

showed how their work throws new light on the past and contemporary issues.

Franz Boas, as a scientist, stressed the importance of gathering data about a people and their culture. His approach was to do field work, listen to informants, speak their language, describe and explain their geography, technology, social organization, myths, oral history, and recorded history. Claude Lévi-Strauss, on the other hand, says that by discovering the subconscious, mental structures through which people organize their thoughts, beliefs, society, and oral literature about the world around them, we can arrive at a better understanding of the people and their cultures.

At first, Claude Lévi-Strauss and Franz Boas appear to be on opposite ends of the anthropological spectrum regarding research. However, Regna Darnell shows that in many respects the goals of both schools of thought have some common origins and are not mutually exclusive. The conference and the resulting papers show that both methods of studying people and their cultures give us insight into the lives of Northwest Coast Natives.

In an excellent brief autobiography, the late Frederica de Laguna, a student and friend of Boas, explains how her studies with European scholars influenced her life and work. In his paper, Claude Lévi-Strauss describes the impact of his experiences on the Northwest Coast on his thinking.

The articles grouped under "The Legacy of Northwest Coast Research" look at the history and interpretations of previous studies of the area. The second group, "Texts and Narratives," has three articles that analyze oral history, myths, and a biography. The two papers in "History and Representations," provide a history of early tourism and the Tlingit of Sitka and describe the changes that have taken place in the Northwest Coast Indian Hall of the American Museum of Natural History.

All eight articles in "Politics and Cultural Heritage," are both informative and provocative. They consider the historical changes that have taken place among the people of the Northwest Coast and present-day adaptations. As a longtime resident of southeastern Alaska, I found the paper by the Dauenhauers, "Evolving Concepts of Tlingit Identity and Clan," most enlightening. Several authors discuss the problem of traditional cultural laws and rules and their role in the modern legal systems and the courts. For example, Boxberger shows the problems that occur when anthropologists and Natives, using oral history and ethnographies, are asked to testify as expert witnesses.

The conference focused on ethnology, that is, a comparison of peoples and their cultures, and historical change. Other subdisciplines of anthropology, such as archaeology and physical anthropology, were not discussed. The papers are well documented, with many cross-references to other articles in the book. The 33-page introduction by the three editors is a fine summary and analysis of the papers presented. I found it useful to re-read the introduction after reading the articles.

This is not really a book for the layman or junior students of anthropology. To appreciate the value of some of the contributions, one has to have a basic knowledge of anthropological theory and the history of previous fieldwork on the Northwest Coast. However, those familiar with the region and the various cultures will find it not only useful, but stimulating. Throughout the papers, oral and written history, data, linguistics, and theory are all woven together in both the Lévi-Strauss and Boasian approaches to understanding people and their cultures.

From my experience, I think that several of the articles, if used in the classroom, would spark good discussions and help students see the relationship between data, theory, history, and current events. I highly recommend *Coming to Shore* for any serious student of the Northwest Coast and its cultural history.

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BENT PROPS AND BLOW POTS: A PIONEER REMEMBERS BUSH FLYING. By REX TERPENING. Madeira Park, BC: Harbour Publishing, 2003. ISBN 1-55017-287-5. 338 p. maps, b&w illus., glossary, index. Hardbound. US\$36.95; Cdn\$36.95.

This absorbing chronicle evokes not just people, but textures and smells of once-essential materials now largely missing from aviation: leather, fabric dope, heated crankcase oil, white (naphtha) gasoline, manila rope, timbers sawn and trimmed to crib a twisted airframe, and wood smoke. Aviation pioneers of the 1920s and 1930s are idols of that era, even for those born too late to have lived through their exploits.

During the period separating the two world wars, especially the second decade, advances in aviation became a common theme in front-page newspaper stories. The world's major dailies reported that this hero or that heroine had piloted an airplane faster or farther, kept it aloft longer, or carried more payload than someone else had done days earlier. Contestants engaged non-stop in this informal aerial Olympics, so medal standings among competing nations needed constant updating. Mishaps involving air pioneers were also newsworthy. The U.S. National Aviation Hall of Fame designates this era between wars as aviation's "Golden Age"; its heroes include Charles and Anne Morrow Lindbergh, both well travelled in the Arctic.

