Negotiating the Creation-Evolution Wars

By Fritz Guy

W hen it comes to putting Genesis and geology together, there are (as is often the case in the rest of life) many options but no free lunches. Every approach is expensive in one way or another. But thoughtful Christians who are in touch with the modern world usually choose among five principal approaches to the problem of relating the biblical revelation about Creation and the natural history of the world.

It is useful to think of each of these approaches in an ideal or "pure" form, recognizing that seldom does anyone's thinking fit neatly into a single category. (The quoted materials are intended only to illustrate a particular approach, not to represent the overall perspective of any particular author.)

Biblical Positivism: Genesis Without Geology

The starting point for the approach of biblical positivism is a simple biblical literalism that views Genesis as providing an authoritative literal account of the process of Creation, accurately describing what occurred and how it happened. This way of reading Genesis is reflected in the bumper sticker that reads, "God says it; I believe it; that settles it." Biblical literalism is sometimes accompanied by a suspicion of modern sciences (and "godless scientists") or by a more general anti-intellectualism.

The most interesting example of this approach is the "apparent age" theory, which argues that in the beginning God created a "mature" earth. Adam had the appearance of being an adult, and a scientific examination of his body immediately after his creation would have provided ample data to indicate that he was, in fact, a fully adult male. On the Sabbath of Creation week his apparent age was at least 20 years even though his real age was only one day. This argument states that what was true of Adam was also true of everything else: every created entity appeared to have the age of its particular maturity. Thus, trees had numerous annual rings; light was well on its way to planet Earth from distant stars; and rocks had sedimentary strata. Of course, in no case was there empirical evidence of a recent Creation; by the nature of things, there couldn't have been. So this theory has an interesting logical status: on the one hand no scientific evidence of age or development can count against it; on the other hand no scientific evidence can support it, either. This is why it is called "biblical positivism": it is an apriori theory of earth history, simply "posited" on the basis of a conviction about the nature of the Genesis narratives of Creation.

The problem with this approach is that it considers scientific evidence irrelevant, if not misleading, in regard to earth history. It is not "putting Genesis and geology together" so much as taking Genesis and ignoring geology. This is a high intellectual price to pay in a culture that is distinguished by scientific and technological achievement. The price is so high, in fact, that relatively few people, Christian or otherwise, seem willing to pay it. The consensus is this:

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"Science is not infallible, but God is hardly deceptive."¹ Trees may have been created with annual rings; but a tree created with "Abraham loves Sarah" carved in its bark would have been gratuitously deceptive. In exactly the same way, it seems, the creation of fossil sequences in rocks would have been deceptive. Evidence that suggests sedimentation or vulcanization is one thing; evidence that points to millions of years of changing forms of life on earth is another thing entirely.

Another problem is that this approach wants to exclude one area of science (namely, geology) from our understanding of reality without affecting other areas. But it is hard to see how this can be done. Since Adventism is firmly committed to scientific medicine (so that its medical institutions and personnel will be legally qualified to provide medical care), it is very difficult to say, "We'll take seriously those sciences (like biochemistry and neurophysiology) that help us practice medicine, but we'll ignore other sciences (like geology and paleontology) if they don't support our beliefs." It is logically possible (although culturally difficult) to dismiss science as a whole, but if one kind of science is theologically legitimate, the whole scientific enterprise is, in principle, legitimate. One cannot pick and choose among the sciences. A commitment to medical science means that an understanding of Creation and earth history must take advantage of the earth sciences; otherwise there is intellectual schizophrenia. If Adventists are going to be concerned about origins, it makes sense for an institution that specializes in infant heart transplants and nuclear medicine to also have a Geoscience Research Institute.

Creation Science: Genesis Controlling Geology

C reation science is a process of harmonizing an understanding of natural history with biblical revelation. The starting point is the conviction that both Genesis and geology are relevant to an understanding of earth history, because truth is fundamentally a unity. Theoretically, this harmonization could work in either direction: one could assert the primacy of modern science, and understand Genesis in terms of geology (which is what "harmonization" in this area usually means); or one could assert the primacy of the Bible and understand geology in terms of Genesis. In both cases the logic is the same: the range of the possible interpretations of evidence in one kind of study is determined by prior conclusions on the basis of evidence in another kind of study.

