

a wide variety of sources, and there are many excellent and attractive illustrations and generalizations respecting the economic and political life of man on the earth. In addition, there are many ingenious ideas and relationships; much matching of the different irregular parts of the world's picture puzzle. But if we look for judgments respecting the political set-up of the world today or if we look for any rational information of use to policy makers in government we find the book singularly deficient. For practical purposes the information is put into unwieldy form, and much of the lore is simply a mass of notes of antiquarian interest but of no practical or theoretical importance in government or geography. To put facts into a series, to invent mnemonic schemes is to achieve neither learning nor science. No one could use such information as a basis of forecasts; one can rarely demonstrate the cause of a given development in any case. One can only suggest reasons for historical unfolding or for possible action today. After all, a map of Europe which shows by broad arrows (p. 637) the different lines of force of the great powers of Europe teaches us nothing that we need to know or have not already learned; and merely as graphics it is open to objection because it is partial. The illustrations of "disharmonic states" (p. 623), as, for instance, the western border of Germany, northwestern Italy, and eastern Persia, bring into juxtaposition environments and cultures so totally different that to classify them as common examples of a principle is to say nothing at all. A prime illustration of the fault of the mnemonic principle is the table on pages 120-121, classifying the nations of the world according to population and area. Again, as a mnemonic this may have usefulness; but as an illustration in support of a discussion of the space requirements of peoples it does not make sense at all. If we compare nations by area we find Germany put in the same general class with Paraguay, and if we compare broad population categories in the same table we find ourselves looking at a group which includes Liberia and Norway and other equally strange bedfellows such as Afghanistan and Chile. The author takes over from Supan the extraordinary table of "colonial quotients," showing the ratio of the area and population of the colonial possessions of the powers with the motherland. Of course England stands at the head with a quotient of 8.4, while Germany has a "quotient" of 0.2; but of what significance is that when the Netherlands has a quotient of 6.2 and Portugal and the United States are respectively 1.7 and 0.1 (p. 125)? Of a similar order is the world map on page 147 showing by excellent symbolism the states having two, three, four, five and more neighbors on their borders. After all, neighborship, if we may so term it, may be the least of one's problems. It is not how many neighbors but what kind of neighbors that counts, and what is the length of the border of friendly and unfriendly neighbors, and how one is situated with respect to one's allies. Thus, too, on page 186, is a discussion of the relation of the geomorphological space types of states, that is the relation of states and state boundaries to the physical set-up. Likewise, plant and animal analogies and homologies are suggested here and there. But all to what purpose?

One can understand much better the two smaller works listed herewith, Vogel's "Politische Geographie," a general discussion of the field (as well as his "Das neue Europa," which deals more fully with each nation), and Reinhard's "Weltwirtschaftliche und politische Erdkunde." The former writes more specifically: his illustrations are fewer, his whole scheme is more modest, his feet are on the ground. Witness his map showing the steppe regions of Central Europe, carefully thought out, showing at a glance more than do a dozen pages of philosophic sleight of hand. He is not unaware of the philosophy of his associates, but he cuts through it to arrive at the specific and the practical and actual relationships rather than at any possible philosophical meanings of such relationships, for the ultimate meanings are really denied to man! Intensely German in spirit and politics, he writes in a form often unacceptable to a non-European; but at least one can make allowance for that, whereas the "philosophy" of his associates leaves only bewilderment.

In a still more specific way Reinhard discusses international relations of raw materials and, in short, the material basis of our civilization. His map illustrations are numerous, his whole style of thought less philosophizing, more apprehensible. He expresses practically no opinions and draws no profound conclusions, but he puts facts into striking relationship and lets the inevitability of their meaning stand in place of personal opinion.

ARABIA AND THE ARABIANS

PAUL W. HARRISON. **The Arab at Home.** xii and 345 pp.; map, ill., index. Thomas Y. Crowell Co., New York, 1924. 8 x 5½ inches.

A. GOODRICH-FREER (MRS. H. H. SPOER). **Arabs in Tent and Town: An Intimate Account of the Family Life of the Arabs of Syria, Their Manner of Living in Desert and Town, Their Hospitality, Customs, and Mental Attitude, With a Description of the Animals, Birds, Flowers and Plants of Their Country.** 325 pp.; ill., index. Seeley, Service & Co., Ltd., London, 1924. 8½ x 5½ inches.

