Shifting Views of the Past:

Adventists and the Historical Sciences

By James L. Hayward

Traditional ideas are never static. . . . They are transformed by the urge of critical reason, by the vivid evidence of emotional experience, and by the cold certainties of scientific perception. One fact is certain, you cannot keep them still. No generation can merely reproduce its ancestors.1

dventist scientists are shifting away from traditional views on the topic of origins. This shift was presaged during the 1940s and 1950s by general acceptance of significant aspects of (1) Darwinian evolution, (2) the geological column, and (3) radiometric dating. All had been targets of George McCready Price's vitriolic pen during the first half of the twentieth century. Surprisingly, acceptance occurred, not because of agitation by the Church's liberals, but largely as a consequence of the efforts of several of its more conservative science educators.²

Darwinian Evolution

Toward the end of the twentieth century, Adventist biologists were embarrassed by aspects of their fundamentalist heritage and looked for ways to build bridges with their profession. Creationists, said Loma Linda's Leonard Brand, "perhaps beginning with George McCready Price," had "developed some bad habits when speaking on the subject of evolution." Although a conservative creationist himself, Brand could agree with other scientists "on microevolution, speciation, and some macroevolution." As he saw it, the "limits of evolutionary change are not easy to define."3

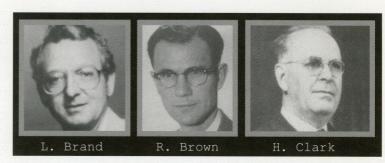
The shift away from Price's anti-Darwinian views actually began as early as 1940. In that year, Harold W. Clark's Genes and Genesis appeared. According to Clark,

> The fixed, definitely bounded categories into which all individuals can be grouped exist only in the imagination of those individuals who still fondly believe such a convenient system possible. The fact is that there exists every conceivable gradation between the different groups of organisms. . . . A considerable amount of change from the original condition of the earth must be conceded in order to explain these findings in nature. . . . The survival of the fittest is a real phenomenon every field naturalist must reckon with. . . . A thoughtful consideration of the problems of distribution of plants and animals emphasizes the reality of the struggle for existence, the survival of the fittest, and natural selection.

Clark, a professor of biology at Pacific Union College, disavowed philosophical evolutionism and hoped his views would "clear the way for a fuller and deeper appreciation of the perfect harmony between the book of Revelation and the book of nature." But his sentiments represented anything but traditional Adventist fare.4

Other Adventists began to assume Clark's more progressive stance. In 1947, Emmanuel Missionary College's Frank Lewis Marsh noted that "Many species (modern) are being built up and have been built right under our eyes today. . . . If there ever was a group of scientists sold on the idea of descent with change (within limits) it is special creationists." In 1969, Harold G. Coffin, of the Geoscience Research Institute, opened the door to even higher levels of evolution, suggesting that change "may have been on the order level with some insects; and it may have been on the phylum level with the Acanthocephala, which are entirely parasitic."5

By the 1990s, Adventist biologists were discussing the evolution of human biology and behavior. At Walla Walla College, a course in sociobiology was taught that focused on the evolution of both animal and human behavior. Biologists at Loma Linda University argued that although man "has a measure of free will," his "character reflects generations of natural selection." At Harvard University, an Adventist physician expressed sadness over his new-found conviction "that humans



and chimps share a common ancestor."6

Some, like Brand, continued to defend Price's geological notions of a young earth and a worldwide flood. But in the area of their primary expertise, Adventist biologists held views only vaguely reminiscent of Price's anti-Darwinian apologies.7

The Geological Column

During the 1990s, visitors to the interpretive center at Fossil Butte National Monument, Wyoming, could view a short video on the geological history of the region. The video featured work by two researchers, Chicago Field Museum's Lance Grande and Loma Linda University's Paul Buchheim. While they expressed some differences of opinion, both geologists agreed that the Fossil Butte strata had been deposited over significant periods in a large lake during the Eocene Epoch. There was no hint of Price's Flood geology in the Adventist's comments.8

Buchheim represented a new generation of geologists and paleontologists within the Church—university trained, erudite, published in the finest journals. Most were happy to examine narrowly defined topics like the Fossil Butte strata. The grand theorizing, or "flood modeling," that typified Adventist apologists during the first 75 years of the twentieth century remained popular among only a small cadre of individuals, commonly biologists by training. Significantly, all Adventist geologists accepted the reality of the geological column—with its sequence of fossilized life forms—which, according to Price, represented a fallacious theory "of Satanic origin."9

