

The Doctrine of Creation

ARTHUR J. PETERSON

47

I

The Christian Doctrine of Creation has been the subject of controversy throughout the centuries as churchmen strove to bring the inflow of new knowledge and thinking into harmony with established religious thinking. At times these engagements have been violent, and to achieve resolution has been difficult — because the most convincing conclusions deduced from carefully derived information would be regarded as unquestionably fallacious whenever they differed from existing views of nature based on extreme biblical literalism.¹

Nevertheless, the Doctrine of Creation has not only survived these engagements but has emerged with significantly greater vitality and meaning. So, as a result of this process of continuing argumentation and resolution, it can be said today, with a degree of satisfaction, that Christian theology has indeed evolved. It has progressed from the interpretation of a “magic” view of natural data to large accommodation of the recognized and respected disciplines of the physical and chemical sciences.

Actually, the age-of-the-earth controversy is one in a long series of major theological controversies. When stripped of all its irrelevancies, it is no more than an impasse between those who hold to a relatively inflexible age of about 6,000 years (calculated on the basis of biblical genealogies) and those who hold to a more flexible age of about 5 billion years (calculated on the basis of scientific study, research, methodology, and technology).² Unfortunately, then, the scientists who are Christians are the ones who frequently bear the brunt of the thrusts of churchmen. It is at this juncture that the polemic gets vigorous, heated, and schismatic; and, tragically, the debate becomes a conflict between Christians.

But many changes in thinking have come to pass — largely by the erosion of insupportable theological arguments for the young-earth view, and by the presen-

tation of convincing, solid, irrefutable scientific information. The Doctrine of Creation will indeed survive the controversy — but with yet greater scope and strength of meaning and with accommodation for and acceptance of the earth's age in harmony with continuing scientific investigation and observation.

The discussion that follows — on the Doctrine of Creation and its relation to the physical sciences that bear on the age of the earth — is based on the historical fact that Christian theology (man's fallible intellectualized ideas about God) is continually changing and emerging. No one can stay this process.

Man — who is fallible, not superhuman or omniscient — does not possess an absolute mandate from God to determine which theological doctrines will or will not change. Therefore, man must accept the principle that any one tenet is subject to change:

48

Man's understanding of God's truth is progressive. "The path of the just is as the shining light, that shineth more and more unto the perfect day." . . . We surely should know more of God's will and purpose than did righteous men of earlier ages. And in days to come we should rightly expect further unfolding of Bible truth.

While we accept the Bible and the Bible only as our rule of faith and practice, we clearly recognize that we do not understand perfectly all truth which God would have His children know today.³

A thoughtful person will undoubtedly concur with Bernard Ramm's observation:

Evangelical Christianity of today owes to science a great debt in setting us free from the superstitious, the magical, the animistic, and the grotesque and has helped in the purification of our theology, our exegesis, and our spiritual life. *Whoever doubts this . . . has not made himself acquainted with the history of these matters.*⁴

Alfred North Whitehead likewise observed:

Theology itself exhibits exactly the same character of gradual development, arising from an aspect of conflict between its own proper ideas. This fact is a commonplace to theologians, but is often obscured in the stress of controversy.⁵

And Wernher von Braun also contributed to these thoughts when he wrote that he believes with all his heart that religion, like science, is growing and changing in the light of further revelations by God — adding that he knew of no comment Christ ever made on scientific work, yet Christ said, "Ye shall know the truth, and the truth shall make you free" (John 8:32). Von Braun concluded his statement by expressing the belief that were Christ among us today he would encourage scientific research as modern man's most noble striving to comprehend and admire his Father's handiwork.⁶

That theology can and must advance in harmony with the advances in understanding the physical world seems implied in a statement by Raymond F. Cottrell that beyond the elementary knowledge of the Bible, which anyone with a sincere intent can understand, there is "an almost infinite revelation of truth sufficient in

scope and depth to tax even the greatest of intellects for a lifetime” (emphasis supplied).⁷

II

Langdon Gilkey alludes to the tensions between theology and science as follows:

In the recent theological past, the massive influence of science on the character and status of theological talk has hardly been a popular point to emphasize. Theology has barely been prepared to admit the influence of philosophy on its understanding of religious truths, much less that of science. . . . The most important change in the understanding of religious truth in the last centuries — a change that still dominates our thought today — has been caused more by the work of science than by any other factor, religious or cultural.⁸

49

These tensions, forerunners of doctrinal change, can be understood better if a few examples of typical fundamentalist thrusts at scientists and the new conservatives are set forth, along with their targets’ reactions.⁹