MRS. STEUART ERSKINE. **The Vanished Cities of Arabia.** 324 pp.; ill. Hutchinson & Co., London, n. d. 9 x 6 inches.

Eastern Arabia was the scene of Dr. Harrison's twelve years of field service as a medical missionary. His work for the American mission in the hospitals at Kuwait, in the oases of Nejd, Al Hasa, and Mesopotamia, among the mountains of Oman, and in the open desert, brought him into close contact with Bedouin, townsman, and agriculturist alike. Clearly and forcefully he sets forth the fruits of long observation of the material and spiritual conditions of Arab life in the communities he visited. One cannot but wonder, however, whether these communities are sufficiently typical to warrant the use, without further qualification, of the very broad title, "The Arab at Home."

Dr. Harrison examines minutely the social and economic conditions of Bedouin and oasis life and makes these the subject of illuminating comparisons. To the pearl-diving industry of the Persian Gulf, in which "probably a hundred thousand Arabs are engaged . . . throughout the summer months," Dr. Harrison devotes a chapter of altogether exceptional interest. As a missionary the author was above all concerned with the religion of the Arabic people. Like others before him, he sees in Mohammedanism a reflection of the desert: "Mohammedanism is little more than the Bedouin mind projected into the realm of religion. The Arab faces God as he faces the desert. Here is a vast omnipotent environment, which rules his life and which reduces him to insignificance and even nothingness in comparison. By conformity to its laws he hopes to live, and as a usual thing he can. But there is an element of caprice about the desert which makes it at times utterly cruel and ruthless, and from that ruthlessness no amount of humble acquiescence or of vigilant effort will save him. This is exactly the picture of the Moslem God. Unlimited omnipotence, governed as a usual thing by law, and usually rewarding obedience with His favor, He is still tinged with unaccountable and unpredictable caprice, and is essentially pitiless in His power and magnificence. It is the image and super-scription of the desert. Long before Mohammed wrote this picture of God into the Koran, God Himself created it in the desert, and so stamped it on the Bedouin's heart."

The subtitle of Mrs. Spoer's "Arabs in Tent and Town" gives a fairly precise idea of the scope of her book. Years spent in the towns and villages of Syria and along the desert borders, combined with a sympathetic spirit and a knowledge of Arabic, gave Mrs. Spoer rare opportunities for observing the lives of a people, many of whose customs date from the days of Abraham. A gift for winning the confidence of the Arab women enabled her to gain an insight into local tradi-

tions, popular mentality, and the intimacies of family life such as few Europeans have been privileged to obtain. She discovered ethical refinements in Arab civilization of which we in the West have no parallel, as, for instance, the Bedouin code of hospitality. For this, the desert environment is, perhaps, ultimately responsible, though Mrs. Spoer asserts that "in its wider and less individual presentation, as active philanthropy, hospitality has always been an inherent part of the religion of the East; a necessary part of Oriental life." Mrs. Spoer's chapters on the weather and on natural history relate mainly to the native's attitude and the folklore regarding these matters. She gives, however, a particularly graphic account of the great invasion of locusts in the Jerusalem district in 1915.

Let us not quarrel with Mrs. Erskine's use of the title "The Vanished Cities of Arabia", though we must confess that on first seeing it our thoughts were carried far southward, to the tombs of Hejr visited by Doughty fifty years ago, or the mysterious city—Gerrha, perhaps—recently found by Cheesman at 'Oqair on the Gulf of Bahrein, or possibly to Sabaeen and Himyaritic ruins on the margins of the great southern desert. With none of these Mrs. Erskine is even remotely concerned. The book, with its truly magnificent illustrations, deals with ruined cities in the rift valley of Syria and on the plateau east of the Jordan and Dead Sea—Petra in its cleft rock, the towering Crusaders' castle of Kerak, the ill-fated "cities of the plain": Philadelphia, Gerasa, and others. It is a pleasant combination of history and travel, informative but not heavy. Students of the history of geography will turn to the chapter on the discovery in 1894 and subsequent partial mutilation of the famous mosaic map of Palestine at Madeba, dating from the time of Justinian (sixth century of our era).

NOMAD AND AGRICULTURIST IN WESTERN TURKESTAN

PAUL KUNHENN. *Die Nomaden und Oasenbewohner Westturkestans*. 131 pp.; bibliogr. Heinrich Pöppinghaus, Langendreer, 1926.

