God desires to make Himself known to us. He has done this in at least three ways: (1) through His Son Jesus Christ; (2) through the work of the Holy Spirit; (3) through His written Word.

Scripture indicates, further, that God may also be known through His creation. This can be inferred from Romans 1:20: “Since the creation of the world God’s invisible qualities—his eternal power and divine nature—have been clearly seen, being understood from what has been made, so that men are without excuse” (NIV). The interaction between two of these sources of revelation—Scripture and God’s “second book” of nature—is a subject worthy of consideration.

Considering God’s Way of Communicating With Us

Is God able to communicate truth to humans? Are humans capable of understanding God’s communications?

Surprisingly, the average Christian gives little thought to these questions. This is probably because, as Christian philosopher Ronald Nash notes, historic Christianity has “affirmed both an intelligible revelation from God and the divinely given human ability to know the transcendent God through the medium of true proposi-

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Effects of Sin on Human Reason

We generally recognize that sin introduced some profound changes into our world; the most obvious, perhaps, being decay and death (see Romans 8). However, not only our physical bodies have been affected by sin, but also our minds. This means that our ability to reason has been affected. “In our fallen state, with weakened powers and restricted vision, we are incapable of interpreting aright. We need the fuller revelation of Himself that God has given in His written word” (Education, p. 17). Of course, we generally recognize as Christians that we need God’s Spirit every day, and we understand that we are to invoke God’s help as we go through the day to live our lives as He would like—to make proper decisions that will be in harmony with His character and will. We often fail to consider the implications of this.

To invite the Holy Spirit into our hearts and minds so that we can think and act like Christ means that the Spirit is naturally going to have an impact on our thinking and reasoning process. Indeed, we need the power of God’s Holy Spirit to help us properly reason through things. As theologian Gerhard Hasel observed, “Human reason is also subject to sin and its . . . effects [on the intellect] and is no neutral norm of judgment. Reason needs the light and witness of divine revelation.”

Fortunately, however, the fact that human reason has been affected by sin does not mean that truth or logic is affected or that truth cannot be discovered and understood. As Nash points out, “Sin does not affect the truth of subject matter such as the multiplication tables. . . . Sin may hinder the ability to reason correctly but it does not alter the laws of valid inference.” That is to say, the Fall does not affect the laws of reason, only our ability to employ those laws.

The good news is that even though our power to reason has been affected by sin, God, through the Holy Spirit and His written Word, enables us to overcome the deficiencies imposed by sin. We must, however, avail ourselves of this help. “To know truth, the mind is necessary, but not sufficient. According to Augustine, the created light of human intellect needs a light from without. Even created intelligible light would be unable to account for human knowledge without the constant, immanent, and active presence of God. We must not think of the forms as having been given to humans once-and-for-all. Though the forms are part of the rational structure of the human mind and belong there by virtue of our having been created in the image of God, the soul never ceases to be dependent upon God for its knowledge.”

Theologian B. B. Warfield makes a similar point: “God, having so made man, has not left him deistically, to himself, but continually reflects into his soul the contents of His truths which constitute the intelligible world. The soul is therefore in unbroken communion with God, and in the body of intelligible truths reflected from God, sees God.”

Of course, we generally recognize as Christians that we need God’s Spirit every day, and we understand that we are to invoke God’s help as we go through the day to live our lives as He would like—to make proper decisions that will be in harmony with His character and will. We often fail to consider the implications of this.

Reason, the Holy Spirit, and Nature

Many might argue that it goes without saying that the Holy Spirit is needed if we are to interpret Scripture properly. But what about nature? Referring to the light Adam and Eve possessed before the Fall, Ellen White, wrote that this light not only illuminated their surroundings, physically, but also their ability to perceive “the character” and “the works of God” (The Ministry of Healing, pp. 461, 462). After the Fall, they lost this light, and the impact of that loss affects us even today.

“No longer could they read [nature] aright. They could not discern the character of God in His works. So today man cannot of himself read aright the teaching of nature. Unless guided by divine wis-
Views have differed about the amount of authority and the level of reliability of God’s written Word for us. However, the fact that our own reasoning ability has been affected by sin and that we are dependent upon God’s power for a proper understanding of Scripture should caution us from diminishing either the authority or the reliability of God’s Word.

Dom, he exalts nature and the laws of nature above nature’s God. This is why mere human ideas in regard to science so often contradict the teaching of God’s word. But for those who receive the light of the life of Christ, nature is again illuminated. In the light shining from the cross, we can rightly interpret nature’s teaching” (ibid.)

Elsewhere she makes a similar point, “The deepest students of science are constrained to recognize in nature the working of infinite power. But to man’s unaided reason, nature’s teaching cannot be but contradictory and disappointing. Only in the light of revelation can it be read aright” (Education, p. 17). “Through faith we understand” (Heb 11:3, NKJV).

Recognizing that we need the Holy Spirit’s guidance when we try to understand nature, we need to remember, as we attempt to discern God’s message in His second book, that it has not come to us in its original, pristine state. According to the Bible, God’s creation was originally very good (Heb. tow meod). Yet because of sin, nature has been blighted—it is not how God intended it to be. According to Ellen White, “Nature still speaks of her Creator. Yet these revelations are partial and imperfect. And in our fallen state, with weakened powers and restricted vision, we are incapable of interpreting aright. We need the fuller revelation of Himself that God has given in His written word” (Education, p. 17).

“Inferences erroneously drawn from facts observed in nature have . . . led to supposed conflict between science and revelation; and in the effort to restore harmony, interpretations of Scripture have been adopted that undermine and destroy the force of the word of God. . . . In order to account for His works, must we do violence to His word?” (ibid., pp. 128, 129).

Obviously, we don’t want to use God’s second book to undermine or destroy the first. In Ellen White’s understanding, when both Scripture and nature are properly understood, there can be no conflict between the two.

“He who has a knowledge of God and His word through personal experience has a settled faith in the divinity of the Holy Scriptures. He has proved that God’s word is truth, and he knows that truth can never contradict itself. He does not test the Bible by men’s ideas of science; he brings these ideas to the test of the unerring standard. He knows that in true science there can be nothing contrary to the teaching of the word; since both have the same Author, a correct understanding of both will prove them to be in harmony. Whatever in so-called scientific teaching contradicts the testimony of God’s word is mere human guesswork” (The Ministry of Healing, p. 462, italics supplied).

Using God’s Two Books Together

Views have differed about the amount of authority and the level of reliability of God’s written Word for us. However, the fact that our own reasoning ability has been affected by sin and that we are dependent upon God’s power for a proper understanding of Scripture should caution us from diminishing either the authority or the reliability of God’s Word. “The Bible and the Bible alone, is to be our creed, the sole bond of union; all who bow to this Holy Word will be in harmony. Our own views and ideas must not control our efforts. Man is fallible, but God’s word is infallible. . . . Let us lift up the banner on which is inscribed, The Bible our rule of faith and discipline” (Selected Messages, Book 1, p. 416).

Ellen White’s comments about the relationship and interaction between God’s two books are similar to a current argument within the area of archaeology. For some time there has been a debate about the role of written materials versus material cultural artifacts (potsherds, building remains, tools, weapons, objects related to food and textile production and use, etc.). Some feel that artifacts are a better source for reconstructing the past because texts can be slanted and may be written too long after an event to be useful. Artifacts, on the other hand, are contemporary and lack the bias that can be injected into a text. Textual scholars, on the other hand, argue that texts are more important than “mute artifacts” because they provide cognitive information—a direct conduit into the thinking of people of the past. Textual scholars feel that through various forms of scholarly analysis, such as textual criticism, they can adequately compensate for the weaknesses of the text. A similar argument occurs between scientists and theologians: Does nature tell us more about God, or does Scripture?
In archaeology, the textual scholars seem to be winning this debate. This may not seem surprising to laypersons, who would rather have a written document from the past than a pile of mute stones. The fact is that in spite of the advances of anthropological and archaeological theory designed to extract information from mute artifacts, it is still difficult to get at the mind of ancient humans merely through their artifacts. The quality and nature of the information content is generally recognized as superior in a written text. One of the reasons for this is that most texts were written with the intention of communicating (revealing, if you will) cognitive information from one mind to the minds of others.

As an archaeologist, when I find an artifact, I try to determine who made it, how it was made, what its purpose was, etc. Though I believe I am trained to do a pretty good job of answering these questions, I would find it much more helpful if the ancient manufacturer had left behind some written account addressing those issues. I like to have the artifact and the text together, with the text giving me guidance as to how and why the artifact was made.

Nature is somewhat analogous to archaeological artifacts. The believing scientist can assume that God is the author of nature and that nature does reveal something about its Maker. However, the information expressed by nature is not explicit; much more inference is required to determine its meaning. Nature is better understood with the assistance of written material.

Human documents can admittedly be unreliable. In Scripture, however, we have the Word of the infallible Creator to guide us in understanding our world.

As in archaeology, there might be some who feel that the artifact (in this case, nature) is more important than the text (in this case, the Bible). But the question must be asked, “Was God’s original intention and primary purpose in creating nature to reveal Himself to His creation?” This would seem unlikely for several reasons.

First, before the Fall, humanity had direct access to the Creator, so an indirect revelation (material/nature or written) was unnecessary.

Second, we are told that the primary purpose for the creation of the Earth was to be inhabited. That the Creator’s hand can be detected in His work may have been inevitable, but it is of secondary importance. After the Fall, however, when direct access to God was cut off, these incidental indicators assumed both a new role and importance.

Third, it appears that the revelation in nature has been affected by the entrance of sin.

Fourth, if nature were intended as a complete and satisfactory revelation of God, then God would not have needed to send additional, later revelations through both His Son and the written Word.

Finally, there is a qualitative difference in the information contained in God’s written Word versus His second book. Written revelation is propositional or cognitive revelation, while natural revelation is not. In other words, it is addressed directly to our minds with the purpose of communicating information about God to us.

Though it would be nice to see all conflicts between nature and Scripture resolved, the question needs to be asked, “Do all apparent conflicts need to be resolved?” Any belief in the supernatural is going to collide with science sooner or later. When I took a course in physiology, we had a section on abnormal physiology. When I saw how many things can go wrong, how easy it is for them to go wrong, and, ultimately, how inevitable it is that we will all die, I was duly impressed that we are “fearfully and wonderfully made” (Ps. 139:14, KJV). I have become increasingly impressed that all life forms need the sustaining power of God.

