



The Many Faces Of Adventist Creationism: '80-'95

As the millennium nears, Adventist views get more diverse.

by James L. Hayward

AS ADVENTISTS APPROACH THE 21ST CENTURY, some continue to hold to a literal six-day Creation, though they question the universality of the Flood. Others remain committed to the notion of a universal flood, but believe that life is considerably older than 6,000 years. Still others argue for an extensive and complicated history of life on earth involving considerable change. Adventist creationism wears more faces now than ever before.¹

Adventists have never enjoyed universal agreement on earth history. But by 1980, rumblings from Adventists impressed with evidence for long ages, fossil progression, and biological evolution became even more audible. Church leaders, still reeling from Ford, Davenport, and Rey, responded by installing one of their most effective apologists, Ariel Roth, as director of the Geoscience Research Institute, and another,

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Gerhard Hasel, as dean of the SDA Theological Seminary. Roth and Hasel would shape the conversations of church scientists and theologians on this issue for the next 15 years.

During the second half of 1994, two events upset the uneasy equilibrium that had been established. The first was the death of Gerhard Hasel. Hasel had flown to Ogden, Utah, to present a paper on the days of Creation to the annual Biblical Research Institute Science Council (BRISCO) meetings to be held there. On the afternoon of August 11, the day before the first session, he was killed when his rental car was struck by another vehicle as he attempted to make a left-hand turn. The next day his paper was read to a somber group of creationist scientists and theologians by John Baldwin, but his loss was keenly felt by both friend and foe.²

The other event was Ariel Roth's October 1 retirement as the third director of the Geoscience Research Institute (GRI). The 67-year-old apologist had led GRI almost as long as his two predecessors put together, and had previously served on both their staffs. During his

tenure as director, Roth continued to edit *Origins*, the flagship creationist journal, and he had supervised a complete transformation of GRI's scientific staff. Following retirement, he stayed on to participate in institute activities and to complete a long-awaited book on science and faith. Staff scientist L. James Gibson was appointed as the new director.³

The Roth-Hasel era was an important, contentious, and until now unchronicled period during which official attempts to contain pluralism on the issue of earth history were met with a profusion of Seventh-day Adventist views on the topic. While some church members find the growing diversity of opinion during this era distressing, others see it as compelling evidence that Adventists continue to take the Christian doctrine of Creation seriously.⁴

Ariel Roth and the Geoscience Research Institute

In 1980, Ariel A. Roth became the third director of the church's apologetic think tank for issues related to earth history. Trained as a parasitologist with a Ph.D. from the University of Michigan, Roth had chaired the biology departments at both Andrews University and Loma Linda University.

A cautious and intelligent man, Roth had been exposed by Richard Ritland, the first director of GRI, to the problems of earth history and biblical interpretation, but unlike Ritland had remained loyal to Flood geology and a literalist interpretation of Scripture.⁵

From nearly the time of its inception in 1958, the GRI staff had been divided over the issue of how to interpret the past. Frank L. Marsh, Harold G. Coffin, Robert H. Brown, and Roth were biblical literalists who also took the writings of Ellen G. White as authoritative sources on earth history. By contrast, P. Edgar Hare, Harold E. James, Jr., Edward N. Lugen-

beal, and Ritland believed that the earth and life were very old and searched for ways to interpret Scripture in light of this view. Under pressure from church administrators, Hare had resigned in 1964, while Ritland remained until 1971. When physicist Robert H. Brown took over directorship in 1971, the days for progressive thinking at GRI were clearly numbered. Indeed, before passing the cloak to Roth in 1980, Brown had collected resignations from the two remaining staff liberals, James and Lugenbeal. In 1980, for the first time since its formation, the GRI staff was solidly conservative.⁶

Soon after assuming directorship, Roth moved the institute to Loma Linda University, where it could collaborate with the newly created geology program at La Sierra College, a few miles to the southwest. Also, over the next 10 years, he created an entirely new staff. While some diversity of personality and opinion characterized the new GRI, staff members were not as split over fundamental approaches to earth history as they had been during the institute's first two decades.

When Roth assumed GRI directorship in 1980, attempts by creationists to bring their views into the public schools through court action had gained momentum. Indeed, during the 1970s, hardly an issue of *Origins*, the journal published by GRI, had failed to carry a sympathetic news update on this movement. GRI found itself in an awkward position over this issue, given the church's strong historic stand on the strict separation of church and state. Ultimately, however, Adventist antipathy toward evolution and the threat it seemed to pose for the integrity of creation week and the Sabbath drew GRI into the fray.⁷

In March 1981, Roth provided the keynote address to a televised hearing of the Oregon House Education Committee. It was considering a bill to force Oregon's public school teachers to introduce students to the notion of special creation as an alternative to evolution.

In his address, Roth suggested that “science should allow the free examination of all the issues, and that to limit alternatives is to limit truth.”⁸

Later that year, in December 1981, GRI plunged into the now famous Arkansas “Scopes II” trial. Earlier in 1981, Frank White, the governor of Arkansas, signed into law legislation designed to provide public school students with the scientific evidence favoring both Creation and evolution. Predictably, the American Civil Liberties Union challenged the law. It argued that teaching creation science violates the First Amendment of the U.S. Constitution, which requires separation of church and state. The ACLU’s list of witnesses read like a Who’s Who roster—Yale biophysicist Harold J. Morowitz, University of California geneticist Francisco J. Ayala, geologist F. Brent Dalrymple, Harvard paleontologist Stephen Jay Gould, and University of Chicago theologian Langdon B. Gilkey, among others.⁹

