



NEW BIOLOGICAL BOOKS

The aim of this section is to give brief indications of the character, content, and cost of new books in the various fields of biology. More books are received by The Quarterly than can be reviewed critically. All submitted books, however, are carefully considered for originality, timeliness, and reader interest, and we make every effort to find a competent and conscientious reviewer for each book selected for review.

Of those books that are selected for consideration, some are merely listed, others are given brief notice, most receive critical reviews, and a few are featured in lead reviews. Listings, without comments, are mainly to inform the reader that the books have appeared; examples are books whose titles are self-explanatory, such as dictionaries and taxonomic revisions, or that are reprints of earlier publications, or are new editions of well-established works. Unsigned brief notices, written by one of the editors, may be given to such works as anthologies or symposium volumes that are organized in a fashion that makes it possible to comment meaningfully on them. Regular reviews are more extensive evaluations and are signed by the reviewers. The longer lead reviews consider books of special significance. Each volume reviewed becomes the property of the reviewer. Most books not reviewed are donated to libraries at Stony Brook University or other appropriate recipient.

The price in each case represents the publisher's suggested list price at the time the book is received for review, and is for purchase directly from the publisher. For more specific information on a book, please visit the publisher's website.

Authors and publishers of biological books should bear in mind that The Quarterly can consider for notice only those books that are sent to The Editors. The Quarterly Review of Biology, C-2615 Frank Melville, Jr. Memorial Library, Stony Brook University, Stony Brook, NY 11794-3349 USA. We welcome prepublication copies as an aid to early preparation of reviews.

REVIEWS AND BRIEF NOTICES

History, Philosophy, and Ethics of Biology	177	Development	199
General Biology	183	Cell and Molecular Biology	199
Paleontology	184	Genetics	201
Ecology	185	Microbiology	202
Conservation Biology	188	Botany	206
Evolution	192	Zoology	208
Behavior	194	Human Biology and Health	214
Neurobiology	196	Miscellaneous	215
Anatomy and Physiology	199		

HISTORY, PHILOSOPHY, AND ETHICS OF BIOLOGY

NEITHER GODS NOR BEASTS: HOW SCIENCE IS CHANGING WHO WE THINK WE ARE.

By Elof Axel Carlson. *Cold Spring Harbor (New York): Cold Spring Harbor Laboratory Press.* \$29.00. xi + 179 p.; index. ISBN: 978-0-87969-786-0. 2008.

The author explores the diverse aspects of humanness through the lens of science. He identifies four principal sources of knowledge about what it is to be

human and our place in the universe: revelation, tradition, experience, and science. Of these, only science provides a viable understanding of who and what we are. Revelation is fraught with contradiction—all the revelations of the world's religions “cannot be simultaneously true, and none of them can be proven” (p. 5); tradition is highly variable over times, places, and societies; and experience, although often effective, is personal, individual learning. Science is, however, “the exploration of the universe by reason,

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using standards of objectivity, controlled experimentation, verification of findings and interpretations by others, and recognition that theories that bind together a lot of facts may sometimes be wrong" (p. 5). This characterization overreaches a bit since attempts to clarify terms such as "objectivity" and "verification" have been fraught with difficulty. Nonetheless, it is a heuristically useful characterization, one that highlights science as critical to understanding ourselves and our universe.

Human history is marked by attempts to place ourselves above the other animals (the beasts) and closer to a god. Science has eroded those attempts but also provided the framework for a different understanding of humanity. Part 2, *Confronting and Recognizing Our Biology*, is a highly successful account, in general terms, of the key biological knowledge relevant to a contemporary understanding of humanity. This brief journey situates modern biology in a mechanistic and evolutionary framework, and describes our knowledge from cells through genes to neurobiology. Part 3, *How Should We Perceive Humanity in the Third Millennium?*, unfolds the interconnectedness of science, the arts, and humanities (including moral values); all are essential to understanding our humanity as we face a challenging future. A central message—delivered with conviction and compelling evidence—is that science education is important, that it needs to be woven together with the arts and humanities, and it needs to be significantly improved. This is an excellent and timely reach across the divides among the sciences, arts, and humanities, and an extremely valuable contribution to our self-understanding.

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DAVENPORT'S DREAM: 21ST CENTURY REFLECTIONS ON HEREDITY AND EUGENICS.

*Edited by Jan A. Witkowski and John R. Inglis. Cold Spring Harbor (New York): Cold Spring Harbor Laboratory Press. \$55.00. xiii + 490 p. + 2 pl.; ill.; index. ISBN: 978-0-87969-756-3. [Includes a facsimile of *Heredity in Relation to Eugenics*, by Charles Benedict Davenport, published by Henry Holt and Company, New York, 1911.] 2008.*

The most visible outline marking the historical footprint left by the 20th-century eugenics movement was marked by volumes about the "wellborn science." They included treatises on heredity, political tracts urging legal reforms, and textbooks for students of every type. One such publication was *Heredity in Relation to Eugenics*, published by Charles Benedict Davenport in 1911. It became an important public source of information about the

then new science of genetics and it bolstered Davenport's growing reputation as a spokesman for American eugenicists. The volume included chapters on the goals and methods of eugenics, an extensive listing of the range of traits controlled by Mendel's principles of heredity, sketches of famous family studies such as the Jukes and the Edwardses, and an introduction to eugenic political aims such as restrictions on reproduction and immigration of the "unfit." More than 170 pedigree charts illustrated the transmission of key traits within families.

Davenport's text is accompanied by ten essays that reflect on his work from a variety of disciplinary perspectives. James Watson's comments on *Genes and Politics* and Ronald Dworkin's essay, *Genetics and Inequality*, are reprised from earlier publications. Jan Witkowski relates details of Davenport's biography and his role as founder of the Eugenics Record Office. Essays exploring how genetics may impact intelligence and psychiatric disorders stand alongside commentary on genetic determinism, evolutionary ethics, and the even more expansive idea of "human nature." Three of the most provocative essays are: Philip Reilly's discussion of Davenport's pedigree studies and their relevance to the history of genetic counseling; Elof Carlson's description of the contemporary context of Davenport's book, born during the earliest years of genetic study when the term "genes" had not yet entered common usage; and Maynard Olson's critique of Davenport's "hopelessly muddled" (p. 79) thinking on applying science to social problems. Olson also predicts that due to knowledge gains flowing from recent genetic study, "the real debate about eugenics still lies ahead" (p. 93). The reappearance of this facsimile volume and accompanying commentary makes an important resource for understanding eugenic thought readily available for historians, scientists, and a newly curious public.

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THREE GENERATIONS, NO IMBECILES: EUGENICS, THE SUPREME COURT, AND *BUCK V. BELL*.

By Paul A. Lombardo. Baltimore (Maryland): Johns Hopkins University Press. \$29.95. xv + 365 p.; ill.; index. ISBN: 978-0-8018-9010-9. 2008.

On May 2, 1927, Justice Oliver Wendell Holmes, Jr. wrote a short and infamous decision known as the *Buck v. Bell* case. In it, he wrote for the majority in an 8-1 decision that the State of Virginia was upheld in applying its compulsory sterilization law and could sterilize Carrie Buck and others covered by the act. Most chilling to many of those who consider this one of the worst decisions made by the Supreme Court were Holmes's words "three