“The Bible never contradicts ‘true science.’ ” This dictum is used by many to counter scientific evidence threatening their opposing views on a subject. It is a paradoxical position, for churchmen accept similarly reliable methods of scientific research and technology in other areas, such as nutrition, medicine, communication, and transportation. Carried to its ultimate, the expression *true science* implies that scientists practice *false science* — which, in the words of Ramm, makes the statement “a pious dictum in need of severe qualification.”¹⁰

“Scientists keep changing their minds.” This charge is used to cast doubt on scientists’ tentative and changing views within the normal process of their scientific methodology. Wernher von Braun reasserted scientific method when he wrote that a scientist who discovers a new bit of knowledge does not tear down his model of reality, but merely changes it to agree with a new set of experiences. By so doing, the scientist admits he has no claim on ultimate truth. His laws are simply observations of reality.¹¹

“The data are not all in.” When churchmen use this dictum, it is intended to delay laymen in arriving at conclusions that may be in favor of the scientists. They do not understand that the scientific methodology does not produce absolutes; hence all of the data are never in. Scientific progress is dependent on hypotheses, theories, probabilities, and so on. If we had waited for all the data — we would not have reached the moon; we would not have submitted to recent surgery; and we would not have come to believe in God. It is doubtful that churchmen would approve a delay in arriving at a belief in God until all the data on him are in.

“Science has not interpreted the evidence correctly.” Some make this accusation when their literal scientific interpretations of the Bible do not square with the

findings of the sciences. Even though the Bible is infallible, they seem to forget that an infallible Bible does not assure that the method of interpretation is proper — nor that the interpreter is infallible (an impossibility even though the interpreter is under inspiration). If one doubts this statement, then one raises the inspired interpreter to a perfection that was in Christ alone. If churchmen were as well grounded in hermeneutics as scientists are grounded in scientific methodology, churchmen would find little fault with scientific conclusions.¹²

"Scientific age-dating methods are unreliable." This accusation is groundless within the state-of-the-art of scientific methodology and understanding. Often arguments against these methods are made by utilizing examples of dating methods which vary widely, but without mentioning those which are more sophisticated and accurate. Scientists remind churchmen that there are many new and highly developed techniques in age dating that can be utilized in combination to corroborate findings within a credible time-span.¹³

"An old-earth age destroys the biblical day of rest concept." I believe that Moses' inspired motive for recording Genesis was most probably religious, not scientific; that his method was mythological, not literal; and that one of his primary concerns in recording the Creative Event was to take into consideration the Sabbath that already existed when he wrote. As I have used "mythological," it does not mean *fantasy* but *religious truth*. As Gilkey states:

We can say that creation is "like" some process or event in our experience, only if at the same time we assert the deep way in which it is "unlike" that process. Thus because what God is and does transcends the finite experience with which we are familiar, all theological ideas must use symbols or analogies, [which] we shall . . . call "myths," to describe God and His acts.¹⁴

Paradoxically, a myth can only be true as a *religious* affirmation, if it is untrue as a literal description of fact. As literal truths, myths are "prescientific," and must be discarded — but it is precisely at this point that they have no relevance for religion.¹⁵

Whether a person accepts the religious meaning of Genesis via the literal or the mythological method, or in combination, the message of salvation is the same in both — the age of the earth does not pertain to the biblical day of rest. It is considered relevant only by those who use the young-earth age for circular reasoning in support of the theologies they have developed. That is, a young earth will counter the evolution theory, support a literal understanding of the Genesis creation narrative, and support the Sabbath as derived literally from the Genesis narrative. This type of circular reasoning is really a religious syndrome, each element being used to support the overall theology — when actually the age of the earth, the evolution theory, and the Sabbath can and should stand on their own merits.¹⁶

"An old-earth age will support the evolution theory." This charge — used by

some (in circular reasoning again) to get support from laymen who have been indoctrinated with the theory that man ascended from “brutes” — is an “abhorrent” notion a young earth would rule out. If those who use this charge would read, try to understand, and utilize the data being made available by paleontologists on discontinuities in the fossil records, they would have a more credible defense against the evolution theory, and still would be able to accept the old-earth age.

