see and feel the proofs, without too much regard for the rules of the game as the Greeks insisted upon playing it. Thus, when Hilbert wishes to construct a sphere tangent to a plane, he merely pushes the sphere up until it touches the plane. In this way he produces a figure from which the reader can see at a glance that a plane section of a right circular cylinder is an ellipse. Further results obtained by this approach are far from trivial.

The second chapter is on lattices and should interest crystallographers. Hilbert gives some exceedingly simple proofs of special cases of theorems from Minkowski's *Geometrie der Zahlen* and a great deal of material that is not to be found in that classic. The regular polyhedra are taken in stride.

Synthetic projective geometry is treated next, with emphasis on configurations. The author can scarcely avoid the use of the word "axiom" in this branch of geometry, but geometrical intuition is placed ahead of formalism. He is thus content to prove Desargues' theorem in the plane by first proving it in space and then projecting the figure onto the plane.

The longest chapter in the book is appropriately given over to differential geometry. That this subject can be developed without coordinates is inconceivable, and in fact we find the author frequently resorting to the it-can-be-proved technique. But for one who has studied the subject in the conventional manner and wishes to clarify his concepts, the exposition is unsurpassed.

Chapter V, entitled "Kinematics," is short. It is devoted to the construction of plane curves by means of linkages and other mechanical devices. The last chapter, on topology, is still a clear introduction to that subject, but a book written 30 years ago cannot be a summary of topology as it is today.

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An Introduction to Physical Anthropology. 2nd ed. M. F. Ashley Montagu. Springfield, Ill.: Thomas, 1951. 555 pp. $8.75.

If a second edition has grown in only six years to nearly twice the size of the first, it goes without saying that it has been thoroughly revised and, besides, must reflect the growth of the science represented. This new edition has matured far beyond its first version, but as an "introduction" it still suffers from one-sidedness—dealing with topics not expected from its title and ignoring others that should form an integral part.

The opening chapter, although accompanied by 11 excellent portraits of men eminent in the history of anthropology, does not provide an account of the historical development of our understanding of man. It defines physical anthropology as "the comparative science of man as a physical organism in relation to his total environment, social as well as physical." The word "social" may be supposed to excuse the later inclusion of a polemic chapter on "the relation between body, mind, and culture," which is clearly out of place. The chapters on primates and their evolution have been greatly improved, particularly through the generous addition of a great many and very good illustrations, but the most important anatomical reasons for man's position among the primates are not made evident. The fourth chapter on the origin and evolution of man provides a fair account of our present incomplete knowledge of this great problem. This vast field of knowledge is growing too rapidly, however, to enable any one man to give a generally acceptable account of it. The pedigree of primates given here in Fig. 105 should have been clearly labeled as "author's interpretation" of phylogenetic relationships, and some justification for these rather partisan views should appear in the text. Besides it should, if at all possible, be explained why this pedigree differs so radically from the one appearing in Fig. 40.

The chapters on "ethnic" differentiation in man are quite readable, partly because some sections were written without regard for documentation and by skipping over problems far from settled. If this volume was designed as an introduction for the layman or first-year student, it should have been considered inadvisable to air controversial matters, for experts will find in these chapters many facile claims in place of a statement of problems they hope to solve in the future. The author's allergy to the legitimate term "race" forms a handicap in these accounts, and his indiscriminate substitution of the terms *division, group, subgroup, type,* and *population* gives the unjustified impression that our species is not subject to race formation, as is the case with all other species.

The final chapter on the effects of heredity and environment upon man is much too short to be called comprehensive, yet it is well written and should induce the lay reader to turn to the selected literature listed in this section, as in all others. The long appendix on anthropological methods has been much elaborated in this new edition but still reveals limitations in at least the metric techniques of the author's science.

Although this *Introduction* is advertised as covering the entire field of physical anthropology, it makes practically no attempt to deal with human age changes, without which the story of the evolution and differentiation of mankind remains incomplete. The book can be recommended chiefly on account of its fluent style, its 161 splendidly reproduced illustrations, and its sectional bibliographies which, although reasonably up to date in regard to English literature, ignore practically all else. This volume represents only a partial and quite personal introduction to the vast science of man, the most interesting part of all biology.

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