LITERATURE REVIEWS

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WHO ARE THE CREATIONISTS?

THE CREATIONISTS: THE EVOLUTION OF SCIENTIFIC CREATIONISM. R. L. Numbers. 1992. NY: Alfred A. Knopf. 458 p. Hardcover, $27.50.

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Today there exists much misunderstanding about the creation movement. Fortunately, Ronald L. Numbers has produced an extremely useful work which goes a long way toward dispelling many of the commonly accepted myths. One frustrating aspect of the book — which tends to be the norm in works on creationism — is that the author never formally defined such critical terms as creation, evolution, fundamentalism, and even science. A typical definition of a creationist has been given by Thomas Jukes (1991), who concludes that:

> *Creation science is based on dogma that creation took place about 10,000 years ago, that the book of Genesis supplies scientific description of what followed, including the Garden of Eden, ... existence of humans and dinosaurs, presence of dinosaurs on Noah's Ark, variability in the speed of light to account for the 10,000-year-old universe, and the denial that radioactive decay is at constant rate. Separate ancestry for humans and apes is, of course, essential to creationism.... Disbelievers in creationism 'must ultimately be consigned to the everlasting fire prepared for the devil and his angels.' ... This imprecation is a form of psychological terrorism that would be inflicted upon schoolchildren if creationists had their way.*

The trouble with this definition is that almost none of the creationists discussed by Numbers believe much or even most of it. As Numbers

states, "By the late nineteenth century even the most conservative Christian apologists readily conceded that the Bible allowed for an ancient earth and pre-Edenic life" (p x). Even Henry Rimmer, the "flamboyant evangelist" and most conservative forerunner of the modern creation movement, did not accept much of this definition. Rimmer, who occupied center stage of the most fundamentalist wing of the creationist platform between the two world wars, "squeezed millions of years into the presumed gap in the Genesis narrative and drained the deluge story of all but local significance" (p x). When the Creation Research Society (CRS) was formed, it was difficult to locate even creation scientists who accepted the young-earth/young-universe position, a point which Numbers emphasizes at length.

Numbers shows that many of the naturalists in the late 1800s were creationists in the broad sense in that they accepted God as the creator and also accepted some evolutionary change as do nearly all creationists involved in science today. He also concludes that most scientists, even evolutionists who did not fall into the creation camp, "remained skeptical about the primacy of natural selection in the evolutionary process" (p 5). They instead emphasized such factors as "the inheritance of environmentally induced characteristics" (p 5).

Numbers also briefly documents the conversion of many eminent American scientists to some form of theistic evolution, noting that stalwarts such as James Dana, the country's best-known geologist, experienced only a "lukewarm conversion to evolution" while still clinging "to the conviction that a special creative act had introduced the first humans" (p 7). Numbers also shows that, in contrast to today, many of the early American scientists — such as botanists Asa Gray and Louis Agassiz — were religiously orthodox. Numbers admits that "one of Darwin's principal goals was 'to overthrow the dogma of separate creations'" and adds that Darwin also admitted, "'however much we may wish it, we can hardly follow Professor Asa Gray in his beliefs' in divinely guided evolution" (p 4). Frederick Wright of Oberlin College is probably the best example of many (and one of the most extensively discussed) who belied the common assertion that creationists are rigid, true believers, fenced in by a straitjacket of biblical literalism with fundamentalist blinders. Indeed, many scientists then struggled with faith-and-science issues throughout their lives, and their positions were not always crystallized. Sometimes, as in the case of

Wright, their beliefs apparently underwent radical change and were partly contradictory.

It is also often assumed that the primary objections to evolution were biblical. As Numbers clearly documents, many of the objections were far more than this.

> *[The] most famous creationist of all, Agassiz, simply ignored the biblical record. Guyot, Dawson, Burr, Armstrong, and Hodge as well as Dana before his conversion cherished the Bible as God's inspired word but were willing nevertheless ... to adopt a figurative reading of the first chapter of Genesis* (p 17).

Summing up the late 1800s, Numbers' conclusion agrees very much with my own, namely, that "the intellectual differences between creationists and evolutionists were not always as great as one might assume" (p 11). Indeed, it is exceedingly difficult to classify scientists who lived in this and later periods in a creation-evolution dichotomy, and about the only meaningful division is between the outspoken atheist agnostic category and everyone else. According to one study quoted by Numbers, a "sizable minority" of the Protestant contributors to religious quarterlies rejected the theory of organic evolution, showing that it was by no means a concern only of fundamentalists, as is often assumed (p 13).

