

treatment on return to the home port. In his commentary, Ross discusses the consequences of each of these as they arise in Margaret Penny's journal, and expands on the journal entries to a greater or lesser extent using his own vast and detailed knowledge of the Arctic and Arctic whaling. In addition, he has provided further specific information about William Penny, a man whose contribution to Arctic exploration has never been fully recognised, even in his own country.

As has been said elsewhere: 'This is truly the work of a mature scholar at his peak,' and it is 'An exceptionally fine book.' This reviewer agrees wholeheartedly with these comments. W. Gillies Ross has taken the entries in a rather spare journal and, by his own skill, knowledge, insight, and experience, has brought life, light, and humour to it. (Alex R. Buchan, 38 Arran Avenue, Peterhead, Aberdeenshire AB42 1PZ.)

THE PHOTOGRAPHS OF HG PONTING. Beau Riffenburgh and Liz Cruwys. 1998. London: Discovery Gallery. 136 p, illustrated, hard cover. £19.95.

Technically innovative, artistically talented, the embodiment of a turn-of-the-century, globe-trotting photographer, Herbert George Ponting in his hey-day was regarded by his peers as one of the greatest exponents of the art and craft of the camera. Today he is best remembered as the camera artist, as he preferred to call himself, on Robert Falcon Scott's last and tragic Antarctic expedition. In actuality, a good deal of his best work originated on earlier travels, from Japan, China, and India in the east to the Swiss and French Alps in the west. This book is lavishly illustrated throughout with reproductions (many full-page) of Ponting's photographs, some 'artistic,' others essentially documentary. Accompanying these illustrations is a readable and well-researched life of the man, containing much of interest concerning his technique and equipment. When Ponting died a bankrupt man in 1935, his collection of glass plates was bought by the Paul Popper Photographic Agency, London, to help pay his creditors. In their premises, the collection languished for many years, being eventually sold in 1990 to a Nottingham-based photographer. The plates are now safely preserved for posterity in purpose-built accommodation. A limited edition of 20 prints from this book are available from the publishers. Both authors are polar historians of repute, and jointly responsible for the editing of *Polar Record*.

The opening chapters are devoted to Ponting's early life and travels. Born in Salisbury, England, he was the second of a family of eight and destined to follow his father into the world of banking, a profession from which he speedily removed himself to seek his fortune in California. Here he dabbled unsuccessfully in fruit-farming and goldmining, eventually finding his true vocation — photography. A keen interest in the newly popular stereoscopic process led to the production of some prize-winning photographs, one of which, 'Mules at a California round-up,' attracted publishers and led to a commission to

visit, in turn, Japan, Korea, and Manchuria. Subsequently, on the outbreak of the Russo-Japanese War in 1904, Ponting found himself accredited to the Japanese Army in Manchuria on behalf of *Harper's Weekly*. It was the time spent in Japan that really fired the photographer's imagination and was to be the inspiration behind his subsequent travel book, *In Lotus-land Japan* (1910). Seven beautifully reproduced plates, representing some of his best work from this period follow chapter 2, those of Mount Fuji being a foretaste of his subsequent studies of Mount Erebus in Antarctica.

Following Manchuria, the strict chronology of Ponting's travels becomes imprecise and one comes to regret the absence of personal journals. Certainly he was in northern China and India between 1906 and 1907; his view of the Great Wall, taken with a long-distance lens, and his pictures of the Taj Mahal are stunning. It was about this time that Ponting met with the mysterious and much-travelled Cecil Meares, subsequently in charge of Captain Scott's dogs. It was Meares who, in 1909, introduced Ponting to Scott, who was determined that photography should play a major role in illustrating the scientific and topographical work in the Antarctic. Previous Antarctic expeditions had made use of the camera, but none could boast of a professional photographer. Thus was Ponting hired at £5 a week — £1 more than the scientists — having turned down a more lucrative offer to tour the empire for the Northcliffe press. Scott's confidence in his choice was not to be misplaced, as his own diary entries give evidence.

In chapters 4 and 6 will be found references to Ponting's *modus operandi* detailing the infinite pains he took to ensure that everything needful for successful cold-climate photography was attended to. Ponting's photographic laboratories, both on *Terra Nova* and subsequently in the expedition's hut on Ross Island, were equipped with every conceivable facility, including a developer for cinematograph film. His field equipment, all incredibly weighty by present-day standards, included two cinecameras, glass-plate cameras as well as those using roll film, and cameras for telephotography and scientific work. Invaluable was the slide projector to boost morale during the dark months of winter.