The shift from Price's geological views has been well documented and will not be detailed here. Suffice it to say that, once again, it was Price's former student and erstwhile friend, Clark, who was responsible for catalyzing the shift. Clark became a believer in the reality of the geological column during an extended visit to the oil fields of Oklahoma and Texas in 1938. Additional



study convinced him of two other cornerstones of historical geology: overthrusts and the Ice Age. His revisionary ideas were self-published in The New Diluvialism, a volume that earned him Price's harshest condemnation.10

Clark continued to believe that the Genesis Flood played a large role in the stratification of the earth, but his acceptance of the geological column was revolutionary. Fellow Adventist science educators were convinced by his logic, and his views soon came to represent the new orthodoxy.11

Radiometric Dating

In a 1999 Spectrum article, Richard J. Bottomley, an Adventist geophysicist from Alberta, showed how "basically simple" it is "to get a rock to tell you how old it is." After reviewing the principles of radiometric dating and potential problems with this methodology, he concluded confidently "that the ages we get from rocks are reliable, and, as you already know, many of them are extremely ancient."12

Bottomley's conclusion was at odds with Price's views, specifically, and with traditional Adventist views, generally. As far as Price was concerned, "this radioactive method is full of fallacies, of slipshod methods, and of sheer charlatanry. And no one who has any regard for solid, scientifically proved results, will ever lose any sleep because of the announced results thus obtained." Price dismissed the entire notion of dating rocks as unworthy of discussion.13

The shift in Adventist views on the topic of radiometric dating began during the 1940s, influenced by members of the Deluge Geology Society, a predominantly Adventist creationist organization in southern California. More extensive discussion of radiometric dating and its implications continued into the 1950s, primarily through the influence of Walla Walla College physicist Robert H. Brown. Based on his confidence in the principles of nuclear physics, Brown believed that

the inorganic material of the universe had been created billions of years ago; but based on his reading of Scripture, he held firmly to the position that life had been around for only about six thousand years.14

Brown's views did not remain unopposed. Marsh and others feared that if fossils were found together with old rocks, the fossils would be considered as old as the rocks. After citing several examples from the literature of this type of pairing, Marsh saw there would need to be a "parting of the ways between belief in an inspired Bible literally read and in the accuracy of the [radiometric] timeclocks." According to Marsh,

Adventists are peculiarly fortunate in having the Spirit of Prophecy to make clear to them that the dates figured out by James Ussher could not be many hundreds of years amiss from the actual dates. . . . [This is] accurate enough knowledge to enable us to judge deductively the reliability of the radioactive time clock datings.

His confidence in the scientific accuracy of Ellen G. White's writings and his belief "that the Bible means literally just what it literally says" prohibited Marsh from entertaining any evidence that "the raw materials of our earth are an hour older than the first day of Creation Week."15

Brand, although suspicious of the assumptions of radiometric dating, took a somewhat different tack from Marsh and admitted that this technique posed a significant problem for young-earth creationists. Rather than closing the door to the scientific evidence, Brand proposed instead "that some new fundamental scientific principles are yet to be discovered that will explain these data."16

Despite some reservations, Brown's confidence in the legitimacy of radiometric dating-at least as applied to inorganic materials—came to be shared by many Adventist scientists over the years, especially physicists.

Facing the New Millennium

By 1999, significant numbers of Adventist scientists accepted (1) the possibility of rather large-scale evolutionary change among organisms; (2) the reality of the sequence of fossils in the geological column; and/or (3) the implication from radiometric dating that the earth, and possibly life, is billions of years old. Joint acceptance of all three of these propositions would mean a significant paradigm shift in Adventist perspectives about the past.

It would be a mistake to assume that the shifts in thinking highlighted here have been universal—a number of Adventist scientists continue to hold very traditional views regarding the past. Likewise, avant garde thinking in one area in no way guarantees progressiveness in other areas. Not uncommonly, Adventist academicians hold more liberal views in areas of their own specialty. Brand's recent book, Faith, Reason, and Earth History, provides a fascinating example of this. But it is clear that many Adventist scientists now express more interest in the views of people like John Polkinghorne, the Anglican physicist, than in those of Henry Morris, the Baptist Flood geologist.¹⁷

If anything conclusive can be said about the progression of Adventist views on earth history, it is that pluralism has characterized and continues to characterize the process. An instructive example of this pluralism is provided by the wide range of opinion among Adventists on the origin and nature of dinosaurs. 18 Diversity of opinion should not be surprising, given the high value that Seventh-day Adventists have traditionally placed on scholarship and advanced education.

