examining the ecological and socio-historical implications of religious syncretism and conversion to Christianity in contexts of inter-ethnic contact. Mixed in here are Saladin d'Anglure's structural interpretation of Inuit shamanism, a paper which argues for the (heretofore overlooked) centrality of the moon in traditional cosmology, Miyaoka's linguistic analysis of the Yupik worldview, and Burch's discussion of "rationality" and "ecological harmony" in pre-contact Inupiat and Caribou Inuit subsistence adaptations. Still in the New World, Part IV includes two papers that consider the interplay of sacred ideas and everyday social and economic practice among Athapaskan-speakers of the western Canadian subarctic: Ridington treats the Dunne-za (Beavers) thought-world as a form of technology, and Sharp shows how Chipewyan animal sacrifice demonstrates distinctions between supernatural and natural causation. On another plane, Feit looks at the Waswanipi Cree shaking tent ceremony as a dynamic institution, responsive to changing social, ecological, and ideological conditions. And different again is Irimoto's use of comparative data on Ainu and northern Dene hunting to demonstrate commonalities in ecological strategy and associated beliefs.

Part V, about Northern Eurasia, includes Hulkrantz's analysis of ecological imperatives in the religion of coast vs. forest-dwelling Saami, and Pentikäinen's examination of Khanty shamanism as a form of ethno-politics and an expression of national identity. Finally, Sasaki attempts to identify cultural and economic types among peoples of Sakhalin and the Lower Amur region of Siberia.

This volume reveals its origins as a symposium all too prominently: many papers are weighed down with needlessly dense language and even denser expositions of evidence and argument. No less bothersome, the concluding essay proclaims that the integrated focus on religion and ecology advanced throughout the book adds up to a new anthropological paradigm! This claim deserves no comment and will receive none here. Setting aside such scholarly abstractions and hyperbole, all expectable in the circumstances, the book still has much to recommend it, at least to the specialist reader. First, it does feature a few well-written and original studies, a welcome tonic to the heavy "scientizing" tone otherwise on offer. Feit's full contextualization of a central Cree ritual, and the humanistic perspective on Dunne-za intellectual culture taken by Ridington, come readily to mind as shining examples. And Burch's piece on the rational and nonrational underpinnings of arctic hunting strategies is equally praiseworthy, especially for the clarity of its argument. Perhaps the main strength of this volume is its great wealth of ethnographic detail, much of which derives from Japanese and Russian sources not readily accessible to North American researchers. There is even an index, unusual in anthologies, to help guide browsers to areas of particular interest. A few detailed maps would improve this side of things immeasurably.

In the main, *Circumpolar Religion and Ecology* is not a book for the casual or uninitiated reader. It properly belongs on the shelves of research libraries and on the desks of anthropologists and other specialists in aboriginal religions and cultural ecology.

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FARTHEST NORTH: THE QUEST FOR THE NORTH POLE. By CLIVE HOLLAND. Toronto: McClelland & Stewart, New York: Carrell and Graf; London: Robinson, 1994. viii + 305 p., 16 illus., 4 maps, bib. Hardbound. Cdn$29.99.

In the preface, Clive Holland informs us that he planned his book to tell "the story of the quest for the North Pole from earliest times to the recent past." He calls it "an enthralling story spanning four centuries and embracing many different motives, many different modes of travel, and many remarkable men." Holland has succeeded in his objective, with panache. The expeditions are so varied and interesting that I have chosen to summarize them and their achievements in this review.

Holland has chosen widely and wisely from the writings of the explorers themselves, and states his role as "mainly to provide continuity and context: to blend together extracts from the explorers' narratives into one unfolding historical drama" (p. vii). This drama, he adds, "has all the best ingredients: ever-present danger; heroic courage; tragedy and triumph; sensationalism; the quest for glory, fame and wealth; unsolved mystery; astounding incompetence; deep hatreds; and a feud so bitter that it still simmers 80 years after the event" (p. 1).