Little miracles such as turning water to wine or the resurrection of a dead man are as unacceptable from a scientific perspective as bigger ones like the Red Sea collapsing or a global Flood. Some folk who want to be accepted by scientists while hanging on to their faith seem to draw protective circles around some supernatural events while casting doubt upon others that violate the conventional understanding of their specialty. This makes them appear inconsistent in their use of Scripture. It may be easier simply to admit that this side of eternity there will be many questions we won’t be able to answer—many problems for which solutions cannot be readily found. Rather than dwelling on those problems that I can’t solve, I have found that there is plenty of positive evidence in both Scripture and nature that point to a loving Creator.

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4 Ibid., p. 89.

Design arguments found their classic formulation in 1802, when William Paley, archdeacon of Carlisle, published his book *Natural Theology.* Paley did not originate this argument, but his book defined its form. It is useful to quote its first words: “In crossing a heath . . . suppose I found a watch upon the ground, and it should be inquired how the watch happened to be in that place. . . . For this reason, and for no other, viz. that, when we come to inspect the watch, we perceive . . . that its several parts are framed and put together for a purpose.”

Note that Paley’s emphasis was not on complexity but on purpose—on intention. He did dwell significantly on complexity but did not develop an argument from beauty as an additional evidence of purpose and design.

In their current form, intelligent design arguments have been well received by those who come from a traditional monotheism—Judaism, Christianity, or Islam. But in other circles their reception has been mixed at best. Outside North America, intelligent design has been widely ignored, and most mainstream scientists have rejected it. What is intriguing, however, is the hostility to intelligent design from many persons who profess a sturdy religious faith.

Recently a group called “Christians in Science,” an assemblage of a
hundred or more intellectuals, met at a conference in England. The theme of the conferences was “Divine Action in Nature,” which offered plenty of room for lively discussion. One might have expected them to be sympathetic toward the presentation of a God who is engaged in nature, who may sometimes intervene. This is a God to whom they pray, who is accessible, who cares for His world.

But this was not so. These scientists of undoubted faith, who in principle should not have a quarrel with the concept of a designer, nevertheless gave little or no support to intelligent design. Though scientists of faith declare belief in God, it seems they are not happy with Him meddling in their universe. They look for answers in the natural realm where they have always looked: under a microscope, in a test tube, in software code, or wherever they can rely on known predictable laws. But though this habitual naturalism works well in the laboratory or in the kitchen, it has nothing helpful to say about occurrences that transcend known laws. So conferees were wary of intelligent design, which rests much of its case on phenomena that have no natural explanations.

Methodologic naturalism, the over-arching paradigm in the practice of today’s science, is an entrenched worldview with a tenacious grip on the minds and hearts of most scientists. This is hardly surprising: Their careers and their writings rest squarely upon it. Yet one wonders what it will take for them to see the inadequacy of the creative mechanisms identifiable in nature, as well as the far-reaching implications of hard-nosed naturalism for the practice of science and education. To be effective, the case for intelligent design needs to be reinforced and extended.

A consideration of beauty may be a step in that direction. One strength of Paley’s pocket watch metaphor was that its truth was so obvious. Even a child could see the need for a watch designer. Much the same can be claimed for beauty. It, too, is self-evident, even to a child. In his book Climbing Mount Improbable, Richard Dawkins relates how he asked his own daughter what she thought wildflowers were for. To this she replied: “To make the world pretty, and to help the bees make honey for us,” which implied they were intended for beauty and for our enjoyment.

Yet even if beauty is self-evident, where does it fit in our discussion of design and purpose? Three requirements are recognized hallmarks of design:

- **Contingency**: the object/event was not obliged to happen by natural law.
- **Specification**: its details are defined by outside/independent criteria.
- **Complexity**: it consists of many interrelated, mutually dependent parts.

Of these three, complexity has already been well explored by Behe, Dembski, and others. Design theorists can argue that, unaided, nature cannot account for the origin of complex biotic structures. They can apply mathematical tools to the specific arrangement of nucleotides in a strand of DNA and show that laws of probability rule out their chance appearance. Furthermore, they can assert that there is no natural information source that can provide the enormous mass of precise coding required to produce living things.

But when they address beauty, the order and the aesthetic virtues we see in nature, a different treatment is needed. Theorists cannot tease apart its ingredients and subject them to a probability analysis. Beauty is in a different category. It is a distinctive outcome of design, but it is not quantifiable, and you cannot insert it into an equation.

In my early efforts to analyze beauty, I stumbled at first. I was looking for new support for the argument from design, but most paths I explored led nowhere. One morning I found courage to broach the subject in a conversation with John Mark Reynolds, a philosopher at Biola University. My question was straightforward: “This talk of irreducible complexity is fine. But where does beauty come in? To produce beauty by chance in the first place is an unsolved mystery. But its survival is an equally huge obstacle. Beauty in itself is not a factor for survival.
Is a rainbow beautiful to those who are color-blind? Why do we perceive that some colors blend well, while others clash? There is more involved than the wavelengths of light. Why is an orchid in the jungle not merely fragile and marvelous in its delicacy and complexity, but extravagantly so? Why this excess? Why are the tail feathers of a peacock not just bright enough with color to attract a mate, but plain flat-out gorgeous, to an extent far beyond any requirement in the mating season?

There is no reason that a fragile, exquisitely delicate orchid should survive in a harsh jungle environment. If Darwinian natural selection is valid, it should present us today with a biosphere populated by tough, rugged, even ugly surviving-type things. Delicacy and beauty should have vanished long ago."

Reynolds took my question in stride: “Oh, you’re talking about the argument from aesthetics.” And silence followed. Well, of course I was. He had simply used different wording to restate my enquiry. But to me it sounded like a dismissal. I got the impression this matter of beauty was old hat, thoroughly dealt with already by a galaxy of thinkers. Chastened, I let the matter drop until I could do some library work.

After considerable searching, the truth came out: It is not so! I found that beauty is surprisingly ignored in the classics. It is noted as a phenomenon to be observed and enjoyed but not in connection with a divine author. I explored in likely places, and I concluded that the analysis of beauty in relation to the existence of God has been neglected or ignored.

The subject deserves more extensive exploration. Here is an aspect of design theory that invites further development. Even without the Greeks and without Aquinas, there is a lot to be said about beauty to help us on our way, to give us a glimpse of where this journey might take us.

First, beauty is widely defined as being solely subjective. Its content may reside in material objects, or in mind, or in experience. But does it exist if it is not perceived? It dwells, we commonly say, in the eye of the beholder. It is a judgment made by an observer. But can beauty exist independent of an observer? If a tree falls in the forest when there is no one to hear, does it make a noise? In philosophy, and also in the Copenhagen version of quantum physics, observers have a vital role to play. They give reality to what was only an idea. Some would say the same goes for beauty: Its material basis may remain, but there is no reality unless it is perceived. We may be reminded of Berkeley, in an earlier time, who taught that material objects do not exist unless they are observed.

Because beauty cannot be independently objectified and measured, it cannot be inserted into an equation and given the same probability analysis that has been given to complexity. But that does not diminish its force as an argument for design, based either on its unexplained origin or on its problematic survival.

Second, we must recognize several distinctive kinds of beauty, coming to our attention through a variety of pathways. They deserve closer consideration.

Visual beauty is the one that most readily comes to mind. But its subjectivity keeps cropping up. Is a rainbow beautiful to those who are color-blind? Why do we perceive that some colors blend well, while others clash? There is more involved than the wavelengths of light. Why is an orchid in the jungle not merely fragile and marvelous in its delicacy and complexity, but extravagantly so? Why this excess? Why are the tail feathers of a peacock not just bright enough with color to attract a mate, but plain flat-out gorgeous, to an extent far beyond any requirement in the mating season? And why are you and I endowed with a capacity not only to see these wavelengths of light, but to integrate them and find delight in them? It is evident that our response to those feathers gives no survival advantage to us or to the peacock. Naturalism, fitness for survival, cannot explain them.

Auditory beauty has a comparable story. It is astonishing that oscillations in the air molecules surrounding us can be so combined as to contain an intricate, sometimes majestic, message. And also that you and I, though oblivious to the laws of physics, find ourselves equipped with an extraordinary mechanism to perceive these oscillations, and, beyond perceiving them, to find them beautiful, or soothing, or jarring, as the case may be.

Again, naturalism gives no explanation. To hear the footsteps of a predator in the jungle may have survival value. But to enjoy the difference between a Rachmaninoff concerto and Chopin’s “Polichinelle” and to find delight in these subtleties gives no survival advantage. Our capacity for enjoying music has, in fact, perplexed naturalists recently. In Nature, in March of 2002, researchers asked: What is music for? What is its usefulness? After all, an appreciation of music confers “no glaringly obvious advantage in the Darwinian struggle for survival.” It seems to be, as Steven Pinker of
M.I.T. put it, “auditory cheesecake.” Again, the observer’s participation is important. Does a progression of chords have beauty for a deaf man? I think the answer is Yes—if that man is already endowed, from his memory, with the ability to hear those chords in his mind. Beethoven could “hear” his music, and write it out as a manuscript, after he became deaf. When I sit at my piano and improvise, I hear in anticipation and enjoy the torrent of sound I am about to make, even before I touch the keys.

Taste and smell provide for us shades of pleasure and subtle delight that are far richer, more delicately modulated, than can be accounted for by any criteria of survival advantage in a world where natural selection is alleged to rule supreme. We may understand the intricate neural sense organs that mediate these modes of sensation. But selection theory cannot account for our pleasure, for example, in the shades of different flavor in a dozen varieties of apple or our favoring one from an array of perfumes.

Touch sensation may not be so obviously an endowment of beauty, but it spoke volumes to the blind Helen Keller. Consider the huge variety of textures and temperatures that our fingers communicate every moment. And it takes little reflection on the rich experience of sexual gratification to be awed by the subtlety and delicacy and tactile ecstasy that far transcends any reflex-driven mating in lower animal forms.

Further, we must marvel at the beauty seen in the mind and its functions. Ideas can be beautiful. Mathematicians declare that there is beauty in a finely drafted theorem. If they ever find it, the Grand Unified Theory will be a thing of great beauty. A noble beauty in logic and rhetoric, a product of our minds revered by the Greeks, has long been recognized. And words, in the hands of a true artist, can be fashioned into wonderfully beautiful poetry.

I remember vividly from years ago the poetry extravaganzas held at the American University of Beirut Alumni Club, when two hundred academics and professionals applauded and wept in response to the recitation of poetry in Classical Arabic. My friends explained that the language was far richer, more expressive, more heart-moving than poetry in English—provided, of course, you had a full grasp of the vehicle. Even in English, words can be powerful agents of beauty. Gray’s Elegy reminds us that the material ground of beauty may indeed be there, though unperceived:

Full many a gem of purest ray serene
The dark unfathomed caves of ocean bear.
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air.