Even though its author has neither visited Western Turkestan nor made use of Russian sources, this doctoral dissertation by a young disciple of Passarge is of distinct value. From the point of view of human geography, the region with which it deals is more or less typical of the entire zone of deserts and dry steppes stretching from the Atlantic coast of the Sahara far into the heart of Asia. Hence, many of Kunhenn's observations and conclusions relating to the desert and oasis dwellers of Turkestan would hold equally true for Arabia or North Africa. Furthermore, his treatise is well planned and clearly presented.

The most striking fact in the human geography of the Africo-Asiatic desert and steppe zone is the dualism of the population. Even where they have sprung from the same racial stock, the desert rover and the oasis dweller are different in almost every respect. The distinction between nomad and settler is fundamental, far more profound than the distinction between townsman and farmer in lands of European civilization.

After a brief sketch of the physiography of Western Turkestan, Kunhenn examines the contrasts between the nomadic herdsmen of the steppes and the Sarts, or oasis folk, in respect to social, political, and family life, to religion, law, occupations, means of subsistence, clothing, habitations, manners and customs, and to physical and spiritual qualities in general. Most of these contrasts may be attributed to the differences between the desert and oasis environment. In the desert, man's foremost enemy is nature. Life is a constant struggle for mere existence in the face of extremes of cold and heat, with the menace of drought and famine ever at hand. The nomad is wholly dependent upon his herds, around the preservation of which the entire course of his life revolves. This means periodic seasonal migrations to and from summer pastures among the mountains or on the cooler, damper steppes to the

north. In the oases, which cluster along the bases of the mountains and about the deltas of the greater streams far out in the desert, plenty of water is distributed by irrigation over rich fields of loess, and there has grown up an enormously dense population. Here man's primary struggle is with his fellow man.

Kunhenn shows how these contrasting environments have fostered, on the one hand, the hardy, simple, independent, democratic, dirty, meat-eating, and naturally religious nomad, and, on the other, the oasis dweller, effeminate, complex, servile, keen-witted, meticulous about his person, a vegetarian, and, though fanatically Moslem and scrupulous in the observance of religious forms, fundamentally irreligious at heart. Kunhenn considers that Islam is "a typical oasis religion" and that the reason why it was accepted so rapidly in Turkestan at the time of the Moslem conquest is that it was admirably adapted to the mentality of the oasis dwellers. Although nominally accepted by most of the nomads, Islam with them is in reality little more than a veneer over the "Shamanism which they have brought with them from regions further east." The nomad has no genuine conception of the unity and omnipotence of God. In this respect his religious outlook differs essentially from the inborn monotheism of the Bedouin even though both are children of the desert.

THE VEGETATION OF ALGERIA AND TUNISIA

AUGUSTIN BERNARD AND R. DE FLOTTE DE ROQUEVAIRE. **Atlas d'Algérie et de Tunisie, Part IV: Carte de la végétation.** 4 pp.; map, diagrs., ills. Gouvernement Général de l'Algérie, Direction de l'Agriculture, du Commerce et de la Colonisation, Service Cartographique, Algiers and Paris, 1925. 24½ x 21 inches.

RENÉ MAIRE. **Carte Phytogéographique de l'Algérie et de la Tunisie.** 78 pp.; maps, ills., bibliogr. Gouvernement Général de l'Algérie, Direction de l'Agriculture, du Commerce et de la Colonisation, Service Cartographique, Algiers, 1926. 10½ x 8½ inches.

These two publications describe the vegetation of the same area and are accompanied in each case by the same colored phytogeographic map. The map is the work of Professor Maire, assisted by MM. Battandier, G. Lapie, P. de Peyerimhoff, and Dr. Trabut. The former publication gives a concise description of the vegetation and carries 13 half-tone illustrations, which are well selected to portray the larger aspects of the principal vegetations. A series of four profiles is given with the same coloring used in the phytogeographic map. The second publication describes the vegetation in greater detail and is accompanied by 60 illustrations of individual species. The vegetation of Algeria and Tunis falls into three natural subdivisions, the lightly forested coastal region, the steppes which skirt the landward side of the broken mountain region, and the desert region which lies adjacent to the Sahara. The coastal region undergoes a dry warm season of 4 to 5 months but receives an annual rainfall varying from 400 to 1600 mm. Its prevailing vegetation is forest of evergreen oaks (*Quercus Ilex* and *Q. suber*) and deciduous oaks (*Q. lusitanica* and *Q. afarez*), together with the olive and species of elm, ash, alder, and poplar. On the mountains and plateaus lying within 100 kilometers of the sea there are forests of pine (*Pinus halepensis*); on the coast there are a few small areas of *Pinus pinaster*; and on the highest elevations there are small areas of cedar (*Cedrus atlantica*). On some of the smaller mountains bordering the northern edge of the Sahara open forests of *Quercus Ilex* and *Pinus halepensis* are to be found. A small arborescent juniper (*Juniperus phoenicea*) occurs in extensive open stands along the border of the Sahara at elevations lower than those occupied by the oaks. Another small coniferous tree, *Callitris articulata*, is abundant in western Algeria and occurs in smaller areas in Tunis.

