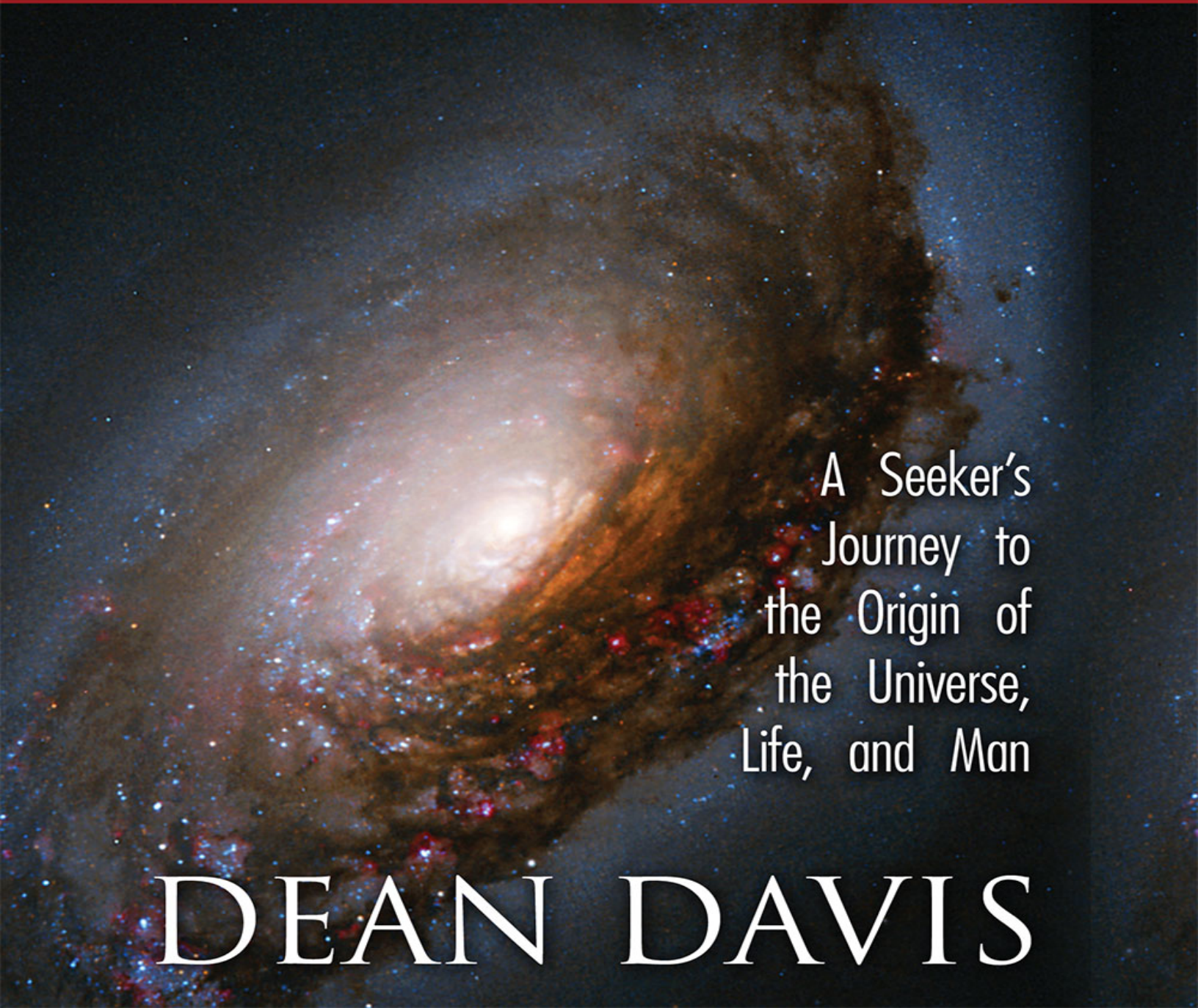


REVISED AND EXPANDED

IN SEARCH OF  
THE  
BEGINNING



A Seeker's  
Journey to  
the Origin of  
the Universe,  
Life, and Man

DEAN DAVIS

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# DEDICATION

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This book is gratefully dedicated to  
The Unknown God—and to seekers everywhere  
who hope to meet him at the beginning

I want to know how God created the world. I am not much interested in this or that phenomenon in the spectrum of this or that element. I want to know his thoughts. The rest are details.