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The intention of Creation science is thus to support the biblical account with scientific evidence and argument. Negatively this involves formulating objections to evolutionary theory; positively it involves presenting evidence of a recent origin of the Earth, life, and humanity. In the 20th century there has been

a remarkable resurgence of belief among many Christian scientists in the crucial geological role of the Flood and in the idea that the Earth is extremely young. A host of biologists, physicists, chemists, geographers, and engineers (extremely few geologists and astronomers) have recently been insisting on a return to a belief in Creation in six twenty-four-hour days only a few thousand years ago....²

This approach has two principle starting points. One is the conviction that biblical statements about origins are relevant to an understanding of earth's history. While it is true that "in dealing with Creation, the Bible puts its major emphasis upon why God did what he did," it is significant that "the Bible is also concerned with what God did and even, to some extent, how he did it. And there is indeed a statement about origins which, imprecise though it may be, nonetheless has implications for the proposals of natural science."³

The other starting point is an implicit (and sometimes explicit) belief in biblical inerrancy, along with a kind of moderate (that is, not absolute) literalism. While affirming a recent Creation in six 24-hour days, this approach is flexible in regard to such things as (1) the nature of the "firmament" (literally, a beaten-out metal plate in

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the shape of a dome); (2) the creation of the sun, moon, and stars on the fourth day, after there is already vegetation on earth; and (3) the order of events in Genesis 2, which tells of the creation of male humanity, then plants, animals, and finally female humanity. Very few people believe that what looks like sky is really a huge metal dome, or that there was no sun or stars before the fourth day, or that humanity existed (in one gender only) before there was plants and animals. Only with this kind of flexibility of interpretation can the conviction of biblical inerrancy be maintained.

There are three elements in the rationale for Creation science. In the first place, a commonsense reading of the Genesis narratives of Creation suggests that they are "straightforward prose."4 In the second place, subsequent biblical materials seem to regard the Genesis account as a literal, factual description of the process of Creation: the fourth commandment (Exodus 20:11; cf. 31:17), for example, along with references to Adam in the Gospels (Mark 10:6-8; Matthew 19:4, 5) and the Pauline letters (Romans 5:12-21; 2 Corinthians 11:3; 1 Timothy 2:13, 14). And in the third place, throughout the history of Christian thought, the dominant understanding of Genesis has been a literal one-the most notable exception being Augustine, who believed that everything was actually created simultaneously but was

presented in Genesis as taking six days so that people could more easily understand it.⁵

The major difficulty of this approach is that "Creation science" is not science in the generally accepted sense of the term. For one thing, the idea of Creation presupposes a Creator, and hence is a self-evidently religious notion. This is why the Arkansas law requiring the teaching of Creation science in public schools was declared to be unconstitutional.⁶ Everyone interested in Creation sciences seems to be religiously motivated; not only are the authors of Creation science materials self-identified as Christian, but in every case the materials are produced by religious rather than scientific publishers. Recently, a new term has been suggested to avoid this difficulty: "origin science." This resolves the logical problem although, again, the proponents and their publishers are religiously motivated.⁷

Another difficulty is the fact that, as of now, the preponderance of scientific evidence points to a very old earth and a gradual development of life forms. Occasionally this is implicitly admitted: "Creationists and flood geologists recognize that if their theory is true, there must be some significant phenomena yet to be discovered."⁸

Biblical Reinterpretation: Genesis According to Geology

Many Christians who have looked at the geological evidence have "shown much support for [both] the antiquity of the Earth and the integrity of the Bible as God's revelation, and have been eager to relate the discoveries of science to Genesis."⁹ And they note some interesting similarities between Genesis and geology: the order and diversity of reality, the progression of different kinds of reality from comparatively simple to more complex, and human existence as part of a temporal process that began before it and points forward to an eschatological future.¹⁰

