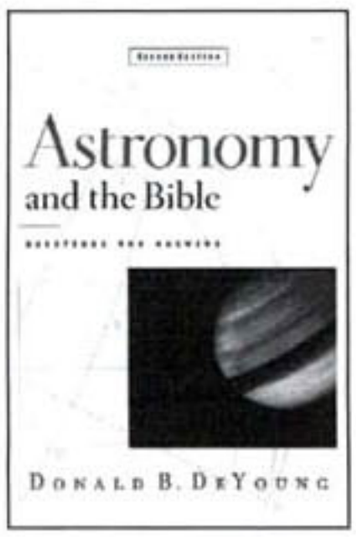

Counterproductive Mix of Science and Theology

WILLIAM D. STANSFIELD

Astronomy and the Bible—Questions and Answers. Second ed. By Donald B. DeYoung. Baker Books, Grand Rapids, Michigan, 2000. ISBN 0-8010-6225-X. 176 pp. Softcover, $12.99.

Astronomy and the Bible—Questions and Answers consists of 176 pages of 110 questions and answers, followed by a list of ten "Suggested Resources for Astronomy and Creation" and five "Internet Resources." There is also a glossary, scripture index, and subject index. The book is an "attempt to bring some balance to astronomy by presenting a Christian perspective" (13) and is "intended as a resource for the classroom and home." Although DeYoung is a Christian, his fundamentalist philosophical position does not represent the bulk of Christians of all denominations. DeYoung states, "Literal creation days and a young age for the universe are also promoted because I believe this view is true to Scripture and science." He also claims that "When the Bible touches on scientific subjects, it is entirely accurate" (17).

Science does not rely on authoritarian documents (especially not religious ones) or propose that any of its literature is "entirely accurate." So in what sense is his methodology true to science? As for his credentials, "Don DeYoung holds a PhD in physics from Iowa State University and a Master of Divinity from Grace Seminary" (176). How can a person obtain a PhD in physics (or any other field of science) from a prestigious secular university while relying on a faith that is fundamentally anti-scientific?

Although DeYoung obviously does not believe either in the evolution of the universe (other than entropy/degeneration) or of life on Earth, his book does not equate a belief in organic evolution with Satanic forces and a decline in moral values as so many other fundamentalists have claimed. My main purpose here is to evaluate the accuracy of the facts presented by DeYoung, not to criticize his outre explanations for the facts according to his interpretations of the Bible.

DeYoung states, "Footnotes have purposely been omitted. Instead, references in the back are included for documentation of ideas and for further study." Thus, even if footnotes had been used, they apparently would not have provided a way to verify the evidence for his claims—for example, "[S]ome experiments indicate that the universe may be young, on the order of 10,000 years old" (98). DeYoung does not cite these experiments, and the scientists I have contacted are unaware of any such scientific evidence. Moreover, he states "Evidence shows that, at some point in history, radioactive decay was temporarily accelerated" (p. 139). Again, DeYoung provides no evidence: "If atoms were 'reprogrammed' in this way . . . an appearance of age may have been built into the universe."

He also writes that "[T]he entire life of a star is an aging process: main sequence → red giant → white dwarf" (84). Since DeYoung believes that all stars were instantaneously created on the fourth day of creation, they are all actually the same age, and there was no "embryonic" stage of star formation from nebulae. He maintains this position despite the fact that stars in various phases of formation throughout our galaxy have been independently documented by innumerable astronomers.

In discussing the anthropic principle, DeYoung says it "is a powerful argument that the universe was *designed*" (136). He claims that if protons were just 0.2 percent more massive they would decay into neutrons and there would be no atomic elements as we know them. Apparently he does not realize that if the proton was more massive, the neutron would be as well! Protons and neutrons are composed of quarks, so the author is changing the mass of quarks and he can't vary the proton without doing the same to the neutron.

In answer to the question, "Did a comet kill the dinosaurs?" the author cites the iridium layer at the Cretaceous boundary. This element "accompanies volcanic activity. The material does not necessarily come from beyond the Earth" (51). In fact, volcanoes do not pump out iridium and it is too rare on Earth to have formed the iridium-rich layer found worldwide in rocks of that age. DeYoung writes that "[C]reationists suggest that most dinosaurs died out as a result of the great flood of Genesis 6–8. Dinosaur representatives that were protected on the ark probably faced severe climate changes in the centuries following the flood, just a few thousand years ago" (51). In fact, all of the scientific data to date point to the disappearance of the dinosaurs from the fossil record at about 65 million years ago.

In fairness, the bulk of this book raises many basic questions about astronomy (e.g., What are meteorites? What makes up our solar system?) and usually gives standard answers that should be of interest to the general public. However, there are numerous factual errors and misinformation in the book, only a few of which I mention here because of space limitations. Readers of DeYoung's book may be left with the feeling that the "glory of God" cannot be fully appreciated unless the study of the universe is understood in terms of Biblical miracles (122). But this book is about the oldest branch of science—astronomy. So why are miracles proposed as solutions to astronomical

William D. Stansfield is emeritus professor in the Biological Sciences Department of California Polytechnic State University, San Luis Obispo, CA 93407.

questions when natural explanations are the only ones that science can give? Mixing theology and science in this way is counterproductive to the public's understanding of science. Therefore, readers should not use this book as their only source of information about astronomy. As a former educator in a secular university with a continuing interest in helping improve the quality of science education, I certainly would not want it to be used as a resource for the classroom.

This review benefited greatly from a critique by John Mottman, PhD, Physics Department, California Polytechnic State University, San Luis Obispo.