Charles Darwin's theory of evolution by natural selection, the winnowing of variants by environmental contingencies, purports to explain how populations of organisms undergo adaptive shifts. With some irony perhaps, Darwin's theory may also explain how variant Adventist views on earth history have experienced, and, in the new millennium, will continue to experience adaptive shifts in response to the growth of knowledge.

Notes and References

1. Alfred North Whitehead, Science and the Modern World (New York: Macmillan, 1925), 269.

2. For more detailed histories of these changes within Adventism, see Molleurus Couperus, "Tensions Between Religion and Science," Spectrum 10 (Mar. 1980): 74-88; Richard Hammill, "Fifty Years of Adventist Creationism: The Story of an Insider," Spectrum 15 (Aug. 1984): 32-45; James L. Hayward, "The Many Faces of Adventist Creationism: '80-'95," Spectrum 25 (Mar. 1996): 16-34; W. W. Hughes, "Shifts in Adventist Creationism," Spectrum 16 (June 1985): 47-51; Edward Lugenbeal, "The Conservative Restoration at Geoscience," Spectrum 15 (Aug. 1984): 23-31; Ronald L. Numbers, "Sciences of Satanic Origin': Adventist Attitudes Toward Evolutionary Biology and Geology," *Spectrum* 9 (Jan. 1979): 17-30; Numbers, *The Creationists* (New York: Knopf, 1992).

3. Brand, Faith, Reason, and Earth History: A Paradigm of Earth and Biological Origins by Intelligent Design (Berrien Springs, Mich.: Andrews University Press, 1997), 125, 149.

4. Clark, Genes and Genesis (Mountain View, Calif.: Pacific

Press, 1940), 38, 42, 50, 58.

5. Marsh, Evolution, Creation, and Science (Washington, D.C.: Review and Herald, 1947), 334, 345; Coffin, Creation--Accident or Design? (Washington, D.C.: Review and Herald, 1969), 336, 337.

6. Walla Walla College Undergraduate Bulletin, 1999-2000 (College Place, Wash.: Walla Walla College, 1999); the course description does not mention humans specifically. Leonard R. Brand and Ronald L. Carter, "Sociobiology: The Evolution Theory's Answer to Altruistic Behavior," *Origins* 19, no. 2 (1992): 54-71; Gary Gilbert, "In Search of Genesis and the Pseudogene," Spectrum 22 (Oct. 1992): 10-21.

7. Brand, Faith, Reason, and Earth History, 245-313.

8. See also Buchheim, "Paleoenvironments, Lithofacies and Varves of the Fossil Butte Member of the Eocene Green River Formation, Southwestern Wyoming," Contributions to Geology, University of Wyoming 30, no. 1 (1994), 3-14; Lance Grande and Buchheim, "Paleontological and Sedimentological Variation in Early Eocene Fossil Lake," Contributions to Geology, University of Wyoming 30, no. 1 (1994): 33-56.

9. Price, Theories of Satanic Origin (Loma Linda, Calif.:

by the author, n.d.).

10. Numbers, Creationists, 123-29; Hughes, "Shifts in Adventist Creationism."

11. Hughes, "Shifts in Adventist Creationism."

12. Bottomley, "Age Dating of Rocks," Spectrum 27 (fall

13. Price, Genesis Vindicated (Washington, D.C.: Review and Herald, 1941), 312.

14. Numbers, Creationists, 133-37; R. H. Brown, "R. H. Brown Comments on Radioactive Age Panel," Report of the Fifth Quadrennial Session of the Applied Arts and Sciences, Lincoln, Nebraska, August 22-28, 1956 (n.p. Board of Higher Education, General Conference of Seventh-day Adventists, 1956), 22-24; Brown, "Radioactive Time Clocks," in Coffin, Creation--Accident or Design? 273-98; Brown, "Geo and Cosmic Chronology," Origins 8, no. 1 (1981): 20-45.

15. Marsh, "The Conflict Between Uranium and Thorium Datings and Bible Chronology," Report of the Fifth Quadrennial Session of the Applied Arts and Sciences, Lincoln, Nebraska, August 22-28, 1956 (n.p. Board of Higher Education, General Conference of Seventh-day Adventists, 1956), 14-22.

16. Brand, Faith, Reason, and Earth History, 95.

17. For an interesting example of a very conservative creationist organization within the Church, visit the website of Southwestern Adventist University's Earth History Research Center http://origins.swau.edu; a listing of the center's personnel and their credentials is provided.

18. James L. Hayward, "Dinosaurs," Adventist Review, Aug. 12, 1993, 12-14; Hayward, "Noah's Ark or Jarassic Park?" Spectrum 23 (Aug. 1993): 6-14.

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