Those who take this approach have developed various ways of interpreting Genesis to take account of a long span of time. (1) The gap theory,

which is no longer prominent,¹¹ puts geological time into the first two verses of Genesis 1, which, it is claimed, describe the conditions that preceded the six 24-hour days of Creation. (2) The day-age theory, on the other hand, puts geological time into the six days themselves, regarding them as indefinitely long but successive epochs.¹² (3) The revelatory-day theory (or pictorial-day theory), which is not as well known, puts geological time into Creation week as a whole, without correlating days with epochs. This theory maintains that it was not Creation that happened in six 24-hour days, but the revelation of Creation. "Pictorial-revelatory days, not literal days nor age-days" are the "means of communicating to man the great fact that God is Creator, and that He is Creator of all."13

The problem with all of these interpretations is that they are not indicated, much less demanded, by the biblical text; they are simply *ad hoc* attempts to make Genesis agree with geology. And there are some glitches. The gap theory ignores the structure of Genesis 1, and the function of the first sentence as the thesis of the whole chapter. The day-age theory ignores the impact of the refrain, "There was evening and there was morning" (Genesis 1:5, 8, 13, 19, 23, 31, NIV). The revelatory-day theory ignores the need for some reference to a visionary experience.

Some who take the approach of biblical reinterpretation go to great lengths to claim they are not reinterpreting Genesis according to geology.

The data of nature can only make us take another hard look at the data of the Bible to see if we have interpreted them correctly the first time. The Bible must finally be interpreted in terms of its own facts even though information from other sources, for example, literature or archaeology, may help us to ask proper questions of the biblical text in our interpretive task. The question of the length of days of Genesis 1 must be decided by the text of Scripture and the analogy of Scripture. It cannot be decided by information from nature.... We cannot reject the twenty-four-hour hypothesis simply because it doesn't agree with science. The length of days is an exegetical question.¹⁴

But after listening to all this explanation, one still has the impression that these interpretations really are determined by geology.

Having allowed for great ages of geological

time, this approach also allows for various views of the creative process. Here the difference between "progressive Creation" and "theistic evolution" does not seem to be theologically significant (since the latter can easily include the former), although the two terms may be sociologically important. Those who identify themselves as "progressive Creationists" may be trying to avoid the pejorative label "theistic evolutionist," which seems to many Christians to be a self-contradiction, since for them the term "evolution" carries atheistic connotations.

Operationalism: Genesis Paralleled by Geology

T he approach of scientific operationalism begins with the conviction that science does not provide information about reality as such, but simply gives directions for further research. Applied to the relation of Genesis and geology, this means that the biblical revelation provides a realistic account of what happened, while the data of natural history indicates how Creation appears.

This means that science provides "theoretical models" used for "facilitating the predictability of future events," but doesn't "depict the actual constitution of the eternally real world." Science

is unable to establish any final truth or a final system of explanation.... What is scientific cannot on the basis of the scientific method be shown to be objectively true, and may in fact be "untrue" or "wrong."¹⁵

In other words, the activity of God in the natural world is so far beyond human comprehension that it is presumptuous and arrogant to assume that it corresponds to our theories. In this view, "modern science can pose no significant problem for Creation, and Creation need pose no problem for science,"¹⁶ because science talks about appearances, the Bible about reality as such. (Students of philosophy may here recognize the ghost of Immanuel Kant, who distinguished between the "phenomenal" realm of appearances and the "noumenal" realm of "things in themselves.")¹⁷

This approach is a sophisticated cousin of biblical positivism: both maintain that biblical

revelation cannot be refuted or supported by scientific data. In this respect, these approaches are like the idea that the world and its contents, including each person's memory, were created 15 minutes ago. But this is to divorce science from any knowledge of reality. The idea that science

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cannot tell us about God is plausible enough; the idea that science cannot tell us about the natural world either is rather hard to swallow, especially now. "Contemporary Western civilization is more dependent, both for its everyday philosophy and for its bread and butter, upon scientific concepts, than any past civilization has been."¹⁸

Dimensionalism: Genesis Intersecting Geology

Dimensionalism regards Genesis and geology, like the larger categories, science and religion, as talking about different aspects of one reality. This approach is a little like operationalism (Genesis paralleled by geology), but in this case, Genesis and geology are seen as "intersecting" because they are both talking about the same subject—namely, the reasons for the actual reality we encounter.

