**COLD FRONT. CONFLICT AHEAD IN ARCTIC WATERS**. David Fairhall. 2010. London and New York: I.B.Tauris. 220 p, illustrated, hard cover. ISBN 978-1-84885-384-3. £ 18.99.

While many 'popular science' books dealing with a melting Arctic have given alarmist pictures of the potential for a violent military escalation in the region, David Fairhall's book offers a more sober and well considered analysis, one that does not become excessively technical or dull. Setting out to discuss the physical, economic, and military implications of an ice-free polar sea, the author covers a wide range of issues he judges likely to be prominent in the future of the region. Cold front certainly is an appropriate title for a book concerning the Arctic, but the title is also intended to evoke the meteorological phenomenon of the same name. Cold fronts occur at the meetings of hot and cold air masses and are characterised by unpredictable weather as well as turbulent winds that may develop into gales followed by showers and periods of clearing and good weather. In other words, the outlook is uncertain. This uncertainty about what will happen in an ever warmer Arctic is a theme that recurs throughout the book.

Since the Arctic consists predominantly of open sea and coastal areas, the book unsurprisingly gives much coverage to sea related topics. This maritime emphasis includes glimpses of legendary expeditions beginning with those of William Barents in the 16th century as well as those of Vitus Bering, Edvard Parry, John Franklin, Fridtjof Nansen, and others in the centuries that followed. In addition to their scientific undertakings and the accounts of their travels, these explorers, have often lent their names to important features of Arctic geography including seas, straits, channels and an island. Consequently, these names would be familiar to many readers who will doubtless be rewarded and entertained by Fairhall's provision of their experiences and explorations.

The book's historical review also covers more recent events including the roles played by nuclear submarines in the region during the cold war and the accomplishments of the famous mastodon icebreakers such as Lenin, which was powered by three nuclear reactors. Likewise, the book also offers insight into landmark events such as the pyrrhic victory of SS Manhattan in 1969. Manhattan was an American tanker refitted as an icebreaker, which completed a journey through the Canadian Arctic from the east coast of the United States to the Alaskan oil fields and back. This voyage demonstrated that the northwest passage was negotiable for a tanker with massive icebreaker support, but it did not convince anyone that such undertakings were either commercially rewarding or possible without significant ecological risks. Examples such as these will be very useful to those who wish to understand the commercial prospects of today's Arctic because even in times of warmer seas such experiences remain relevant to shipping, cruise, and oil companies. An additional strength of the book is how credibly in this respect it explains the region's peculiar demands and the difficulties always present in operations on the polar seas.

Despite his long personal and professional experience of the region, the author does not attempt to answer all questions or to

resolve all the uncertainties, and the humility of this approach is one of the strengths of the book. While giving the reader some critical basic facts from climate research, international law, and politics, the author leaves it to others to draw conclusions about which of the many possible future scenarios is most likely to occur. Thus Fairhall concludes his book with synopses of the opinions of a handful of scholars concerning the political dispensation of the Arctic in 2040. In this respect, the book remains analytical, confines itself to realities that have already been established, and leaves speculation to other authorities.

While the book explicitly states that it will not deal with social issues, including those of indigenous peoples, this limitation might be construed as a shortcoming in a book of this kind. Fairhall might have added another interesting dimension by including a chapter or two devoted to the people of the high north and their histories, including, perhaps, some insight into the extinction of the Norse settlement in Greenland, or into other settlement processes which have led to contemporary population patterns. This is a topic that, in times of global warming with its focus on possible changing living conditions in the north, is most interesting and relevant for the reader. Likewise, many readers could benefit from a more thorough update on current political issues in the region as well as concrete examples of continuing political developments in the Arctic such as Greenland's movement towards independence or analyses of some of the Arctic states' actions and strategies in their negotiations on disputed borders including their work to how to secure sovereignty over extended continental

Finally, *Cold front* is not an attempt to make a scientific contribution to the literature on the Arctic; rather it serves as an excellent introduction to many aspects of the politics, geography, and history of the region. The book serves in this respect as a door opener for a reader lacking extensive background knowledge of the high north. Through its narrative presentations of historical events in combination with geophysics and geography, the book is a reader friendly and stimulating work appropriate for anyone wanting an overview of the region. Since much of the writing on the Arctic is by researchers from the eight Arctic states (the countries with territories to the north of the Arctic circle: Russia, the USA, Canada, Denmark/Greenland, Norway, Iceland, Sweden, and Finland), this author's British background allows him a perspective that sometimes differs from other work in the field for example in the presentation of specific points of contention among the Arctic states, such as the legal status of the northwest passage, the role of the Svalbard treaty, and Russia's efforts to secure an extended continental shelf.

Fairhall tells a story worth reading, and the reader risks becoming engrossed in its exciting narratives and lucid explanations. In conclusion, the reader runs the additional risk of being drawn into the pursuit of further, more detailed studies of the aspects, historical, political, geographical, and otherwise, of this most fascinating part of the globe. (Njord Wegge, Department of Sociology, Political Science and Community Planning. University of Tromsø, 9037 Tromsø, Norway.)