Of the 11 witnesses called to testify, three were Seventh-day Adventists: Ariel Roth and Harold Coffin, both of GRI, and maverick physicist Robert V. Gentry, who had taught at Columbia Union College. Roth’s testimony focused on evidence for rapid growth in coral reefs and gaps in the fossil record. Coffin discussed the uniqueness of life, the sudden appearance of complex life forms in the Cambrian rocks, the presumed paucity of evidence for transitional life forms in the past and present, and also explained his Seventh-day Adventist beliefs to Judge Overton and the court. Gentry reviewed his work on polonium radio halos in granites and mica, which to him suggested that these rocks were created re-

cently and instantaneously. Ironically, this interpretation was shared by few other Adventist scientists.¹⁰

In the end, Judge Overton ruled in favor of the prosecution, noting that the “proof in support of creation science consisted almost entirely of efforts to discredit the theory of evolution through a rehash of data and theories which have been before the scientific community for decades.” Some observers, though, saw the testimonies of the three Adventist creationists at the trial to be a direct fulfillment of prophecy. “Does not Ellen White state that God’s people in the last days will testify about their beliefs in the courtroom?” asked the *Adventist Review*.¹¹

Even more than participating in these legislative and courtroom adventures, GRI seemed concerned with convincing rank-and-file Seventh-day Adventists that a literalist interpretation of Genesis was crucial to

the integrity of Adventist doctrine. Roth took up this internal mission with particular fervor. In a 1988 article in *Adventist Perspectives*, he expressed dismay that “[p]ublished statements by Adventists, seminar discussions, and statements released to the press by Adventists indicate that alternatives to creation are being given serious consideration in some Adventist circles.” These “intermediate views between creation and naturalistic evolution” included the gap theory, progressive creationism, theistic evolutionism, and deism.¹²

By 1995, GRI was one of the few creationist organizations sponsoring “scientific research” as the term is understood in the wider scientific community. Growing numbers of Adventist scientists, however, were becoming wary

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of Roth and his institute, feeling that they consciously overlooked or even misrepresented data from the physical world in order to maintain a literalist view of biblical inspiration. But GRI had little to fear from denominational scientists—it was receiving increasingly strong support from powerful voices in the church’s theological community.

Gerhard F. Hasel and the Adventist Theological Society

If Ariel Roth provided the scientific warp of conservative Adventist creationism during the 1980s and early 1990s, Gerhard F. Hasel wove its biblical woof. Hasel joined the faculty of the SDA Theological Seminary at Andrews University in 1967 and quickly rose to prominence as a conservative biblical scholar and apologist for his church. In 1976, he assumed directorship of the seminary’s Ph.D. and Th.D. programs, and five years later became dean of the seminary. These positions gave him enormous influence over the training of Adventist pastors and biblical scholars. Considering his leadership in the seminary, his influence with church administrators, his extensive writing, and his widespread public speaking, it would be difficult to overstate Hasel’s impact on the Seventh-day Adventist Church during the latter part of the 20th century.¹³

Hasel championed many causes, but none seemed more dear to him than conservative Adventist creationism. He served as a member of BRISCO for many years, and as an editorial consultant for *Origins* from its first issue in 1974 until his death in 1994. He contributed five feature articles to *Origins* between 1974 and 1980—more than any other author. Three of these essays focused on interpretations of the Genesis flood narratives, while the remaining two called for a literalistic interpretation of the genealogies of Genesis chapters 5 and 11, which he called “chronogenealogies.”¹⁴

Hasel fashioned “a powerful coalition of conservative thinkers and wealthy and generous Adventist entrepreneurs” from which, in 1989, emerged the controversial Adventist Theological Society. Membership in the new society was open to anyone nominated by two existing members and willing to sign a “Membership Affirmation,” which included as one of its seven tenets:

We affirm the literal reading and meaning of Genesis 1-11 as an objective, factual account of earth’s origin and early history; and that the world was created in six literal, consecutive 24-hour days; that the entire earth was subsequently devastated by a literal worldwide flood, and that the time elapsed since creation week is to be measured in terms of “about 6,000 years.”

Words like *literal*, *objective*, and *factual* discouraged application by anyone tempted to interpret the church’s statement of belief on Creation too loosely. Moreover, inclusion of Ellen White’s “about 6,000 years” phraseology underscored ATS’s acceptance of her Spirit of Prophecy writings as authoritative on matters of earth history and warned members that only minor disagreement with Archbishop James Ussher’s 17th-century chronology for the world would be tolerated.¹⁵

The Journal of the Adventist Theological Society (JATS), launched in 1990, provided conservative Adventists with a formal outlet for their traditional creationist views. For example, in 1992 E. Edward Zinke, an ATS vice-president who, with Hasel, had been an editorial board member for *Origins* since 1974, confessed in *JATS* that he had once accepted a six-day creation and short chronology for the world through rational consideration of the evidence, not as a result of an abiding faith in the authority of Scripture. He came to see that “divine revelation as identified with Scripture has priority and must function as the foundation of all knowledge, even revelation found in nature.”¹⁶

John T. Baldwin, who at Gerhard Hasel's invitation had joined the seminary faculty in 1988, was a frequent contributor to *JATS* and an increasingly significant voice for conservative Adventist creationism. Baldwin had completed his Ph.D. at the University of Chicago under theologian Langdon Gilkey, and like Gilkey displayed a strong interest in the theology of creation, albeit from a decidedly more conservative perspective. In a critique of progressive creationism and theistic evolution, Baldwin suggested in a *JATS* article that by accepting the notion "that death existed prior to Adam for long ages," one would begin to discount everything from the occurrence of a "universal 'wet flood'" to the importance of the Sabbath and the promise of Christ's return. In a second article, Baldwin opined that Adventists needed to remain "fully and dynamically concordist with respect to the relation of science and religion." Thus the first 11 chapters of Genesis are "not merely to be taken *seriously*, but *historically*." Biblical history, not natural history, should exert ultimate control over how Adventists interpret the past.¹⁷

In yet a third *JATS* article on the topic, Baldwin suggested that:

Responsible strict concordist scholars willing to risk the whitewater ride through the spray-filled canyons of the creation texts and nature itself will surely discover additional new harmonies between Scripture and science about which to write, not only as it were with breathless excitement but above all with deeply compelling academic power. This effort can continue to show that concordism is not an anachronistic effort, but is very relevant indeed in the post-Darwinism age . . . Now is the time to tremble at the words of the God of Israel, particularly in the creation and flood narratives, and not to tremble at the words of Darwin whose theory is in crisis. Strict concordism's day in court may have come.¹⁸

George McCready Price could not have articulated the hopes of conservative Adventist creationism with more style or optimism than this. Of course, never before could tradi-

tionalist-minded Adventist creationists claim, as they could now, a growing coterie of properly credentialed, well-funded scholars willing to voice their views so openly and persuasively.