—Albert Einstein

Seek and ye shall find.

—Jesus of Nazareth

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# KEY TO ABBREVIATIONS

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## **Terms**

- BC: Biblical Cosmology  
CMB: Cosmic Microwave Background  
EPC: Evolutionary Pantheistic Cosmology  
GTR: General Theory of Relativity  
GR: General Relativity  
HC: Hindu Cosmology  
NAC: New Age Cosmology  
NCE: Naturalistic Cosmic Evolution  
NT: New Testament  
NTM: Neo-Tychonic Model  
OT: Old Testament  
PE: Punctuated Equilibrium  
QM: Quantum Mechanics  
RT: Relativity Theory  
SR: Special Relativity  
STR: Special Theory of Relativity

## **Books**

- CC: Crash Course on the New Age  
GWW: Galileo Was Wrong  
ITB: In the Beginning  
MCT: Modern Creation Trilogy  
SRC: Science and the Re-enchantment of the Cosmos  
UND: The Universe Next Door



UTT: Understanding the Times

# ACKNOWLEDGMENTS

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**T**here is much uncertainty attached to modern cosmology, but of one thing we may be absolutely sure: Scientific laymen trained in the humanities rarely write books about the origin of the universe, life, and man. That I have dared to do so is testimony to the invaluable help supplied by many dear friends, colleagues, and loved ones. I wish to acknowledge them here.

First, sincerest thanks to Athena Dean, Hannah McKenzie, and all my other new friends at Redemption Press. As ever, their professionalism, competence, and good humor has made this literary project a true delight. Lord willing, I'll be back soon!

My indebtedness to the many professional teachers and scientists who have written for laymen like me will become crystal clear in the pages ahead. Here, however, I would especially like to thank four new friends: Doctors John Byl, Gerardus Bouw, Philip Stott, and Robert Sungenis. These busy men—and Dr. Byl in extra measure—were kind enough to patiently answer my many questions, make substantive suggestions, and encourage me in my labors. They would not, of course, agree with all of my conclusions, so I alone am responsible for what you will find in the pages ahead. Nevertheless, *much* of what is good in those pages has reached me (and you) through them. I am exceedingly grateful for it.

Thanks also to my old and faithful friend Steve Carver, who worked his usual magic on the computer to create the various diagrams and tables that you will find in the text.

I owe a special debt of gratitude to my father, Don Davis, who has faithfully supported me in this and other literary ventures. Dad, you have

shown yourself a true patron—in every sense of that rich and venerable word.

Finally, heartfelt thanks to my dear wife, Linda. Honey, I will never forget how you pulled me through those two terrible midnight hours when I thought I had erased four-fifths of my book from the new computer. It was only one of your many expressions of love and support. No, I will never forget.

## Introduction

# THE TEST, THE TEACHER, AND THE BEGINNING

---

**T**his is a book about the great themes of cosmology—the origin, structure, purpose, and destiny of the universe. But it is especially about the one theme that serves as seed for all the rest: the beginning—the origin of the universe, life, and man.

It is also a book written specially for seekers—people who believe, or at least suspect, that there is more to the universe than the universe; people who sense that there is an ultimate spiritual reality behind all things, a reality about which they are curious to know more. If you fall into this category, you will find in the pages ahead something you may have been looking for: a meditation on the cosmos that is attentive not only to natural science, but to philosophy and theology as well.

