutional memory. Ironically, however, North by 2020 notes and praises intergenerational transmission of traditional elders' wisdom to youths in indigenous communities ("intergenerational guardianship," p. 65, 73). The book illuminates its Section 2 on indigenous knowledge with Susie Bevins' spirit mask, which evokes for me this elder-youth connection (Plate 2:55). Western scientific and scholarly practices have not uniformly heeded Section 2 co-editor Barnhardt's recommendation, "...to approach [coexistence] on a two-way street rather than viewing the problem as a one-way challenge to get indigenous people to buy into the western system" (p. 64).

Publishing generally and scholarly communication practices specifically are commonly known to be in flux. Some of us readers are gratified that printed copies of works like North by 2020 are still produced, and that these and literature citations in them have not moved so far from traditional formats as to be retrievable and understandable only by those inside a cloister of scholars. Nevertheless, some citations push limits of assuming electronic publications' wide accessibility from the Web. One feature that disappoints me in North by 2020 is the volume's index. Although World War II and the Cold War are acknowledged to have profoundly affected the circumpolar North (Gaddis, 2005) by shaping sovereignty issues that persist to the present (Grant, 2010), no index entries lead to these topics in the text. The USDOI's Bureau of Energy Management, Regulation and Enforcement is central to Outer Continental Shelf petroleum development in Alaska, but I found no index entries that help keep these acronyms straight. Perhaps if the editors and publisher of North by 2020 had been allowed extra time before going to press, the literature citations could have been extended farther back in time, the irony of heeding wisdom of indigenous elders but not always that of elders from Western scholarly culture avoided, and the index improved.

One theme not promised by *North by 2020*'s opening section deserves commendation. The volume editors sometimes do heed elder scholars' advice, as in their lengthy quotation of Prof. Gell-Mann's advice on taking a "Crude Look at the Whole" (1.2). Zolotukhin (7.3) suggests that universities are ideal facilitators of international cooperation. Eicken et al. (7.5:597) briefly tout universities as spaces well suited to discourse on coastal developments in the Arctic in the form of "thought experiments." Eicken and

Lovecraft amplify these and similar comments in the final section of the book, to advocate academic settings as those where stakeholders can best share ideas in a neutral setting, to form "Communities of Practice" (Section 9:685–688). That proposition alone should earn this book shelf space in many institutional libraries.

## REFERENCES

Albert, T.F. 2001. The influence of Harry Brower, Sr., an Iñupiaq Eskimo hunter, on the Bowhead Whale Research Program conducted at the UIC-NARL facility by the North Slope Borough. In: Norton, D.W., ed. Fifty more years below zero: Tributes and meditations for the Naval Arctic Research Laboratory's first half century at Barrow, Alaska. Fairbanks, Alaska and Calgary, Alberta: Arctic Institute of North America. 265–278.

Barnes, P.W., Schell, D.M., and Reimnitz, E., eds. 1984. The Alaskan Beaufort Sea: Ecosystems and environments. Orlando, Florida: Academic Press. 466 p.

Bockstoce, J.R. 1986. Whales, ice, and men: The history of whaling in the Western Arctic. Seattle: University of Washington Press. 400 p.

Brower, C.D. 1942. Fifty years below zero: A lifetime of adventure in the Far North. New York: Dodd Mead. 310 p. (Reprinted in 1994 by University of Alaska Press.)

Emmerson, C. 2010. The future history of the Arctic. New York: Perseus Books. 403 p.

Gaddis, J.L. 2005. The Cold War: A new history. New York: The Penguin Press. 333 p.

Grant, S.D. 2010. Polar imperative: A history of Arctic sovereignty in North America. Toronto, Ontario: Douglas & McIntyre. 560 p.

Ray, P.H. 1885. Report of the International Polar Expedition to Point Barrow, Alaska, in response to the resolution of the House of Representatives of December 11, 1884. Washington, D.C.: Government Printing Office. 695 p.

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HAROLD INNIS AND THE NORTH: APPRAISALS AND CONTESTATIONS. Edited by WILLIAM J. BUXTON. Montreal and Kingston: McGill-Queen's University Press, 2013. ISBN 978-0-773541672. xiii + 417 p., 13 contributors, b&w illus., notes, bib., index. Softbound. Cdn\$32.95.

Harold Innis (1894–1952), an economic historian at the University of Toronto whose interests included staple theory and the role of communications in history, must be one of Canada's most studied academics. This volume, the result of a conference held at Concordia in 2007, follows

the tradition of previous Innis scholarship by presenting a strong collection of papers on one aspect of his career. In 1924, as a junior academic, he was able to wrangle some funds from the University of Toronto to head north to the Mackenzie basin on his first trip of many to different parts of Canada's vast North. He would also venture to the Soviet Union at the end of the war. In between, he became the Canadian Historical Review's northern reviewer, writing some 11 review essays on the North. What he discovered when he went north was obviously important to him, and for the rest of his career, in talks, reviews, and lobbying to both government and university, Innis became an advocate for the North, stressing the importance of all things northern to the future of Canada. Arguing that this aspect of Innis's career has not received much attention from scholars, editor William Buxton seeks to redress this failure with the publication of this collection of some 15 articles and over 400 pages of what he terms "micro-narratives" (p. 6).

Buxton and the others in this work have achieved their goal. The essays allow for an extensive examination of Innis by scholars interested in the North. Cumulatively they demonstrate both the importance of the North to him and his particular perspective on the region as a particular and distinct environment and as part of the greater whole of Canada's evolution as a nation-state. Indeed, as several articles demonstrate, the northern experience for Innis was central to theories that became hallmarks of his work. including his interpretations of the relation between transportation and development, his (at that time) embryonic work on technology and communication, and his belief that Canada was a natural product of geography. The North may also have been the means, in Innis's mind, that would allow Canada some room to discover its own identity. As Matthew Evenen concluded, "Innis's nationalism thus evolved as a northern nationalism, one that would offset the degrading influence of Britain and the United States by finding Canada's meaning in its own mythic north" (p. 75).

Perhaps most interesting, however, is the complex view of economic volatility (what Innis called "cyclonics") that came out of Innis's northern experience. Innis was an enthusiast of northern development and saw the region's future growth as both inevitable and important to Canada. Indeed, as Jim Morochuk notes, Innis's writings had an edge of "northern boosterism" (p. 150). At the same time, Innis recognized that development also brought destruction. Old ways of life, especially Aboriginal economies and cultures, were threatened by the opening of the North. In typically elliptical fashion he wrote "Save Eskimo" at one point in his field notes (p. 163).

Innis's support of development while recognizing its costs to local communities creates some debate within this volume. Was he a Southerner viewing the North through a filter that undervalued local culture and the tremendous cost of development to Aboriginals? Or was he a realist, sympathetic to local concerns, and an advocate for the North? Was he the independent scholar assessing as best he could the likely future of the North, or was he so closely