

Book Reviews

Essentials of Human Anatomy. Russell T. Woodburne. Oxford University Press, New York, 1957. viii + 620 pp. Illus. \$12.50.

It is not often that one has an opportunity to read a refreshing book in the field of human gross morphology. Woodburne's *Essentials of Human Anatomy* is one such book, and it will, I am sure, revitalize the regional approach to the study of human morphology. The need for such a book becomes evident with the increasing pressures for knowledge in medicine and with the concomitant compression of the time available for learning the essentials of (in this case) anatomy. Its relative brevity lies in "an adherence to the essentials of morphology presented functionally and concisely."

The text is not intended to be encyclopedic, as are standard anatomy books using the systemic approach. However, some topics are discussed in greater detail than in such books—for instance, the internal segmentation of the liver. More space is devoted to certain anatomical facts which are of more clinical import. Thus, there is an excellent discussion of the cervical fasciae, based on the now classic paper by Grodinsky and Holyoke (1938). In connection with the frequent development of mammary carcinomas and their subsequent metastases, the lymphatic drainage of the gland is emphasized.

In comparison with other books on regional anatomy, *Essentials of Human Anatomy* (i) considers a closer integration of physiology and anatomy, (ii) gives references to new information, (iii) presents much cross-referencing of facts within the text per se, and finally, (iv) uses the anatomical nomenclature adopted by the Sixth International Congress of Anatomists in 1955. The third and fourth points are especially significant, the former because it enables the reader to find further information on a particular point without going to the index, the latter because the changes in terminology that have been adopted are directed toward simplicity, consistency, logic, and elimination of the use of eponyms.

Mnemonics and analogies are used in a way that is reminiscent of another standard text on regional anatomy. There

are over four hundred high quality drawings and radiographs, most of which were prepared expressly for this text. Liberal use has been made of illustrations from Patten's *Human Embryology*, while the rest of the illustrations have been taken from recent publications. The book is well indexed.

This text is highly recommended to all who are interested in anatomy.

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The Concept of Development. An issue in the study of human behavior. Dale B. Harris, Ed. University of Minnesota Press, Minneapolis; Oxford University Press, London, 1957. x + 287 pp. Illus. \$4.75.

This volume is, in effect, a series of free associations to the term *development* by a distinguished and diversified company of scholars and specialists. Prepared in honor of John E. Anderson, for 30 years director of the Institute of Child Welfare at the University of Minnesota, the volume includes contributions from half a dozen psychologists (Anderson, Harris, Olson, Russell, Sears, and Werner), four biologists (Hamburger, Meredith, Schneirla, and Scott), a philosopher of science (Nagel), a historian (Heaton), a classicist (DeWitt), an anthropologist (Spencer), and three representatives of applied fields—a pediatrician (J. A. Anderson), a psychiatrist (Lippman), and a social worker (Kidneigh).

Free associations, recent research tells us, reveal less of the esoteric than of the everyday concerns of the respondent—what he thinks about and how he thinks about it. So with these essays. We learn, for example, that for the psychologist and biologist, development is a property of living organisms, with the psychologist showing some slight partiality for the human species. The anthropologist, the historian, and the classicist view the process as a characteristic of cultures, periods, or, more generally, phenomena conceived as organic systems. The trend toward abstraction culminates, as one might expect, in the contribution of the philosopher, who attempts a disembod-

ied formulation in terms of stipulated logical relationships among entities designated by letters and subscripts.

Having found the bluebird in his own home territory, how does each specialist view this elusive creature? As is usual with bird-watchers, the view is a distant one, and the principal concern is identification. Most of the essays begin with the problem of definition and many never get beyond it. There are innumerable statements of defining-properties and of distinctions between development on the one hand and growth, change, differentiation, and so forth, on the other. The editor, in his introductory essay, asserts that the volume was planned in the spirit of Dobzhansky's thesis that "generalization and integration can best be made by scientists who are also fact-gatherers, rather than specialists in . . . speculation." There can be no question that, among his contributors, Harris has indeed included a number of distinguished fact-gatherers. But some of them apparently welcomed an opportunity to indulge in theorizing, uninhibited by cantankerous research results. Others, who brought their data along, were not in a speculative mood. The editor offers the 17 contributions as "evidence that concepts of development variously conceived are fruitful in research work in many fields and of great value in the study of human behavior." In my judgment, only three essays approach satisfaction of this ambitious criterion—those of Werner, Russell, and Sears. These authors do propose ideas that are translatable into concrete research operations, either in the form of new observations to be made or new hypotheses to be investigated. Werner and Sears describe studies from on-going research programs; Russell points to the intriguing problems that confront the experimental psychologist once he forgoes the comfortable assumption that the laws of learning remain constant irrespective of the developmental level of the learner.

Other contributions are noteworthy on other counts. Schneirla presents an excellent survey of the research literature on the development of behavior in animals. Scott and Olson provide convenient integrations of previous research contributions by themselves and their associates. DeWitt puts his scientific colleagues to shame by the clarity and grace with which he exposes the complexities and risks involved in attempting to transfer organic concepts from the field of biology to other realms.

But all these are isolated achievements. As a whole, the volume lacks unity. *The Concept of Development* unfortunately contributes little to the development of a concept.

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