This approach distinguishes "the question of ultimate origins (Where did it all come from?) from the quite different question of proximate origins (How did A arise out of B, if it did?)."¹⁹ Accordingly, it is believed that biblical revelation is intended, not to give an account of the process of Creation, but to identify the source and explain the intention of Creation. In other words, Genesis answers the questions Who? and Why? while geology and its related sciences answer the questions When? and How?²⁰ These are seen as complementary sets of questions about radically different dimensions of reality. Back in the 17th century, Galileo recognized this distinction when he explained, "The purpose of the Holy Ghost [in Scripture] is to teach us how one goes to heaven, not how heaven goes."²¹

For dimensionalism, the idea of Creation is an article of faith, like the idea of a Creator. It is compatible with "all kinds of scientific vocabularies which can underline, concretize, and illustrate it; but what this faith speaks of remains independent of all these modes of expression."²² Genesis is seen as a profound religious/theological affirmation of Creation—Genesis 1 as a hymn in seven stanzas, and Genesis 2-3 as a symbolic narrative something like the parables of Jesus—which is taken "seriously but not literally."²³

So what Genesis is saying is that God is the source of everything. God is exclusively ultimate; everything else is created by God and dependent on God. What God creates is real and good, so nothing is intrinsically evil. This is not "scientific"; it is far more important than science.

To know the process by which things came to be would be only interesting; to know that it comes from a will which unites its power with a creative love is to be able to answer with confidence all our most crucial questions about the meaning and intelligibility of our existence.²⁴

Thus Genesis and geology answer differing kinds of questions that need to be kept separate. "Bringing appropriate questions to the Bible leads to a harvest of beautiful and powerful answers; inappropriate questions are the seeds of nonsense."²⁵

Internal evidence for the theological (nonscientific) character of Genesis is seen in (a) the grammatical and logical subject of most of the sentences, which is not the world or its contents, but God: "God said," "God saw," "God blessed"; (b) the two parallel series of three creative acts: forming the world by differentiation (light from darkness, water from air, land from sea), and filling the world by production (astronomical objects, fish and birds, animals and humanity); and (c) the difference in the order of Creation events in Genesis 1 and 2—a difference that is no problem if the two narratives are not regarded as providing a chronological account.

According to the approach of dimensionalism, although Genesis and geology intersect (because they are both talking about the reasons for the reality we encounter), they cannot be in conflict:

The Creator is behind all physical processes, all reproductive capabilities, all principles of harmony in the universe. Then in principle there can be no conflict between faith and science. Conflict will arise only if God is assumed to be merely the God-of-the-gaps, whose activities are circumscribed to the miraculous while science studies the "normal" or "natural" events. If the Creator is Lord of all events, taking ultimate responsibility for everything, then the term "natural" will not mean self-explanatory, but that fixed and stable state of processes in the universe of which God is the Ruler and Maintainer.²⁶

This approach makes it comfortable to think about both the geological evidence and the biblical narratives at the same time: one can wonder about the age of the earth and not be anxious. It is not necessary to say, "If the geologists don't come up with the right data, we'll have to give up the Bible." On the other hand, this approach involves a different way of reading the first part of Genesis (taking it "seriously but not literally") and of thinking about such things as the Sabbath, the figures of Adam and Eve, and the relation of death to sin. This is, for some, too high a price to pay.

No, there are no free lunches. Biblical positivism, for example, is clear, uncomplicated, and continuous with historic Christianity and Adventism; but it comes at the cost of isolating itself from modern science-which isn't possible for a community that is committed to scientific medicine. Creation science takes science seriously in order to use it in the service of a belief based on a reading of Genesis; but it is not itself truly "scientific." Biblical reinterpretation wants to make Genesis scientifically respectable by harmonizing it with contemporary geology. Operationalism maintains the integrity of both Genesis and geology, but at the cost of divorcing science from reality. Dimensionalism gives each source of knowledge about Creation its own role and function, but it requires a new understanding of the meaning of Genesis.

Among all the approaches and options, not everyone will make the same choice, because different people will differently assess the benefits and the costs of each approach. However, we must learn to respect one another's choices.

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