And like other beauties that depend upon a recipient’s perceptual ability, finding delight in poetry is a mysteriously complex process that fulfills none of the criteria for survival fitness. Where did it come from? What is its usefulness in the survival contest?

Leaving the sensory modalities that serve our perception, we turn to a third attribute of beauty: It expands when shared with another perceiver. It is possible, of course, as an individual to enjoy beauty. But if our quest, like Paley’s, is for an ultimate purpose, we can understand beauty most persuasively as a gift that enriches the receiver and also gives pleasure to the giver. When thus shared, it grows in depth and intensity. For me, reflection yields no satisfying way to contemplate beauty other than as a generous gift that, in all of nature, is offered uniquely to humans who have the capacity to perceive and celebrate it. Furthermore, we can discern no convincing source for beauty in chance events or through natural selection. So at the end of the day, we are left in wonder of a wise and generous Designer, one who shares His own consummate sense of artistry.

In summary, then, beauty is subjective, though it resides in observable realities. It is diverse in its material sources and defies the rules of natural selection. It does not have a discernible cause for its existence in the physical cosmos or in living things. It has no power within itself to survive, to exist.
Confronted by both the complexity and the beauty all around me, I am a believer out of necessity, compelled to bow before a transcendent Being who is personal, who is intelligent beyond imagining and imponderably artistic and generous. In discussing beauty in today’s confrontation with entrenched naturalism, a bold creationist who upholds a designer/creator of beauty wins hands down. Though it is outside the laws of a naturalist worldview, his model works.

To argue from beauty requires that those who are committed to intelligent design should be willing to take a further radical step: They must proceed to characterize the designer. If you have design you must have a designer, and a criticism of the intelligent design movement is that it is advocating a thinly disguised form of creationism. Yet in order to preserve a united front, design theorists have resisted being drawn into discussions about the nature of the designer. It has been more useful to view the movement as a large umbrella that shelters a diverse company of thinkers, all of whom reject philosophic naturalism.

Naturalism, the common adversary, remains far from being defeated, but an argument from beauty can be developed as a powerful additional weapon. Not everyone under the umbrella will be comfortable using it, for it points to a particular kind of designer. When you bring this weapon to bear, you narrow the range of attributes you attach to this designer. And each of us will have a different, personal animus towards using the argument.

When I regard complexity my tendency is to conceive of an engineer-craftsman kind of God, left-brained (to descend into human categories), with an unthinkable capacity for details of function. His world holds together; its parts work well. But when I consider beauty, I look for an artist God, thoroughly right-brained, a personable, relational God who takes pleasure in the beauty He devises and shares.

Here I speak for myself, as well as for others who are bold enough to confess belief in a Creator. Confronted by both the complexity and the beauty all around me, I am a believer out of necessity, compelled to bow before a transcendent Being who is personal, who is intelligent beyond imagining and imponderably artistic and generous. In discussing beauty in today’s confrontation with entrenched naturalism, a bold creationist who upholds a designer/creator of beauty wins hands down. Though it is outside the laws of a naturalist worldview, his model works.

The model reveals a designer, a Demiurge, a God whom we can glimpse, though indistinctly, because the data we observe in nature require that He exist and that He be active in the cosmos. And His attributes come into clearest focus when we not only consider complexity, which is essential for life, but also see beauty, which is essential for spirit, as His gift to us. He is not only a designer and a fabricator, but also an artist who fashioned the physical vehicles that carry the colors of a rainbow and the sounds of great music. Further, He gave us eyes and ears to perceive them, plus a mind to enjoy these life-enhancing delights. He is an artist who likes company, who wants to share His own pleasure, His joy in the work of His hands.

The words still ring in my ears that I heard most memorably once in Washington, at the opening of the Mormon Temple: “He created us that we might have joy.” And though I treated the words offhandedly then, I am moved today when I consider how much truth they contain.

I am seeking, and science is seeking, a satisfying accounting for many unexplained attributes in the cosmos, in living things around us and within us. But materialist science has come up with only supposed models that do not satisfy me. At too many points naturalism fails. It makes beauty an unexplained anomaly and requires us to place faith in unlikely natural mechanisms that are described in full seriousness, but have scant supporting evidence and are beyond my believing.

It is not an abandonment of intellect, but rather an awed humility that leads me to open my mind to embrace super-naturalism, to acknowledge a Creator. For then I can say: I have a model that works, that does give answers. It is a Judeo-Christian model, mirrored in Islam, that recognizes the Creator God of the Bible. This is a God who, like any true artist, could complete His day’s creative activity, look upon His handiwork, and declare that it was good.

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The New Testament testimony to Creation is no problem for today’s followers of Christ. Scripture deals with the most important human questions: Who are we? Where do we come from? Where are we going? Why are we here? While the New Testament preaches the good news about salvation and points to a wonderful future for those who choose to follow Christ, it also addresses the issue of Creation.

The Creation Theme in the New Testament

The New Testament refers to Creation quite frequently. All the larger New Testament books, namely the Gospels, Acts, Romans, the Corinthian letters, Hebrews, and Revelation, in addition to a number of the smaller epistles, contain quotations or allusions relating to the Creation account in Genesis 1–2. The strongest emphasis on Creation is found in the letters to the Romans and to the Hebrews, as well as in the Book of Revelation.

In some cases, Creation and the Fall are connected. At other times, the Fall is referred to alone, yet the Creation context cannot be denied. This is so because Genesis 1–2 and Genesis 3 are closely linked. Furthermore, references to Cain’s murder, the mention of several names listed in the genealogy of Genesis 5, and events found in Genesis 4–11 occur in the New Testament.

Genesis 1–2 are not the only Creation texts in the Old Testament. Other important passages on Creation are found in Job 38–42; Psalm 8; 19; 104; Isaiah 40:26–28, 65:17–66:2; Jeremiah 10:11–13; 27:5; 32:17; 51:15, 16; Amos 4:13, 5:8, 9, 9:5, 6; et cetera. All refer to Genesis 1–2. Therefore, Old Testament quotations in the New Testament dealing with Creation are basically taken from Genesis 1–2.

The quotations used in the Gospels are all part of Jesus’ response when being questioned about divorce: Genesis 1:27; 2:2, 7, 24. Interestingly enough, these quotations refer to the creation of humankind and to the two divine institutions established at Creation: the Sabbath and marriage.

The Word Family ktisis, ktisma, ktio

Among the New Testament texts dealing with Creation, some use formulas such as “from the foundation of the world.” In addition, the word family ktisis, ktisma, ktizo appears 38 times in the New Testament and stresses the importance of the concept of Creation in the New Testament.

The noun ktisma refers to “creatures” and “everything created.” The word describes what God created in the beginning (1 Tim. 4:4). God’s creatures include also humans and animals throughout the past, the present, and the future (James 1:18; Rev. 8:9). Furthermore, Creation surpasses our world and is not limited to this Earth or Solar System. There are created beings in heaven whose creator is God (Rev. 5:13). Consequently, the New Testament teaches that God created the Earth, its atmosphere, and life on this Earth, but also extraterrestrial life forms that are not part of our Creation.

The term ktisis, “creation,” refers to “every human institution/creation” in one New Testament quotation (1 Peter 2:13). Usually, however, it describes God’s work and initiative. The addition of the adjective human indicates that the normal understanding of the term, namely, as God’s action and its results, does not apply in this case, but this does not affect any of the other usages of the term in the New Testament.

Ktisis is found in the phrase “the beginning of [the] creation” (Mark 10:6; 13:19; 2 Peter 3:4), which refers to Genesis 1–2. Creation here is God’s creative act at the beginning of this world’s and human-kind’s history. In Romans 8,
only the children of God wait for the future, but the “whole creation groans” (vs. 22, NKJV) and wants to be “set free from its slavery to corruption” (vs. 21, NASB). In this passage, creation probably refers to all created beings and is not limited to humankind. In Mark 16:15 and Colossians 1:23, however, when the gospel is preached to “all creation” or “every creature,” the term describes humanity only throughout the centuries of the Christian era. In Romans 8:19-21 the context seems to suggest that the created beings again include extraterrestrial beings who are not part of our creation. “The first-born of all creation” (Col. 1:15, NASB) and “the Beginning [beginner] of the creation of God” (Rev. 3:14, NKJV) is Jesus. Yet, in Christ, people, although creatures of God, can become “a new creature” (2 Cor. 5:17, KJV; cf. Gal. 6:15). In this case, a spiritual meaning is added to the physical. Because Jesus is the Creator, He can bring about a new creation, people who are reconciled with God through Him and proclaim this reconciliation.

The verb *ktizo* describes God’s activity when He brought about creation, including humanity (Mark 13:19; cf. Matt 19:4; 1 Cor. 11:9; Rev. 10:6). He has created all things (Col. 1:16; Rom. 1:25; Eph. 3:9; Rev. 4:11). Again there is a spiritual dimension: “we are . . . created in Christ Jesus for good works” (Eph. 2:10, NKJV). Jesus has also broken down the barrier between Israelite and Gentile. Those who believe in Him are one church. He has made (*ktizo*) “the two into one new man” (vs. 15, NASB). Christians are called to “put on the new self” (Eph. 4:24, NIV) which “has been created in righteousness and holiness of the truth” (vs. 24, NASB; cf. Col 3:10). Thus, the term “to create” refers not only to the creation of this Earth and life upon it, but also to Christ’s church, consisting of individuals who form one body. This “spiritual creation” forms a smaller segment of the whole picture and cannot be used to reinterpret physical creation as known from Genesis 1–2 and other texts.

The New Testament contains numerous references to Creation, among them eight direct quotations from Genesis 1–2. The specific Creation language of the word family *ktiz-* describes God’s activity in all cases but one. Other vocabulary needs to be studied. Obviously, the New Testament texts assume that Creation is to be understood literally. God created the heavens and the Earth and various plants and beings. The concept of creation is not limited to that described in Genesis 1–2. Jesus has also created His church. People have become—and even today are becoming—a new creation in Jesus Christ. But this ongoing creative activity of God does not challenge the idea of the specific creation of heavens and earth and life upon it at a specific point of time in the past. Rather, because God was able to do the first, He is able to do the other, also.

**Jesus Christ and Creation**

*Jesus and Scripture*. The issue of Creation is closely linked to the issue of Scripture as the Word of God. This is the crux in the current debate. If we were not Christians, it probably would be much easier to accept Creation or evolution—or other approaches such as theistic evolution or progressive creation. But we have Scripture, which plays a central role in the life of our faith community as well as in our private lives. Therefore, we must ask: Is Scripture the final authority in the Creation/evolution debate, even if in some cases it seems to contradict interpretation of data produced by science? Or should Scripture be reinterpreted to fit these scientific models of origins?