On the periphery of the clamour and limelight of competition for international headlines, bush fliers on Canada's northern provincial frontiers and in the Northwest Territories forged new air routes, pushed limits, and quietly improvised reliable technologies for aviation through

the 1930s. Rex Terpening's modest, self-deprecating narrative is a tribute to Canada's own "Golden Age." He thoughtfully describes the evolution of aviation in the decade preceding his own start as an apprentice "air engineer" based in Fort McMurray. The Depression had paralyzed economic ventures, except mineral prospecting, in the region surrounding Great Bear Lake, downstream (north) of Fort McMurray. Terpening's first step in a long aviation career now seems momentous, although he began as an unpaid apprentice in 1932. Even that inauspicious status was soon interrupted, when Bill Spence, pilot and co-owner of Spence-Mac Air Service, died landing in a snowstorm in early 1933. Young Rex then crewed aboard the *Northland Echo*, a wood-burning steam sternwheeler plying the Athabasca River. With one summer's earnings (1933), the author was able to return to an unpaid apprenticeship, this time with Canadian Airways Ltd. (CAL). More importantly, crewing on the sternwheeler provided him with surface transportation experience in the region, which, seven decades later, enriches his book on air transportation with comparative perspectives.

In the 1930s, the novelty of flight had yet to wear off, and Terpening's thrill with each adventure still pervades his vivid, detailed accounts of specific trips. But the book has significantly more to offer than quaint nostalgia. The author's field experiences as an in-flight aircraft mechanic (as we might describe his job today) with "Spence-Mac" and CAL are more pivotal than his job title at first suggests. He actively participated in suggesting and implementing technological improvements to an intermediate generation of aircraft and to guiding the evolution of northern flight operations with his unique insights.

By the time Terpening entered Canadian bush aviation, monoplanes with single, front-mounted engines designed in the United States or Europe had replaced biplane flying boats with rear-mounted engines and other biplane heirlooms of World War I aviation, such as Curtiss JN-4 "Jennies" and "Canucks." As episode after episode documents, however, certain design features of transitional machines that enabled year-round delivery of passengers, freight, and mail—such as the mounts for floats and skis—remained too weak for hard bush landings. Bent propellers often resulted from these landings. "Blow pots" were the hazardous naphtha gasoline-fired heaters aimed at cold-soaked engine blocks to coax them to start on winter mornings. A number of airframes were reduced to blackened skeletons by misbehavior of these heaters. Terpening recounts his constant ministrations to the demands of this makeshift cohort of bush aircraft, from draining the oil each evening, heating it and refilling the crankcase in the morning, to camping out alongside damaged equipment while working on collapsed landing struts or stripped timing gears or dealing with other mishaps that required replacing parts in the field.

Canadian aircraft manufacturers eventually introduced their own improved designs based on the lessons of the early 1930s. The Canadian-built Norseman (e.g., p. 319),

which appeared in the late 1930s, was widely heralded as the finest bush airplane of its time. A Norseman's rugged undercarriage could be damaged only by impacts serious enough to threaten the integrity of the entire airframe. Except for a few rearguard actions, such as Terpening's five weeks spent restoring one Norseman to airworthiness on Lake Lawson ice near Yellowknife in January and February 1938, the interlude when "air engineers" were as essential as pilots to nursing fickle machines through the rigors of the North was in decline by the time World War II began. The guild, by dint of succeeding, had essentially put itself out of business and sent its practitioners indoors for the rest of their aviation careers.

Part of the charm of this account is the author's understandable admiration for certain types of aircraft. The Junkers W-34, for example, earned Terpening's respect each time pilots put it through difficult trials. A ground collision in ice fog at Fort McMurray damaged the wing of one of these low-wing monoplanes in January 1935, but gave Terpening and other air engineers an inside look at the struts of this aircraft. The simplicity and strength of the design impressed them as they cheerfully repaired the damaged section of wing (p. 85–96). The following summer, while supporting a search for missing RCAF aviators, pilot Matt Berry and Rex Terpening put their Junkers W-34 (ARI) through death-defying tests by carrying two floats for a damaged airplane lashed between the W-34's own floats and its low wings (p. 221–227). In retrospect, they decided that this awkward load could not have been manoeuvred, or even kept aloft, had it been lashed to a less forgiving design than the Junkers W-34 with its powerful engine.

Another charm of the book is the author's fondness for individual airplanes, regardless of manufacturer or type. (Readers of a certain age may remember how steam locomotives bore similar individual personality traits and attracted specific admirers from circles of railroad enthusiasts.) Of three Fairchild 71s bought new by DOMEX in 1931, two were "DBR" (Damaged Beyond Repair) by early 1933. The third of these airplanes, called AKY (Terpening designates each craft by its last three tail letters or numbers), proved remarkably resilient. Sold out of the North to new owners in Vancouver in late 1933, the float-equipped airplane promptly had the misfortune to be flying low, between a tug and its barge under tow, when the tow cable tightened, emerged from the water, and snagged AKY out of the air by its floats. Nobody was killed, but AKY required major repairs, carried out by the Boeing Company. Boeing gave AKY a new three-letter designator—AOP—after the extensive upgrade. AOP laboured on for an unrecorded variety of owners in the west, until popping up in 1941 in northern Quebec, in service of developing the Manuan power project. There one morning, as AOP (née AKY) was taking off directly into the sun, its floats struck a small passenger boat at gunwale level. Again, nobody was hurt in the crash. Because of extreme wartime shortages, the ageing AOP was dragged

to shore and rebuilt for bush flying once more. As best the author can determine, the valiant and venerable AOP was retired only after eight more years of service, when dry rot in the wing spars made it impossible for Ontario authorities to issue a Certificate of Airworthiness.

