Once More Into the Fray: Creation Science Seeks Respectability

The Beginnings of Modern Creationism

Henry M. Morris. A History of Modern Creationism. (San Diego, CA: Master Book Publishers, 1984). 382 pages. \$12.95 (\$9.95 paper).

Reviewed by Ronald L. Carter

The History of Modern Creationism, written by Henry M. Morris, the founder and director of the Institute for Creation Research, is not a book describing modern creation theory, but instead is a history of organizations and people within the modern creationists movement. The author's goal is to trace the development of creationism from Francis Bacon and Isaac Newton, the "Great Creationists," to the present-day modern creationists. However, the account reads more like a Who's Who of modern creationism than a book on the history of ideas.

This book appealed to my religio-cultural curiosity by frequently referring to Seventh-day Adventists. Morris calls the self-taught Adventist geologist George McCready Price "One of the most important creationist writers of the first half of the 20th century" (p. 60), but he believes that the reason many have questioned Price's importance is due in part to the fact that Price belonged to a religion regarded by many as an eccentric cult. Morris cites and annotates numerous other Adventists who actively contributed to various creationist organizations.

One of the most striking features of this book is

its strong autobiographical style and content. The reader acquires an unambiguous understanding of Morris's views regarding such things as the age of the earth, and his attitude toward Christians who, in his view, compromise biblical literalism. Morris is motivated by a strident belief that the fundamentalist view of biblical inerrancy is the only true basis for creationism. Adopting a type of "dominoes" fatalism, he asserts that theistic evolution is the natural next step to the compromising "gap" and "progressive creation" theories that are widely accepted by Christian churches. For Morris, trying to combine evolution and creation is like "trying to equate God and Satan." Morris's career has been further motivated by his dream to start a liberal-arts college that is truly based on "the biblical concept" of creation, a goal he accomplished with the establishment of Christian Heritage College near San Diego, California.

Among the events central to the development of creationism, according to Morris, are the 1925 Scope's trial (with its ensuing embarrassment to fundamentalists); the 1959 centennial celebration of the publication of Charles Darwin's On the Origin of Species (which rallied creationists to new heights of commitment); and the \$17 million Biological Sciences Curriculum Study established in 1959 to provide an increased appreciation for evolution theory throughout the American public school system. The publication of Henry Morris and John C. Whitcomb's The Genesis Flood not only changed his life by making him internationally known and extremely busy, but also changed the course of creationism as "the Lord used his book." Furthermore, Morris tells the reader that, in the 1970s, the Institute for Creation Research caused the evolutionists to

take notice when "creationism finally penetrated the consciousness and aroused public concerns."

Throughout this 10-chapter book, Morris dispenses criticism, in nearly equal quantities, to both evolutionists and "liberal" Christians. He believes that evolution was first promoted by pagan priests, witch doctors, and pantheistic philosophers. In his view, evolution is merely a revival of "ancient paganism" and a theory that "appealed to the innate desire of man to escape from his responsibility to God, and it did so by persuading him that his escape was supported by science" (p. 33). "The fact is," he continues, "that the waves of imperialism, revolutionism, and racism which took such deadly toll in the wake of Darwin can be traced directly to the spread of evolutionary philosophy in society" (p. 45).

With regard to liberal Christians, Morris says:

To me, however, the saddest aspect of this whole dismal history is not the fact that scientists and sociologists so quickly capitulated to evolution. The worst feature is the inexcusable behavior of the theologians (p. 37).

Morris laments the fact that mainline churches, led by liberal theologians, retreated quickly to the gap theory. Morris sees "pious apathy" giving rise to the problem of Christian compromise and believes that liberalism and its "higher criticism" derive from strained exegesis that seeks to accommodate evolution. Furthermore, according to Morris, modern scientific creation scientists have made it abundantly clear that the real facts support a literal biblical view of Creation. Morris is convinced that the first step to destroying creationism within the churches is the acceptance of long ages for earth history.