From the moment when *Terra Nova* entered the pack ice on the voyage south to the time when Ponting finally returned to civilization in January 1912, he seemed to spend every waking hour of the day — and of the night too, using flash — recording every feature he could of land and sea-ice formations, as well as the seals, whales, skuas, and penguins that so delighted audiences back home. A selection of the best of these Antarctic photographs is reproduced in the book, including eight full-page numbered plates of the best known. Among these are many of Ponting's portraits and groups of his comrades, most famous of all being that of Scott writing up his diary. One can only regret the impossibility of Ponting accompanying the Pole Party at least to the foot of the Beardmore Glacier. He himself was probably frustrated by the scenic limita-

tions of the locality, by the failure of his colour plates, and by his inability to capture the elusive splendours of the aurora.

Ponting's early return to England was designed to raise much-needed funds by way of lectures and exhibitions and by the promotion of his stills and the movie film. In a chapter entitled 'Trials and tribulations,' the authors show how these plans were in part frustrated by Scott's conferring photographic rights to publishers without Ponting's knowledge. Fortunately, he retained control over the movie that many years later was to be reissued with a sound track as the classic *90 degrees south*. With the outbreak of World War I, interest in the Scott expedition waned, although Ponting, obsessed with the tragedy, continued to promote its story. Yet notwithstanding the success of his narrative account *The great white south* (1921), Ponting's fatal flaw, a total lack of financial acumen, led him from one business to another until in the end he died an embittered man.

The book concludes with an assessment of Ponting's place in the history of photography, followed by an account of the photographer's work and a brief sketch of Scott's career. This book is a welcome tribute to a great photographer of whom little has been written since H.J.P. Arnold's biography (1969), now long out of print. The authors have updated this work with new material culled from the recently published journals of Ponting's comrades and some unpublished sources. (H.G.R. King, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

References

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GENERAL GEOCRYOLOGY. E.D. Yershov. 1998. Cambridge: Cambridge University Press. 580 p, illustrated, hard cover. ISBN 0-521-47334-9. £75; \$US120.

The Russian experience in geocryology or permafrost studies is both long and far-reaching, and as such it forms a vital part of this embryonic discipline. Yet for most permafrost researchers, the Russian contribution remains frustratingly elusive, hidden behind a language barrier that is breached only by infrequent, but frequently dated and often relatively weak, translations. The translation of E.D. Yershov's *General geocryology* is billed as the revelation of a classic work, providing a comprehensive and contemporary view of this portion of Russian science. For a generalist reviewer, only some of the most pressing questions stemming from such a billing may be answered, but for those questions that may be answered the responses are unequivocally positive.

Is the text comprehensive? It certainly is, containing five major sections, each comprised of three or four chapters. Following an irritatingly unnumbered first chap-

ter, the first major section leads the reader systematically through the fundamental thermal, physical, chemical, and mechanical processes of the freezing and thawing of ground and soil, plus the constituent water. This background in formative processes leads naturally enough into a second section focused upon the composition and frozen structures of sediments and rocks. The third section is a comprehensive evaluation of the important outcomes of seasonal freezing and thawing, the ensuing thermal regimes, and associated landforms. In the fourth section, Yershov changes perspective and provides a historical and geographical background of permafrost and associated phenomena. The fifth, and final, section is inevitably focused upon a review of applied and/or engineering issues. In short, the text represents a comprehensive course in geocryology — from cradle to grave, as it were.

Is the text, in fact, a fair reflection of Russian permafrost science and its history at the beginning of the 1990s? This question cannot be answered by this particular reviewer, nor presumably by anyone else who lacks familiarity with the original Russian-language literature. One frustration that does emerge is the grand total of only 21 references for a text spanning nearly 600 pages. Given that most of the citations actually provided are in Russian, it may be argued that this is not a critical shortcoming; nevertheless, it does mark Yershov's manuscript as more of a textbook than a research monograph. Despite an admittedly limited ability to assess firmly the text's position in its Russian context, the reader certainly develops the impression that the writing is all-embracing.

How does Russian permafrost science compare with English- or American-language geocryology (assuming Yershov's summary to be an adequate one)? There is no simple answer to this question because the breadth of the text means that there are innumerable answers depending upon the specific topic under consideration. A partial answer, derived from my own research interests in periglacial geomorphology, is that the shortcomings of a comprehensive, textbook review are apparent, but that there are many intriguing tidbits and snippets. Such a response should be read in a positive light, because surely it is true of any advanced textbook regardless of the language of origin. What did emerge strongly was a much more highly nuanced and sophisticated treatment of difficult issues than I have often read in other translations of Russian research. Undoubtedly, part of this improvement stems from the greater timeliness of this translation: it is all too easy to be critical of work that is decades old, but only recently translated. In short, some readers will be critical, others will be intrigued, many will probably be both — but in different portions of the book. All responses must surely be to an over-arching textbook, and not to a state-of-the-art research manuscript.

The line diagrams are generally small, but extremely clear and sharp, and as a result the reader is left with clear impressions, but no real opportunity to use them in a direct sense. The photographs are commonly mediocre, some even fuzzy and muddy to the point of being merely