### **Book Reviews**

### Two on Darwin on Trial...

DARWIN ON TRIAL by Phillip E. Johnson. Washington, DC: Regnery Gateway & InterVarsity Press, 1991. 196 pages, index. Hardcover; \$19.95.

Reviewed by L. Duane Thurman, Professor of Biology, Oral Roberts University, Tulsa, OK 74171.

Darwin on Trial is another book on creation and evolution written by a lawyer. Unlike Wendell Bird, who emerged from law school as an advocate for the creation-science version of creation, Phillip Johnson became active in evolution and creation issues as a law professor who had been teaching in the University of California at Berkeley law school for over 20 years. Johnson, whose specialty is the analysis of logical arguments and the identification of hidden assumptions, has written two books on criminal law and procedures.

Darwin on Trial has 154 pages of text followed by 33 pages of research notes and a short index. Except for the occasional footnotes, sources and quotes are referred to in the research notes by sequential paragraphs rather than numbered citations. There are no illustrations, charts, or tables. InterVarsity Press co-published this book by special arrangement with Regnery Gateway, Inc.

The first of 12 chapters is a discussion of the legal battle surrounding Louisiana's 1981 law requiring equal treatment for "creation-science" in public school science classes. After a chapter each on natural selection and mutations, Johnson devotes three chapters to an evaluation of fossil evidence for Darwinism, and a chapter each on molecular evolution and prebiological evolution. The last four chapters address the rules of science, Darwinist religion, Darwinist education, and science and pseudoscience.

The book reads well, with good chapter-to-chapter transitions that keep the reader informed of the path ahead. Johnson deals more with the philosophy of naturalism, hidden assumptions, inconsistencies, and the large picture than with details of evolutionary mechanism and analysis of word meanings in scripture. This broad philosophical perspective can help scientists who are more prone to focus on technical details than to see how well these evidences are used to support assertions. Johnson goes beyond mere objective analysis of evidence and the way it is used. It is easy to see Johnson the lawyer trying to persuade the reader as judge and jury to accept his point of view.

Johnson maintains that Darwinists lack sufficient empirical evidence to support the strength of their statements on evolution and that they exclude the possibility of design

Reviewed by Owen Gingerich, Professor of Astronomy and History, of Science at the Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138.

Phillip E. Johnson's brilliantly argued critique of Darwinian evolution is guaranteed to arouse exasperated irritation from those who accept evolution as an article of faith. Like a clever lawyer for the prosecution, he scores point after point as he demonstrates how little empirical evidence underlies that hypothesis, and as he attempts to link it with a materialistic and atheistic philosophy. His account is deftly organized, articulate, even witty; I enjoyed it as a good read.

Johnson is a professor of law at the University of California in Berkeley. He has an enviable logical gift of mind, and a covetably sharp pen. His book contains such gems as, "Descriptions of fossils from people who yearn to cradle their ancestors in their hands ought to be scrutinized as carefully as a letter of recomendation from a job applicant's mother." Elsewhere, after criticizing a naturalism that "does not explicitly deny the mere existence of God," he remarks that, "A God who can never do anything that makes a difference, and of whom we can have no reliable knowledge, is of no importance to us."

Drawing upon a wide range of scientific literature, Johnson shows the flimsiness of the reasoning that numerous small mutations can really drive evolution. Problems with the fossil record and with the molecular evidence come under his persistent questioning. Finally, he turns to Darwinist religion and Darwinist education. Each step of the logical chain is designed to cast more and more doubt on the efficacy of Darwinian evolution.

