

## Geographical Research

R ECENT progress in geographical research has been marked by a definite trend into fields of specialization. To maintain a proper perspective of the whole science, these special fields should be accorded respect and encouragement, but should not be accepted as separate sciences. In the past few decades, as a result of superior communications and increased human contacts, more exploration and greater research contributing to the understanding of human relationships have not only been warranted but demanded.

Medical geography, the geography of disease, is an expression of this fact. Medical geography is based on well-known facts widely scattered through the various branches of medicine; what may be new is the approach by definition and methods to the problems raised. Recognizing that geographical factors determine the occurrence and distribution of a pathological complex and that disease is a multiple phenomenon which occurs only if various factors coincide in time and space, the American Geographical Society has undertaken to give as much weight as possible to medical geography.

The resultant development has been the study of disease as it is related to physical environment in two principal ways-when it occurs as a result of parasitic infection and when it occurs as a result of influence of the milieu on physiological functions-thus perhaps relating degenerative diseases to the geographical environment. To this end an "Atlas of Diseases" is being compiled, a continuing project of mapping the world distribution of diseases. It is based on all available published and unpublished data, showing their significant epidemiological factors and geographical distribution, with a summary of the more important epidemiological problems relating to each disease. Two maps, showing the world distribution of cholera and of poliomyelitis, have already been published, with a score or more to follow.

Another expression of recent progress has been a burgeoning of explorations likely to result in valuable discoveries in geography and its related sciences. Military necessity has been a strong stimulus, although not necessarily a primary one; the immediate objective has been to learn the influence of environmental factors upon man and upon their interrelated future.

During the past quarter of a century it has been proved that there has been a definite amelioration of climate. Hans W:son Ahlmann, Swedish ambassador to Norway and one of the world's foremost glaciometeorologists, says this climatic change is the first in the endless series of climatic variations and fluctuations in the past and coming history of the earth. He points out that it can be studied, measured, and possibly explained through systematic and comprehensive studies in glaciology.

Detailed investigations, cosponsored by federal agencies and the American Geographical Society are now being carried on in the ice fields of southeastern Alaska. The Juneau Ice Field Research Project is an effort to unravel the remaining secrets of glacier ice and to determine the ways in which it indicates even minor changes in climate.

The project has particular significance: Equipment, supplies of all kinds, and new logistic methods are being tested, and effective operating techniques are being extended and improved. The small research station, on a rock island on the edge of the Taku Glacier 16 miles above its terminus, is a good operating base for such studies. The AGS hopes other individuals and institutions working in the varied scientific problems that may be investigated in this area, will make use of these facilities. Such studies are a matter of scientific teamwork, and the experience in Alaska is expected to encourage future cooperative effort among the various disciplines involved.

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