Adventist Academia

Under pressure from church leadership for his liberal views, Harvard-trained paleontologist Richard M. Ritland had resigned from directorship of Geoscience Research Institute in 1971 to join the biology department at Andrews University. General Conference officials hoped this move would curb Ritland's growing influence on the church at large. But much to the chagrin of his critics, Ritland continued his proselytizing, this time among biology graduate students.¹⁹

In 1978, one of Ritland's colleagues in the biology department discussed, with Ariel Roth, Ritland's influence on students. Roth suggested that Andrews contact a former Loma Linda University graduate student, W. William Hughes, who would serve as an ideal counterpoint to Ritland. Gregarious and charismatic, Hughes was completing a post-doctoral fellowship with the prominent geophysicist S. K. Runcorn at the University of Newcastle. Most importantly, he was committed to a short-term chronology.²⁰

Roth's proposal impressed the Andrews University administration, and Hughes was courted for a faculty position in the biology department. He accepted, but only to discover later that his appointment had been arranged without knowledge of Ritland's friend and biology department chair, Asa C. Thoresen. Nevertheless, once the gentle-spirited Thoresen learned of the hiring, he set aside his dismay at this breach of protocol and collegiality, and did what he could to make Hughes feel welcome.²¹

For the first few months after Hughes ar-

rived in 1979, he and Ritland remained cordial yet wary of one another. Soon, however, Ritland invited Hughes to join him on a paleontological field trip to Indiana, Ohio, and northern Kentucky. Ritland showed him evidence for multiple levels of *in situ* fossil reefs with delicate preservation of crinoids, bryozoans, and other ancient reef denizens. This evidence, along with extensive discussions with Ritland and others on theology and biblical exegesis, convinced Hughes that traditional Adventist interpretations, such as those promoted by Roth, were untenable.²²

The attempt to balance Ritland's influence had backfired—now Andrews University was saddled with two old-earth paleontologists instead of one. Moreover, Hughes was less subtle about his newfound views than Ritland. Hughes wrote an essay for the university newspaper, *Student Movement*, in the fall of 1982, entitled, "Darwin: 100 Years On," commemorating the centennial anniversary of the evolutionist's death. The article itself was relatively innocuous but, unfortunately for Hughes, was accompanied by a portrait of Darwin and a drawing that depicted the descent of humans from ape-like ancestors. A concerned parent of an Andrews University student sent a copy of Hughes' essay to General Conference officials, who were unhappy with what they saw.²³

In subsequent years, when Hughes applied for "continuous appointment" status and then full professorship, he faced opposition from university administrators. The battle-weary Hughes eventually won his advancement, but in 1989 he applied for, and was granted, a two-year leave of absence, after which he chose not to return to Andrews.²⁴

Southern California was the site of the church's other center of creationist activity, Loma Linda University. Not only had GRI moved there from Berrien Springs by 1981, but this was also home to the denomination's only Ph.D. program in biology and its only

degree program in geology. GRI and the two academic programs developed close ties. Beyond the convenience of their proximity, all three had been organized around common assumptions regarding earth history, and both GRI and the biology department had experienced the leadership and vision of Roth.²⁵

The geology department had been organized in 1980, by the charismatic Lanny Fisk, with the goal of producing Adventist geologists who could work in industry as well as teach in denominational schools. Fisk had earned his Ph.D. in biology at Loma Linda University during the early 1970s, and during the latter part of the decade entered the doctoral program in geology at Michigan State University.²⁶

Unfortunately, the three-faculty geology program never took off. Few Adventist students had any background or interest in geology, and by 1984 the job market for geologists had plummeted. So, by 1989, the Loma Linda University administration felt it could no longer afford to support the geologists. One accepted a position in Loma Linda University's biology department. Fisk, how-

"Says the Lord: Heaven is my throne and the earth is my footstool" (Isaiah 66:1). The following illustrations, unless otherwise noted, are adapted from the work of an anonymous 15th-century German illustrator of Petrus Comestor's *Historia Scholastica*.



ever, felt betrayed by closure of the department he had worked so hard to establish, and moved to Oregon, where he began an oil-exploration business.²⁷

Back at Andrews University, several faculty at the SDA Theological Seminary brought a deep interest in creationism to their research and teaching. A young archaeologist, Randall W. Younker, joined the seminary faculty in 1988. Younker, who was completing a Ph.D. in archaeology at the University of Arizona, had earned a master's degree in biology from Pacific Union College. He and John Baldwin teamed up to teach a required course for the Master of Divinity students called "Issues in Origins" for which they flew in several GRI lecturers from California each year. Richard Davidson, a former Th.D. student under Hasel, was an Old Testament scholar who displayed a strong commitment to traditional Adventist creationism. Davidson and Younker, along with Baldwin and Hasel, were all members of the Adventist Theological Society.²⁸