What we know about Jesus is basically what the Gospels and some other parts of Scripture tell us about Him. This can be taken at face value or can be questioned. But even if we choose a critical approach and claim that many New Testament texts ascribed to Jesus are not authentic but are productions of the early church, the outcome would probably remain quite similar.

Some scholars have suggested that Jesus favored traditionalism and did not challenge wrong ideas. But the Jesus of the Gospels was willing to handle delicate and controversial issues. Wenham states that Jesus was “prepared to face the cross for defying current misconceptions. Surely he would have been prepared to explain clearly the mingling of divine truth and human error in the Bible, if he had known such to exist.”

So, what did Jesus think about Scripture?  
1. Jesus believed in the inspira-
When Jesus pointed to the past, He did not do so exclusively to Genesis 1–2. In His speeches He referred to Abel, Noah, and the Flood, all occurring in Genesis 3–11. These passages give the clear impression that according to Jesus, Noah and Abel were real human persons, that Genesis 3–11 is historical narrative, and that a global flood actually happened. 

The phrases do not allow us to talk about creation of humanity only and thereby separate it from the rest of creation, but rather the phrases “from/before the foundation of the world” “refer to the beginning of the whole creation as described in Genesis 1.”

Jesus also referred to preaching the gospel to all Creation: “‘Go ye into all the world, and preach the gospel to every creature’” (Mark 16:15, KJV), or “‘to all creation’” (NIV). The proclamation of the gospel is directed to all human beings. The parallel text in Matthew 28:19 talks about “all nations” (KJV). The Book of Acts shows how that commission was carried out.

“Creation” or “creature” is used in a restricted sense, referring to human persons. By calling people “creatures” or “creation,” Jesus may have been reminding His audience that all human beings are created by God, have intrinsic value, and are God’s property. As such they deserve to hear the gospel and be saved.

2. Direct references to Creation. Jesus said, “‘The Sabbath was made for man, and not man for the Sabbath. Therefore the Son of Man is also Lord of the Sabbath’” (Mark 2:27, 28, NKJV). This refers to the fourth commandment in Exodus 20:8–11, where the Sabbath is linked with Creation. However, Creation is also present in Mark 2 itself. According to Jesus, the Sabbath is God’s creation, as is humanity. The purpose of the Sabbath is to be a blessing to humankind. It is one of the great gifts of Paradise.
that has reached us. This text also assumes that humanity was created by God.

Just as the Sabbath and the original Creation were linked in the Old Testament, they are also connected in the New Testament. Humans were already in existence when the Sabbath was made; therefore, the day evidently was made for their use and benefit. It is significant, however, that Adam was not made lord of the Sabbath. The “Son of man,” Jesus Christ, holds that title (Mark 2:28, NKJV).

The shift from verse 27 to verse 28 is abrupt: “Therefore the Son of Man is also Lord of the Sabbath” (NIV). The term *therefore or so* (NIV) seems to make sense if the One who created humankind and Sabbath is the Son of Man. If this conclusion is correct, Mark 2 is a remarkable text in which Jesus Himself maintains an indirect claim of being the Creator of humankind and of the Sabbath. The New Testament stresses again and again that Jesus is Creator, but it seems that this claim is not found in Jesus’ own statements directly.

Jesus does use direct language, however, in Mark 13:19: “For those days will be a time of tribulation such as has not occurred since the beginning of the Creation which God created, until now, and never shall” (NASB).

This text is part of the Synoptic Apocalypse. It is a strong statement connecting “to create” with “creation.” Although it is obvious that God is the creator, it is stressed anyway. The phrase “since the beginning of the creation” is shortened in a number of other statements by Jesus and His followers, but still refers to creation (Matt. 19:4, 8; 1 John 1:1; 2:13, 14). A similar phrase, “in the beginning” (John 1:1, 2; Heb. 1:10), is not just the beginning of humanity, but comprises the entire creation process.

3. Quotations from Genesis 1–2. Matthew 19:1–12 and Mark 10:1–12 are parallel texts dealing with the problem of divorce. Jesus was opposed to divorce, but whereas in Matthew, an exception clause is mentioned, such a provision is not made in Mark. In both cases, however, Jesus supported His position by pointing back to Creation and showing God’s intention when He instituted marriage.

Whereas Mark 2 deals with Creation and Sabbath, Mark 10 and Matthew 19 deal with Creation and marriage, the other institution left to us from Paradise. These texts are the clearest reference to the Genesis creation account found in Jesus’ teachings. He quoted Genesis 1:27 and 2:24.

By applying these texts to marriage, Jesus declared that they are foundational to Christians. Creation took place in the beginning. God created. He created the first couple, Adam and Eve. The distinction between genders was set by God. By quoting from Genesis 1–2, Jesus affirmed the Creation account and the mode of creation as described there. He understood Genesis 1–2 literally and took the two chapters at face value.

Thus the New Testament stresses that Jesus accepted the Bible of His time as the authoritative, trustworthy Word of God. Israel’s history traced back to the Creation account is reliable. All Old Testament characters were real beings who lived in time and space. A real Creation and a real Flood happened. Jesus did not utter any doubts about Scripture, but stressed that “Scripture cannot be broken” (John 10:35, NKJV).

Jesus held that Creation took place. God created. Creation happened at a definite time. There was a beginning, Creation week, which included all of God’s creative activities described in Genesis 1–2 and the establishment of the Sabbath. Because Jesus mentioned major biblical characters throughout Israel’s history, the beginning of humanity is not separated from the other creative acts of God in the Creation week.

Humans were created before the Sabbath. They are worthy to attain salvation and must be able to hear the gospel. In Mark 2, the Sabbath is a 24-hour day. This Sabbath refers back to the Creation Sabbath. Obviously, according to Jesus, the Creation days were literal 24-hour days. A literal and close reading of Genesis 1–2 seems to be the proper approach to Scripture.

Jesus Christ as the Creator

The New Testament affirms repeatedly that Jesus is God, that He exists forever, and that He was incarnated as a human being “when the fullness of the time had come” (Gal. 4:4, NKJV). As such He lived among us, died a shameful and painful death in our place, then was raised from the dead and taken to heaven. He now serves as our High Priest and will come back as King of kings in order to take His people
If the biblical testimony is trustworthy, namely that Jesus is the Creator, He must know what creation is all about, and His words carry a weight that surpasses all human knowledge. If it is true that Jesus is the Creator, He should know by which process He has accomplished creation. To claim that creation occurred as described in Genesis—which is the picture presented in the Gospels—while having used an evolutionary process, is deceptive to say the least.

home. But in addition to all these functions, Jesus is described as the Creator and the Sustainer of all creation.

This is a unique contribution by the New Testament to the theology of Creation. Although the Old Testament points to Christ as the Creator in a somewhat hidden way (Gen. 1:26; Prov. 8:22), the New Testament clearly spells out that Jesus is the Creator. Though a number of texts emphasize that God has created all things (e.g., Acts 4:24; 14:15; 17:24, 26; Rom. 1:25), crucial passages stress that Jesus is the Creator. Jesus provides some hints that He is the Creator through proclamation and deeds. In the stilling of the storm, for example, it is left to His disciples to plainly tell us who Jesus is: the Creator-God (John 1:3; Col. 1:15, 16; Heb. 1:2, 10).

All these passages and their contexts show that Jesus is God. Since He is God, He is also Creator. Or vice versa: since He is Creator, “who is the image of the invisible God” (Col. 1:15, KJV). These texts exclude Jesus from the realm of created beings. In fact, all things and all beings have been created through Him. The cosmic perspective that includes more than the creation, which we encounter, is spelled out most clearly in Colossians 1. In encountering Jesus, we encounter the Creator.

John 1:1–3 portrays Jesus as the Word, as God, the Creator, and life. Creation is expressed in several ways. This Word existed already “in the beginning” (vs. 1, KJV), a reminder of Genesis 1:1. The Old Testament background of the statement about the Word of God is at least partially found in Psalm 33:6: “By the word of the Lord the heavens were made, and all the host of them by the breath of His mouth” (NKJV). Three verses later one reads: “For He spoke, and it was done; He commanded, and it stood fast” (NKJV). Jesus is this creative Word of God. And John tells us explicitly that all things came into existence through Him.

Hebrews 1:10 applies a quotation, namely Psalm 102:25, to Jesus, although the Old Testament context talks about Yahweh as the Creator. The phrase “in the beginning” (KJV) takes us back to Genesis 1:1.

Colossians 1:15–20 is an extensive christological hymn. The first part, stressing Jesus as Creator (vss. 15, 16), corresponds with the last part (vss. 18b–20), in which Jesus is the Reconciler. The very same person who has created all things is able to reconcile all things through His blood shed on the cross.

Therefore, to claim Jesus as Savior but question Him as Creator does not make sense. To claim that He has saved us through His once-and-for-all death on the cross, a short event in history, but maintain that He has created us through an evolutionary process that takes millions of years, is inconsistent.

Furthermore, Jesus’ creative power is seen in the fact that His followers are spiritually re-created. Ephesians 2:10 talks about being “created in Christ Jesus for good works” (NKJV) and 2 Corinthians 5:17 about being a new creation or new creature in Christ. Ephesians 2:15 points to Christ creating one church, the new person, out of two groups, Jews and Gentiles (NLT). None of these creative processes that depend on Christ’s sacrifice on the cross requires an evolutionary process taking billions of years.

On the other hand, if the biblical testimony is trustworthy, namely that Jesus is the Creator, He must know what creation is all about, and His words carry a weight that surpasses all human knowledge. If it is true that Jesus is the Creator, He should know by which process He has accomplished creation. To claim that creation occurred as described in Genesis—which is the picture presented in the Gospels—while having used an evolutionary process, is deceptive to say the least. Why should we trust Christ with regard to our salvation if we have to question the veracity of His statements on Creation?

Since Jesus is the Creator, we cannot talk about the topic of Creation and the problems related to faith and science without focusing on Him. As crucial as Genesis 1–11 is for the current debate, Jesus cannot be excluded from this discussion.

Jesus’ Disciples and Creation

Jesus’ disciples had much more to say about Creation.

Paul proclaimed “the living God, who made the heaven, the earth, the sea, and all things that are in them” (Acts 14:15, NKJV), which probably alludes to the Sabbath commandment (Ex. 20:11). This God has “from one man . . . made every nation” (Acts 17:26, NIV). In Romans 5, he men-
tions Adam by name and discusses the consequences of his sin, but also the gift of salvation in Jesus Christ.