The feud mentioned is that between Frederick Albert Cook and Robert Edwin Peary. I read this chapter first, as soon as the book arrived, and found it objective yet restrained. Cook got nowhere near the pole, but probably wished to spoil Peary's hour of glory by claiming to have got there first. Peary did not allow for ice-drift, had a suspiciously swift return, and—the National Geographic Society to the contrary—probably ended up about 80 km west of the pole, near 89 degrees latitude.

The northward quest began in 1596, when Willem Barentsz discovered Svalbard (Spitsbergen is the main island) and reached 79˚49′ N; Barentsz died on the return trip. In 1611, the first whaling expeditions to Svalbard began. In 1773, Constantine John Phipps found an impenetrable wall of ice east of Greenland, and reached 80˚37′ near Svalbard.

A whaler, William Scoresby, Sr., reached 81˚30′ in 1806. The ships of the Admiralty expedition, led by David Buchan and John Franklin, failed to get any farther north in 1818. William Edward Parry in 1827 attempted an ice-sledging expedition, with dreadful toil, fighting the southward ice movement, and yet became the first to reach 82˚45′, still well over 450 nautical miles from the pole. Only in 1868 was

Adolf Erik Nordenskiöld able to best the Scoresby latitude record by ship when his *Sofia* reached 81˚42′.

The Americans pursued a route on the west side of northern Greenland. First, Elisha Kent Kane wintered near Etah in 1860–61. Then, In 1871, Charles Francis Hall went farther, taking his ship into the Hall Basin to reach 82˚11′, only to die of arsenic poisoning. The Austrian-German expedition of Julius von Payer in 1874 discovered the Franz Josef Archipelago north of mainland Russia and marched on the ice for 17 days from their icebound ship to reach 82˚30′.

Britain's Arctic expedition of 1875–76, led by George Nares, was a disaster. The ships reached a new high (for a ship) of 82˚28′ and the sledging parties a new high of 83˚20′ before the men were weakened by scurvy, 642 km short of the North Pole.

Again in 1879–81 an American, Commander George Washington De Long, led an expedition northwest from Bering Strait, sponsored by the *New York Herald*. His ship, the *Jeanette*, was imprisoned in ice and sank; only 13 of 33 crew members safely reached the northern coast of Siberia.

Fridtjof Nansen, the most flamboyant and luckiest of the polar explorers, first made his mark in 1888 by crossing Greenland from east to west using skis and man-hauled sledges. Next, Nansen built a ship that, when squeezed by ice floes, would rise up unharmed onto the surface of the ice. In 1893, Nansen took the *Fram* through the waters of the New Siberian Islands, and set it into the ice, hoping to drift for three to five years through the Arctic ice pack. Holland accurately says: "No explorer in the world could remotely match his ability to present a serious scientific experiment as a spectacular, death-defying, insanely courageous adventure" (p. 108). On 14 March 1895, when the *Fram* had drifted to about 84˚04′, Nansen and Hjalmar Johansen left the security of the ship on a "crazy, reckless, foolhardy, virtually suicidal act of bravado," to walk to the North Pole carrying a kayak each (p. 111). On foot, they reached 86˚13′ on 8 April and then realized the southerly drift of the polar ice made their goal unattainable. After a long hike over the ice, when they were nearing Franz Josef archipelago on 5 August, Johansen was nearly killed by a polar bear. They paddled their kayaks south to the third large island, Jackson Island, where they wintered. The next summer, on 12 June, both kayaks went adrift, but Johansen, fully clothed, with superhuman exertion, caught up to them. Only five days later, at Cape Flora on Northbrook Island, the southernmost of the archipelago, they literally stumbled upon the scientific party led by Frederick Jackson. "No chance meeting in history, no Livingstone and Stanley even, could ever match this one for pure serendipity" (p.134). On 21 August they were delivered to Tromsø in northern Norway, incredibly only one day after the arrival of the *Fram*, which had been propelled in the drifting solid polar ice pack to Svalbard.

