

African Hemoglobins

Abnormal Haemoglobins in Africa. J. H. P. Jonxis, Ed. Davis, Philadelphia, 1965. xvi + 477 pp. Illus. \$20.

This excellent volume contains papers and discussions from a symposium which was sponsored by the Council for International Organizations of Medical Sciences (CIOMS) and held at Ibadan, Nigeria, in March 1963. It is interesting to compare this volume with the one that covered the first CIOMS symposium on abnormal hemoglobins, which was held at Istanbul in 1957. The first symposium was largely concerned with the characterization of hemoglobins and their distribution throughout the world. The present volume is mostly concerned with African data and African problems, although there are contributions by workers in Europe and America. The main emphasis is on clinical manifestations and on population genetics, but there are several more general discussions, including useful and critical reviews on the forms of thalassemia (Fessas), on glucose-6-phosphate dehydrogenase deficiency (Motulsky), and on population genetics (Allison).

The incidence of abnormal hemoglobins is reviewed, and new data are provided for northwestern Africa (by Cabannes), for the Congo and Rwanda-Burundi (by Vandepitte and Stijns), and for the Sudan (by Vella). The distribution of S and C hemoglobins in Africa begins to be well mapped, but the incidence of thalassemias is less clear, partly because of the lack of a single entirely suitable screening test.

The quantity of clinical material available for study in Africa is vast, and as the more acute problems of parasitic and infectious disease are brought under control, it is becoming possible to collect observations on the abnormal hemoglobin syndromes in large numbers of patients. Thus from Ibadan it is noted, almost in passing, that at University College Hospital 668 cases of homozygous sickle-cell disease and 462 cases of SC disease were diagnosed in the 3-year period, 1959 to 1961. The clinical contributions from this center are among the most impressive in the volume. They include an account of the radiological changes in S-hemoglobinopathies (Cockshutt), an analysis of 2435 postmortem examinations in which electrophoretic analysis of the hemoglobin pattern had been performed

(Brew and Edington), and a review of 190 cases of hemoglobin SC disease in pregnancy (Fullerton, Hendrickse, and Watson-Williams).

It is impossible to mention all the main contributions. The 25 papers are amplified and embroidered by the discussions, which have been skillfully edited so that they retain a flavor of spontaneity, despite the 2-year interval that elapsed between their presentation and publication. The final discussion touches on such future problems as the prevention of sickle-cell disease and the possibilities for radical forms of treatment.

The organizers of the symposium, G. M. Edington and J. H. P. Jonxis (the latter also edited the book), are to be congratulated. The only omission is a complete map of Africa, which would have been valuable for reference purposes. The inclusion of a comprehensive map might be considered in planning any future work of this kind.

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Panamanian Archeology

Archeological Investigations in the Parita and Santa Maria Zones of Panama (*Bureau of American Ethnology, Bulletin 193*). John Ladd. Smithsonian Institution, Washington, D.C., 1964 (order from Superintendent of Documents, Washington, D.C.). xii + 291 pp. Illus. \$2.50.

This is a technical report on the excavations of five archeological sites located inland from the Pacific coast of Panama at the base of the Azuero Peninsula. The sites were excavated by Matthew Stirling, Gordon Willey, and their associates. El Hatillo Site consisted of 11 low mounds in irregular arrangement. Extensive trenching of the site produced dwelling refuse and burials, but the primary purpose of the constructions was not made clear. The site was occupied during and after Late Coclé times. A radiocarbon date of 415 ± 90 years ago seems to be too late.

At the Girón locality three test pits made in refuse deposits between 1 and 2 meters in depth yielded a valuable fragment of chronological information immediately prior to the time level of Coclé Polychrome. The Delgado Site

was a shallow midden that gave a sample of Late Coclé and the succeeding Herrera phases.

A shallow hilltop occupation was trenched on the Sixto Pinilla Place. Refuse deposits, caches, and burials, some in chambered tombs, showed that the principal occupation was coeval with the range of the Coclé Periods at Sitio Conte. A similar site was excavated at the Leopoldo Arosemana locality. This was in part contemporary with the Girón occupation.

The principal value of this paper to those who are not specialists in the prehistory of the immediate region is the excellent summary of Panamanian archeology given in the introductory section and the discussion of the relation of the early isthmus cultures to the American Formative. Chronology does not come easily in Panama, and the difficulties seem to be similar to those encountered in highland Colombia. Panamanian cultures have been related to northern South America rather than Mesoamerica for at least 2000 years, and a shared pattern of scattered and transitory dwelling sites seems to be the cause of the archeologists' frustrations; deep deposits of refuse are very rare.

Ladd confirms what the rest of us have strongly suspected. The highly similar and complex block of Neolithic-level cultural traits that, in the second millennium before the Christian era, spread from Peru to the Mississippi Valley did not pass through Panama. This Formative base, from which the later American civilizations developed, was carried by sea as Michael Coe has suggested.

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Social Anthropology

Sorcery in Its Social Setting: A Study of the Northern Rhodesian Cewa.

M. G. Marwick. University of Manchester Press, Manchester, England; Humanities Press, New York, 1965. xxii + 339 pp. Illus. \$7.50.

The title of this book accurately describes its contents. The book is a study of sorcery in a Northern Rhodesian society, which offers an interpretation based principally on the social relations of the people concerned. As such, the book falls within the mainstream of British social anthropology,