The foregoing examples, indicative of the harsh nature of the controversy, cause one to wonder what brought about such thrusts and exchanges. Generally, these attitudes have their roots in fundamentalism per se. And, not surprisingly, fundamentalism has borne the brunt of many unkind thrusts, such as the label “a religious phenomenon,” “a queer doctrine,” and the like — several church organizations being the targets.¹⁷

51

Fundamentalism as a religious entity was born about a hundred years ago — although germination started about four hundred years before that, in orthodoxy as a countermovement against the then-modern science of Copernicus and Galileo. Later, fundamentalism moved against liberalism, which was then adopting literary and historical biblical criticism, leaning toward scientism, and accepting the new geology. These and other “extreme heresies” were so threatening and alarming that the ultraconservative wing of orthodoxy took every means to oppose them.

Among other things, this opposition assumed a form of crass literalism in biblical interpretation. With the resulting development of a myriad of detailed doctrines necessary to counter each real and imagined threat, eventually almost all flexibility in religious thinking was crowded out. This swing toward the extreme right brought about theological positions aptly described by Ramm thus: “It is possible not only to have slack theological views, but to have views far more rigid than Scripture itself.”

Extreme literalism overlooked much biblical truth conveyed symbolically, parabolically, typically, poetically, and so on. Since fundamentalism of that era had no understanding of modern hermeneutics, and deliberately avoided early concepts of hermeneutics, its interpretations took strange positions. The same biblical passages, for example, might be interpreted literally in one fundamentalist church and allegorically in another — with no clear justification for their differences other than to keep interpretation in line with and in support of theologies each had previously developed.

It can be understood, therefore, why fundamentalism has always been irritated with science. But, says Ramm —

Hyperorthodoxy [fundamentalism] does not believe its platform "to the hilt." . . . It is willing to retain faith in the Bible no matter what the scientists say. But would it really believe the Bible if at *every* point the Bible and science conflicted? If the differences between the sciences and the Bible were to grow to a very large number and were of the most serious nature, would it retain faith in Scripture? True, we may believe *some* of the Bible "in spite of" science, but certainly the situation would change if we believed *all* of the Bible in spite of science. That is to say, the hyperorthodox have made a virtue of disagreeing with science, and have not set any sort of limits as to how serious the divergences with science may go before they must rethink their position. Their guiding principle cannot be extended without making their entire position indefensible or simply absurd.¹⁸

Many young thinkers of today's intellectual age are asking penetrating questions on scientific and theological issues, seeking credible answers, and perceiving reasons to believe that fundamentalists can reconcile their thinking with that of the scientists without changing the essence of their salvation theology. Could it be that these thoughtful Christians — who might be called the "new conservatives" — may contribute to sounder thinking and stronger faith within Christianity as well as to improving relationships and witnessing effectively outside Christianity?

III

The biblical Doctrine of Creation is surely one of the most profound religious concepts in Christendom, and in it should be found a solution to the age-of-the-earth controversy. With this possibility in mind, I will mention briefly several major aspects bearing on such a solution.

AGE-DATING PROBLEMS IN GENEALOGICAL TIME

The 6,000-year age-of-the-earth theory is arrived at by summing up biblical genealogies that in themselves present many obvious and subtle problems. To arrive at a credible earth-age by this method, one has to determine, first of all, if the Genesis narrative is so structured that the method can be utilized. This means that, for dating purposes only, the narrative must:

- 1/ Evidence unquestioned and continuous family trees;
- 2/ Be capable of being understood in terms of today;
- 3/ Fit into established historical dates and events; and
- 4/ Contain no mythological numbering systems that cannot be explained satisfactorily.

If any one of the foregoing criteria are lacking, the genealogical method of calculating the earth's age cannot be considered of scientific value. Some of the vast number of problems involved in this method of age dating are indicated in a few representative examples in subsections 1, 2, and 3.

Sarna points out:

The literalist [extreme] approach to Scripture cannot stand the test of critical scholarly examination. Literalism involves a fundamental misconception of the mental processes of biblical man and ignorance of his modes of self-expression. It thus misrepresents the purport of the narrative, obscures the meaningful and enduring in it, and destroys its relevancy. At the same time, literalism must of necessity become the victim of hopeless inconsistency.¹⁹

This "inconsistency" is very real and can be seen in two examples. One position is that "we take the Bible in its entirety, believing it not merely *contains* [emphasis in text] the word of God, but *is* [emphasis in text] the word of God." In a following sentence from the same source, another affirmation revealing a decided departure from the "*contains*" and "*is*" concept reads: "Its [the Bible's] truths, revealed, are 'given by inspiration of God,' . . . yet are *couched* [my emphasis] in the words of men."²⁰

53

Biblical writers often had more profound thoughts in mind than those which seem "most natural" to the eyes and thinking of the late twentieth-century reader. There is profound and wise counsel in Cottrell's words when he cautions, "We shall give each [Bible] writer an opportunity to tell us what he means, by what he wrote," and adds, "We are all prone, perhaps more often than we realize, to read our own preconceived opinions into the words of Holy Writ, unaware, betimes, that the inspired writer never intended to say what we construe his words to mean."²¹ The serious student of theology is keenly aware that to understand difficult passages of Scripture often requires more than the approach of the literal method. He frequently requires the ultimate in the art and science of hermeneutics to penetrate and understand their messages.