“In Adam all die, [but] in Christ all will be made alive” (1 Cor. 15:22, NIV). The creation groans and suffers and longs to be set free “from its slavery to corruption” (Rom. 8:21, NASB) while Christians eagerly wait for the final salvation. Paul knows that Eve was deceived (2 Cor. 11:3) and that Adam was formed first and then Eve (1 Tim. 2:13). The catalogue of vices in Romans 1 is presented in the context of Creation.

Paul quotes Genesis 2:24 when he warns against sexual immorality (1 Cor. 6:16) and when he dwells on the relationship between husband and wife, which becomes a symbol for the relationship between Christ and His church (Eph. 5:31). In the context of his discussion of the first resurrection, Paul quotes part of Genesis 2:7, slightly embellished: “The first man Adam became a living being” (1 Cor. 15:45, NKJV).

In Hebrews 4:4, when the issue of rest is discussed, he quotes Genesis 2:2: “‘God rested on the seventh day from all His works’” (NKJV). In Hebrews 11:3, he states: “By faith we understand that the worlds were framed by the word of God, so that the things which are seen were not made of things which are visible” (NKJV).

Paul bases his theology on a literal reading of the Creation account and the story of the subsequent Fall. When he uses typology, he compares historical persons with other historical persons. He follows Christ’s approach to interpreting Genesis 1–11.

Like Paul, John is strong in pointing out that Jesus is the Creator. Allusions abound in the Book of Revelation. All things are created by God (Rev. 4:11). God “created heaven and the things that are in it, the earth and the things that are in it, and the sea and the things that are in it” (10:6, NKJV). Humankind is called to “worship Him who made heaven and earth, the sea and springs of water” (14:7, NKJV). Both texts not only point to Creation, but may refer to the Fourth Commandment (Ex. 20:11). The tree of life (Rev. 2:7; 22:2, 19), the springs of the water of life (21:6), as well as the serpent (12:9, 17; 20:2) remind us of the original paradise (Gen. 2:9, 10; 3:1, 3, 14, 22, 24). The trumpets and the bowls seem to be an undoing and a reversal of Creation; whereas the description of Revelation 21–22 points to the new Jerusalem and the new heavens and earth—a new Creation.

Again, John used the same understanding of Creation that Jesus and Paul employed. If at the end of the Millennium, God is able to create a new heaven and a new Earth without time spans of millions or billions of years, but brings them about right after the Millennium, why should He not have used similar techniques right in the beginning? We may not be able to understand precisely how He has done that, and there may be conflicting data or interpretations that do not yet fit the great puzzle, but obviously the New Testament confirms a literal reading of the Creation account, a Creation week of 24-hour days, and a short chronology.

Implications for the Current Debate

What are some of the implications for us? We are neither afraid of science nor opposed to it. We can hardly do without it. We appreciate both knowledge that can be gained through science and knowledge that comes through God’s Word. That does not mean that we accept all presuppositions, theories, and philosophical or scientific models on the market.

Thomas C. Oden suggests: “Classical Christian doctrines of Creation do not necessarily deny an evolution, or the possibility of a natural evolutionary development of nature and history. . . . One can posit a gradual evolutionary process that is not a denial of creation.” It seems that Jesus has not left us this choice.

Another author discusses antinomies in science and theology. “Antinomies are resorted to when one single model of reality does not do justice to all the data,” and apparently contradictory statements or laws are both believed to be true. He mentions the nature of light, Christ being totally God and totally human, the doctrine of the Trinity, and others and suggests “that we now stand before two great antinomies: special creation and theistic evolution. Both models can legitimately appeal to supporting sets of data, both scriptural and scientific. . . . Both models have serious problems. . . . As a procedural strategy we must embrace both models.”

This scholar may have overlooked that, for instance, in the case of the doctrine of the Trinity, the
Modern cosmology had its origin in the 1920s when the American astronomer Edwin Hubble found that almost all galaxies—Milky Way systems like our own—show a so-called “red shift.” That is to say, the color of the light we receive from a galaxy is redder than when it left that galaxy. The simplest way to interpret this is by assuming that this is a manifestation of the Doppler effect: A light source moving away from an observer on Earth will look redder than it did at its source. When Hubble started to interpret his observations, he did not immediately rely on the Doppler effect for an explanation because he wanted to keep open the possibility of alternative explanations.

Models of the universe into which the new findings could be fitted included one by Milne and another by Lemaitre, both of which allowed an expanding universe. The idea of an expanding universe agreed with Einstein’s Theory of General Relativity (GR). Although other viable models existed, since

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By Mart de Groot*

Science and religion need to integrate their knowledge for a clearer worldview.

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Modern cosmology had its origin in the 1920s when the American astronomer Edwin Hubble found that almost all galaxies—Milky Way systems like our own—show a so-called “red shift.” That is to say, the color of the light we receive from a galaxy is redder than when it left that galaxy. The simplest way to interpret this is by assuming that this is a manifestation of the Doppler effect: A light source moving away from an observer on Earth will look redder than it did at its source. When Hubble started to interpret his observations, he did not immediately rely on the Doppler effect for an explanation because he wanted to keep open the possibility of alternative explanations.

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Science and religion need to integrate their knowledge for a clearer worldview.
If today the universe is expanding, then it must have been smaller in the past. In the light of this, moving back far enough in time, one would arrive at a moment when the universe had some minimum size from which it expanded. It seemed that in this way it was possible to arrive at the beginning of time. Christians soon recognized this as a possible way of understanding the opening statement of the Bible: “In the beginning God . . .”

Hubble was eager to include GR in his explanation, he soon abandoned his initial reservations, adopted the Doppler effect as a valid explanation, and concluded that most galaxies are moving away from us. Thus, the term “expanding universe” came into being.

Further steps suggested themselves quite easily: If today the universe is expanding, then it must have been smaller in the past. In the light of this, moving back far enough in time, one would arrive at a moment when the universe had some minimum size from which it expanded. It seemed that in this way it was possible to arrive at the beginning of time. Christians soon recognized this as a possible way of understanding the opening statement of the Bible: “In the beginning God . . .”

Dating this beginning was more complicated. It required the measurement of both the rate of the expansion and its possible variation in time. Since the light from distant galaxies requires long periods of time to reach us, the observation of such distant galaxies allows us to determine the rate of past expansion. Telescopes available to Hubble in the 1930s, however, were not powerful enough to see objects at very large distances, and, consequently, the first estimates of the age of the universe came out at around 2 billion years. For Christians prepared to see the first two verses of the Bible as distinct in time from the rest of the universe, this did not cause alarm. Even the later construction of larger telescopes and the subsequent better estimates of the age of the universe as some 15 billion years did not immediately cause too much concern for many Christians.

The Big Bang Theory

Concerns were raised, however, when details of the now widely adopted Big Bang theory were worked out. It soon became clear that this theory was on course to allow long periods of time not only for cosmological structures but also for biological evolution to have ample time for its slow developments and changes. Besides that concern, however, an important objective difficulty for the Big Bang is immediately apparent: Basic to the theory is the sudden expansion of so-called “primordial matter.” But what is the origin or source of this matter? Although a number of complicated hypotheses have been suggested, no satisfying answers to this question have yet been found. In the light of this, at the start there is ample room for a creative act outside the realm of scientific or physical observation.

Now another interesting aspect in the Big Bang presents itself. After the rapid expansion of the particles composing the primordial matter that lasted only a fraction of the universe's first second, conditions were ripe for the production of the better-known building blocks of the cosmos: constructive chemical elements. These elements were produced in pairs. Each normal particle came with its antiparticle, both containing the property to destroy the other in a flash of radiation, upon encounter. In the highly dense conditions of the early universe, such encounters could not have been avoided, and, as a result, all matter would have been annihilated by antimatter, making it forever impossible for the known chemical elements to be produced. The only way to avoid this would have been for a surplus of normal matter over antimatter to have been produced in the first few seconds. It is possible, in fact, to estimate fairly accurately what the surplus should have been. For every one billion pairs of matter and antimatter particles, one more normal particle was needed. There is no good physical explanation for the presence of this asymmetry. Nor does one feel comfortable suggesting that nature has a preference for asymmetry. Thus, one must ask the question: What or who caused this needed asymmetry?

Chemical Elements Needed for Star and Life Formation

Another question is raised by the Big Bang theory. After the first three minutes, and as a result of the rapid cooling due to its expansion, the universe became too cold for the formation of chemical elements more complex than the very simplest: hydrogen and helium with a small admixture of deuterium, lithium, and beryllium. Since most natural matter on Earth is composed of more complex elements such as oxygen, nitrogen, carbon, calcium, and silicon, one must ask how and when these more complex vital chemical elements were formed. Astrophysics—that is, physics applied to stars and galaxies—has discovered an answer. Stars shine through a series of nuclear reactions deep in
matter is slightly more dense than inhomogeneities—regions where conditions are just right for the ignition of the nuclear processes that produce both the stellar radiation and the more complex processes that produce both the stellar radiation and the more complex processes...stars. Again, though it is unclear how these inhomogeneities formed, their presence provides important support for the Big Bang theory; unless, of course, one invokes an apparently necessary act of God to introduce the inhomogeneities into an otherwise perfectly homogeneous medium.

First, the gas needs to have certain inhomogeneities—regions where matter is slightly more dense than elsewhere—so that these can be the centers for gravity’s star-contracting action. Since the universe’s primordial matter was spread out very evenly during the period of inflation, it was not obvious how these inhomogeneities could have arisen.

To investigate this situation, the Cosmic Background Explorer Satellite (COBE) was launched in 1990. Its task was to measure the amount of radiation produced from different parts of space when the universe was only some 300,000 years old. At that time the temperature of the universe had already decreased from its initial high. As mentioned earlier, further expansion since then has cooled the universe to much lower temperatures. The COBE measurements of this temperature show that the temperature is not the same in all directions. Where it is slightly higher, it betrays the existence of slightly denser matter, just enough to allow gravity to do its work of contracting clouds of gas into stars. Again, though it is unclear how these inhomogeneities formed, their presence provides important support for the Big Bang theory; unless, of course, one invokes an apparently necessary act of God to introduce the inhomogeneities into an otherwise perfectly homogeneous medium.

Second, at the time stars and galaxies were formed, the expansion of the universe must not have been so rapid that the outward-directed expansion could not be overcome by the inward-directed action of gravity. On the other hand, the expansion must not have been too slow, because in that case, gravity would already have overcome expansion, and the universe would not be expanding and could even have collapsed into itself before now. Thus, the force behind the original expansion must have been subject to some very fine tuning: one part in 10^4 (i.e., 1 with 49 zeros) is what is needed. Again, one is constrained to ask what or who was responsible for such incredible fine tuning?