Salomon August Andrée, with his second attempt to reach the pole in an air balloon on 11 July 1897, contributed "one of the most extraordinary and most moving stories" (p. 142). After crashing onto the ice 320 km north of Svalbard on 14 July, his party had by 5 October reached White Island, the never-visited northeasternmost island of the Svalbard archipelago, where they wrote their last diary entry on 17 October. Their skeletons, journals, and undeveloped photographic film were not found until 1931.

On 11 March 1900, Captain Umberto Cagni led an Italian expedition of 10 men, 102 dogs and 13 sledges from Rudolf Island in the Franz Josef archipelago, and by 25 April reached 86˚34′. Three lives were lost in bettering Nansen's previous record by only 32 km.

Even with the advent of airplanes and the safety factor of wireless communication, the North Pole remained a difficult target. Roald Amundsen in 1925 attempted to reach the North Pole with two flying boats purchased by companion Lincoln Ellsworth's millionaire father, but got only to 88˚, and had to spend three weeks making a barely adequate runway for the one serviceable plane. In a three-engine plane on skis, Richard Evelyn Bird from the United States thought he had reached the pole on 9 May 1926, in an outward flight of less than nine hours from Svalbard; subsequent calculations suggest that he had reached only 88˚17′. The other flight that year combined Italy's airship, American Lincoln Ellsworth's money and Roald Amundsen's charismatic leadership. The airship, renamed *Norge*, arrived safely at the Pole after a 13-hour flight from Svalbard, dropped Norwegian, Italian and American flags on the ice, and carried on over the pole to Teller, Alaska. In this expedition, the captain, Italian Umberto Nobile, and his essential mechanics failed to receive the credit they deserved.

The final airship attempt in the *Italia* took off from Svalbard on 23 May 1928. Its party travelled 100 km/h, reached the pole, and planted flags, but crashed on 25 May during the difficult return journey. Finn Malmgren, the Swedish meteorologist with the party, set out across the ice for help, but died in the attempt; the main party was finally rescued on 20 June by an Italian flying boat, but only after Roald Amundsen had disappeared forever on 18 June in a search flight.

In 1937 the Russians sent four large four-engined aircraft to the North Pole, with supplies to build an ice-drift station. They also made a 63-hour flight over the pole, from Moscow to the state of Washington, and a 62-hour flight from Moscow over the pole to San Jacinto, California, a world long-distance record flight of 10 140 km. A third Russian transpolar flight went missing.

Now one can take a comfortable tourist expedition to the pole in a 75 000-horsepower Russian nuclear icebreaker. Clive Holland did so one year recently as guest lecturer and gave the series of lectures that form the basis of this book.

It is perhaps niggardly to mention one mistaken date and two omissions. The second Russian flight over the pole left Moscow on 12 July 1937, not 12 June; we are not told that it was the search expedition by Melville on 21 March 1882 that rescued De Long's journals; there is no mention of Sir Hubert Wilkins' 1926 flight from Point Barrow, Alaska, north of the Canadian arctic islands and Greenland, to Svalbard. I also regret the lack of an index.

Beautifully written, this book is a joy to read. My 13-year-old grandson can expect a copy under the tree this coming Christmas.

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POLITICS AND SUSTAINABLE GROWTH IN THE ARCTIC. Edited by JYRKI KÄKÖNEN. Aldershot, England: Dartmouth Publishing Company Ltd., 1993. 111 p.

It seems the Arctic remains as much an enigma today as it was in the nineteenth century. Problems have changed, but solutions remain evasive. For example, many of the 12 million or so inhabitants of the circumpolar North live a subsistence way of life. They have never been able to tie in with the larger consumptive economy of their nation states or enjoy the corresponding benefits and economic security. Moreover, pollution from modern, industrial societies is penetrating even the most remote areas of the region, threatening the subsistence way of life of indigenous peoples. At the same time, organizations working on an Arctic Environment Protection Strategy, for example, have their hands tied because "the principal polluting states are not among the parties" (p. 47). Therefore, a book on growth, sustainable development and politics in the Arctic is certainly apropos.

