Book Reviews

An Anthropological Reconnaissance in West Pakistan, 1955. With appendixes on the archaeology and natural history of Baluchistan and Bahawalpur. Henry Field. Peabody Museum, Harvard University, Cambridge, Mass., 1959. 332 pp. Illus. + plates. $9.75.

For those who are not world travelers and who, therefore, are confused by the newer political boundaries, it may be well to explain that the locale of Henry Field's latest report—West Pakistan—is on the Arabian Sea, with Iran and Afghanistan to the west and north and India, Tibet, and Sinkiang Province (Hsin-chiang) to the east and north. The parts of West Pakistan with which the report is chiefly concerned are Baluchistan, the southwesternmost province, and Bahawalpur, the eastern desert province. The two areas are separated by a series of mountain ranges coursing north and south and by the Indus River Valley paralleling the mountains.

West Pakistan became an independent political entity in 1947, largely because its population is predominantly Moslem. Also, much of its population has closer linguistic affiliations with Iran, to the west, than with India, to the east. This is true particularly of the western districts of Baluchistan, where Baluchi, an Iranian-type language, is mainly spoken, as might be expected simply from the physiographic fact that this area is an extension of the Iranian plateau. By way of contrast it can be said that the eastern province of Bahawalpur has little in common with Baluchistan except heat and aridity. Its heterogeneous population, speaking mainly a language identical with western Punjabi, ekes out an existence on the margin of the Indian Desert.

On 20 March 1955 Henry Field and his wife, accompanied by Mohammed Idris Saddiqi (an archeologist), Abdur Rauf Khan (a geographer), S. V. Rizvi (a geologist), Naeem Beg Chugtai (a zoologist), Hasham (a snake charmer), and H. A. Abidi (chief engineer and director of Food and Agricultural Organization projects in the Baluchistan States Union), landed, by special arrangement, from a steamer at Pasni on the coast of Baluchistan. The main reconnaissance began at Pasni and continued as the party traveled overland by motor to Quetta (approximately 350 miles in a direct line to the northeast, but, of course, much farther by the route traveled), arriving there on 7 April. Most of the party then went south by train to Karachi at the mouth of the Indus River, but the Fields and Mohammed Idris Saddiqi went eastward by train to Bahawalpur and spent the time between 12 and 20 April making a further reconnaissance by motor in the Kholistan area. Actually, therefore, the present bulky report covers only about one month in the field.

The route followed by the expedition is shown on nine detailed maps (enclosed in a pocket on the inside of the back cover), and it is described in chapters 5 (pages 77–100) and 7 (pages 162–177). These travel records ("traverses") are supplemented by 100 collotype plates showing scenes, cultural objects, and human types (all of the photographs were made by Mrs. Field).

It is not altogether clear from the report why these particular portions of West Pakistan were selected for exploration. Perhaps it was because Sir Aurel Stein left intriguing records of his visits there earlier in this century. Perhaps it was simply a matter of ease of access. In any case, it is evident that southern Baluchistan is important archeologically because it was the land connection between the ancient civilizations of the Near East and those of the Indus Valley and, on the other hand, that Bahawalpur is close to ancient Harappa, one of the twin cities of the Indus Valley civilization. Furthermore, the anthropometric characteristics of the present-day peoples in these parts had not been adequately recorded.

Before considering the body of the report it should be pointed out that Henry Field has been on "the track of man" (to use the title of his popular book), and of whatever else he could find, in the Near East and in adjacent regions since the late 1920's. The Pakistan volume now joins at least seven other such publications (chiefly on the anthropology of Iran and Iraq), which total more than 1500 pages of text and more than 500 plates. This work was sponsored at first by the Field Museum (now the Chicago Natural History Museum); since 1950 it has been under the sponsorship of the Peabody Museum of Harvard University.

Field is usually prepared to collect everything in sight. He himself is a physical anthropologist, so he specializes in anthropometric records of living people and brings back any available skeletal material. However, he or his associates always bring back cultural objects and specimens of the local flora and fauna. In the present report, chapter 6 (pages 101–143) deals with anthropometry, while 17 appendixes by almost as many collaborators (pages 181–279) deal with the rest of the collections, including such varied things as potsherds, old manuscripts, reptiles and amphibians, shells, insects, brachiopods, plankton, plants, drugs, agricultural implements, date trees, and camel brands.

From what has been said it should be apparent that, in addition to anthropology, many areas of science have been enriched by Field's industry as a collector. A considerable part of this industry is directed toward getting others to work for him. In the preface to the present volume he acknowledges help from more than 80 individuals and 17 libraries. He himself has combined data from these sources with his own observations to give a picture—unfortunately, not too clear a picture—of the land through which he traveled, the people who occupied it in the past, and the people who are living there at present. This, in turn, is supplemented by more than 700 references to the literature and by an index (24 pages).

The chief merit of this book is its attention to details; the chief fault is its lack of interpretations. For example, in the 17 pages of chapter 3, devoted to "Races, tribes and groups," many tribal and group names are given, and in the 43 pages of chapter 6, devoted to "The physical anthropology of the Baluchis, Brahuis and miscellanea," there are

many body measurements, but nowhere is the true racial position of the population of Baluchistan indicated. By contrast, Carleton Coon in his book *The Races of Europe* (Macmillan, 1939) neatly summarized this matter in the following words (page 431): "[The Baluchis and the Brahui] seem to be the results of a mixture between the Veddoid type isolated in the Hadhramaut, and the Irano-Afghan race to which their linguistic relatives belong. The difference between the majority of the Baluchis and Brahui and the fine type of the Hadhramaut is simply the difference between the small Mediterranean type of southern Arabia and the Irano-Afghan."