Morris devotes most of this book to a discussion of the origin and evolution of organized creation societies. He describes more than a dozen organizations, giving information about when, where, and how these groups were born. Frequently Morris makes personal comments about how he was involved in these societies or how he personally knew these leaders. Often, more detail is given about the numbers of people attending a meeting, where an organization meeting was held, or what Morris thought of an individual, than is given concerning modern creationism's ideas and its struggles. At first reading, I was put off by Morris' frequent "I" statements, which seemed self-serving. On re-reading, however, and especially as I began to recognize more fully the central nature of Morris' involvement in the development of the modern creationist movement, I became more accepting of the first-person references.

Morris credits both Price and Harold Clark, an Adventist science teacher from Pacific Union College, with having had a significant influence on the development of his own creationist views. Morris also discusses the Adventist-dominated Creation-Deluge Society, its metamorphosis into the "Forum" under the leadership of Molleurus Couperus, and the Ernest Booth-inspired Society for the Study of Natural Science, which Morris says provided a conservative response to growing liberalism in the Adventist church.

But Morris is also diplomatic in his chastisement of both fundamentalists and Adventists. He describes Adventists as dominating early Creation groups and then cautiously implies that they limited their influence by being too cliquish and self-interested, and by building their theories on Ellen White's writings. However, he assures Adventists that he is not rebuking *them*, but conservatives and fundamentalists of other denominations who have failed to participate more with Adventists.

Morris sadly notes that within southern California a "restive" group of Adventist liberals has emerged and, today, widespread liberalism is to be found in the Adventist church.

In his view, the Geoscience Research Institute, whose members, since its establishment in the late 1950s, conduct research, teach, and write full time, does not qualify as the first *creationist* institute because its stance on the age of the earth is too liberal for it to be considered a true Creation research institute. The first *creationist* institution is his own Institute for Creation Research.

Morris concludes his book by commenting on the future. He predicts that the Christian privateschool movement will continue to grow and that many humanist organizations will arise in response to the new and great public awareness that modern creationism has produced. He calls upon Christians to look at the evidence scientific creationism has produced (not presented in this book) and to resist the spirit of compromise that, if not stopped, will destroy the church.

I had hoped that this book would detail the history of ideas, issues, and data that have transformed theories and have produced "Modern Creationism." I found, instead, that Ronald L. Numbers' article in *Science* (Vol. 218, November 5, 1982) provides more succinct details and insights into the people and organizations of modern creationism than does Morris's book. Nevertheless, this book makes it very clear that Henry M. Morris played a fundamental role in shaping the very nature of modern creationism.

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Adventist Scientists & Robert Gentry's Pleochroic Halos

Robert V. Gentry, *Creation's Tiny Mystery*, 2nd ed. (Knoxville, TN: Earth Science Associates, 1988). 348 pages. \$10.75 (paper).

Reviewed by S. C. Rowland, R. E. Kingman, and M. V. Anderson

R obert V. Gentry presents in his book, *Creation's Tiny Mystery*, what he considers to be evidence to support his own Creation model (chapters 1-4), which he believes falsifies the standard evolutionary paradigm. He also recites his polemical disputes with the scientific community (chapters 5-15); and provides the original documents of these disputes (extensive appendices). This review will deal primarily with the physical basis for Gentry's arguments as outlined in chapters 1-4.

One cannot help but be inspired by Gentry's commitment to and passion for his research on the pleochroic halos. Unfortunately, his logic is seri-

ously flawed; several of the assumptions which are crucial to his conclusions are, in our opinion, unfounded. Furthermore, one of his major conclusions, the dating of the Creation event to about 10,000 years ago is a *non sequitur*; and finally, he fails to deal consistently with all the data.

