

phenylpyruvic acid should be regarded as the intermediate involved in the uptake of the first oxygen atom. With this compound substituted for the amino acid and with α -ketoglutaric acid omitted, the same enzyme preparations cause the oxidation of the tyrosine keto acid, provided that sufficient ascorbic acid is added to the system. Without the vitamin insignificant oxidation is obtained. Thus it may be argued that ascorbic acid plays its part in tyrosine metabolism by acting as a coenzyme in the oxidation of the deaminated amino acid.

The exact mechanism of this chemical reaction is unknown, but an attractive working hypothesis may be presented, based upon the reversible enediol oxidation reduction center of the vitamin. The enzyme would be regarded as removing hydrogen from the tyrosine keto acid by means of the dehydroascorbic

acid form of the vitamin, with subsequent transfer to oxygen and regeneration of dehydroascorbic acid. Specific experiments testing this hypothesis and more detailed discussion will appear in a subsequent communication.

References

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Book Reviews

Principles of Human Geography (Huntington's). 6th ed. Revised by Earl B. Shaw. New York: Wiley; London: Chapman & Hall, 1951. 805 pp. \$6.25.

The late Ellsworth Huntington's *Principles of Human Geography*, in its several earlier editions, has been one of the major texts in the field of geography for many years, and the able editing and revision of the sixth edition by Dr. Shaw should continue its use. Shaw has injected many of his own viewpoints and the results of some of his own research into the book, combining them skillfully with Huntington's forceful ideas and writing.

The *Principles* of Huntington and Shaw is in the tradition of the French masters of human geography, Vidal de la Blache and Brunhes, in its search for universals. Man's relationships with the several physical or natural elements of the environment are the center of attention; intercultural relationships are distinctly subordinate. Subject matter is categorized in terms of elements such as climate, landforms, and soils, and relationships are primarily the natural influences upon man rather than the effects of man. The role of the physical environment is presented in a distinctly positive manner, although man is by no means relegated to complete subservience in this environment. Environmental determinism as such is categorically denied.

Huntington's theses concerning the close relations between climates and the energy of peoples and their civilizations receive ample presentation as the most extreme form of man's dependence upon nature. It is regrettable that this form of environmental determinism, actually a highly debatable issue on which little solid agreement exists at present, should have been discussed in such a positive manner. Direct effects

of climate in such areas as the Congo basin have as yet been insufficiently isolated from other influences on the health of man, both related and unrelated to climate.

Although the natural elements of our environment as causative factors in world geography get the lion's share of attention compared to the treatment of the cultural elements (cf. *Culture Worlds*, by R. J. Russell and F. B. Kniffen, *SCIENCE*, **114**, 400 [1951]), this book is in no sense a text on physical geography, as nature is discussed only insofar as it relates significantly to man. But relationships rather than areas form the organizational framework, and, in a concluding section, where major countries are discussed on a regional or areal basis, brevity results in rather unsatisfactory discussion. Vivifying presentation of facts and ideas, which highlight many pages elsewhere, are here absent.

The book is helped by a handsome format, well-chosen photographs, and a minimum of typographical error. With a few exceptions, the mapping is adequate.

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The Mountain of Giants: A Racial and Cultural Study of the North Albanian Mountain Gbegs.

Carleton S. Coon. Cambridge, Mass.: Peabody Museum of American Archaeology and Ethnology, Harvard University, 1950. 105 pp., 16 plates. \$4.75.

In the author's words, "This is not a work of ethnography, but one of somatology" (p. 5) that perhaps too narrowly announces merely an attack upon "the Dinaric problem." In fact, Dr. Coon's long-delayed publication of field work done 20 years before should interest many specialists variously concerned