To return to the main line of thought: There is the question as to whether the biblical numbers in the patriarchal and tribal periods are intended to be schematized and rhetorical, rather than literal. Experts say a close study of the year numbers reveals a combination of the sexagesimal (sixty-based) system that prevailed in Mesopotamia with the decimal system used in Egypt, with the occasional addition of the sacred number seven.

In response to my inquiries on the extent of literal and mythological biblical interpretation methods used throughout Hebrew history, two noted Hebrew professors and authors provided interesting information.

According to Heschel, the literal understanding of Genesis extends into antiquity, and (probably surprising to many) the mythological meaning is not something new, for it can be traced back into ancient history to the Hellenistic times.²²

Sarna indicated that the literal approach to Genesis was certainly held by many

Hebrews in the past and still finds adherents in some orthodox circles.²³ On the other hand, he observed, there is evidence of a nonliteral interpretation quite early in the history of Hebrew exegesis. The question of whether the narrative was taken literally in biblical times, he noted, is very complicated, because it involves a detailed examination of the thought processes of biblical man and his manner of self-expression. Perhaps the most important observation Sarna made, and probably a provocative one, is that the distinction between literal and nonliteral interpretation is a Western notion and not entirely applicable to biblical culture.

Despite all this, it appears that the centuries-old methods of literal and mythological interpretations offer no problems in presenting the religious views of the Bible, but that neither one holds any potential for arriving at a credible age of the earth — simply because of the vagaries of literalism and the inherent content and structure of mythology.

2/ HISTORICAL PROBLEMS

In discussing the problems of biblical genealogies of the patriarchal period, Sarna says: "It is one thing to speak of the Patriarchal Age, quite another to determine the exact period into which it fits. No external sources have as yet been uncovered that refer by name to any of the patriarchs or to any personages associated with them. Without such synchronistic controls, we have solely the biblical data to fall back on, and here, unfortunately, the problems are thoroughly complex."

He makes the well-known point that the length of the time covered by the patriarchal period can be calculated very simply, but adds that complications arise when it is attempted to fit this period into the framework of history. He then states that calculations according to years and according to generations cannot be satisfactorily resolved. "In other words," he continues, "the patriarchal chronologies constitute paradigmatic, rather than pragmatic, history."²⁴

Commenting on the tribal period, Sarna identifies several genealogical problems, one being "the census taken one year after the Exodus shows that in three generations Manasseh had grown from a single individual to a tribe that could count 32,200 males over the age of twenty."²⁵

Another author, Henricus Renckens, commenting on the age of the earth, says that it is no longer possible to suppose the existence of a connecting thread between Israel and the events of the creation. He says further, "If there is one idea to which we must say goodbye once and for all, it is that of the traditional period of four thousand years between Adam and Christ."²⁶

At this point it is interesting to note an indication of evolving theology in one

recent seven-year span. A Bible commentary published in 1953, in discussing the earth's age, states: "The figure 6,000 is undoubtedly a rough approximation of the time from creation, as based on the Hebrew patriarchal chronology, to the present century."²⁷

And a Bible dictionary published by the same church in 1960 avoids the age-dating controversy and makes this forthright statement:

The Scriptures nowhere give us the total number of years from Creation to the Flood, from the Flood to the Exodus, or, for that matter, for the series of kings. The totals must be arrived at by the interpretation of the various figures given in the text. That is why this dictionary, although it holds to the accuracy of the account of Creation as given in Genesis, and to the substantial accuracy of whatever chronological data are furnished, does not presume dogmatically to set forth the exact date of the creation of the earth.²⁸

A close reading of the foregoing quotations is interesting in three major respects:

55

First, the Bible commentary placed an approximate age of 6,000 years on the earth, and the Bible dictionary (published seven years later) saw fit to avoid placing an "exact" age on the earth, for the reasons given.