Field's findings add detail to the data available to Coon but apparently do not change the interpretation which the latter gave. Actually, Field measured only two linguistically distinct samples of the Baluchistan population: 85 Baluchis and 151 Brahuis. According to W. W. Howells, who studied the statistical data of these series (page 112), when they are compared as total populations "they are seen to differ in head length, head breadth and bigonial breadth to a definitely significant degree; possibly they differ in stature, bizygomatic diameter and the face heights as well." One would like to know whether language has been the isolate which has produced this difference in physique.

To his own series from Baluchistan, Field adds (page 115) numerous other series "compiled by Cappieri from published sources," and yet he fails to include in his enormous bibliography the pertinent references to the major contributors, Gupte and Risley. As I have already indicated, a general interpretation of these comparative data is also lacking. Incidentally, the editor has handicapped the reader in chapter 6 by placing Tables 101 to 111 between Tables 11 and 12. Thus, for example, one of the abbreviated headings in table 104 on page 118 is explained in table 12 on page 122.

As compared with anthropometry, archeology, one of the objectives of the reconnaissance, gets little attention in this report. Nowhere is the antiquity of human occupation in the areas visited made clear. F. A. Khan of the Pakistan Department of Archeology has contributed "Fresh light on the ancient cultures of Baluchistan and Bahawalpur" (appendix A). From this we learn only that "the chief characteristics [of the Baluchistan ceramic material] are those of being a monochrome black-on-pink or gray ware like the pottery of Shahi-Tump with a free style of ornament, qualities found on the pottery of Seistan and Bampur sites in Iran; and the monochrome and polychrome wares resembling Kulli pottery, which has outside parallels with the 'Scarlet ware' of Susa D and Mesopotamia. The Bahawalpur pottery, black-on-red, is undoubtedly the product of the Harappans." I am unable to provide a reliable chronological interpretation of these statements, but it is certainly safe to say that the sites mentioned by Khan go no further back than the protohistoric period. The failure of the expedition to find anything earlier than Harappa is noteworthy.

In summary, the present report, for all its impressive size, is woefully short on conclusions, being little more than a catalog of places visited and things collected. Undoubtedly, some of the new information supplied does fill a void, and it is therefore gratefully received, but the manner of its presentation does little credit either to the author, to his multitudinous collaborators, or to the sponsor and publisher.

T. D. STEWART

U.S. National Museum, Smithsonian Institution

Safe Handling of Radio-isotopes. International Atomic Energy Agency, Vienna, Austria, 1958 (order from International Publications, 801 3rd Avenue, New York 22). 99 pp. Illus. $1.

This manual of the International Atomic Energy Agency (IAEA) is in the nature of a stop-gap publication pending the issuing by the agency of its own regulations for the use of radionuclides obtained through the agency. Thus, the recommendations incorporated in the manual stop short of specifying maximum permissible levels and wisely refer the user to the levels set by the competent authority in his country, or to those set by the International Commission for Radiological Protection where no such national levels have been set. Under the section on luminizing operations reference is also made to the relevant provisions of the International Labor Organization regarding ionizing radiations.

However, in spite of the fact that the IAEA is itself unable to recommend specific levels, the manual should prove a most valuable aid to any radiological health or safety officer in that its contents include very many sensible and well-considered sections on such matters as organization, medical supervision, monitoring, accidents and decontamination, design and use of sealed and unsealed sources, transportation, and radioactive waste disposal.

One appendix summarizes the 1954 and 1958 recommendations of the International Commission for Radiological Protection on maximum permissible levels for exposure to external radiations and for radioactive contamination of Air and water. A second appendix, in default of international agreement, sets forth the maximum permissible levels for surface contamination, as recommended by the competent authorities in France, Poland, the United Kingdom, the United States, and the U.S.S.R.

In the English version of the manual the language is unfortunately occasionally somewhat ambiguous, but this may have occurred in translation from one of the other languages (French, Russian, and Spanish) in which it is also published. On a more pedantic level it is interesting to note that the word *isotope* is used correctly once in the manual and incorrectly on almost every page. Thus, the IAEA perpetuates one misnomer in its use of "atomic" for "nuclear" energy and perpetrates another in its use of "radioisotopes"—both on the cover. It is probably necessary, however, to reconcile oneself to the continued misuse, even by scientific writers, of these two words.

From the practical point of view the recommendations are almost all wholly sound, although in one or two instances the reader is given cause to doubt. Is it, for instance, necessary in a low- or medium-level radiochemical laboratory not only to use paper towels and handkerchiefs but also always to treat them as radioactive residue? The problem of waste disposal is already assuming frightening enough dimensions!

It is unfortunate that such a valuable manual, which should be in the hands of every radiological safety officer, is so poorly bound that even a well-treated copy such as my own is falling to pieces. If this is typical its disintegration rate in the laboratory is likely to be such as to consign it, unjustly, to the short-lived-waste container.

W. B. MANN

Radioactivity Section, National Bureau of Standards