To these Andrews Seminary faculty, the biggest problem with taking the fossil record at face value was the apparent need to assume that animal death occurred before the appearance of humans and the Fall. If death had occurred before sin, the apostle Paul's statement that "by one man sin entered into the world, and death by sin" (Romans 5:12, KJV) lost significance and the whole economy of Adventist Christianity seemed to vanish. In the face of this prospect, no scientific evidence favoring the appearance of humans after millions of years of animal death could be taken

seriously.²⁹

One solution to this knotty problem was proposed by Loma Linda University's theologian and physician Jack Provonsha, who believed that the very foundation of Adventist belief was "placed in jeopardy by this issue." Unlike his Andrews' colleagues, however, Provonsha was unwilling to skim over the implications of the bulk of scientific data. Instead, he resurrected the once-popular "ruin and restoration" theory, suggesting that when Lucifer was cast to earth from heaven he was given "a long period of time" to work out his

principles. This included genetic experimentation resulting in the evolutionary process which ultimately led to the development of human-like apes. At some more recent time, Provonsha suggested, God stepped in and created the Garden of Eden with Adam and Eve.³⁰

Outside of Flood geology, which many Adventist scientists found increasingly irrelevant, Provonsha's model was the most serious attempt to take both conservative Adventist theology and scientific data seriously. His effort, however, was met with little enthusiasm on the part of progressives who saw too much evidence for continuity in the history of life. Where in the fossil record or among extant living things, for example, did one find evidence for two creations, one demonic and the other divine? All life, human and nonhuman, seemed to operate by the same rules and was subject to the same limitations.

Conservatives, for their part, were even less impressed with Provonsha's brainchild. Not

By the end of 1995, Adventist creationism stood at an important crossroad. Leadership could encourage open and honest discussion of evidence. As it approached the new millennium, Adventist creationism would be reshaped by an ever more diverse army of practitioners.

only was God excluded as “the all-inclusive Creator,” but the devil was given too much power. Moreover, there was no mention in Scripture of any such devilish creation. The solution to the geological riddle, it seemed to them, must be found in Flood geology.³¹

But if Provonsha’s model was rejected and Flood geology accepted as the answer, which of its many versions should be embraced? George McCready Price had provided the early “scientific” inspiration for Adventist Flood geology, but some of his extremist views had been jettisoned by thoughtful Adventists when Harold W. Clark’s “new diluvialism” appeared in the 1940s. Clark had proposed that the rising Flood waters had wiped out successive ecological zones, which were now preserved as the organized layers of the geologic column. His ingenious model had provided a working hypothesis for Adventist apologists for nearly half a century. By the 1980s, however, his “ecological zonation theory” had sustained so many blows that it was rapidly fading into the background. While conservative Adventist scientists remained conceptually committed to Flood geology, they did so without a generally agreed-upon substitute for Clark’s model.³²

A second nagging problem involved the genealogies of Genesis 5 and 11. These had long formed the framework for traditional Christian chronologies of prehistory. Though many Christians had come to view these genealogies as highly stylized texts, Adventist biblical literalists, including Gerhard Hasel, continued to insist that they had chronological significance. During the early 1980s, Hasel asked Colin House, an Australian Ph.D. student at the seminary, to critique a *Ministry* article by Warren H. Johns on the topic. Johns had hinted that the genealogies were somewhat stylized. After a time, House began to side with Johns’ view—and soon began to feel unwelcome in Seminary Hall. His Andrews

University education was salvaged by a switch to the religious-education program in the School of Education. House’s dissertation, completed in 1988, provided an exhaustive numerical analysis of the Genesis genealogies. According to House, Genesis 5 and 11 could not provide a chronological framework for the history of the earth.³³

In contrast to House’s study, several Adventists engaged in creationist-inspired research projects that seemed to support the traditional Adventist paradigm of a young earth and universal flood. Some of this research was eventually published in peer-reviewed journals. Harold Coffin, for example, published his finding that some of the trees blown into Spirit Lake during Mount St. Helens’ 1980 eruption ended up at the bottom of the lake in an upright position; thus, he opined, not all upright fossil trees are in position of growth and may have floated into position before fossilization. An article by Lance T. Hodges and Ariel Roth provided data to suggest that at least some reef deposits in the fossil record had been transported into place by “storm action.” Leonard Brand and Thu Tan provided experimental support for his view that many fossil footprints were made by animals running on a water-submerged substrate, and that many of these animals were moving uphill. None of these papers contained overt references to creationist philosophy or Flood geology, but they demonstrated that young-earth creationists were capable of asking interesting questions and of doing publishable research.³⁴

Many Adventist academicians, however, seemed unaffected by the views of their more activist creationist colleagues. Indeed, several Adventists, active in their local congregations, were making contributions to science with conclusions that were decidedly out of step with traditional Adventist views. For example, Ervin Taylor, a radiocarbon expert at the University of California, Riverside, published a

significant volume discussing applications of radiocarbon dating to archaeological research; and P. Edgar Hare, staff scientist at Carnegie Geophysical Laboratory, was using his amino acid racimization dating technique to provide a temporal framework for prehistoric human artifacts. Most Adventist scientists busied themselves with answering safer, more functional questions about nature.³⁵

Field Conferences and Publications

Conservatives and progressives seemed to agree on one thing during the 1980s and early 1990s: Both publications and field conferences were crucial means of educating the masses. Numerous articles appeared in Adventist periodicals during this period addressing a variety of issues impinging on earth history. Moreover, field trips, usually held in connection with conferences, were commonly arranged events.

The most regularly scheduled conference and field trip was the annual BRISCO meeting sponsored by the General Conference. In addition to regular BRISCO members, interested scientists and biblical scholars from denominational institutions as well as other individuals were invited to attend the meetings and to present papers. The Geoscience Research Institute coordinated these forays. GRI's paradigm of Flood geology and short-term chronology provided the framework for presentations and discussions, though in later years considerable diversity of opinion on geology and time was openly expressed.³⁶

Several recurrent topics dominated the discussions at BRISCO. Biblical scholars such as Gerhard Hasel and William Shea often presented exegetical treatments of the Genesis creation and flood accounts, attempting to demonstrate that the meaning of the Hebrew words supported traditional Adventist inter-

pretations. Many papers wrestled with the issue of time and the geologic column, with considerable effort devoted to identifying levels in the column where the Flood left its mark.