Second, this suggests to me that the contributors to the dictionary were aware of major problems in attempting to arrive at a theological age of the earth or they would have given an approximate age to parallel that of the commentary, even though they could not arrive at an "exact" age.

Third, this church does have a dogmatic age of the earth of about 6,000 years placed on it by one of its revered founders — which was unexplainedly omitted.

I believe the preceding indicates that there are many, and probably insurmountable, problems in attempting to date the earth on strictly biblical data, and that there is evidence of retreat from the once vigorous stand of the young-earth adherents.

3/ THEOLOGICAL PROBLEMS

The Bible provides man information about God, Christ, and himself. Also it provides information on mankind's origin, redemption, and destiny. "[The Bible] was not given to acquaint us," in the words of Cottrell, "with such things as the facts of secular history or the natural world, except to the extent that these subordinate incidental facts are essential to its *primary purpose* [emphasis supplied]." In my opinion, the "incidental facts" are the thought vehicles that communicate the "primary purpose" and are essential from this viewpoint only.

Cottrell continues:

The Bible was never intended for use as a textbook on such subjects as history, botany, zoology, geology, or astronomy. But it is an impressive fact that Bible statements in these areas subsidiary to its principal purpose, *when rightly understood*, are in full accord with data

derived directly from *observation and experience* — in striking contrast with all other writings from the era in which the Bible was written [emphasis supplied].²⁹

Moses wrote for the Israelites in the terms which they could understand, and his writings must be understood from this viewpoint, if one can manage to get within their frame of reference.

AGE-DATING PROBLEMS IN GEOLOGIC TIME

Early methods of age-dating the earth hinged on determining the time rates for the cooling of the earth, the accumulation of sediment, and the salting of the oceans. Obviously these methods were crude; but on the basis of a steady process and perceptive observations, credible estimates of one to several billion years were reached.

56

In 1896 radioactivity dating became a possibility; and by 1910, analysis of minerals containing uranium showed the earth to be extremely old. Inaccuracies were prevalent then because only a few rare and unusually rich radioactive minerals contained enough of the products of radioactivity decay (radiogenics) to allow analysis of their age by the crude methods available at that time. Around 1940 the mass spectrometer was perfected, and from then on progress in measuring geologic time was swift. By 1955, many fundamental studies needed for measuring the age of very old substances had been completed. These basic measuring techniques are given in the table shown.³⁰

Radioactive nuclei decay at constant rates regardless of temperature, pressure, chemical combination, or physical state, thereby contributing to a high degree of age-dating reliability. However, there is a certain error associated with every isotopic analysis, and a calculation is meaningful only when the radiogenic component is large compared with the error in the measurement of isotopic abundance. Measuring strontium isotope abundance by the use of the best mass spectrometers now available is accomplished with "absolute accuracy" to within a few tenths of 1 percent. In practice, one can trust a calculated age for a specimen only when the Sr-87 is as little as about 5 percent radiogenic. The results do not mean much when only 1 or 2 percent are radiogenic.

As of 1971, the earth's age has been calculated to be 3.5×10^9 years by K-40; 6.6×10^9 years by U-235; and 4.6×10^9 by meteorite-lead radioactivity (the most acceptable).³¹ These values were determined by the latest state-of-the-art techniques, and they are subject to some error. It should be obvious, however, that by no stretch of the imagination can they be discounted down to the 6,000-year theological age of the earth to which many hold.

When confronted with the reasonably reliable data given above, some would say that they do not doubt the validity of the data, but that they believe God could

have created this matter 6,000 years ago with the age characteristics built in to make the earth look older. This argument has no merit, and it indicates theological immaturity. Man's study of God's handiwork would be precluded, because man could not distinguish between "real" and "illusory" facts. Such a manipulation would amount to deception — an attribute foreign to the character of God.

IV

The Bible opens with the words "In the beginning God created" — an affirmation of a religious faith so profound that it is beyond total human comprehension. Yet Moses, under inspiration of God, was able to record for his people, and for all mankind, a narrative about The Creation in words anyone can understand. It can be said without qualification that *the Genesis narrative loses none of its everlasting importance for salvation when it is read and understood in its genuine literal sense.*

57

But beyond this elementary knowledge that even a child can comprehend, as pointed out previously, there is an almost infinite revelation of meaning and truth sufficient in scope and depth to tax even the greatest intellects for a lifetime. The existence of this reservoir of untapped revelation is acknowledged by all churches — but often they do little to reveal it, for fear their own theologies will be upset. Carl F. H. Henry stated:

An evangelical who erodes all his energies contending for the inerrancy of the Bible and neglects to unsheaf its revelational content has, to be sure, a warped sense of evangelical duty.³²

For the purpose of reconciling adverse attitudes and the sciences, a proper place to start using the revelational content of the Bible is with the Doctrine of Creation.