Between the forested and desert portions of Algeria are extensive steppes, with 200

to 350 millimeters of rainfall, characterized by an open stand of plants less than a meter in height. The characteristic plants of the steppe are grasses (*Stipa tenacissima* and species of *Aristida*, *Bromus*, and *Koeleria*) and shrubs (notably *Artemisia herba-alba* and *A. campestris*). Many other species of plants are found in the steppe, including numerous ephemeral herbaceous plants. The vegetation of the Sahara is well characterized by both of the authors as being only "rarefied steppe."

FORREST SHREVE

THE COASTAL DESERT OF SOUTHWEST AFRICA

ERICH KAISER. *Die Diamantenwüste Südwest-Afrikas, zugleich Erläuterung zu einer geologischen Spezialkarte der südlichen Diamantfelder, 1:25,000, aufgenommen von W. Beetz und E. Kaiser.* Mit Beiträgen von W. Beetz, J. Böhm, R. Martin, H. Rauff, M. Storz, E. Stromer, W. Weissermel, W. Wenz, K. Willmann. Vol. 1, x and 321 pp., maps, diags., ills.; Vol. 2, vii and 536 pp.; maps, diags., ills., index. Dietrich Reimer (Ernst Vohsen), Berlin, 1926. 9½ x 12½.

The reader's satisfaction in the extent and thoroughness of this report will be enhanced by the excellence of the illustrations. A rarely beautiful series of photographs shows typical landscapes region by region as seen from the ground and from the air. Desert filling has nowhere been better illustrated than in Plate 14 which shows by air photograph a group of mountains all but buried under desert waste. The colored frontispieces to the two volumes hint at those inexpressible compositions of light and color that give the desert its peculiar power to haunt the memory. Volume 2 has been thoughtfully provided with two packs of stereoscopic photographs. An elaborate index furnishes a key to the whole work, and there are tables, diagrams, and sketches to illustrate almost every phase of the discussion. Volume 1 is accompanied by a set of detailed relief maps, geological maps and sections, and analyses of the various physiographic and geologic elements. For example, map No. 11 shows in great detail the belt of wandering dunes north of Angras Juntas, one of the best maps of its kind yet published.

The detailed geological maps are of especial interest because the principal object of the work is illustrated in them: the geological development of the region and the origin of the diamond-bearing deposits. The diamonds occur in sandy beds associated with the coast. It is concluded that they had their origin in the interior as elements associated with igneous rocks. The breaking down of these igneous rocks distributed the diamonds throughout a broad sheet of alluvial deposits. These deposits were later reworked especially in the Eocene, and the diamonds concentrated along drainage lines where they are found today.

The most striking feature of the work is the large colored topographic map on the scale of 1:25,000, showing by thirteen tints the relief of the land from below sea level to 240 meters above sea level. The large scale and the minute division of the vertical elements of the relief have provided one of the most satisfactory representations of desert topography in existence. In addition to the means of color clever use has been made of shading. Accompanying the map is a separate text published by the Geographical Society of Munich (*Mitteilungen*, Vol. 19, 1926, pp. 38-75). This describes the field methods employed, the development of the cartographic style, and gives a brief summary of the main physiographic features. The underlying structure consists of a series of folded rocks whose axes run for the most part parallel to the coast. The rock itself is mostly gneiss and schist intruded by granite and covered in places by stratified rock. Secondary structural lines are rift valleys traversing the primary structural lines at an angle and emerging at the coast where they form notable elements in the coastal physiography. Besides a high series of coastal terraces whose origin is uncertain there are raised beaches to the height of 40 meters as well as at intermediate levels.