

- glacial erosion. Axel Heiberg Island, N.W.T., Canada.
- PESSL, JR., F. University of Michigan, Ann Arbor, Mich., U.S.A.
Studies in geomorphology and glacial geology. Sortehjorne, Greenland.
- PITELKA, F. A. University of California, Berkeley, Calif., U.S.A.
Comparative ecology of lemmings and other microtines in northern Alaska. Barrow, Alaska, U.S.A.
- REED, B. L. Harvard University, Cambridge, Mass., U.S.A.
Bedrock geology of a part of the Lake Peters area, Alaska. Lake Peters, Alaska, U.S.A.
- SATER, J. E. Arctic Institute of North America, Washington, D.C., U.S.A.
Acquisition of material for developing photogrammetric and photo-interpretative techniques for the evaluating of the surface morphology of sea ice. Barrow, Alaska, U.S.A.
- SMILEY, Ch. J. Macalester College, St. Paul, Minn., U.S.A.
Crataceous floras of Kuk River, Alaska. Kuk River, Alaska, U.S.A.
- SOLECKI, R. S. Columbia University, New York, N.Y., U.S.A.
Archaeology and ecology of north-eastern Alaska. Arctic Slope, Alaska, U.S.A.
- STEERE, Wm. C. New York Botanical Garden, New York, N.Y., U.S.A.
A critical field study of arctic American mosses. Barrow, Alaska, U.S.A.
- TEDROW, J. C. F. Rutgers University, New Brunswick, N.J., U.S.A.
A study of the pedologic processes operating in the arctic areas of Alaska. Brooks Range, Alaska, U.S.A.
- WILIMOVSKY, N. J. University of British Columbia, Vancouver, B.C., Canada.
An ichthyological survey of the Aleutian Islands. Aleutian Islands, Alaska, U.S.A.

REVIEWS

LA FRANCE ET L'EXPLORATION POLAIRE. DE VERRAZANO À LA PEROUSE. 1523-1788.

By MARTHE EMMANUEL. *Paris: Nouvelles Editions Latines. 1959. 9 x 5½ inches, 397 pages, maps, plates. No price.*

For anyone interested in polar exploration and able to read French this is a most fascinating book, the more so because it is written from a point of view different from any to which most of us in North America are accustomed — that of a Frenchwoman setting out expressly to examine French participation in the field. It thus has for us a freshness and stimulation over and above its very considerable intrinsic merits, and the result is a book that is indispensable to any well-stocked polar library.

Most of us would raise a polite eyebrow and wonder how the story of

French exploration in the Arctic and Antarctic could fill nearly 400 pages and get no farther than 1788. Dr. Emmanuel herself is the first to raise this question, in the opening sentence of her introduction, and the first to admit that the contribution of France does not compare with those of many other countries. Nevertheless many will be surprised at the extent of the effort and achievement that she reveals, an achievement all too often nullified by apathy and lack of government support at home, and by the obstinate refusal of the armchair geographers to believe the reports brought home by explorers. For example, every child knows about Raleigh and the founding of Virginia, but how many know that half a century before Raleigh the Italian Verrazano, sailing under French colours, traced the coast of North America from Spanish Florida

north to Labrador and gave it the name of Francesca? If the French government had followed this voyage with colonization, it is possible that the United States and Canada might today be one large united French-speaking territory.

As will be seen from the above example, Dr. Emmanuel does not limit herself strictly to polar exploration. Yet she never loses sight of her subject. All the voyages she discusses are directly connected with what turned out to be polar objectives, such as the Northwest Passage (Verrazano, the explorers of New France, La Pérouse) or the elusive Terra Australis (Bouvet, Marion du Fresne, Kerguelen) and contribute quite legitimately to the overall picture. The book is divided into two almost equal parts dealing with the Arctic and Antarctic respectively. Quite a large section is devoted to the Spitsbergen whaling days, and here the French played a very important part, as all the other nations, Dutch, English and Danish alike, were dependent on the hardy Basque harpooners of the Biscay fisheries to teach them the art. It was also the French who later were the first to process whales on board ship and thus do away with the necessity for a shore station.

It must not be thought because the book deals specifically with the French contribution that it is chauvinistic in tone. The author's attitude is occasionally partisan, but on the whole she takes a very detached and objective view of her countrymen, and while she presents much little-known material that will greatly enhance the importance of their role in the eyes of those hitherto unfamiliar with it, the claims she makes on their behalf are modest. And if she is outspoken about the English tendency to take possession of territories on claims that appeared groundless to all but themselves, the point must be admitted to be well taken, and it is salutary for those of us who are of British extraction to be reminded of it from time to time. This regrettable propensity at least showed a willingness on the part of the home government to take action and to support claims to discovery, however tenuous. Dr. Emmanuel's book gives

repeated instances of the opposite attitude in France — apathy and unwillingness to follow up discoveries or even to publish the results of voyages till years later if at all, so that in many cases it was hardly surprising that French names were replaced on the maps by those of later explorers, from Verrazano's Francesca right down to the names chosen by La Pérouse on his fine survey of the coast of Southern Alaska.

