Book Reviews

THE STORY OF MAN

By Carleton S. Coon. Alfred A. Knopf, New York, 1962. Pp. 438. Price \$7.50.

The first edition of this imaginative and comprehensive history of man's beginnings and of his successive stages in cultural and technological development was published in 1954 and translated into eight languages. This book is in sharp contrast to most other attempted syntheses by American anthropologists in that it refuses to place the word *race* between quotation marks, to dismiss it as a myth or to assert that those who believe that somatic racial differences have their mental counterparts suffer from some neurotic disorder.

"More serious," writes Coon (pp. 187-8) "are the activities of the academic debunkers and soft-pedalers who operate inside anthropology itself. Basing their ideas on the concept of the brotherhood of man, certain writers, who are mostly social anthropologists, consider it immoral to study race, and produce book after book exposing it as a 'myth.' Their argument is that because the study of race once gave ammunition to racial fascists, who misused it, we should pretend that races do not exist. Their prudery about race is equaled only by their horror of Victorian prudery about sex. These writers are not physical anthropologists, but the public does not know the difference."

Coon explains racial diversity as evolutionary adaptation to climate in terms of Gloger's Rule (that denizens of wet forests tend to have black or red coats), Allen's Rule (that animals tend to have longer extremities when their habitat is desert or grassland than when it is forest or mountains), Bergmann's Rule (that animals increase in size as one moves coldward on their range) and Rensch's Rule (that denizens of colder areas have longer hair and that arctic animals store fat all over, whereas torrid desert animals store it in lumps).

These Rules have obvious application to the different races of man. In general, the rules derive from two challenges which men, and the other animals, face until they are able to control the climate in which they live. The first challenge is ultra-violet radiation. The light skin of Caucasoid and Mongoloid races, forged in northern climatic zones, had differential survival value because it permitted maximum passage of ultra-violet radiation and hence creation of Vitamin D by irradiating ergosterol. The trivial exception is that of the dark-skinned Eskimos who satisfy their Vitamin D needs by raw fish consumption. In tropical areas, dark pigmentation serves to filter out excessive and damaging ultra-violet radiation. Enough passes through to satisfy Vitamin D needs and prevent rickets. The second rationale of the rules is the need of the cold-habitat

The second rationale of the rules is the need of the cold-habitat organism to conserve heat and that of the warm-habitat organism to lose it. Heat conservation is maximized by a spherical shape, evenly distributed adipose tissue, the flat features and protected eyes of the Mongoloids. The denizens of the tropics, who must lose heat, are angular and "skinny" in body form, they have attenuated extremities and maximum ability to lose heat by sweating. Where flesh must be stored to meet the emergency needs of desert-dwellers, it is done in lumps, as in the case of the Bushmen, to avoid interference with the heat-loss mechanism.

Although Coon analyzes the competitive demands on the heart of the process of thinking and the mechanics of heat loss (through pumping fluids through the emergency network), he does not draw the indicated conclusion, namely, that Negroid and Melanoid man evolved in environments that are quite possibly negatively selective for intelligence. He emphasizes that all of the races have made a cultural contribution of one sort or another and suggests that the importance of racial difference may diminish in an environment of controlled climate.

In this second and revised edition, which incorporates the discoveries of Dart and Leakey, Professor Coon accepts the theory of pre-sapiens raciation. He finds Mongoloid characteristics already present in *Sinan-thropus*, which he dates about 360,000 years B.P.

Coon also introduces the concept, in the second edition, of major racial differences in the tempo of evolution. He suggests (pp. 35, 37-38) that *Homo Sapiens* in a Caucasoid form emerged in Europe about 250,000 years ago, that a Mongoloid form of *sapiens* emerged in China about 150,000 years before the present, whereas Australoid *Homo sapiens* can be dated back only 40,000 years and Negroid *sapiens* only 35,000 years.

dated back only 40,000 years and Negroid sapiens only 55,000 years. A second critical area of evolutionary tempo is the discovery and use of fire. "Until he found fire man was little more than an animal with tools instead of fangs and claws," Coon writes. Fire, he adds, "is vital to the social life of human beings. . . The use of fire is the only openand-shut difference between man and all other animals" (pp. 62, 63). The Mongoloid Sinanthropus of about 360,000 B.P. had fire, as did Swanscombe Man, a Caucasoid who flourished about 250,000 years ago. However, diligent search by Leakey of areas of continuous Negroid settlement in Northern Rhodesia reveal that Negroid man did not discover fire until about 40,000 years ago.

Dr Coon, who has been professor of anthropology and curator of ethnology at the University Museum in Philadelphia for the past fourteen years, and who is also one of the most eminent of living American physical anthropologists, has added in this revised edition to the numerous and rewarding insights of the original work.

N. W.

COMMUNICATION IN AFRICA: A SEARCH FOR BOUNDARIES

By Leonard W. Doob. Yale University Press, New Haven and London, 1961. Pp. 406. Price \$7.50.

The purpose of the author was to outline the conditions associated with the act of communication in every conceivable circumstance. The chosen laboratory was Africa. A vast amount of literature was digested to produce this book. The elements isolated and studied are the communicator, his goal, the media, site, language, the audience and its reactions. Every item that might contribute to the transfer of information is reviewed and illustrated.

The work is intended for the specialist. A general reader would find most sections to be tedious. Collections of facts and descriptions tend to resemble telephone listings, merchandise inventories, and dictionaries, all highly useful in themselves but not recommended for stimulating reading.

The desire of the author to document the obvious is evident at many points. To announce that scarification, tattooing, cosmetics, gestures and clothing can convey information in Africa is to test the patience of even the most unsophisticated reader. An African psychologist writing on European communication would hardly consider it worth mentioning that television sets operate on electrical power. Too many observations of the same order are discussed by Mr Doob. Since he writes for specialists, they might have been spared such elementary insights. The epilogue provides a strange apology for making a search for boundaries into a comprehensive detour.

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