Assuming, with Big Bang cosmology, that at some time during its existence the universe brought forth stars, it becomes relatively easy to conceive how things developed further. Deep in the interior of stars, hydrogen is burned at very high temperatures and slowly converted into helium. When most hydrogen has been used up in this way, the core of the star collapses, and its temperature rises dramatically. At this heightened temperature, helium is ignited, forming carbon. From here, successive stages of nuclear burning produce the chemical elements up to iron.

More complex elements beyond iron are formed when massive stars explode at the end of their existence as energy-generating entities, that is, when stars “die.” Dying stars return much of their matter to the environment. At this point such matter is no longer composed of hydrogen and helium only. Through the dying process it has been enriched with other, more complex, chemical elements. The gas that has been returned to space can give rise to the next generation of stars when, again, gravity contracts gas clouds into energy-generating objects. Each time a star is formed from a gas cloud, some matter at the periphery of the cloud is not captured by the star but remains in orbit around it and can form planets. In this way it is possible to understand how planets composed of iron, nickel, silicon, manganese, et cetera can form in a universe originally composed only of hydrogen and helium.

In all of this, could it be that there is some connection between the way human beings came into existence and the chemical elements essential to life, which according to the Big Bang theory were made deep inside stars? Might there be some connection between the process of star making and the “dust of the ground” referred to in Genesis 2:7 (KJV) and its role in the advent of human life?
Probably the most serious shortcoming of the Big Bang is its inability to go back to the very beginning of time and space. Though the condition of the universe seems to impede our looking back farther than when it was already 300,000 years old, theoretical extrapolations have allowed scientists to pronounce upon much earlier conditions right to the first second. However, limitations imposed by physical theory do not allow us to analyze what happened in the very first tiny fraction of a second.

came into being in terms of the Big Bang theory, could this suggest a plausible path for the process of biological development? Could the scenario painted by the Big Bang theory be something initiated and guided by a Creator, thus outlining a complete description of how life on Earth came into being?

This is not the place to discuss the shortcomings of the theory of biological evolution. Suffice it to point out that we have just identified an additional hurdle for this theory to negotiate when we noted that biological evolution is a non-self-starter if it is not preceded by physical evolution—the formation of elementary particles as the building blocks of all matter. Along with this we have noted that, by its nature, biological evolution also depends on chemical evolution—the production of the more complex chemical elements essential to life. If one would like to believe that the above processes are just the way God acted in His creative works, then it becomes necessary to accept the long-time scales of billions of years required for bringing these processes to completion, an option not contemplated by the Genesis account when it deals with the origin of life.

Problems With the Big Bang Theory

The credibility of the Big Bang depends on the solidity of its supporting pillars. The first among these are the redshifts. If these are to be interpreted as a Doppler effect, then the conclusion of an expanding universe seems inescapable. But it must be remembered that Hubble’s choice of the Doppler effect for the explanation of his observations was based in part on philosophical arguments. Hubble assumed the validity of GR and of the so-called Cosmological Principle (CP).

Recently, however, GR has come to be questioned by the discovery that faraway galaxies are receding faster than predicted by Einstein’s original theory. It seems that, though gravity attracts over large distances, at the very large distances we find in the universe, it turns into a repellent force. This requires the addition of the so-called “cosmological constant” to the law of gravity and, thus, a revision of the Big Bang theory. It is not yet clear how the Big Bang will come out of this process.

The CP postulates that, generally speaking, the universe looks the same from every location within it. At the same time it is reasonably assumed that the laws of science as we have come to know them on Earth operate in the same way throughout the universe and at all times. Although this is the only assumption one can make if sense is to be made out of our astronomical observations, it is a philosophical assumption and it does introduce a form of uniformitarianism that would seem to exclude divine intervention in the affairs of the cosmos.

Another problem with the choice of the Doppler effect to explain the redshifts is that these can also be produced in different ways not requiring a recession of the galaxies. Among these, theories of tired light may hold some promise. The idea is that a photon—a single packet of light—on its long travel through the universe will suffer some interaction with particles in space and thus lose some of its energy. This loss of energy manifests itself as a redshift. Since space is not empty—although very sparsely populated with only a couple of hydrogen atoms per cubic meter—the farther the photon travels, the more it becomes redshifted. That’s exactly what is observed. Unfortunately, tired-light theories have not been given the attention they merit because of the early popularity of the Doppler effect as an explanation for the redshift. This popularity has in fact caused a neglect of many alternatives.

As mentioned earlier, probably the most serious shortcoming of the Big Bang is its inability to go back to the very beginning of time and space. Though the condition of the universe seems to impede our looking back farther than when it was already 300,000 years old, theoretical extrapolations have allowed scientists to pronounce upon much earlier conditions right to the first second. However, limitations imposed by physical theory do not allow us to analyze what happened in the very first tiny fraction of a second. It seems that what happened during the first $10^{-43}$ seconds (a number with 42 zeros behind the decimal point) will forever remain a scientific mystery. Thus, the question about the origin of primordial matter is not answered. And it does not
help to say that primordial matter was made out of energy because that only begs the question: Where did that energy come from?

God’s Revelation on Origins

For Christians who want to base their faith on God’s revelation in the Bible, there is plenty of scope. Despite its desire to be a theory that explains everything, the Big Bang has so many weak points that there is still ample room for God to play His role. Not that this is the way we should introduce God into our thinking about origins, because if at some future date, science answers some of these questions, we might be forced to abandon part of our way of explaining God’s role in the creation of the universe. Our relationship with God should not be based on His ability to answer our questions about the universe (although the ultimate answers do rest with Him) but on the kind of God He is as revealed at Calvary and in His dealings with His creation.

Of course, such a view of God does not answer all our questions about the origin of the universe. What exactly happened during Creation week, especially on the fourth day, is still a mystery. Science says that the Sun is some five billion years old. The Bible seems to suggest that our Sun was created at about the time our Earth was. A similar question concerns the rest of the universe—the stars and galaxies. As long as we do not possess the scientific knowledge that we have been promised will eventually be ours after we have arrived safely in God’s eternal kingdom, and as long as we are still struggling to find the correct interpretation of many a Bible passage, these questions will not be answered. But our look at the Big Bang does allow us to say “it ain’t necessarily so.” We would do well to heed Albert Einstein’s famous statement, “Science without religion is lame, and religion without science is blind,” and integrate more fully these two areas of knowledge. Thus, more progress is to be made when we interrogate the universe, not about its origin, but about the One who designed and created it. Because that is how “The heavens declare the glory of God” (Ps. 19:1, KJV).
IS CREATIONISM STILL VALID IN THE NEW MILLENNIUM?

Efforts to present creationism in a secular wrapping distort its central thrust.

Creationism is not for the faint-hearted. It is based on a 3,500-year-old assertion found in the Bible: “In the beginning God created the heavens and the earth” (Gen. 1:1, NIV). Most contemporary scientists, however, believe that we are here as a result of a huge explosion of primeval matter billions of years ago. To believe in creation is to run against the tide.

“Nothing in biology,” wrote Dobzhansky, “makes sense except in the light of evolution.” The editors of Science magazine, introducing a special issue on evolution, stated not long ago: “The intellectual concepts arising from our understanding of evolution have enriched and changed many other fields of study.” In the same issue, Stephen Jay Gould wrote: “Organic evolution [is] one of the firmest facts ever validated by science.”

The standard creationist response to such declarations is to point out flaws in the evolutionary arguments. But creationists are at their best when they show that their explanations work better than those of evolutionists. Their goal should be to develop their paradigm so well that people will have to admit, “Nothing in biology makes sense except in the light of creationism.”

With that as a background, consider a few aspects of Creationism still valid for 21st century thinking Christians.

Is Creationism a Religiously Motivated Paradigm?

Yes. Efforts to present creationism in a secular wrapping distort its central thrust. At the very core of creationism is the Creator. The Bible teaches that the Creator is intimately involved with nature, yet not part of nature. It follows that religion cannot be divorced from science. While science may be practiced without any reference to religion, the interpretation of such efforts may be flawed.

Of the great civilizations, the one in Western Europe gave rise to modern science, with emphasis on experimentation and mathematical formulations. Several cultures of antiquity, the Chinese and Arab among them, produced higher levels of learning and technology than medieval Europe. Yet it was in Europe that modern science was born. Heavily contributing to this was the Judeo-Christian faith, with its confidence in the laws of nature.

The supposed conflict between religion and science is a recent invention and a distortion of historical realities by a class of historians whose agenda was to destroy the influence of religion. The currently popular secularism in science may only be a detour in the history of science.

What are the Perceived Liabilities of Creationism?

Creationism originated in a pre-scientific world, where myths abounded. The biblical story of Creation is often compared with the Babylonian and other creation stories.

Creationism rests on the notion that there is a supernatural Being, which cannot be verified scientifically. Moreover, if this is true, then ours is a capricious world, subject to the whims of supernatural powers. Science is not equipped to study such a world.

Creationism restricts the range of inquiries, because by definition, there is no point studying the origins of life or the relationships between organisms.

Creationism implies accountability. Then humankind is not the supreme authority in the world.

The fact that a creation story exists in different ancient cultures suggests a common source for these stories.

The supreme Being of the Bible
created a world with laws that were either given or which can be discovered. Humans are mandated to subdue and care for creation, using these laws. There appears to be no caprice in the routine operation of nature. Nevertheless, the creationist paradigm permits divine intervention in nature, when known natural laws are superseded. Creationists believe that past divine interventions of great significance have been explained to humanity by special revelations. Modern science went astray when it discarded supernaturally revealed information relevant to science.

Whether the creationist paradigm is restrictive has to do with one’s perspective. A person’s understanding of reality will dictate his or her range of inquiry.

Is Science Hindered or Helped by Creationism?

The creationist worldview was a strong motivating factor for scientists to study nature—actually to experiment and see how God ran the world. These were the “voluntarist” scientists who opposed Aristotelianism (which held that the universe and everything in it had to be made by laws of logic that Aristotle himself discovered).

The biblical doctrine of creation assures us that we live in an orderly world ruled by the Supreme Law-giver. This is in stark contrast to the pagan worldview, which saw nature as alive and being moved by mysterious forces. Thus, the doctrine of creation was a positive and possibly decisive contributing factor to the birth of modern science.

Is there Explanatory Power in Creationism?

To a great extent, science is the process of explaining. The acid test for the value of a paradigm rests in its explanatory power. For example:

- Elements of design, seen in nature at every level, follow naturally from Creationism.
- The great diversity among organisms can be viewed as a reflection of the Creator’s unbelievable range of imagination.
- Interaction and mutual support among organisms is a testimony to a benign design.

The burden to explain how living matter came into existence is lifted. So is the burden of having to connect every organism together through phylogenic trees.