The academic or armchair geographers come in for considerable criticism. It is interesting to speculate on the reasons for the obstinate refusal of so many of these men to abandon, in the face of the most conclusive evidence, such long-cherished chimeras as the great southern continent and the strait of Juan de Fuca and Admiral de Fonte, which was supposed to join Hudson Bay to the west coast, and on the extent to which they retarded geographical knowledge by this refusal. Such men were to be found everywhere, and France had a whole family of them — the brothers Delisle and their in-laws and descendants, the Buaches, who even after Cook's last voyage were still talking to La Pérouse of de Fuca and de Fonte. An interesting exception was the great naturalist Buffon, who was a strong supporter of the southern continent and of the open polar sea theory, but unlike Buache altered his thinking after the voyages of Cook and Phipps.

Of particular interest to Canadians is the section on Canada and the struggle for Hudson Bay. Here again we see the British solidly backed up at home and the poor French left in the lurch at every turn. It was not love of the British that led Radisson and de Groseilliers to defect, but sheer frustration at their treatment by the French Government. It is remarkable indeed that there were not more like them, and even more remarkable that the French made the tremendous achievements they did in the New World. Perhaps it was just this lack of encouragement and unwillingness to provide sufficient support that first taught the French in Canada to manage without and to adapt themselves so well to the Indian ways of travelling.

With a minimum of material assistance they travelled overland to Hudson Bay, the Prairies, and the Gulf of Mexico, and would no doubt soon have reached the Pacific, as Dr. Emmanuel points out, had it not been for the intervention of the Seven Years War in 1754. As it was, French *coureurs de bois* rendered indispensable assistance to those who did.

An interesting point is brought out in connection with La Pérouse's voyage to Hudson Bay in 1782 and the taking of Fort Prince of Wales. Among the effects of Samuel Hearne, governor of the fort at the time, La Pérouse found the journal of his journey to the Coppermine, hitherto unpublished and indeed, according to this author, deliberately kept secret by the Hudson's Bay Company. La Pérouse wanted to confiscate it as Company property, but Hearne insisted it was his own, and was allowed to keep it on condition that he would publish it as soon as he got back to England. It was in fact not published until 1795, which was deplored by the French, and rightly if the story is accurate, as a breach of faith. Had it been published immediately on his return from the Coppermine in 1773, the ghost of Juan de Fuca's strait would have been laid much sooner, and La Pérouse himself would not have been sent to look for it in 1785.

The author has achieved the rare feat of writing a solid scholarly work that is at the same time delightfully readable and sometimes even humorous. There are two reasons for this, other than her own easy flowing style. The first is that she quotes a good deal from her sources, which have the immediacy of all first-hand narration and the piquancy of style and language of their period. And secondly she is obviously deeply interested in people, and it is real people, not dusty historical events, that one finds in her pages. Some of them are highly colourful characters, too, like the whaler Jean Vrolicq, a sort of sea-going Vicar of Bray, who sailed under whatever colours seemed expedient at the time. Or like Jean-François Regnard, successful writer of comedies, who made a journey to Lapland in 1681, and wrote

a detailed and entertaining account of the country and the people, which he lifted whole from a recent but obscure text on Lapland written in Latin by a naturalized Swede from Strasbourg. Unfortunately on his return to Paris he found that this work had just been translated into French, English, German and Dutch and was in all libraries. His own account had to be shelved, but was published after his death and became a best-seller, being looked on as a model of travel literature. And with some reason, if the following comment on the robust health of the Lapps is typical: "Ne connaissant point de médecins, il ne faut pas s'étonner s'ils ignorent aussi les maladies."

The book is well but unobtrusively documented and has a good bibliography, but lacks an index, which would be very valuable to a work of this kind. It is illustrated by some interesting historical maps, some of which however suffer from illegibility as a result of poor reproduction. The two supposedly modern maps, on the other hand, which are presumably intended for general reference, are not only illegible but of such a staggering antiquity as to leave the reader gasping. The one of the Arctic is pre-1914, showing neither the islands discovered by Stefansson nor Severnaya Zemlya. But it is churlish to complain of trifles in a work of such excellence and charm. A second volume, bringing the story up to date, is in preparation and will I am sure be eagerly awaited by all who sample the first.

MOIRA DUNBAR

INGALIK MENTAL CULTURE

By CORNELIUS OSGOOD. *New Haven: Yale University Publications in Anthropology*. No. 56, 1959. 9¼ x 6¼ inches, 195 pages, map, 10 text figures. \$2.50.

This is the third and final monograph of a detailed ethnographic account of the Athapaskan-speaking Ingalik Indians living in the area of the lower Yukon River of Alaska. The first volume, *Ingalik Material Culture*, appeared in 1940; the second, *Ingalik Social Culture*, in