New conservatives have determined to their satisfaction that, to biblical man —

- 1/ The idea of creation was primarily a relationship with God — not an event;
- 2/ The narrative of creation, therefore, is religious — not scientific;
- 3/ The biblical account of creation concerns the "why" — not the "how"; and
- 4/ In the idea of creation is the answer to the religious question — what is the meaning of man's life and what is man's destiny?

As Gilkey says:

The idea of creation was a "religious" rather than a scientific or metaphysical idea, because it provided an answer to one of the fundamental religious questions of man's life, namely, the question of the ultimate meaning of his life as a contingent, temporal being set in the wider context of nature and of history.³³

Creation's deeper meaning is to be understood in terms of divine purpose, not in the simplistic literal terms of its conveyance. As Gilkey comments further, if we

are to understand *why* it happened, we may have to relinquish an explanation of *how* it happened — and indeed to transcend this notion. For a dimension of mystery must be left beyond our structural understanding if freedom is to be a real factor in our human life.³⁴

With this view of The Creation, the new conservatives have complete freedom for scientific investigation without fear of clashes with their personal religion, although clashes with institutional religion may continue. And what is most important is that this view is not an artificial device formulated to enable others to “get along with” the sciences — it is the most likely view biblical man had of The Creation.

Traditional biblical literalists run into trouble when trying to reconcile their theological views with cosmological views on “time.” For them “In the beginning God created” often means a full-blown permanent creation that does not square with the creation that contemporary sciences observe. God created not only *at the beginning* of time, but also *in* time. A basic problem for theologians is to express the *relation of eternity* to time, to creation, without losing touch with reality in the natural world. This cannot be done from a literalist point of view, but must be accomplished mythologically. As we have seen, a myth in theology is a secular narrative about a transcendent God; it sets forth a theological truth, not fantasy, and it speaks of eternity in the language of time.

An acceptable Doctrine of Creation is, first of all, just a doctrine — a fallible, intellectualized principle taught by its adherents — and no different structurally from other principles, whether they be social, political, economic, or scientific. But, a doctrine must present a theology about God that makes religious, philosophical, and mythological sense, or it has little value. As I have attempted to point out, literalism’s theology does not adequately meet these requirements. It should be rethought and restated, therefore, to harmonize with theological concepts and observable facts.

Three Doctrine of Creation statements follow to help put into perspective the points previously made.

1/ A modern Hebrew expression of the Doctrine of Creation, in the words of Sarna, reads:

The Bible opens with the account of Creation, not so much because its primary purpose is to describe the process of cosmogony, nor because its chief concern is with the nature of the physical world or the origin and constitution of matter. Genesis is but a prologue to the historical drama that unfolds itself in the ensuing pages of the Bible. It proclaims, loudly and unambiguously, the absolute subordination of all creation to the supreme Creator who thus can make use of the forces of nature to fulfill His mighty deeds in history. It asserts unequivocally that the basic truth of all history is that the world is under the undivided and inescapable sovereignty of God.³⁵

2/ A Protestant fundamentalist expression of the Doctrine of Creation reads:

The word "creation" in its broadest sense implies the formation by the Creator, or God Himself, of the universe, including our world and all living things in it. However, the Creation narrative (Genesis 1 and 2) is concerned primarily with the bringing into existence of this earth, the sun, the planets, and the living creatures found on the earth.³⁶

3/ Langdon Gilkey's Protestant expression of the Doctrine of Creation is one of the most meaningful I have seen. Because it is typical of the new conservative's point of view, I present it in its entirety:

59 The Christian doctrine of creation, therefore, expresses in theoretical language those positive religious affirmations which biblical faith in God makes in response to the mystery of the meaning and destiny of our creaturely finitude. These affirmations are: 1) That the world has come to be from the transcendent holiness and power of God, who because He is the ultimate origin is the ultimate Ruler of all created things. 2) That because of God's creative and ruling power our finite life and the events in which we live have, despite their bewildering mystery and their frequently tragic character, a meaning, a purpose, and a destiny beyond any immediate and apparent futility. 3) That man's life, and therefore *my* life, is not my own to "do with" merely as I please, but is claimed for — because it is upheld and guided by — a power and a will beyond my will. This is what the Christian means when he says, "I believe in God the Father Almighty, Maker of heaven and earth." This is what the idea of *creatio ex nihilo* is essentially "about."³⁷

It can be said with a high degree of confidence that, under the pressures of the sciences in this century, the Doctrine of Creation has been given more attention and has been involved in more controversies among the fundamentalist type of churches than any other biblical doctrine. My purpose has been to point out this fact and to suggest some solutions to the problems associated with biblical literalism in the Genesis area where the fundamentalist type of churchmen attempt to make the Bible speak scientifically.

