Lines in the Ice: Exploring the Roof of the World. By Phillip J. Hatfield. McGill-Queen's University Press, 2016. 256 pages, 120 colour photos.

Reviewed by Jesse Devost

The Arctic has never been the "blank space" at the top of a globe. *Lines in the Ice: Exploring the Roof of the World*, by Phillip J. Hatfield, transects this space with several centuries of exploration and exploitation of the polar region. It is a beautifully designed and semi-large format book, with roughly equal portions of text and graphics (incredible maps, drawings, photographs). You could proudly display it on your coffee table, and could also sit with it for several evenings and read.

A key feature of large format books is that the reader can casually open to any page and be engaged in the content facing them. Hatfield clearly knows this and presents the material in short, page-spread sections that each tell a complete story. While this approach may sometimes leave the reader wanting a smoother narrative between pages, the collection of small parts still nicely builds a larger landscape of Arctic exploration and explains how the history is still relevant today.

The book is divided into three chapters, with the first covering the initial era of Arctic exploration. The mythical northeast and northwest trade routes were never conquered in this era, but resources certainly were. This was often a good enough reason for the voyages, because the resources brought home greatly assisted the host countries to finance their respective kingdoms and their conflicts with others. Many of the great European explorers of the sixteenth and seventeenth centuries, such as Frobisher, Drake, Hudson, and Cook, made their inroads and left their names across the region.

The second chapter charts a resurgence of exploration in the nineteenth century after a period of little activity. It features Britain's naval dominance and its systematic and persistent efforts to uncover the Northwest Passage in incremental and often costly voyages. By this time, the British public had a huge appetite for stories of Arctic conquest and British might. In the early nineteenth century, new forms of communicating and depicting these epic voyages were popularized, along with journals and sketches.

Arctic panoramic sketches, long horizontal panels depicting 360-degree views became popular and big business for explorers after returning home.

Explorers by this era had become multidisciplinary experts in science, engineering, and management but still boasted plenty of brawn. Crews often had to overwinter while their ships were encased in ocean ice. Ice cricket anyone? Cross-dressing theatre?

Franklin, an undisputed heavyweight of Arctic exploration, is showcased several times in the book, but his ill-fated 1845 departure for the Northwest Passage is the main focus. There is not much about the exploration itself because these is so little information about what actually happened, so Franklin's story is really the search, mystery, and legacy that the mission generated.

One of the most compelling parts in the book is a photograph and story about a small copper cylinder found in a cairn on King William Island in 1858. A note from Franklin's crew members was tucked in the cylinder; at that time, it was the most direct piece of evidence of the fate of the crew. What makes the note so chilling is that it captures a time when starvation and deaths were beginning to mount and the survivors were set to journey south overland. Given that the note was not discovered until ten years after it was left in the cylinder, the hope and desperation of the remaining 100 or so crew are anguishing to read, knowing they were venturing to their deaths across an unforgiving landscape.

Despite the British verification of a route through the Northwest Passage in the 1850s, it wasn't until 1903 that Norwegian explorer Roald Amundsen was the first to fully navigate the passage by ship. His innovative approach was a key to his success: a small crew, small and nimble vessel, careful selection of equipment, and close and respectful contact with the Inuit, learning their strategies. The drawings of Amundsen's ship as compared to the British Arctic vessels are striking.

The third section of *Lines in the Ice* looks at the modern era of Arctic exploration, which is defined by air exploration, the search for oil, the Cold War, and the further exploitation and "modernization" of Indigenous populations. Hatfield offers a profound observation that "contemporary interaction with the Arctic is still informed by desires and activities that have their roots in the days of the silk roads" (186).

The advent of satellite and digital mapping is reshaping the Arctic again. Resource companies have increased their capacity to search for mineral and petroleum resources. And the Inuit have been using modern mapping, combined with traditional knowledge, to reclaim their lands, rename locations, and map cultural sites.

In many places, however, the writing displays some distance from the stories themselves, and it seems apparent that Hatfield has maybe never been to the Canadian Arctic. The book frequently mentions the "impact" that centuries of exploration has had on the Indigenous peoples of the Arctic. This is a significant point and this impact will be the most significant legacy of the exploration era. While Hatfield provides many words to this impact, he rarely goes into any depth at the profound ways the Europeans have harmed the culture and traditional identity of the Arctic's original inhabitants.

A striking example is a page on missionary and residential schooling in Inuit communities (200). Hatfield speaks to how "much late-twentieth century writing" about missionary presence in the Arctic has "focused on the negative impact" on their cultures. And while he does provide reasonable copy to describe this, he reserves an equal portion of this discussion to the "positive consequences," especially the development of written languages. It doesn't seem the author had a poor intention to understate the negative impact, but I felt, after reading this section, that as someone who lives in the North and has visited some Arctic communities, providing equal balance for the negative and positive consequences of residential schooling is not justified by the reality in many northern communities. The development of written language is important to modern Indigenous cultures, and it is also convenient for researching the North from British libraries. It does not, however, equally counterbalance the generational horrors entire northern societies have suffered as a result of Western intervention.

The book closes on how climate change is altering the Arctic landscape beyond what ancient and modern history has ever observed. In this situation, historical information, ancient and modern, is becoming more important than ever in understanding the North today. This book is an important part of communicating this history and context to a broader audience.

Lines in the Ice is a meta-book about Arctic exploration, with beautiful graphics, sepia-serious historical design, and engaging stories. Despite some balance issues, Philip J. Hatfield does an incredible job of curating a vast collection of archived materials, bringing to life a part of the world that most people will never see with their own eyes.

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