Creationism is helpful in light of the exceptional fidelity of genetic reproduction on the one hand and the very limited range of possible changes that can be accomplished by mutations. (It has now been shown, for example, that the bacterium E. coli remains E. coli even after thousands of generations in the laboratory.)

Not all manifestations of the biosphere have to do with survival values. There is more to life than mere survival. If survival were the only criterion, we would see a much starker and sparser world. Creationism frees us from having to explain why there are both uni- and multi-cellular organisms, and why there is an absolute requirement for two different genetic types of organisms (male and female) to coexist.

The puzzle of the chicken/egg is solved. The chicken came first.

The cause for existence, from atoms upward, is understood to be the expressed will of the Creator. The Adventist understanding of Creation emphasizes that the Creator was not dependent upon pre-existing matter. We hold that matter is not infinitely old, that it was created.

A characteristic of a designed entity is that the whole is greater than the sum of its parts. Design and organization enable components of complex systems to cooperate for the expression of new functions. Layers of reality may be arranged to show the appearance of new functions at each successive level.

Predation, toxic plants, viruses, and the suffering and death of non-plant organisms do not fit into a scheme conceived by an all-wise Creator. The creationist paradigm assigns these to the work of an evil power in nature. This concept is
When the Viking Missions to Mars found no evidence for life on the Martian surface soil, even though microbial life was predicted by the chemical evolutionary paradigm, the adjustment was made to postulate the existence of living organisms deep within the Martian soil.

Can We Make Scientifically Testable Predictions Using the Creationist Paradigm?

Creationism has been criticized for not leading to testable predictions. Wrong paradigms may lead to testable suggestions, but that does not necessarily make for a good hypothesis. It makes it a testable hypothesis. When a paradigm’s prediction is tested and the results are different than predicted, sometimes the paradigm is altered, but often the test results are reinterpreted so as to allow for the continuation of the paradigm’s validity. When the Viking Missions to Mars found no evidence for life on the Martian surface soil, even though microbial life was predicted by the chemical evolutionary paradigm, the adjustment was made to postulate the existence of living organisms deep within the Martian soil.

The creationist paradigm suggests that rather than creating a few species, the Creator generated a rich variety of living organisms. Therefore, it would be surprising to find planets populated with microorganisms alone.

Other predictions that follow from the creationist’s position are:
• The biosphere is complete. No new orders of organisms are expected to arise. (The creationist paradigm nevertheless is comfortable with new species arising within the same order.) All current organisms have recognizable ancestors.
• No living organisms will arise abiotically.
• The fossil record will suggest a rich variety of organisms coexisting from the beginning.

Theological Insights From Creationism

Science cannot be divorced from religion. Theologians must not give up the realm of physical reality entirely to the scientist. They may not be able to contribute to the understanding of how physical realities operate in nature, but they have a grave responsibility to advise scientists on the clearest meaning of supernatural information that has bearing on science.

To illustrate this, we may imagine a scientist from elsewhere in the universe visiting Earth a week after its creation. Not being told of the recent creation event, and observing mature organisms and well-developed trees in the Garden of Eden, this well-meaning scientist would conclude that Earth had been around for some time. The conflict regarding the age of the Earth is caused by the fact that dating techniques all but ignore the possibility of a mature Earth appearing suddenly.

Humanity is accountable to the Creator for the way we utilize nature’s resources. The Creator’s wisdom and sophistication are documented by countless examples in nature. It needs to be emphasized that He is not only the Designer of the world, where objects and organisms are integrated into a coherent setting, but He also brought all of it into existence and has sustained it for thousands of years. Contrast this with the famous “Biosphere” experiments, which showed how difficult it is to balance ecological systems.

Even though we do not have a complete understanding of how our world fits into the rest of the universe, and what kinds of contribution we can make to it, there can be no doubt that the existence of our world has a purpose.

The Adventist worldview is based on the profound theme of the great controversy between Christ and Satan. The Bible tells that in the last days, Satan will work mightily to deceive the world. A facet of this deception may be the theory of evolution.

Creationism is a robust paradigm, fully capable of undergirding the scientific enterprise in the new millennium. Wider acceptance of creationism by the scientific community in the future will depend, in part, on how well theologians can convince scientists of the priceless value of revealed information. In addition, this approach will gain greater credibility as more scientists conduct research on the basis of the creationist perspective.

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One of the things I have learned while mountain biking is that it is not always a good thing to look back. When you are shooting along a single-track—winding your way through trees just 15 or 20 inches apart, negotiating roots and rocks and fallen logs, or anticipating quick turns, sudden drop-offs and steep climbs—you need to be alert and forward-looking. You need to keep focused on what you are doing at the moment and on what’s coming up next. If you turn your eyes backward for even an instant, you can get into big trouble. I learned the hard way.

We were shooting down a straightaway. No trees. No logs. No sudden drop-offs. Just a straight narrow single-track groove worn into the sandy soil of Michigan’s Yankee Springs State Park. I heard someone coming up fast behind me. I called out, thinking they might want to pass. No one answered. I glanced back to see my friend pumping hard and closing in. That brief looking back was all it took. Next thing I knew, my front wheel was riding up and down the side of the groove. Suddenly it was pulled cockeyed and I skidded hard and fast on my side through the brush along the trail. My bike finally stopped, and I went head over heels. Ouch! Bruised and bleeding, I could hardly get up. All because I looked back for an instant.

But sometimes, looking back is an important part of looking ahead. In fact, if you don’t look back, you just may miss what’s up ahead altogether. I’m thinking now of the Book of Genesis and the reality that our world is fast biking down a narrow single-track groove toward a collision with eternity. If we don’t take the time to look back and get our moral and spiritual bearings, we will be totally unprepared for what we may encounter as we approach the end.

That’s what Moses had in mind as he wrote Genesis, the first of a five-part book we call the Pentateuch. His intended audience was the generation of Israelites that was about to go into the Promised Land. Inspired by God, His thinking lay ahead. To the future. To the generation on the verge of entering the Promised Land. They were headed in an awesome direction.

But the children of Israel were in danger of unbelief and failure to trust God even as they were on the very border of the Promised Land. The only way they could look ahead with confidence was to look back and gain perspective. The only way they would be prepared to meet the spiritual and moral challenges that lay along the pathway ahead was to be reminded where the trail originated. They needed to remember who they were and Who was with them.

Looking back was an important ingredient of their looking ahead.

In his commentary on Genesis, Eugene F. Roop writes, “The beginning cannot be ignored as if it is past. Beginnings do not disappear; they form the ground from which all subsequent moments arise.” In other words, beginnings set the tone and live on in whatever takes place afterward.

The nuances of the Hebrew text are profound. The word beginning (Gen. 1:1) marks a starting point of a specific duration. It’s the first in a series, or the initiation of a series of historical events. It has an end or purpose in view. It’s a word often paired with its antonym end. By using this word to open the account of Creation, Moses (under the inspiration of God) not only marked Creation as the starting point of the history of God with His people, but also prepared the way for the consummation of that history at “the end of time.”

The “end” is already anticipated in the “beginning” of Genesis 1:1. The fundamental principle reflected in the opening word of Genesis and the prophetic vision of the end of times in the rest of Scripture is that the last things will be like the first things: “Behold, I create new heavens and a new earth” (Isa. 65:17, NKJV); “I saw a new heaven and a new earth” (Rev. 21:1, NKJV). The allusions to Genesis 1–2 in Revelation 22 illustrate the role that these early chapters of Genesis played in shaping the form and content of the scriptural vision of the future.

Genesis also provides a paradigm of the moral and spiritual issues leading up to the end. The careful reader can trace parallels between the Book of Genesis and the broad issues and events of the last things on Earth. Jesus pointed out that “as the days of Noah were, so also will the coming of the Son of Man be” (Matt. 24:37, NKJV).

There are two themes that a look back at Genesis provides: a particular view of God and the multi-generational saga of the first family of the Bible.

God! That’s where Genesis begins. All at once we see Him creating
the world in a majestic display of power and purpose: “In the beginning God created the heavens and the earth” (Gen. 1:1, NKJV). There is no biography of God. No elaborate background of how God came into being. We are introduced to Him through His actions, which begin with bold strokes of creativity. Genesis unfolds a clear, concise statement about the Creator and the Creation. Its simplicity belies the depth of its content. These seven words (in Hebrew) are the foundation of all that is to follow in the Bible.

Genesis also gives us stories of people. They are epic stories, vivid characters in dramatic circumstances, a virtual multi-generational saga of the Bible’s first family and their all-too-human struggles of faith and faithfulness. The interesting thing about Genesis is that its stories turn from full-scale global events like the Creation or Flood, or world history like the tower of Babel or the famines of Egypt, to isolated, seemingly incidental experiences of private individuals, like Noah’s lewd drunkenness or Hagar’s soulful cry in the desert. But these vivid dramas, these family tales, convey truth for a people with the Promised Land on the horizon. They are family stories that convey truths about spiritual identity, personal accountability, and moral purpose—and the longing search for a blessing.

Moses has at least four things in mind as he writes: (1) to identify the Creator, (2) to explain the origin of the world, (3) to tie the work of God in the past with the work of God in the future, and (4) to give hope and moral perspective that encourages both faith and faithfulness in light of the epochal events on the horizon.

The God who was about to lead the children of Israel into the Promised Land was the Creator of the Universe. The same God who made the wasteland of this unformed Earth into a virtual Eden garden for the first family is the One Who seeks to lead His people from the Sinai desert wasteland to the Promised Land.

Moses had the Promised Land in view when he wrote Genesis. We, too, must have our eye on the sea of glass when we read it. Looking back is an important ingredient of looking ahead. Beginnings do not disappear; they form the ground from which all subsequent moments arise, especially as we stand as a final generation on the brink of eternity.

In this special issue of PD on Creation, we want you to look back with us to see the awesome Creator who is leading us forward to His new creation (Rev. 21:1). God will make all things new by the same creative power with which He began all things (vs. 5). Our understanding of this important topic determines both our faith and our life choices. As you read through these articles on the biblical understanding of Creation, be encouraged. Find new hope in the God whose chief purpose in creating human beings was to bless them.5

REFERENCES
3 Sailhamer, pp. 83, 84.
5 Ibid., p. 31.
Biblical writers often refer to phenomena of nature as a revelation of God’s majesty and greatness. “The heavens declare the glory of God; and the firmament shows His handiwork,” says David in Psalm 19:1 (NKJV). How true! Consider the universe for a moment! On a clear night, one can see about 3,000 stars with the naked eye. Astronomers, however, tell us that our Milky Way galaxy has about two hundred thousand million stars, all in their appointed order circling along the orbit God assigned to them. Yet our galaxy is only one among several hundred thousand million galaxies in the universe that astronomers can locate with their strongest telescopes. And who knows how many more galaxies there are beyond that.