V

How does the thrust of this essay involve the Seventh-day Adventist church? Special remarks on the application of the material to Adventist theology are not necessary here — except for one critical view of this church's attitude toward one aspect of the Ellen G. White writings, but not the writings as such. I have the highest respect for Ellen White — the person, the woman of God — and her secular and spiritual counsel, a treasury of hope and inspiration without equal. It is the implementation of her insight and counsel that causes me concern.

(It is encouraging to know that a Biblical Research Committee has been set up by the Seventh-day Adventist church to concentrate on principles of biblical interpretation.³⁸ Through its several subcommittees, including a Bible-Science subcommittee, the Research Committee is maintaining a continuous program of investigation and enunciation. Since Adventists find their authority in the Bible, it

is to be hoped that much work will be done in the field of hermeneutics to resolve many problems in biblical interpretation. If this is done properly, sound and consistent interpretation of Ellen G. White may also be forthcoming.)

A primary obstacle to Adventist acceptance of the old-earth age is found in the statements of Mrs. White in which eighteen times she uses the expression "six thousand years" as the age of the earth. Sometimes she modifies it, saying "nearly six thousand years" or "about six thousand years." Then there are fourteen places where she mentions the span of "four thousand years" stretching from creation to the time of Christ.

The value of these theological expressions as historical facts (if in this context they can be used at all) must be based on an infallible religious derivation. Ellen White has said, however: "In regard to infallibility, I have never claimed it; God alone is infallible."³⁹

60

This forthright disclaimer should end the matter. But the church hesitates to accept it.

The church reasons that Mrs. White was human and could make mistakes, but she could not be considered *unreliable* in the messages she brought from God. This strange reasoning that equates *reliability* with *infallibility* in theological matters is difficult to comprehend, for there is a shade of meaning differentiating the two words. One can rightly be reliable and trustworthy, yet this does not mean that the reliable person is an infallible person.

It is one thing to bestow respect and honor on Mrs. White as a prophet, but quite something else to venerate her as an infallible prophet by a ploy with words contrary to her forthright statement denying infallibility. This kind of church theology is a disservice to her.

What is most disconcerting generally about this whole matter is the church's implicit and explicit claims that Mrs. White was able to communicate God's messages with absolute fidelity in mortal man's sinful state. Such claims elevate her to the perfection that is only in Christ. Even prophets of old, and under inspiration, had difficulty understanding God at times. Infallibility under any name — whether we substitute words like trustworthiness, inerrancy, reliability, or whatever, to imply infallibility — is impossible with mortal man, even under inspiration. That man in sin does not have pure eyes to see the truth of God as it is, and so creates theologies that are full of error, is a reminder from Emil Brunner.⁴⁰

There is no question about Mrs. White's being most respected and a high authority in her calling. But her authority (as any authority) had its limitations, being subject as it was to external influences and state-of-the-religious-thought of the period. Authorities do not always arrive at ultimate judgments, and quite often they retrench and begin again with new data.

Mrs. White's statements on the age of the earth were most authoritative for her time and her religious persuasion. It is no discredit to her that she accepted, along with other authorities of her day, the age of the earth as calculated genealogically by Archbishop James Ussher. But to perpetuate her early scientific connotations on this issue — in view of her disclaimer to infallibility and in view of modern knowledge of the earth and the universe — is to do her and her church a tragic injustice.

In *Movement of Destiny*, Froom reveals many facts behind the development of the complex Adventist religion.⁴¹ If infallibility had been an element in this development, it is difficult to understand why there were so many crises over the emerging theology and specific doctrines in those early days. But infallibility was not an element in the development of the church.

