route. Appealing in its initial simplicity, the hot/cool approach is complicated by a further breakdown into issue-specific hot spots and aggregated hot spots, each of which is judged either accessible or inaccessible. Once the reader has overcome the hurdle of terminology, this chapter can be appreciated as a valuable overview of the key pieces of information scattered throughout the book. In the process of extracting material from the other chapters, certain statements appear unsupported or confusing. One example relates to the contention that new icebreaking ship designs will achieve speeds approaching those required to make the NSR a worthy competitor to the Suez Canal. Yet this statement follows a discussion that claims that future icebreaking commercial ships on the NSR will only achieve 4-7 knots in winter, versus the 11-13 knots required to be competitive with traditional open-water routes. Several interesting new topics are introduced here and touched on briefly: the potential effect of global warming on the Arctic shipping season, and the philosophy of 'multi-value' navigation that takes into account both economics and environmental sustainability. The book ends on an upbeat note, with reference to Vilhjalmur Stefansson's optimistic predictions in the 1920s of northern development to come. Østreng makes the important point that conclusions tied to a time horizon of less than 10 years may have little relevance to the level of development, which could occur along the NSR later in the twenty-first century. The bibliography includes an impressive listing of all the INSROP reports as well as a selected listing of other references. The index tends to be overly specific such that individual ship types and names are listed (for example, Noril'sk), while topics and subjects are not (such as icebreakers, marine mammals, ice thickness).

It is difficult to sum up such a vast undertaking. This book represents a lasting legacy of essential baseline and historical information, and forms an essential and unique reference work for anybody with an interest in the past or future development of this region. On another level, it provides a wonderful insight into Russian Arctic history and the mindset of the Soviet system. As the editor points out, no other form of government could have achieved the level of development reflected in the NSR during the 1980s. In Østreng's own words: 'The challenge of today is whether this system, left to the new Russian regime, can be utilized by market forces to enable profits to be made in the future.' (David Dickins, DF Dickins Associates Ltd, 1660 Cloverdale Road, Escondido, CA 92027-6717, USA.)

FIRE INTO ICE: CHARLES FIPKE & THE GREAT DIAMOND HUNT. Vernon Frolick. 1999. Vancouver: Raincoast Books. 354 p, illustrated, hard cover. ISBN 1-55192-232-0. \$US21.95.

Assessing Vernon Frolick's book is rather like assaying one of the complex minerals analysed by the volume's protagonist, Charles Fipke, and then having to say what it is exactly. The front cover promises 'the true-life story of the man behind the great Canadian diamond discovery,'

while the back cover describes it rather blandly as 'business' and 'biography.' Even combined these categorisations hardly do the work justice, nor do they make it stand out sufficiently from the crowd.

This is a pity, because in many respects Frolick's achievement is as multi-faceted as one of Fipke's cut diamonds. It is an amalgam of biography, travel writing, anthropology, ethnology, geography, and at least half a dozen different types of history (cultural, imperial, family, ethnic, tribal, and secret, to name but a few). It is also a travel book — the story of a lifetime of journeys worthy of The odyssey that takes its reader to New Guinea, Australia, South Africa, and Canada. At times it even reads like a rites-of-passage narrative, not only of Fipke but also his family, past and present. In weaving together so many different strands, and fictionalising the verbal exchanges between his characters, it would do no disservice to Frolick to say that at times he conjures the magic of a Bruce Chatwin.

The axis of the text is the geologist Charles (Chuck) Fipke, an enormously complex, contradictory, and difficult character. He appears as the quintessential male, plunging fearlessly into swamps, and trading clothes with potentially hostile cannibals to avoid being killed for the protein that his body will provide. He is a 'man's man' who never misses taking a geological sample, whatever the odds, who continually tests restrictive boundaries and rises to any challenge. He seems naturally tough, almost invincible, but just when the reader thinks that he is dealing with a character from a Hemingway story, Frolick reveals a human being who has overcome a 'stutter' (page 122) and has failings like the rest of us.

Frolick creates a character who at times seems badly equipped for fitting into civilised society (pages 14-15) and yet is immediately able to cope with the uncivilised work and environments in which he has to live. In this respect he is the antithesis of his wife, Marlene, who has a more conventional understanding of the wisdom of limits than her husband and who acts as his counterpoint in the text. The juxtaposition of the two characters is a clever device that undercuts a simple hero-worshipping of Fipke. At crucial moments in the text — such as when Fipke deliberately startles a herd of rhinos simply to obtain 'worthwhile close-ups' (page 162) — the reader oscillates between an identification with Fipke's desire for a perfect photograph and Marlene's fear/anger as the stampede narrowly misses killing them. Indeed, a recurrent suspicion of Fipke's unsettling propensity towards self-destructiveness haunts the text.

In essence Frolick is telling a success story, but with dynamics that are far from simple. The tension between the conventional, represented by Marlene, and the uncompromisingly individualistic, like Fipke, lends the text a bittersweet flavour. Superficially the book charts Fipke's life from its early privations to a flourishing career as a geologist who is made immeasurably wealthy by his discovery of diamonds in the Canadian Arctic. On the one

hand, it is a happy 'reversal of fortune' story, as Fipke restores a family fortune that should have been, but that was denied when his father was bamboozled out of selling a property that sat on top of vast oil reserves. On the other hand, the discovery of diamonds in Canada is sadly eclipsed because Fipke's behaviour finally estranges his wife and precipitates their separation.