Particularly contentious were arguments over ancient "lakebed sediments" in southwestern Wyoming. H. Paul Buchheim, a Loma Linda University geologist, had found what he considered to be incontrovertible evidence that these were true lakebed deposits laid down over many seasons. However, given their intermediate position in the geologic column, others preferred to assume these sediments had resulted from late paroxysms of the Flood. Meetings also featured periodic updates on a "paleocurrent" model under long-term development by Southwestern Adventist College biologist Arthur V. Chadwick. Chadwick had expended enormous energy to develop a computer simulation of the predominant orientations of water currents at various levels of the geologic column. The remarkable consistency of these orientations at each level he interpreted as evidence for the ebb and flow of the Genesis flood waters.³⁷

One member of BRISCO, Warren H. Johns, represented a minority of Adventists formally schooled in both science and theology. After seminary training and a brief stint as a pastor, Johns completed a master's degree in paleontology at Michigan State University before assuming associate editorship of *Ministry* magazine. After four years at *Ministry*, he entered the Ph.D. program in theology at Andrews University, while at the same time serving as seminary librarian. Johns, a conservative by nature who assiduously trawled the scientific, theological, and creationist literature, brought a sense of realism to Adventist creationism. In papers presented at BRISCO, he cautioned participants to read both science and Scripture carefully to look for actual, rather than contrived, harmonies. During the early 1990s, he coordinated an annual field trip to southern Indiana where participants, mostly

from Andrews University, inspected Pennsylvania rocks containing at least six years' worth of tidal cycle activity. Adventists usually thought that Pennsylvania coal-bearing rocks were laid down during the year of the Genesis flood, but according to Johns, these preserved tidal cycles suggested that the Flood deposits must occur either above or below this level.³⁸

In addition to BRISCO, the Geoscience Research Institute coordinated other tours and conferences in North America, Europe, and Australia. Participants were often pastors, secondary-level science teachers, and church administrators. GRI speakers pointed out problems with standard evolutionary interpretations of geologic formations and in their place offered Flood-based explanations. One such conference was held in the summer of 1991 for North American Division college and union conference presidents. Even newly elected General Conference President Robert S. Folkenberg and his predecessor Neal Wilson attended. Roth took the occasion to inform the new president and other participants that large numbers of Adventist scientists had become evolutionists. After the meetings, alarmed administrators returned to their posts wondering how to deal with the problem at their institutions.³⁹

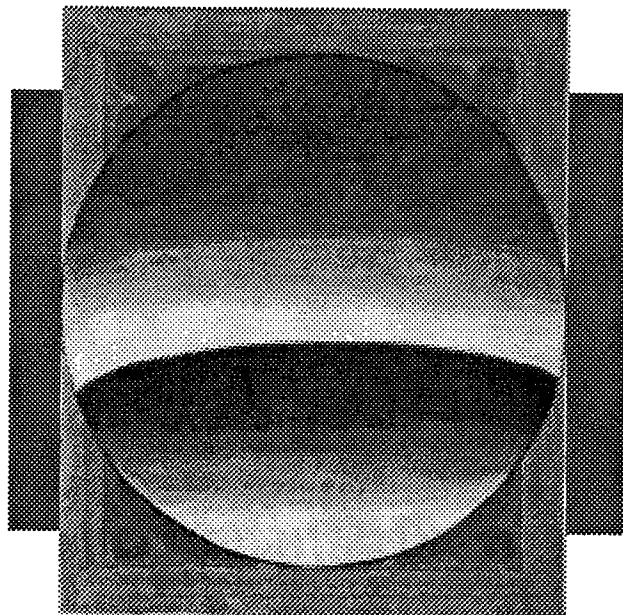
In 1985, the Association of Adventist Forums conducted a geology field conference in the Wyoming Rockies. Modeled after GRI field conferences held before GRI's "conservative restoration," the event was led by former GRI director Richard Ritland and fellow revisionist colleagues P. Edgar Hare, Edward Lugenbeal, and Bill Hughes. A few attendees like Hughes were regular BRISCO participants, but the overlap was minimal. The 104 registrants participated in one of two field trips and an intervening five-day conference.

Conference presenters dealt with three themes: earth history, the biblical record, and responses by Christians seeking to reconcile

their faith with the evidence from science. The field trips featured some of the classic geologic sites in the Rockies, including the Cretaceous coal seams of Price, Utah, the Green River Formation of Wyoming, the spectacular Wind River Mountain deposits, and Yellowstone's fossil forests. As Karen Bottomley reported in *Spectrum*, "The conference generated some feelings of apprehension, partly because not all of the familiar answers seem adequate to explain what we saw, and because participants were concerned that the issue of origins might be divisive for the Adventist Church." But it also generated "excitement and spiritual commitment" in the context of the "Adventist tradition of progressive truth."⁴⁰

While field conferences provided participants with firsthand exposure to the evidence and opportunities to discuss issues with the experts, publications reached a wider audience and established a more permanent record of thought and activity. *Origins*, published by GRI, devoted itself completely to the topic of earth history and the Creation/evolution controversy. *Origins* made its debut in 1974 with Roth as its editor. From its first issue, the masthead carried an impressive roster of pro-

From *Historia Scholastica*: "God Separated the light from the darkness . . . the first day" (Genesis 1:4).



duction personnel, board members, and consultants, nearly all with "Ph.D." appended to their names. The journal was well edited and carried articles on topics ranging from the significance of cruelty in nature to the cosmological implications of data from Jupiter and Venus. While articles were generally supportive of conservative creationism, several pieces debunked some of the more egregious creationist claims. For example, in 1981, Arthur Chadwick tried to lay to rest the recurring but false creationist assertion that pollen grains had been found in the Precambrian rocks of the Grand Canyon. In the same year, Richard Ritland countered the creationist perception that the geologic column was the concoction of infidel geologists intent on propping up the theory of evolution.⁴¹