According to Numbers, another reason why so many of a religious persuasion — including religious scientists as well as the clergy — were critical of evolution was because of the "turn-of-the-century debates within the scientific community over the validity of Darwinism"; that "by the late nineteenth century many were expressing skepticism about the ability of Darwin's theory of natural selection to account for the origin of species" (p 37-38), a debate not unlike those still in progress today. Numbers documents primarily the rise of a revised creationism in the late 1880s and again in the 1960s which were fueled in part by "the aggressive declarations" of "biologists, who announced their determination to drive the last vestiges of supernaturalism from science," a campaign which "aroused fear and anger among the orthodox" (p 37).

The book is full of historical insights which connect a number of prominent Christians with the creation movement — the apologist C.S. Lewis found the "arguments against evolution increasingly

compelling — and the pretensions of many biologists repellent," and he even wrote that evolution may be "*the* central and radical lie in the whole web of falsehood that now governs our lives" (p 153). Numbers debunks the often-cited belief that members of the larger scientific community scrupulously "'ferret out deception' and punish offenders," whereas creation scientists are "'unwilling to punish systematic deception in their very midst.'" According to Numbers, the above comment is inaccurate because the abuses by creationists are "less prevalent" than this conclusion implies, and "some of the most telling criticisms of creation science have come from creationists themselves and have appeared in their own journals" (p 258).

This reviewer's major concern is where Numbers discusses the area closest to my research, i.e., discrimination against those who are, for whatever reason, labeled creationists. Admittedly, some of the cases that I reviewed were difficult to document, but many had overwhelming documentation of discrimination (Bergman 1984). Although he questions the extent of my conclusion, Numbers eloquently supports my thesis, even acknowledging that his colleagues believe that a creationism worldview is "pathological" (p 342) and that, although some scientists dislike the idea of suppressing dissent, others have "jokingly dismissed creationists as a bunch of pseudoscientists who got 'their doctorates in a box of Cracker Jacks,'" while many scientists regard the creation worldview as "'nonsense' on a par with the concerns of the flat-earth society" (p 319-320).

A major handicap of Numbers' work is that he was not a part of the creation movement's inner circle, and consequently had to rely upon the kindness and honesty of creationists in providing letters, interviews and documentation in order to tell his story. Much of their in-fighting and examples of lapses in professionalism did not make it into his work, either because he felt it to be redundant or, most likely, he did not interview creationists who had this information, or those whom he interviewed believed it to be inappropriate to reveal this history to him. Conversely, much of the positive was also not recounted (for an excellent balance to Numbers, see McIver 1989).

The work also contains a well-written, fairly accurate summary of the history of the American Scientific Affiliation (ASA), which minimized its internal conflicts while maximizing its conflicts with other groups. Numbers even covers the ASA's attempts to enter the

foray with their booklet *Teaching Science in a Climate of Controversy*, which only

> *... outraged many evolutionists, who denounced the ASA for promoting creationism in disguise. A cluster of big-name critics writing for The Science Teacher accused the ASA scientists of hiding their intentions under 'the veneer of sweet reasonableness,' of 'telling lies to naïve and trusting young persons,' and of obfuscating, distorting, and waffling 'to the point of pure nonsense'* (p. 321-322).

One noted science writer dismissed the ASA's efforts as nothing but "an ordinary exercise in pseudoscience" which is more dangerous than the CRS brand because it presented "'that pseudoscience in a package so slick that it can seem respectable to people who would dismiss an I.C.R. [Institute for Creation Research] tract as ridiculous'" (p 322).

Numbers effectively refutes many of the critics of creationism by examining their claims such as "creationists are not scientists" because they have abandoned the scientific attitude. He includes such gems as noting the inconsistency of prominent critics of creationism who first asserted that

> *...'the hypothesis of special creation has, over nearly two centuries, been repeatedly and sympathetically considered and rejected on evidential grounds by qualified observers and experimentalists.' But just four pages later the same writers claimed that special creation was not 'a testable hypothesis for the origin of the universe, the earth, or of life thereon'* (p. 248).

To describe creationism both as having been tested by science, and then being untestable, is not uncommon.

In short, this work is a commendable, basically fair presentation which is only part of the story and requires at least a reading of the prolific works of Henry Morris and Tom McIver's summary of many of the same events in order to obtain a balanced view of the creationists' history. As Numbers himself admits, a number of his reviewers "disagreed vehemently with my interpretation and even some of my 'facts'" (p 348).

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