61

Ellen White knew this. But some in the church do not seem to understand it. She stated in *Selected Messages* (book one, page 21) : "Inspiration acts not on the man's words or his expressions but on the man himself, who, under the influence of the Holy Ghost, is imbued with thoughts. But the words receive the impress of the individual mind." She knew she was mortal, was sinful, and could not transmit God's messages in their purity; hence they were bound to contain errors. Ellen White's thinking on infallibility is aptly contained in her statement in the *Review and Herald* of December 20, 1892, page 1:

There is no excuse for any one in taking the positions that . . . all our expositions of Scripture are without an error. The fact that certain doctrines have been held as truth for many years by our people, is not proof that our ideas are infallible. Age will not make error into truth, and truth can afford to be fair. No true doctrine will lose anything by close investigation.

With such a clear statement on infallibility, I cannot help siding with Ellen White against some of her modern interpreters.

CONCLUSION

In this paper I have presented the reality in Christendom of an evolving theology which no person, group of persons, or church body has the power to check, although restraints and frustrations may occasion delay. This process is much like "time" in that it has a purpose to fulfill, and it will run its course, shining "more and more unto the perfect day." Rather than obstruct it, Christians have the obligation (as part of the Great Commission) to accelerate it.

I have presented science, despite all its limitations, as a most influential and respected associate of theology in the endeavor to arrive at ultimate truth. And I have reviewed some of the tensions between theology and science that jeopardize the harmony of the Christian church and obstruct the path of progress.

The problems of age-dating of the earth by both the genealogical method and the geological method have been examined because of their significance to the age-of-the-world controversy that needs to be resolved. The desirability of expanding the restrictive theology of literalism where it clearly interacts adversely with science has been considered as part of the overall problem.

My hope here, obviously, is to provoke thought that will help accomplish a number of good things.

The most immediate benefit to be desired is improved relationships between persons within church bodies — particularly the reduction of tensions among those many Christians involved daily with the rapidly expanding sciences of life, earth, sea, air, and space. They are reading, viewing, listening, studying, thinking, and working in these sciences. Many of their children associated with them will most probably work in the same areas eventually. It would be a disservice to the church were these persons not to be able to study, think, and operate in that world of reality without an excess of unease because of the misconcepts and misjudgments of religious associates. (It goes without saying that what applies for them is equally applicable for persons of like keen mind and tender conscience studying and working in other disciplines.)

But beyond, there is a larger gain to achieve. If unity and truth are to prevail in the Christian church at large, the notion that warfare is necessary between religion and science should be dispelled for all time. It is unthinkable that the God of revelation and theology, as persons of conscience seek to understand truth there, is other than the God of the natural world, as persons of conscience seek to understand truth there. He is the God of all knowledge — the Omniscient One.

The question that remains is whether church leaders can extend their concern to restudying tenets that are past due a searching reexamination. The church stands to gain in the process — both by the harmony that should result from reconciling scholarship in theology with that in God's physical world, and by greatly expanded and enriched understanding of the Doctrine of Creation that could open the way to a profound sense of the meaning of life.

Rethinking and restating theologies in fundamentalism has always been achieved at the price of severe struggle. But no real evil need be feared. Spiritual devoutness and intellectual honesty go hand in hand. The function of doctrine is to make a statement that squares with both Christian principle and the reality of God's creation. To seek ways to make such statements should be our continuing goal.

I close this presentation with the following pertinent quotation from Alfred North Whitehead:

It would . . . be missing the point to think that we need not trouble ourselves about the conflict between science and religion. In an intellectual age there can be no active interest which puts aside all hope of a vision of the harmony of truth. To acquiesce in discrepancy is destructive of candour, and of moral cleanliness. It belongs to the self-respect of intellect to pursue every tangle of thought to its final unravelment. If you check that impulse, you will get no religion and no science from an awakened thoughtfulness. The important question is, In what spirit are we going to face the issue? There we come to something absolutely vital.⁴²

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BASIC MEASUREMENT METHODS (see note 30)

METHOD	MATERIAL	TIME DATED	USEFUL TIME SPAN (YRS.)
carbon-14	wood, peat, charcoal bone, shell	when plant died slightly before animal died	1,000 to 50,000 2,000 to 35,000
potassium-argon	mica, some whole rocks	when rock last cooled to about 300° C	100,000 and up
	hornblende, sanidine	when rock last cooled to about 500° C	10,000,000 and up
rubidium- strontium	mica	when rock last cooled to about 300° C	5,000,000 and up
	potash feldspar	when rock last cooled to about 500° C	50,000,000 and up
	whole rock	time of separation of the rock as a closed unit	100,000,000 and up
uranium-lead	zircon	when crystals formed	200,000,000 and up
uranium-238 fission	many	when rock last cooled	100,000,000 to 1,000,000,000 depending on material