And yet, the exercise left me with a highly uneasy feeling. Suppose, just for a moment, that Johnson were reviewing Newtonian physics in 1700. The whole thing, he might point out, was based on an unproven hypothesis that the earth moved. The most obvious prediction, that the stars should show an annual shift owing to the earth's motion, had not been confirmed, despite a concerted effort. The idea that distant planets could be attracted by the sun with no intervening frame to transmit this pull was clearly an unsubstantiated notion. And the geometrical proofs that involved distances or time intervals vanishingly small clearly smacked of division by zero, and anyone versed in mathematics could see how absurd that was. All in all, the *Principia* was a dangerously se-

#### **BOOK REVIEWS**

### THURMAN, continued.

and purpose by God as creator. By automatically ruling out all versions of creation, Darwinism becomes the only reality allowed — because of their rules — not because of the strength of empirical evidence. The problem of insufficient evidence is solved by substituting scientific naturalism, a philosophy which, in some ways, is a religion to the Darwinists. This is also what G. A. Kerkut, a British biochemist and evolutionist whom Johnson did not cite, said in *Implications of Evolution* in 1960. Johnson does not merely imply that the emperor has no clothes; his repeated request for empirical evidences instead of philosophical substitutes is as persistent as the familiar "Where's the beef?"

Johnson also points out that evidence does not speak for itself but has meaning only in the philosophical context of the interpreter. The different ways in which writers such as Richard Dawkins, Niles Eldridge, Stephen Gould, Douglas Futuyma, G. G. Simpson, and Karl Popper interpret science, Darwinism, and the possibility of God as creator are discussed. I was surprised that Thaxton, Bradley, and Olsen's book *The Mystery of Life's Origin* was not mentioned, even in the chapter on prebiotic evolution.

Johnson recognizes the confusion caused by "elastic" definitions of science, evolution, and creation, which to him is not limited to literalistic fundamentalism. Although recognizing the important distinction between microevolution and macroevolution, he most often uses the general term "evolution," which can be given variable meanings by his readers, too. He points out the faulty analogy of artificial selection to natural selection, which he examines as a tautology, deductive argument, scientific hypothesis, and philosophical necessity for Darwinists. There is much more in this book to enlighten or refresh our perspective of origins, evolution, and creation.

Darwin on Trial emphasizes the influence that different philosophies and worldviews have on the way empirical evidence is interpreted — or accommodated for, when lacking. This book should inspire us to be more attentive to logic and to search for hidden assumptions. Before debating how many angels can dance on the head of a pin, perhaps we should ask whether or not angels even dance. The few overly inclusive statements, use of general instead of precise terms, and omissions of some important works on this topic are not serious. I recommend Darwin on Trial as a book worth reading.

# This publication is available in microform from University Microfilms International.

Call toll-free 800-521-3044. Or mail inquiry to: University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

### GINGERICH, continued.

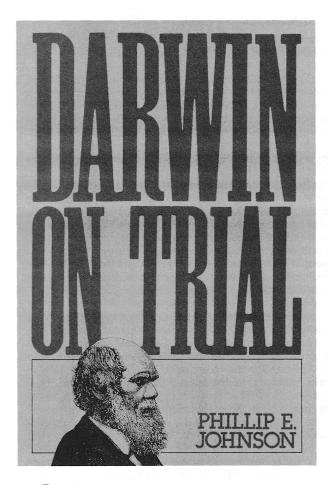
ductive attempt to build a mechanical universe in which the need for God was radically diminished.

The point is that science attempts to build up a coherent explanatory scheme, and part of the game plan is to seek mechanistic, automatic methods that do not rely on the supernatural. This coherency is generally achieved by ignoring certain apparent facts of nature because other aspects seem more important. Copernicus was impressed by a group of beautiful linkages and commensurabilities that became obvious only in a sun-centered arrangement. He had to ignore his lack of any explanation of terrestrial physics (why birds didn't get left behind by a rotating earth, for eample) or the failure to observe an annual stellar parallax. Newton was able to pull together many more of the pieces, and while he couldn't prove that the earth moved, his system was so comprehensive that most people had no trouble accepting ideas that Galileo had earlier admitted were "contrary to the evidence of the senses.'

