

is a pressing need for an Antarctic ship. A new generation will come to grips with these problems. It is gratifying to note that the first woman branch chairperson, Dr Margaret Bradshaw of the Canterbury Branch, took office in the jubilee year. The editor of *Polar Record*, an active member of that branch in his Christchurch days, will join with all readers of this journal in extending to the New Zealand Antarctic Society sincerest good wishes for its second half century. (H. G. R. King, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER.)

THE DIARIES OF TRYGVE GRAN

THE NORWEGIAN WITH SCOTT: TRYGVE GRAN'S ANTARCTIC DIARY 1910-13. Hattersley-Smith, G. (editor), McGhie, E. J. (translator), 1984. London, HMSO. 258 p, illustrated, hard cover. ISBN 0 11 290382 7. £9.95.

This is the first publication in English of the diaries kept by Trygve Gran who, as a Norwegian ski-ing expert, took part in Captain R. F. Scott's Antarctic expedition in 1911-13. Gran (1889-1980) was the youngest member and last survivor of the expedition. His original diaries of the expedition are no longer available but a Norwegian edition was published in 1915 (*Hvor Sydlyset Flammer: Leir-og Ekspeditionsliv paa Antarktis*. Oslo, Gyldendalske Boghandel, Nordisk Forlag.) and his biography (*Fra tjuagutt til sydpolarer*. Oslo, Ernst G. Mortensens Forlag.) appeared in 1974. This translation by Gran's daughter includes the foreword that he wrote for the 1915 edition. Gran's active life is summarized in an introductory biography, and the editor has included extracts from the diaries of other expedition members, geographical notes and other information giving reference to the events of the expedition. When news was received of the diversion of Amundsen's 'northern' expedition to reach the South Pole, Gran was placed in a somewhat difficult position; his thoughts, actions, loyalty to Scott's expedition and responses of other expedition members are well illustrated by his writings. Similarly much light is spread upon the personalities and motivations of Captain Scott and the others involved. Gran was a member of the search party which discovered the fate of the polar party and found the body of Scott on 12 November 1912. The book is illustrated with an excellent selection of contemporary plates, and a detailed map. It is a most welcome addition to the recent literature about the expedition. (R. K. Headland, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER.)

ANTARCTIC EARTH SCIENCE: ADELAIDE SYMPOSIUM

ANTARCTIC EARTH SCIENCE: FOURTH INTERNATIONAL SYMPOSIUM. Oliver, R. L., James, P. R. and Jago, J. B. (editors). 1983. Cambridge, Cambridge University Press. 697 p, illustrated, hard cover. ISBN 0 521 25836 7. £45.00, US\$79.50.

The 100th anniversary of the birth of Sir Douglas Mawson, the antarctic explorer, geologist and leading scientific figure in Australia, was fittingly celebrated in Adelaide in August 1982. This was the venue of the Fourth International Symposium on Antarctic Earth Sciences, which was attended by over 200 scientists representing 16 countries. In a five-day period, 183 papers were presented in four concurrent sessions; the proceedings volume contains the texts of some 174 papers and abstracts. The wide-ranging content of *Antarctic earth science* probably comes as a surprise even to those who assiduously attended as many as possible of the symposium sessions. As might have been expected,

the scope of the symposium covered most of the general topics discussed in the three previous symposia, though in some respects there has been a marked change in emphasis over the years.

The contents list of this book is quite overwhelming; one immediately begins to wonder whether it would ever be possible to read it from cover to cover, especially with the microscopic type size, or whether it will only be used as a reference work by the more specialized earth scientists. Nevertheless, one quickly becomes aware of the nice mix of geology and geophysics, and the well-judged application of modern techniques to some of the long-identified problems. Clearly, this book is a veritable mine of information for those entering the Antarctic field for the first time. Critical evaluation of individual papers is not the task of the reviewer but that of the specialist scientist. The comprehensive author/subject index is indeed a valuable aid to finding one's way through the 680 pages of text.

It is not at all surprising to find a wealth of papers dealing with the most important problem of Antarctic geology—the boundary between East and West Antarctica, and its relationship to the Ross Orogen. Some of these papers are quite specific and deal with matters of detail, whereas others take the 'broad-brush' approach to excite the imagination. Equally important is the section devoted to the crustal structure of Antarctica. Here, the geophysicists have come into their own by providing so much useful information on which the geologists can build.

The section on the Scotia Arc and the Antarctic Peninsula adequately reflects the vast amount of field work in that region in recent years, and the coordination of effort between geologists and geophysicists of several countries.

One might have expected to find more papers directed towards Antarctic mineral resources, especially since the media seem to be giving the layman the impression that Antarctica is an Eldorado awaiting development. Equally disappointing is the coverage of plate tectonics and Antarctic-orientated problems of Gondwana.

In many places in the text one can detect the helpful hand of the referees; woolly statements made at the symposium have been tightened up in the final papers and some of the papers themselves have been shortened materially. Congratulations are due to the editors of this volume for undertaking a task of such enormity with speed and accuracy.

Perhaps this is the time to reflect upon the state of the art *vis-a-vis* Antarctic earth sciences. Both the 1963 and 1970 symposia provided the opportunity for existing reconnaissance geological and geophysical data to be coordinated and reviewed in the light of post-World War II scientific thinking. In contrast the 1977 and 1982 symposia allowed Antarctic scientists techniques to develop the problem-solving approach against the background of earlier knowledge, and to present the results of 'theory-testing' in the field. All in all, these four symposia have set the broad scene for Antarctic earth scientists, and maybe the time has come to consider focussing future symposia on fewer but narrower fields of research. (R. J. Adie, British Antarctic Survey, Madingley Road, Cambridge CB3 0ET.)

A COLLECTIVE FARM IN SIBERIA

KARL MARX COLLECTIVE: ECONOMY, SOCIETY AND RELIGION IN A SIBERIAN COLLECTIVE FARM. (Cambridge Studies in Social Anthropology 40). 1983. Humphrey, C. Cambridge, Cambridge University Press, and Paris, Editions de la Maison des Sciences de l'Homme. 522p, illustrated, soft cover. ISBN 0 521 27401X. £10.95.

Although the country of the Buryat Mongols lies outside the area of direct interest to students of the Arctic and Subarctic, Dr Humphrey's study of 'economy, society and