environment.

Two papers in this volume give detailed information about antarctic soils. One, by F. C. Ugolini, is about soils formed in an Adelie penguin rookery. Where fresh guano and regurgitated materials are present, both high nitrogen and salts are common. By use of differential thermal analyses it is possible to identify guano, algal, and moss materials in the soil. The author believes it is possible to identify buried ornithogenic soils because the layers seem to be little disturbed in this McMurdo Sound region. R. E. Cameron's paper emphasizes the microbial and ecological aspects of Victoria Valley (a dry valley) in East Antarctica. Not only is detailed information provided about microbes, but also about the soil and other materials they are in, the physical and chemical setting and other pertinent facts. Some soils were too dry or saline and did not have any microorganisms in them. In others, various types were found, some requiring special techniques for their culture. All organisms grew at 2°C as well as at 20°C. The soils are fully characterized and described.

Some antarctic mites at Hallett Station are considered in a paper by E. E. Gless. In spite of difficulties of laboratory cultivation, these organisms are characterized as to their life histories and a new species is described. The subantarctic rain forests of Magellanic Chile, the southernmost forests in the world, are reported on by S. B. Young. The evergreen trees grow at very slow rates despite the high moisture. The composition of the forests is described as are some of the significant environmental factors influencing past and present growth. Some trees are estimated to be about 1000 years old, although the oldest one with tree ring count is about 300 years old, even though they are stunted in their growth. This is a different "rain forest".

This volume is truly a remarkable record of research that provides much data and many ideas about the various terrestrial organisms of Antarctica, and their environments. I found the editing and production of the book to be very salutary. One misidentification, of a figure number in the text on page 229, was the only typographical error that I noticed. George Llano in his preface says that, "much of biological research involves graduate research assistants, and seven of these papers represent, in part or in whole, their contributions presented in partial fulfillments of requirements for higher degrees."

We can all be grateful to the National Science Foundation and its Office of Polar Programs for supporting the valuable research of these senior scientists and their students that has given so much striking information about this distant and unknown land. Emanuel D. Rudolph


In this lavishly-produced book, George Swinton presents the most comprehensive statement on Canadian Eskimo sculpture and the best representative collection of photographs of the sculptures themselves. Like the only comparable set of published photos in the catalogue for the exhibition Sculpture/Inuit, these richly document the variety, vigour and merit of modern Eskimo sculpture. This new book is no rehash of Swinton's 1965 Eskimo Sculpture but a new presentation and one with a different viewpoint resulting from the continuing developments in Inuit art and Swinton's deeper study. For example, he no longer forecasts, as did many others, the demise of Eskimo art but, comprehending acculturation, he anticipates changes in it. Although now more aware of ethnological and archaeological concepts and data, he never writes like an anthropologist. Swinton's text is personal, committed, vigorous and wide-ranging even when he reviews the art and events of the prehistoric and historic periods in arctic Canada. At that I'd have welcomed a more detailed history of the 1948-58 period and surely many readers will wish Swinton to write in detail on his ideas of mythological or religious content in current Eskimo art.

Perhaps the most pertinent chapter is that on Eskimo aesthetics. There, by inference and implication, Swinton rejects many common stereotypes of Eskimo art — and there are many indeed to be rejected. What is "Eskimo art"? Who decides? Swinton provides the reasonable, but not so simple, answer that Eskimo art is that produced by Eskimos. The discussion of such questions follows from a candid and careful attempt to explain why Eskimos "do" art although, in that passage, the reviewer is not so convinced that the Canadian Eskimo find in art "a means of cultural and ethnic self-affirmation". I accept that some Eskimos do but perhaps also many whites find that art, for themselves, a means of Eskimo affirmation.

Inuit art of the past 25 years will probably be recognized as the most significant development in Canadian art since the Group of
Seven. Thus, I dare to suggest that we need next, from this apt and audacious teacher, separate articles, perhaps in book form, on individual Eskimo sculptors and their work for among the many good things in this book are introductions to the stunning and distinctive work of Pangnark, Tiktak, Axangayuk, Latcholassie, Eli Sallualuk, Fabian Oogark, Tasseor, Ekoota, Erkoolik and others.

Anyone aware of Canadian Eskimo art will find in this sentient book much enlightenment, perception and the stuff of good debate.

Heartily recommended.

William E. Taylor, Jr.


Professor S. V. Slavin is the acknowledged doyen of northern economic studies in the Soviet Union. For forty years he has been an active researcher in this field, and he has for long been the leading adviser to Gosplan, the State planning authority, on the subject. He has also been, and remains, the Chairman of the large Interdepartmental Commission for Problems of the North, in some ways the equivalent of Canada's Advisory Committee on Northern Development. His published output, already large, is now augmented by two new books.

The one which will excite most interest in the west is The Soviet north: Present development and prospects, for it is his first major work to be published in English. It is based on his Promyshlennoye i transportnoye osvoyeniye severa SSSR [Development of industry and transport in the north of the USSR], Moscow, "Ekonomika", 1961; updated, but not, as the preface implies, expanded, for the 1961 book is twice the size of the present one. It is an overview of the whole contemporary position: natural conditions, population, industry, agriculture, and transport. The material is not arranged as a catalogue of what is now going on — indeed, if one wishes to know about the present position in a particular area, one can get somewhat confused — but rather the emphasis is placed on the special factors arising from the northern environment. There is a regional split-down into three chapters (European north, Siberian north, and Northeast), and a final chapter looks at the future. The picture Slavin gives is virtually 'official'. It is optimistic, it looks always on the bright side, and it obviously omits factual detail on all sensitive or classified subjects (such as non-ferrous metal production). On the other hand it gives quite a lot of factual detail on other topics, it is authoritative, at least in the sense that its views are not likely to be at variance with those of authority, and, most important, it is written by a highly experienced and informed specialist. In other words, it is a good source — as far as it goes.

For those familiar with the general outline of Soviet northern development, perhaps the most interesting section is that on the future. Slavin expects continuing massive expansion of the extractive industries, to be serviced by over 10,000 km. of new railway lines. This will lead to the creation of new economic regions: the European north, the Ob' north, the Angara-Yenisey region, and the northeast (Yakutia, Chukotka, Kamchatka). When an influential planner talks in these terms, it may happen. A point worth remembering is that the Soviet economy, as manifested in the north, is very like any other: an enterprise must pay if it is to survive. Conservation, it may be added, is not mentioned at all.

There are a number of useful but small-scale maps, and interesting but poorly reproduced photographs. The translation is good, but occasionally falls down on proper names (I. Lead on p. 19 should be J. Lied, the Norwegian entrepreneur).

If The Soviet north is for the foreign reader, the other volume, Sovetskiy sever, is specifically for Soviet high schools. Despite its title (which means 'the Soviet north'), it is not the same book. Its object is to enthuse young people with the idea of working in the north. But Soviet youth, or at least that section one might hope to attract, has to be approached seriously, with plenty of facts about the economic geography of the area. So the book is not necessarily to be disregarded by older and non-Soviet readers. Although it does not go into the kind of detail which is lacking in the English-language book, its generalised statistics are up to date and sometimes cover points not referred to in the other book. There is also a short exhortation to observe good conservation practices and treat nature with care. The maps are different, but cover much the same subject matter, while the illustrations are entirely different, and some are in colour.