Material for the volume was presented at a seminar sponsored by the Tampere Peace Research Institute held in Inari, Finland in May 1991. It covers a host of problems in the Arctic, involving people, development and the environment. The chapters are in effect short works on particular subjects, and unfortunately there is no common thread linking them. However, what is lacking in coherence is made up in subject matter. Each of the selections provides a world of information for anyone interested in the circumpolar North.

The leadoff work is a conceptual piece by W.L. Goldfrank. He suggests problems in the region are explained in the centre-periphery dichotomy; the centre, or core, is where all the action takes place, and peripheral areas like the Arctic suffer. Nowhere in the world do these peripheral regions have the clout to alter a maldistribution of resources controlled by the centre. Moreover, the prospects for change, in the short run at least, are not very good.

The only article that deals with this conceptual framework is the last one in the book, by Michael Pretes. He argues that indigenous people on the periphery have few means for increasing their cash flow. With the exception of government spending, little money is invested in the region. Consequently, incomes are low and unemployment high. Pretes suggests that by using resources from land claim settlements, "trusts" can be created, thus providing a continuous and autonomous source of funds for these people. Such funding could begin to expand local economies and thus help create linkages with the larger economies of the nation-state.

A second set of articles deals with problems of pollution in the region. Alexei Yu. Roginko outlines the situation in Arctic Russia, which encompasses about half the circumpolar North, and is home for about 10 of the 12 million people of the region. Part of the problem is attitudinal. In the past, the prevailing view has been "the more we take from the Arctic the better" (p. 26). The consequence of this sort of thinking has been few environmental controls and extensive pollution. In the struggle between economic development and environmental protection, development has constantly been the winner. Once Russians realized there were serious problems, most solutions came from Moscow. There were, however, few resources and a lack of political will applied to environmental protection.

Marvin S. Soroos also has a chapter concerning the environment. He outlines very specifically research done on Arctic haze. Recognizing and tracking this haze was an indication that the pollution tide was on the move. Correcting for it, however, is another problem. Most of the pollutants are airborne, drifting from the European Continent. Imposing regulations across international boundaries has not worked and is still the challenge today.

Another pair of readings involve indigenous peoples of the Arctic. Dalee Sambo has an interesting piece about indigenous "security" which was part of the traditional culture of the Inuit. Today, however, there has been a gradual "deterioration" (p. 51) of this security and there are significant social consequences. Now the Inuit need greater involvement in "decision- and policy-making" (p. 62) in order to restore some degree of self-determination.

The Sami of Sweden, Norway, Finland and Russia are discussed in an article by Elina Helander. Their traditional way of life has been confronted directly by modern "development." Our Western "concept of development" is not necessarily fully compatible with the notion of "sustainable" [development] (p. 78). Thus, there is a need to change current models of development to include more "local" control, actions and solutions.

A final set of readings tackles the notion of sustainable development. For a definition of "sustainable," Jyrki Käkönen relies on the Brundtland Commission: development is sustainable "as long as fulfilling the needs of this generation does not create limitations for the following generations and their chances to fulfill their needs" (p. 15). He comes to a perplexing conclusion: in our society growth and centralization go hand in hand, and they do not have a very good track record. Sustainable development, on the other hand, may require decentralization, and that we give up our "OECD [Organization for Economic Cooperation and Development] standard of living" (p. 23).

J.D. House considers the place of knowledge-based rather than resource-based development in the North, and its relation to sustainable development. The problem is one of awareness and structure. Knowledge would create awareness, which in turn should broaden the structural base of impacts in a decision-making process. Presumably, greater involvement in the