Pleochroic Halos

◄ entry's research over the past **J** quarter century has centered on tiny discolored spherical shells a few tens of microns in diameter found in micas and coalified wood. These are associated with radiation damage in the material resulting from alpha particles (helium nuclei) emitted by a variety of heavy nuclei that result from the radioactive decay of ²³⁸U. The patterns of concentric colored spheres are a signature of the nuclear species present because each emits alpha particles of characteristic energy. The distance an alpha particle will travel in a material is determined by its energy. The rate of production of damage sites giving rise to a halo is directly proportional to the amount of alpha-emitting material present, and is inversely proportional to the half-life of the emitter. The halos that result from the Polonium isotopes 218, 214, and 210 are of special interest to Gentry because of their short half-lives of 3 minutes, 164 microseconds, and 138 days. In contrast, the halflife of the progenitor of the decay chain, ²³⁸U, is 4.5 billion years. Because electrons deposit much less energy in the material, electron emission does not produce observable halos.

The Mica Polonium Halos

G entry argues that finding polonium halos without evidence of the precursor nuclei disproves the standard account of evolutionary geology. This argument depends on his inferred absence of mechanisms to implant polonium inclusions in time scales less than those of the three-minute half-life of ²¹⁸Po. It is easy to suggest mechanisms that at least partially meet this requirement. Such a mechanism was described by Rowland at the 1986 Quadrennial Conference on Higher Education when Gentry was present. One nucleus in the series of reactions stemming from the ²³⁸U decay is ²²⁶Ra, which decays to ²²²Rn, which exists in gaseous form. In an aquifer covered by an impermeable dome, radon gas would be expected to collect. The decay of the radon to ²¹⁸Po could produce polonium which, in an aqueous solution, readily precipitates. If these precipitates find their way into the mica before they decay (in a time span of a few minutes), this would produce Gentry's halos. Several mechanisms have been suggested to account for the intrusion of the polonium into the mica.

It should be observed that if, for the sake of argument, one grants that the halos could not have been produced by such mechanisms, the halo phenomena make no statement about the amount of time that has elapsed since their formation.

Coalified Wood Halos

P olonium and uranium halos are found in coalified wood, but the polonium halos that are found are those from the ²¹⁰Po isotope. This is as expected because of the shortness of the half-lives of the other polonium nuclei. The ²¹⁴Po alpha decays to form ²¹⁰Pb, which emits electrons to form the halo producing ²¹⁰Po. The 22-year half-life of the lead gives ample time for its intrusion into the wood prior to its coalification. Gentry reports finding such samples in regions spanning much of the past 200 million years of geologic age. His argument for the uniqueness of events that lead to the halo formation as an indication of their resulting from a single catastrophic event, the Flood, is not necessary or convincing.

Reflections

G entry does not discuss the length of time required to form a uranium halo in either mica or wood. If, because of theological reasons, he claims that at the Creation, the Fall, and the Flood, the decay rate for uranium changed, shortening the time required to form uranium halos, then he has left the domain of science. Postulating increased decay rates for uranium while leaving the decay rates for polonium unchanged is scientifically an inconsistent treatment of the data and theologically capricious.

If reasonable mechanisms exist for these polonium halos to have been derived from daughter products of ²³⁸U, Gentry's arguments have absolutely no scientific basis. Since halos of only three of the known 26 isotopes of polonium are found, and these are all daughter products of ²³⁸U, his case for these halos being "an indelible record of creation" is weak. Why should the Creator have chosen to use only those isotopes of polonium that occur as daughter products of ²³⁸U when he had so many others he could have used?

Motivated by his theological perspective, Gentry has offered a hypothesis for the origin of the polonium halos that is not inconsistent with the occurrence of the polonium halos. But, when he fails to deal consistently with the uranium halo data, he has ceased to do science and has certainly not proved Creation.

The book helps its readers understand the motivation of one who has felt compelled to challenge a standard scientific model and now feels under attack. Unfortunately, the scientific basis for Gentry's challenge appears tenuous at best.

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