Distances in the universe boggle the mind: Apart from the Sun, the nearest star to our Earth, Alpha Centauri, is 5.22 trillion light-years away. (One light-year is the distance light travels in one year: about 5.9 trillion miles!) A spaceship traveling 100,000 miles per hour would require about 29,000 years to get there. Just think of it: our Milky Way is said to have a diameter of 100,000 light years; yet compared to some of the other galaxies in the universe, it is not part of the big league! The largest galaxy known thus far is Markarian, with a diameter of 1.3 million light-years. And here we are on planet Earth, a mere grain of sand in the vast expanse of the universe whose limits, if there are any, are beyond our comprehension. Indeed, “What is man that You are mindful of him?” (Ps. 8:4, NKJV).

Similar awe-inspiring facts would come to light if we used an electron microscope to study the 20,000 to 25,000 genes each individual possesses, or the millions of cells in the visual cortex of the brain. The plant world provides us with some amazing statistics. How many of us realize that

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during the summer, full-grown trees may get as much as 40 gallons of water up to their branches and leaves every day—without electric pumps. The secret is that “when water evaporates from the leaves, it creates a constant compensating suction of water below. The suction continues through twigs, branches, and trunk down to the roots.” Our finite minds are simply unable to comprehend all the wonders of the created world.

Yet, in spite of overwhelming evidence for design in nature, i.e., evidence for a creative mind or a Creator, most people, at least in the “sophisticated” Western world, believe that everything came into existence by chance over billions of years. Charles Darwin’s theory of evolution, ridiculed at first, has truly captured the mind of modern humankind. Atheists and agnostics see evolution as the only viable option to explain the origin of life, and individuals who still believe in a supernatural being are frequently so overwhelmed by the “evidence” of the scientific establishment that they opt for theistic evolution, i.e., God used evolution to create the world we live in.

For the first hundred years of our existence as an organized body, Seventh-day Adventists stood united in defense of a six-day creation of our world within the past six to ten thousand years. After all, every Sabbath we were reminded of the fourth commandment, which provides the reason for keeping the Sabbath rather than Sunday. “In six days the Lord made the heavens and the earth, the sea, and all that is in them, and rested the seventh day. Therefore the Lord blessed the Sabbath day and hallowed it” (Ex. 20:11, NKJV).

In recent decades, however, cracks have begun to appear in this united stand against evolution. Some scientists and theologians in our educational system have begun to raise question as to the wisdom of holding on to our belief in a six-day creation in the face of what they believe is overwhelming scientific evidence to the contrary. In 1980, therefore, at the General Conference in Dallas, where 27 Fundamentals Beliefs were officially accepted as the church’s statement of faith, the church for the first time in our history officially stated that we believe in a six-day creation. We had always believed it, but it was never formally accepted by a vote of the General Conference in session.

Fundamental Belief number six on Creation says, “God is Creator of all things, and has revealed in Scripture the authentic account of His creative activity. In six days the Lord made the heaven and the earth and all living things upon the earth, and rested on the seventh day of that first week. Thus He established the Sabbath as a perpetual memorial of His completed creative work. The first man and woman were made in the image of God as the crowning work of Creation, given dominion over the world, and charged with responsibility to care for it. When the world was finished it was ‘very good,’ declaring the glory of God.”

In this Fundamental Belief, it is clearly spelled out that we believe (a) that God created heaven and earth and all that is therein in six days, and (b) that the Sabbath is a continual reminder of the six-day creation.

Yet, this did not stop some scholars and scientists who see Creation extending over millions of years from advocating a modified form of theistic evolution. The General Conference, therefore, initiated a series of Faith and Science conferences from 2002 to 2004 in which the various issues surrounding the Creation/evolution controversy were openly discussed. The final report of the International Faith and Science Conference Organizing Committee in 2004 was submitted to the 2004 Autumn Council of the General Conference. It stated that though there is widespread affirmation of the church’s position on creation, “[W]e recognize that some among us interpret the biblical record in ways that lead to sharply different conclusions.”

The 2004 Annual Council, after careful discussion, produced a response to the report in which the members strongly endorsed the church’s historic, biblical position of belief in a literal, recent, six-day Creation. To close any possible loophole by which a day could mean something other than a 24-hour day, the council stated “that the seven days of the Creation account were literal 24-hour days forming a week identical in time to what we now experience as a week.” The response also called upon all boards and teachers at our schools to uphold and advocate the church’s position on origins.

The importance of belief in a six-day Creation cannot be emphasized enough. Once this article of faith is compromised, the Sabbath and the historicity of the first 11 chapters of Genesis stand on shaky ground. And if we cannot be sure that the Fall of humanity and the Flood are historical events, how can we know that the plan of salvation and the Second Advent are? Solomon wrote, “Trust in the Lord with all your heart, and lean not on your own understanding” (Prov. 3:5, NKJV). Wise counsel indeed!

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In August 1989, Voyager 2 swooped low over the north pole of Neptune. It was four planets and more than 2.8 billion miles from Earth. Hurtling along at more than 61,000 mph, it passed within a mere 3,000 miles of Neptune’s surface. By Newsweek’s reckoning, this accomplishment was about the same as sinking a 2,260-mile putt on a cosmic golf course.

For 14 years, the faithful unmanned spacecraft sent back spectacular color photographs of the scenery along the way. It showed new views of the universe from a close-up vantage point—the rings of Saturn, Jupiter and its moons, Uranus, and Neptune. Meantime it also signaled five trillion bits of scientific information for scientists to catalog and analyze. By the time the latest batch of data came in from Neptune, the radio signal was so weak—a 10-quadrillionth of a watt—that it took 38 giant radio antennas on four continents to catch it.

Weighing a little less than a ton, Voyager 2 has since escaped the pull of Neptune’s gravity. Now it is continuing on its odyssey into infinity. Scientists say that by the year 2020 its generators will no longer be able to power communications so far back to Earth. After that it will never be heard from again but it will continue on. Thirty-eight centuries from now it is supposed to pass within 1.7 light-years of Ross 248, a cool, red, twinkling star. In nearly 300 centuries it will pass within 4.3 light-years of Sirius.

The mission of Voyager 2 has been described by scientists and the media as humanity’s most successful achievement in space exploration. Yet as exciting as this accomplishment was, it could never compare to the awe-struck feeling of human inconsequence in the vastness of the universe: “When I consider Your heavens, the work of Your fingers, the moon and the stars, which You have ordained; What is man that You are mindful of him, And the son of man that You visit him” (8:3, 4, NKJV).

On board the Voyager 2 is a recording of greetings in 60 Earth languages and one whale dialect. Scientists sent along this recording with the hope that sooner or later someone or something out in the infinity of space will happen upon the spacecraft and will be able to understand one or more of the recorded messages. Then maybe someone will return our call. This may seem to be a little odd when you think about it, considering that God has always been out there and that He has been trying to communicate with humanity since Creation itself.

The psalmist must have been quite a stargazer. It’s easy to imagine him on a cold winter’s night completely enraptured by the glittering universe overhead. Several psalms refer to the starry heavens and to the fact that they should be a suggestion to us of God’s great creativity. “Of old You laid the foundation of the earth, And the heavens are the work of Your hands” (102:25, NKJV).

He also described the awe-struck feeling of human inconsequence in the vastness of the universe: “When I consider Your heavens, the work of Your fingers, the moon and the stars, which You have ordained; What is man that You are mindful of him, And the son of man that You visit him” (8:3, 4, NKJVV J V). Apparently the psalmist didn’t need 38 giant radio antennas on four continents to pick up messages from outer space.

Alas, it is not so for everyone.

In 1927 Wilbur Daniel Steele published a short story entitled “The Man Who Saw Through Heaven.” The central character, Hubert Diana, visited an observatory on the eve of his departure by ship as a Christian missionary assigned to Africa. The narrator of the story described him in the following way: “Curiously impervious to little questionings, he had never been aware that his faith was anywhere attacked.”

So when Hubert Diana peered through a telescope for the first time in his life and realized the utter vastness of the universe, he was struck with his own inconsequence. When a cynical astronomer commented that in such a vast universe there was no way of knowing with certainty whether our lowly Earth was anything more than the jewel in the finger ring of one of countless organisms a million times greater than we, Hubert Diana’s faith suffered a meltdown. He boarded the ship the next day in a daze, and by the time he reached Africa, he apparently lost his mind completely. Rather than reporting for his assignment, he disappeared.

The rest of the story recounts the efforts four years later of a search party for Hubert Diana, led by his intrepid wife and a representative of the mission society who had assigned him to Africa. In his wanderings, like a wild-eyed pagan prophet, he had harangued anyone who would listen about the infinite
inconsequence of humankind. Curiously, in every village he had visited, he had created small mud sculptures of creatures of all shapes and forms. He had terrorized the superstitious villagers and had come to be known as “Father Witch.”

As the search party grew ever closer to catching up with him, however, they noticed that the mud sculptures appeared to be growing increasingly complex, more and more humanlike. At last they reached the place where, five weeks before, he had died apparently of tropical illnesses and been buried by nervous villagers. Nearby, in a low hut, they came upon his last sculpture: it appeared to be formed much like a human seated on a crude throne, its head inclined toward its hand, on one finger of which Hubert Diana had slipped his own finger ring. And, in response to queries from the search party, one of the villagers unknowingly revealed the derivation of the name “Father Witch”: they had misunderstood his meaning when they’d heard him pray, “Our Father, which art in heaven . . .”

Before his death, he had returned to his faith.

What do we do when we peer through the telescope of scientific “knowledge”? How do we respond when faith and science apparently contradict one another? These are questions that we must address, or someday our faith will be at risk of meltdown.

The question of Earth’s origin, for example, has polarized our society, and, unfortunately, it has become a political issue. It is the flashpoint for much debate—especially in public education. One of the key questions in this issue is: How do we interpret the information that we observe from nature? Christians would phrase it this way: How do we interpret the information that God has revealed to us through nature?

The psalmist had no doubt. Neither did the prophets: “The one who forms the mountains, creates the wind, reveals his thoughts to mortals, makes the morning darkness, and treads on the heights of the earth—the Lord, the God of hosts, is his name!” (Amos 4:13, NKJV).

And the apostle Paul stated it even more assertively: “From the time the world was created, people have seen the earth and sky and all that God made. They can clearly see his invisible qualities—his eternal power and divine nature. So they have no excuse whatsoever for not knowing God” (Rom. 1:20, NLT). No excuse for meltdown!