While GRI focused primarily on geology, paleontology, and geochronology, topics of biological interest also appeared in *Origins*. Two such articles were particularly noteworthy for breaking new ground in the official Adventist press. The first, coauthored

From *Historia Scholastica*: "God made two great lights . . . and the stars . . . the fourth day" (Genesis 1:14-19).



by Leonard R. Brand and Ronald L. Carter, both of Loma Linda University, argued in print what several Adventist biologists had been teaching for some time: that both animal and human social behavior is under the influence of Darwinian natural selection. The implications of this notion for concepts of human sin, free will, and judgment were, of course, enormous; but, ironically, the article generated little discussion. The second article, co-authored by Brand and L. J. Gibson, provided a creationist rationale for accepting not only natural selection, but also the possibility of some biological change at the macroevolutionary level. Previous comments on the extent of change in the official church press generally embraced microevolutionary change, but balked at anything termed macroevolution. Now, even traditionalists within the church were beginning to push for higher levels of biological change.⁴²

Spectrum, which had, during the 1970s, catalyzed a shift in the views of its readership on issues related to earth history, carried fewer articles on the topic during the 1980s and early 1990s. Nonetheless, several significant contributions appeared. Gordon Shigley provided a historical analysis of the intended meaning and subsequent interpretations of Ellen White's ambiguous "amalgamation of man and beast" statements. Both F. E. J. Harder and Larry G. Herr sought to bring readers beyond an elementary reading of the Genesis creation account toward a grander view of the doctrine of Creation. By comparing the 1953 and 1978 editions of the *Seventh-day Adventist Bible Commentary*, Bill Hughes documented a significant shift in Adventist views from Price's unyielding Flood geology to Harold W. Clark's more accommodating "new diluvialism." Fritz Guy reminded readers that when it comes to paradigms of earth history, there is no free lunch—each requires some form of compromise. Gary Gilbert shocked even some of his more liberal readers with the suggestion that

genetic evidence strongly favors a common ancestry for chimpanzees and humans. James Hayward argued that Adventists need to consider a broader spectrum of biological evidence than is customary when they attempt to model the past, and examined the history of Adventist interpretations of dinosaurs. John Baldwin dusted off William Paley's "argument from design" and brought it center stage to the Adventist Creation/evolution debate.⁴³

The *Adventist Review*, official organ of the church, contained several informative and thought-provoking pieces on the topic of faith and the natural world. During the summer of 1993, for example, when excitement over the movie *Jurassic Park* had reached fever-pitch levels, the *Review* commissioned an article on dinosaurs. When printed, it was accompanied by a flashy color illustration of the prehistoric creatures on the cover. "Dinomania has hit the *Adventist Review*!" one pastor responded. "And why not, if you can deal with it in such a forthright and balanced manner?" But another pastor pled instead for "more covers of Jesus, the ministering church, His body, and people taking their stand for the Lord."⁴⁴

Thus, through field conferences and publications, Adventist creationism influenced many people in many different ways. That influence was never greater, however, than it was on Seventh-day Adventist church administrator Richard L. Hammill.

The Journey of Richard L. Hammill

Richard L. Hammill completed a 44-year tour of duty in denominational service in 1980, retiring as a general vice-president of the General Conference. As a theology major at Walla Walla College, he said he had learned "progressive Adventism" from William Landeen, Frederick Schilling, and George McCready Price. Doctoral studies in Middle

Eastern studies at the University of Chicago's Oriental Institute had made him aware of problems facing Adventists hoping to cling to Ussher's chronology. After completing his Ph.D., however, he soon became absorbed with church and academic administrative responsibilities and for many years was unable to pursue this interest.⁴⁵

In the late 1950s, when he was with the Department of Education at the General Conference, Hammill had lobbied for a church-sponsored program to help Adventist science teachers deal with issues of earth history. As a result, the Committee on the Teaching of Geology and Paleontology was established which, in 1958, gave birth to the Geoscience Research Institute. Hammill took great personal interest in GRI—he sat on its board of directors until his 1980 retirement, participated in most of its earlier field trips, and poured over staff-member reports.⁴⁶

When, in the fall of 1980, Hammill drove out of Washington, D.C. and into retirement—"singing at the top of my voice"—he headed west and soon found himself reading the earth history he had reluctantly set aside following his Chicago days. He used his time to re-evaluate the theories of continental drift and plate tectonics, to reconsider human history in light of the Pleistocene fossil record, and to troll the literature on radioactive isotope dating.⁴⁷

Nine years later, the septuagenarian scholar would report his conclusion that

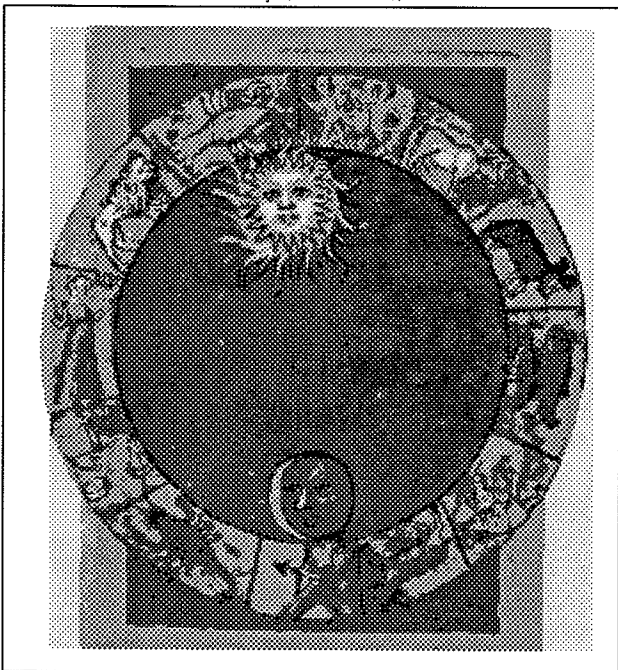
animals [were] living in the earth . . . millions of years ago before these [continental] plates separated. And, moreover, as I got to looking into the geologic column, I had to recognize . . . that the geologic column is valid, that some forms of life were extinct before other forms of life came into existence. I had to recognize that the forms of life that we are acquainted with mostly, like the ungulate hoof animals, the primates, man himself, exist only in the very top little thin layer of the Holocene, and that many forms of life were extinct before these ever came in, which, of course, is a big step for a Seventh-day Adventist