Overall this is a very enjoyable and highly informative book, containing some beautifully written descriptive passages that demonstrate a genuine feel for language. However, what ultimately differentiates Frolick from Chatwin is that whereas Chatwin was always in control of his material, Frolick is often not. The tendency towards length and detail rather than brevity and simplicity works against the text, as does the complexity of its structure.

For example, in the first part of the book Frolick eschews simple, linear chronology, and structures the text in a way that is both cyclical and also historically discursive. In the first chapter, Frolick throws the reader straight into the narrative with Fipke, ending on a tense note with his protagonist in trouble. The succeeding chapters then backtrack, allowing the reader to understand how Fipke found himself in the dilemma described in the first chapter. The idea is an interesting one and it certainly communicates the energy and drive of Fipke before the character is properly introduced. The difficulty, however, is that Frolick takes so long getting the reader back to the point of crisis that the tension felt at the conclusion of chapter one has long since dissipated. The text also has minor errors of proofreading. On page 93 Frolick describes a '30 lease' (presumably a '30 [year] lease'), while the word 'girls' appears on page 116, inexplicably with a possessive apostrophe.

That said, one should not dwell on a book's lower merits for fear of masking its numerous higher ones. Frolick has written a very ambitious, meticulous, and informative text. Readers of this book will learn about the 'spirit ceremonies and single note drum rhythms,' the customs and rituals of some of New Guinea's 700 indigenous tribes, the history of Ukraine, West Irian, South America, South Africa, Cecil Rhodes, apartheid, and the politics of land ownership in the Canadian Arctic. If you read very carefully you might just find yourself with a sufficient knowledge of mineralogy and diamond-hunting to go prospecting yourself. (Ian N. Higginson, Centre for History and Cultural Studies of Science, Rutherford College, University of Kent at Canterbury, Canterbury, Kent CT2 7NX.)

TOWARD MAGNETIC NORTH: THE OBERHOLT-ZER-MAGEE 1912 CANOE JOURNEY TO HUD-SON BAY. The Oberholtzer Foundation. 2000. Marshall, MN: The Oberholtzer Foundation. 127 p, illustrated, hard cover. ISBN 0-9703138-0-2. Can\$50.00.

While some of the more remote parts of the Canadian north, for example, Prince Patrick Island or Prince Regent Inlet, had been explored and mapped by the mid-nineteenth century, other areas much farther south remained *terra* 

incognita (except to the local inhabitants) until well into the twentieth century. Such an area is that of Nueltin Lake and the Thlewiaza River, just west of Hudson Bay; the lake straddles the sixtieth parallel, and the river, which flows through the lake, lies only a few tens of kilometres farther north.

In 1912 the lake and river were successfully explored (and mapped in some detail) by a rather improbable two-man canoeing expedition. Ernest Carl Oberholtzer was born in Davenport, Iowa, in 1884. As a young man he became an ardent canoeist, exploring the lakes and rivers of the Minnesota—Ontario border. Here he became friends with an Ojibway trapper, Billy Magee, or Titapeshwewitan ('Fardistant-echo'), then aged 50. Although neither man had been north of Rainy Lake, in 1912 they set off on a trip to the Barren Lands. Oberholtzer's original intention was to retrace Dr Joseph Tyrrell's route down the Kazan River, but to continue north from Yathkyed Lake (from where Tyrrell had headed east down the Ferguson) to Baker Lake and Chesterfield Inlet.

Having travelled by rail to The Pas, the two men set off up the Saskatchewan River in an 18-foot [6 m] chestnut canoe on 26 June 1912. Their route led via Cumberland House, the Sturgeon Weir River, Frog Portage, and the Churchill River to Brochet at the head of Reindeer Lake. Here Oberholtzer had hoped to hire a guide for the remainder of the trip, but was unsuccessful. Undaunted, he decided that he and Magee would proceed on their own. However, he did lower his sights somewhat, opting to head for Nueltin rather than Yathkyed Lake, and then to go east down the Thlewiaza to Hudson Bay.

They paddled, tracked, and portaged up the Cochrane River, portaged north into the headwaters of the Thlewiaza, then down the latter to Kasmere Lake and Nueltin Lake. On Kasmere Lake they stopped for a few hours on 8 August at a Chipewyan camp. Their progress north down Nueltin Lake, some 200 km in length, with a convoluted coastline of numerous headlands and dead-end bays and encumbered with numerous islands, was slow and tedious. But finally, on 27 August, they left the lake and headed east down the lower Thlewiaza. They reached Hudson Bay on 12 September and were pleasantly surprised to encounter an Inuk named Bite in his kayak; his family was camped nearby.

Fortunately, given the late date, Oberholtzer was able to persuade Bite to take them in his whaleboat, with their canoe lashed alongside, to Churchill, where they arrived on 17 September. From there they set off again on their own for York Factory, despite snow, hail, gale, and heavy seas. From there they followed the standard canoe route south up the Hayes River to Norway House, arriving on 19 October; the last steamer on Lake Winnipeg had already left and the two men were faced with the long haul south up the lake in snow and gales; they were windbound for six days. Their canoe trip ended at Gimli on 6 November 1912.

Theirs was quite a remarkable trip; travelling without a guide, in part through unmapped country, they had covered