Michael Shermer, Why Darwin Matters: The Case Against Intelligent Design (Times/Holt, New York, 2006), ii + 199pp., ISBN 0-8050-8121-6, \$22.00

Until he took a course in evolution as a graduate student in experimental psychology, Shermer was a creationist in that he believed that each separate species had been created as it is today and has remained and will remain unchanging in time. So was Darwin during his voyage on the *Beagle* and until his March 1837 meeting with John Gould about Gould's studies of Darwin's bird specimens, followed by Darwin's 1844 letter to Joseph Hooker all but acknowledging the mutability of species. For both Shermer and Darwin, "the theory of top-down intelligent design of all life by or through a supernatural power was replaced with the theory of bottom-up natural design through natural sources. . . . " (p. xxii)

"Darwin matters," writes Shermer, "not only because his theory changed the world and reconfigured our position in nature, but because he launched a new and profound understanding of biology and science that has served future generations." (p. xxii) But while Shermer maintains that evolution is a scientific theory to be accepted and not a religious tenet to be believed, he also maintains that accepting evolution as a scientific theory need not preclude belief in a religious tenet.

Shermer also writes that he eschewed the advice of Stephen Jay Gould and Richard Dawkins that evolution is not debatable and debated Kent Hovind at the University of California, Irvine. Publisher of *Skeptic* magazine, Shermer also describes his "six principles of skepticism" as part of his recollection of that debate, along with Intelligent Design's ten best arguments and the efforts of science to rebut them.

Shermer's experience from "debating" Hovind is that "the evolution-creation debate is really about . . . religion, not science (p. 88) and that science is not under debate; it is under attack." (p. 87) He considers creationism as an "exoheresy" (a word coined by Isaac Asimov), which can benefit science by forcing it to hone its arguments. But he also poses the question: "Will those who accept evolution let those who do not accept it to determine what science is?" (p. 88)

Shermer feels that science is under attack (rather than debate) from Intelligent Design creationists because they are asking school boards to force teachers to teach Intelligent Design creationism as science. "Creationists and their Intelligent Design brethren do not just want equal time, they want all the time they can get," he writes (p. 108). Citing ID law professor Phillip Johnson's *The Wedge of Truth*, Shermer sees ID as "a religious war against all of science," (p. 109) in which scientific "materialism" is attacked after "naturalism" is subdued. Except for Jonathan Wells, who is a "Moonie" charged to destroy Darwinism, the leaders of this "religious war" are all Christian, he notes. To "defend" science against those who would consider evolution to be a religious doctrine (and treat it as such), Shermer quotes his own definition: "Science is a set of methods designed to describe and interpret observed or inferred phenomena, past or present, aimed at building a testable body of knowledge open to rejection or confirmation." (p. 94)

After chronicling Darwin's evolution from being a "creationist," as described above, into an agnostic, because of the cruelty Darwin witnessed between species, Shermer considers three

possible relationships between science and religion: 1) a "Conflicting-Worlds Model," in which science and religion claim to have mutually exclusive explanations for everything, 2) a "Same-World Model," which holds that, while science and religion are two separate ways to understand the universe, they can work together to deepen our understanding of it, and 3) a "Separate-Worlds Model," in which "science has taken over the job of explaining the natural world," (p. 121) while religion "still serves a useful purpose as an institution for social cohesiveness and as a guide to finding personal meaning and spirituality." (p. 121)

Because the first two models require God to be able to explain natural phenomena and thereby subject God to the tests of science, Shermer rejects them. Although he identifies Pope John Paul II theologically in model #2, Shermer quotes one of his encyclicals in arguing for model #3 as "the only way science and religion can be reconciled, particularly in the context of the evolution-creation controversy." (p. 124) "God is beyond the dominion of science, and science is outside the realm of God." (p.125)

In his Epilogue Shermer pursues this point further, as further evidence that accepting evolution need not preclude belief in a religious tenet, by citing additional ways to find spirituality in the context of evolution:

If we define the spirit (or soul) as the pattern of information of which we are made -- our genes, our proteins, memories, and personalities – then spirituality is the quest to know the place of our essence within the deep time of evolution and the deep space of the cosmos. There are many ways to be spiritual, and science is one in its awe-inspiring account of who we are and where we scome from. (p. 157)

As we are pattern-seeking . . . primates, to most of us the pattern of life and the universe indicates design science has presented us with a viable alternative in which the design comes from below through the direction of built-in self-organizing principles of emergence and complexity. Perhaps this natural process, like the other natural forces which we are all comfortable accepting as non-threatening to religion, was God's way of crating life. Maybe God is the laws of nature -- or even nature itself -- but this is a theological supposition, not a scientific one. (p. 160)

Shermer also provides a "Coda," titled "Genesis Revisited" -- the story of creation according to modern science written in the style of Genesis. He also provides a Selected Bibliography which lists (separately) books and websites both supporting and refuting Intelligent Design.

- John L. Roeder