when you are taught that every form of life came into existence in six days. . . . I had felt it for many, many years, but finally there in about 1983 I had to say to myself, That's right. The steadily accumulating evidence in the natural world has forced a reevaluation in the way that I look and understand and interpret parts of the Bible.

Hammill said he hadn't turned into an evolutionist, though he thought that "evolutionists have a lot of things on their side. . . . I am what people would call a progressive creationist. I do believe that all forms of life came into existence by the creative power of God."⁴⁸

Hammill's about-face was met with horror on the part of church conservatives. Progressives, on the other hand, could scarcely control their glee over Hammill's shift. When Lawrence Geraty introduced Hammill to an Association of Adventist Forums group in Seattle in 1989, he recalled how, during the 1960s and 1970s, he had, as a young seminary professor at Andrews, chafed under then-President Hammill's efforts to rein him in. "In those days I could hardly have imagined inviting our speaker to share his testimony on

From *Historia Scholastica*: "God created . . . every living creature that moves . . . the fifth day" (Genesis 1:20-23).



his journey as a progressive believer," confessed Geraty, "but to his credit he is one of the few converts to Adventism that I know who, after his retirement, has truly made a transition to a progressive faith."⁴⁹

Spectrum and *Adventist Today* ran articles in which Hammill reviewed his history within Adventist creationism and chronicled the shift in his thinking. In 1992, Andrews University Press published his memoirs, noting on the dust cover that, "because of its openness, *Pilgrimage* breaks new ground in the field of Adventist autobiography."⁵⁰

Hammill remained faithful to the Adventist Church, though admitting that he felt "most at home with committed, loyal Adventists who like to investigate new ideas." In his "spiritual pilgrimage," he had

sought through the years to grow in my understanding of God, of Biblical teachings, of the universe, and of the marvelous and complex environment, physical and social, in which God has placed us. This search for ever-increasing truth was carried on within the freedom, the nurture and the context of the Seventh-day Adventist Church and, I believe, under the guidance of the Holy Spirit and the blessing of God.⁵¹

Ironically, the freedom and nurture that sustained Hammill during his quest for truth would soon be challenged at the highest level of church administration.

1994 Panel Discussion at Loma Linda University

Raymond F. Cottrell, following a distinguished career as a member of the church's "Daniel Committee" and associate editor of *Adventist Review* and *Seventh-day Adventist Bible Commentary*, in 1993 became founding editor of *Adventist Today*, an independent, bimonthly periodical devoted to "news, analysis, and opinion." On April 2, 1994, *Adventist Today* sponsored a panel discussion on Ad-

ventist creationism, moderated by Cottrell, in the Loma Linda University Church youth chapel. Attended by an overflow crowd, the event would send shock waves through the world church.⁵²

Though billed as a panel discussion, the interaction functioned more like a debate. Sitting at Cottrell's right were Ariel Roth, Robert Brown, and Clyde Webster, of the Geoscience Research Institute. Seated to his left were Richard Hammill, Ervin Taylor, and P. Edgar Hare. Taylor, professor and chair of the department of anthropology, University of California, Riverside, and an expert on radio-carbon dating, had long been a critic of GRI. Hare, a staff scientist at Carnegie Institution's Geophysical Laboratory in Washington, D.C., was an original member of the Geoscience Research Institute team and had pioneered the development of the amino acid dating technique.⁵³

Hammill, Hare, and Taylor had been assigned to "present problems," while Roth, Brown, and Webster were charged with explaining "what the church has done and is doing" about these problems. Hammill began by recounting how GRI had been established to "deal adequately with the problem" of geochronology in relation to the Adventist understanding of scriptural history. "The book of Genesis correctly describes events in the development of human culture but telescopes or foreshortens the time factor," he said.⁵⁴

Hare explained that fossils of different organisms appeared at different levels of the geologic column, with the earliest appearing in rocks about three billion years old. He reviewed the evidence for continental drift and changes in climate indicated by the Greenland ice core and deep sea cores. He concluded that "mod-

ern humans are a very recent life form on earth," and that "most fossils and geologic activity are not the result of a single event."⁵⁵

Taylor argued that not only should the time frame for the fossil record be "measured in hundreds of millions of years," but that human-like fossils extend the record of our own ancestry "back hundreds of thousands and even several million years." He opined that GRI's "attempt to gather information that refutes the mass of existing scientific data concerning the vast age of the fossil and archaeological record" was "reminiscent of tobacco interests which seek to discredit evidence that the use of tobacco causes lung cancer."⁵⁶

Brown initiated the conservative response by reaffirming his belief that the Bible is "the ultimate means for understanding the past," and that "the testimony of the Bible can be validated by scientific enterprise, if conducted correctly." He said that Jesus' "conversion of about 150 gallons of water into choice grape juice" and his feeding of "over 10,000 hungry people" with the five loaves and two fish show that God intervenes in the normal course of events. "The challenge before us today is not to explain these events but to accept the divinely-attested historical records of their

Adapted from an early 16th-century German engraving.



occurrence. . . . There is no need to prove that a man might survive three days in the stomach of a whale. The need is to . . . recognize that God could create an animal, or miniature submarine, specifically designed to preserve Jonah's life."⁵⁷