Rex Terpening's enthusiasm is not confined to things mechanical. Pilots Bill Spence and Matt Perry were bookends to his years as air engineer, and he regarded each of them highly. Terpening also admired the Inuit he encountered, both generally and specifically. His personal friend Tommy Tingmeak rated extended treatment (p. 254–265).

Readers could be confused by the organization of this book. I was distracted by some of the text boxes, and I had trouble threading stories around these and other interruptions. Perseverance is rewarded, however, and the book's index helps keep chronological track of major events.

Excellent black-and-white photographic images complement the author's crisp memory and writing to make his 1930s adventures more vivid. In keeping with the spare words of his book, I encourage readers to celebrate Mr. Terpening's ascent to Canada's Aviation Hall of Fame. Owning and reading his book will reward you with insights into events that richly deserve to be remembered.

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NORTHERN EXPOSURES: PHOTOGRAPHING AND FILMING THE CANADIAN NORTH, 1920–45. By PETER GELLER. Vancouver: UBC Press, 2004. ISBN 0-7748-0927-2. xx + 258 p., b&w illus., notes, bib., filmography, index. Hardbound, Cdn\$85.00; Softbound, Cdn\$29.95.

Today, images of Canada's Arctic fill hundreds of books, magazines, and television documentaries. So many Arctic pictures can be viewed in a lifetime that even those who've never been to the Arctic may think they know it. This tradition of taking pictures of the Arctic for mass consumption dates back to the early days of photography, but often these images were taken not to make pretty pictures for calendars, but for other reasons. *Northern Exposures: Photographing and Filming the Canadian North 1920–45*, by Peter Geller, places these early Arctic images in their historical context, examining who did the picture taking, how it was done, and more importantly, how these images were used to construct a view of the Canadian Arctic that persists today.

In the hundred or so years since the advent of the photograph, images have come to dominate our society. In media ranging from magazines to motion pictures, we consume hundreds of images a day without question. Now

imagine the time before television and media saturation, a time when it was still possible to be a "real" explorer and venture into unknown lands, and the impact of the image dramatically increases. Peter Geller takes us back to such a time and critically examines the practice of picture taking in the Arctic, focusing especially on those images created by the three dominant forces of change in the North—the government, the Church, and commerce.

Geller focuses mainly on the period between the two world wars, a time of great image-making activity and transformation for the North. The Canadian government, the Anglican Church of Canada, and the Hudson's Bay Company all had a stake in the Arctic and how it was perceived in the South. As Geller explains, a Southern image of the North soon became a part of Canada's national identity. *Northern Exposures* looks at how all three institutions used images to exert control over the area and further their own aims. The resulting book is as much a history of a country's evolution as it is an examination of cultural imperialism, with a bit of art history thrown in. There is something for everyone.

This book is divided into six chapters, the first of which introduces the Hudson's Bay Company's icebreaker *Nascopie*, whose passengers captured many Arctic moments on film. Boats formed an important link to the South, so several are detailed throughout the book. Also included in this chapter is a brief history of the photograph and the technological advances that led to mass production and distribution, setting the stage for developments to come.

These technological advances, which allowed average people, as well as professionals, to take pictures, resulted in a vast and varied visual record of the Arctic. While these pictures now offer a wealth of information to historians, Geller writes that one of his aims of the book was "to question the nature and meaning of this evidence" (p. 6), reminding us that while pictures hold power, they are also ambiguous and open to interpretation. Essentially, the book asks historians and readers alike to be more critical consumers of images, asking questions about not only what was filmed, but what was left out.

The next three chapters deal individually with the practices of the three institutions, the federal government, the Anglican Church, and the Hudson's Bay Company. In each chapter, Geller delves into the stories of individuals who stood out as the most influential and prolific image-makers for each corporation. For the Canadian government, it was people like Major L.T. Burwash who detailed the government's occupation in the North. From R.C.M.P. outposts and mining explorations to surveys of the Inuit, Burwash captured the presence of the federal government in the Arctic, partly as a visual record and partly to convey to the rest of the world Canada's sovereign claim over the North.

While the federal government feared that other countries such as the United States and Denmark might take possession of the North, the Anglican Church feared for the souls of the northern people. To this end, missionaries flocked to the frozen lands to bring light to its people, and among these