While Johnson does a spectacular job of showing what a leap of faith is required to believe that random mutations could, over time, form major genus-building patterns, he almost totally ignores the achievements of evolution in accounting for the temporal and spatial distribution of organisms and in explaining imperfect design such as geese with webbed feet that never go near the water, or flightless birds. Thus Johnson, always the lawyer, never manages to comprehend why so many scientists find evolution so compelling.

What is puzzling about his brief is that he never quite comes to terms with what we or the Supreme Court ought to have done with respect to the Creationists. He makes a good case to show that all of us who accept the activity of God in the universe are necessarily creationists, in that we accept the role of design and purpose. Johnson allows that God might well have used natural selection over billions of years to form life as we observe it on earth, but to him the essential requirement is the designing hand of God in the operation. Johnson is clearly distressed that the orthodoxy exemplified by the National Academy of Sciences and the court decision essentially prevents the mention of design or purpose in the teaching of science.

Evolution has had an uphill battle for acceptance, not just because it places us within a mechanistic, chance-driven animal kingdom, but also (ironically) because it is not mechanistic enough. Unlike Newtonian mechanics, with its rigid predictive outcome, evolution is contingent, chancy, unpredictable; most leading evolutionists take a dim view of intelligent life on other, alien worlds because they feel that the earth's particular life forms are the happenstance of an idiosyncratic history that would never be duplicated again. In their attempt to show how we could come to be via a chance process, these evolutionists are loathe to dilute this astonishingly different mode of explanation with an taint of design. I can understand and sympathize with some of their vehemence, but of course Johnson is correct in pointing out that this all-



## CRITICALLY ACCLAIMED

"Unquestionably the best critique of Darwinism I have ever read."

Dr. Michael Denton, molecular biologist and author of Evolution: A Theory in Crisis

"Darwin on Trial may be the most important book on the evolution debate in decades."

David L. Wilcox, chairman of the Creation Commission for the American Scientific Affiliation (from an article in Christianity Today)

### INTERVARSITY PRESS

Available at your local Christian bookstore or call

(800) 843-7225

### **GINGERICH**, continued.

too-easily becomes a philosophic stance of religious proportions, a matter of faith and credo not intrinsic to science itself. Science is not atheistic or anti-God, just neutral with respect to the deity. Not too surprisingly, the evolutionary orthodoxy tends to stray from this guideline rather badly at times, as Johnson is all too willing to notice.

So, what does Johnson want us to do about all this? Abandon teaching evolution in schools? Teach it as a scientific myth? Give creationists equal time? He calls the writers of the ASA *Teaching Science in a Climate of Controversy* "naive," but he seems to offer no obvious prescription. If he understood better how science functions, perhaps he could have proferred some advice, for he is obviously a thoughtful and intelligent author. As it is, he has written a fun, provocative, but ultimately very frustrating book.

THE CREATION SCIENCE CONTROVERSY by Barry Price. Sidney: Millennium Books, 1990. 244 pages, index. Paperback.

This book was written by an Australian Roman Catholic science teacher, and for this reason has a perspective not commonly found in anti-creationist writings. The author discusses not only "scientific creationism" in the United States, but also the "creation science" movement, as it is called in Australia.

Price deals with the areas typically found in anticreationist materials such as thermodynamics, the flood, fossils, dinosaurs, Paluxy footprints, and others. He also discusses rather extensively the leaders of the movement, notably Henry Morris, Duane Gish, and others involved in Australia. Gish seems to be his primary target. One chapter ("Gish the Debater") and parts of other chapters contain information on alleged inaccuracies, inconsistencies, and other problems related to statements made by Gish. Much of this is not documented with bibliographic references and may lead the reader to wonder about the accuracy of Price's information.

Other chapters contain various other problems associated with the scientific creationism movement. These include textbook controversies, court cases, and numerous details regarding the movement in Australia.

Price makes numerous valid criticisms of the scientific creationism movement. However, his style of writing is biased and not very objective. He makes some rather personal attacks upon the leaders of the movement and questions their honesty and integrity. There is quite a bit of material related to the Bible in which the author demonstrates little sympathy with traditional biblical in-