Roth contrasted the variety of views of earth history with the "biblical model of creation by one God in six days." For example, "it would be a strange God who would create varied forms of life over billions of years and then ask us . . . to keep the Sabbath because he created all in six days." Moreover, belief in the occurrence of death and evil before the origin of humans "challenges the story of the fall and its consequences on nature." Rather than drifting toward evolutionism, said Roth, we should note that "the rapidly growing churches in the United States are those with firm beliefs," and that we should do all we can "to bring salvation to as many as we can."⁵⁸

For information on how God created and interacts with the world, Clyde Webster said he looked to "Scripture, not science." The "standard interpretation of the fossil record found within the geologic column" needs reinterpretation in light of the progressively older radiometric dates obtained for progressively lower rocks in the earth's crust. But according to Webster, there was reason to hope this problem could be resolved in a way consistent with the belief in a recent six-day creation and subsequent worldwide flood.⁵⁹

After time for rebuttal on both sides, the panel fielded questions from the audience. Hammill found opportunity to comment extensively on appropriate and inappropriate uses of Scripture, as well as the nature of evidence for an old earth. As far as he was concerned, he said, the battle for a short chronology "is already over." Taylor and Brown got into several verbal tussles over the accuracy of radiometric dating versus a Flood-

based chronology, with an exasperated Brown finally losing his composure:

Well, the question is, Do you want to believe in the flood? Believe in it! If you don't, don't believe in it! That's your choice. . . . I choose to place my faith on taking the Bible straightforward in the way it reads. I may be wrong in doing that, but I think the risk is much less that way than any other way I could go.⁶⁰

Cottrell had given listeners two opportunities to leave during the afternoon, but three hours into the meeting most of the audience remained, mesmerized. The fact that revisionist comments, particularly those of Hammill, had generated the most applause gave reason for hope to some, but to others gave cause for alarm.

President Folkenberg Reacts

It did not take long for an official reaction. On April 4, church president Robert S. Folkenberg, though not personally present at the Loma Linda discussion, reported to Adventist leaders throughout the world, in his "From the GC President" newsletter, that the

historicity of the Scripture and the Genesis account of creation came under attack last Sabbath afternoon, not by secular forces but by two retired church workers, Raymond Cottrell [sic] (retired associate editor of the *Adventist Review*) and Richard Hammill (retired vice-president of the General Conference and former president of Andrews University), during a panel debate in California.

Folkenberg then noted that Roth and his colleagues from GRI had "pointed out that interpretation of frequently-conflicting data can vary widely, depending on the presuppositions of the scientist."⁶¹

Two weeks later, Folkenberg devoted the entire issue of his newsletter to the topic of "creation/evolution."

We believe that God created life on this earth in six literal days, just a few thousand years ago. . . .

Some Seventh-day Adventist theologians debate the historicity of Scripture and its inspiration. To accept the Scripture as authoritative means accepting the reality of creation and the flood as described in the first eleven chapters of Genesis. Seventh-day Adventist scientists, on the other hand, must struggle with the tension between "scientific integrity" . . . and "theological integrity." Is it possible to be a Seventh-day Adventist (creationist) and a scientist? There seems [sic] to be two likely outcomes.

The first, hoped-for outcome, wrote Folkenberg, would be a scientist who "searches for that which supports (a) a short chronology (thousands versus millions of years), and (b) Catastrophism versus the gradual or uniformitarian deposition of the geologic column, or which (c) demonstrates weaknesses in the evolutionary arguments." "Evidence is growing," he wrote, "that [a] second outcome is increasingly common in several divisions of our world church." This "accommodationist" outcome results in the scientist trying to "reconcile the Bible to contemporary scientific interpretations" including the reinterpretation of "the six days of creation to represent millions of years. . . . Of these the questions can legitimately be asked, are they really creationists, as Seventh-day Adventists understand that term to mean?"⁶²

In the aftermath of the April 2 meeting, *Adventist Today* published the results of a 1994 survey it commissioned of science faculties at Adventist colleges and universities in North America. Of 121 respondents, 92.6 percent held that the "Bible is God's word with human thought forms and perspectives," 64.5 percent accepted the notion that "most fossils result from the worldwide, Bible flood," and 43 percent believed that "God created live organisms during six days less than 10,000 years ago." But a troubling 28.1 percent of the respondents favored some form of progressive creation or the evolution of life over extended periods of time. "Perhaps the biblical account of so momentous

an event as creation is purposefully brief, allowing us the freedom to struggle over a universal reality," wrote Loma Linda University's Floyd Petersen, the biostatistician who assembled the report. "We might all be surprised when someday we hear the details explained by The One who was there."⁶³

Folkenberg, however, hoped for an earlier, more earthly resolution. As a result of his concern, a blue-ribbon panel of Adventist scientists was established by early 1995 to study the problem; moreover, John Baldwin was invited to make a presentation at the 1995 Autumn Council on Adventist worldviews related to science and faith. For his part, Folkenberg was touring North American churches and institutions, questioning the loyalty of anyone who felt free to stray from an historic Adventist faith. "Nurture," which presumably allowed for such freedom, he declared, was a "four-letter word."⁶⁴

By the end of 1995, Adventist creationism stood at an important crossroad. Earlier voices were fading. A larger and more diverse generation of scientists and theologians was setting the terms of conversation now than in 1980. Indeed, the Loma Linda panel discussion, and articles in independent Adventist publications, showed just how variant Adventist views on earth history had become. Church administrators could attempt to contain the growing diversity of opinion by intimidation or force—counterproductive and ineffective approaches, given the complexity of the issues involved. By contrast, leadership could encourage open and honest discussion of evidence from as many sources and perspectives as possible in the traditional Adventist belief that truth will endure scrutiny. Either way, as it approached the new millennium, Adventist creationism would continue to be reshaped by an ever-growing and ever more-diverse army of practitioners.

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