Finally, this is, as it were, a book within a book. It was first conceived as a humble chapter, part of a much larger work, now completed, called *The Test: A Seeker's Journey to the Meaning of Life*. In time, the one chapter became two, two became four, and four became the volume you now hold in your hands. What produced this literary cell division, I do not quite know. Perhaps it was my keen interest in the subject, or its boundless philosophical importance, or its rich (and sometimes maddening) complexity, or the controversy that has often surrounded it, never more so than today.

In any case, my “chapter” has at last reached full stature and I am eager to introduce it to you. However, for the meeting to go well, I feel it is

important that you know a little more about its mother. Permit me then to break with literary protocol by devoting the lion's share of a lengthy introduction, not so much to the present book, but rather to a summary of the book from which it sprang—*The Test*.

I should forewarn you here that these philosophical preliminaries may seem at first to be of little relevance to cosmology, so much so that you are tempted to skip them altogether. I urge you to resist the temptation. Why? Because sooner or later the best cosmologists realize that their *first* order of business is to resolve certain fundamental questions concerning the proper source(s) of trustworthy knowledge about the universe. Here is a sampling of their perennial favorites:

Is it possible to know *with certainty* the truth about the origin, structure, purpose, and destiny of the universe?

If so, exactly *how* can we arrive at such certainty? Does it come to us strictly through the use of scientific method? Does philosophy have a role to play? Could personal mystical experience—or even communications from spiritual beings living on other “planes” of reality—be of any help?

And what about divine revelation? Is it possible—as *many* have insisted down through the centuries—that a personal creator god has spoken to us on cosmological matters? And if he has, how shall we know *which* god, *which* prophet, and *which* holy book(s) to trust?

Again, these are the kinds of questions to which thoughtful cosmologists find themselves repeatedly driven. As such, they are the kinds of questions that wise seekers will ask from the very get-go. And they are precisely the kind of questions that I address at considerable length in *The Test*.

So then, please join me for a short day-hike here in the lowlands of *epistemology*—the study of the possibility and sources of trustworthy knowledge about the great “questions of life” in general, and about cosmological questions in particular. Having done so, I trust you will find yourself in far better shape for a challenging cosmological climb that will follow soon enough.

## **Life: A Mess or a Test?**

*The Test* is structured as a spiritual journey in which the first step is to experience a fundamental change in perspective. To this end, I begin by reminding my readers of a fact most of us know very well but sometimes try to avoid: Each of us has a heart full of questions. Here I especially have in mind what are sometimes called life's "ultimate questions"—the distinctly religious and philosophical problems that have ever occupied the deepest thoughts and concerns of the human race.

In *The Test*, I identify an irreducible core of nine such questions:

1. What is the ultimate reality?
2. What is the origin of the universe, life, and man?
3. What, if anything, went wrong? Why are evil, suffering, and death in the world?
4. What, if anything, can be done about them?
5. What is the meaning of life?
6. How should we live? What are the proper motives and standards for human conduct?
7. What happens when we die?
8. Where is (cosmic) history heading?
9. How can we find trustworthy answers to the questions of life?

Pondering these questions, we soon realize that they display several interesting and significant characteristics.

First, they are *universal*. As a study of world religion and philosophy will quickly show, people of all times and all places have wrestled with them. This may not seem surprising, but in a way it is. Why should all people, and not just some, think about these high level questions? Could it be that such questions somehow belong to human nature itself? And if so, how did they get there?

Secondly, they are *existentially urgent*. By this I mean that we care, and care deeply, about finding the answers. Indeed, I think most of us would admit that our own sense of personal well-being depends heavily upon discovering the truth about one or more of the questions of life.

Thirdly, *they take in reality as a whole*. That is, they are philosophically comprehensive. They address everything that philosophers could ever think to address: things above and things beneath; things past, present, and future; things without and things within; things physical and things spiritual. In short, reality as a whole.

This brings us to our final observation, namely that these questions are *closely related to what philosophers call our worldview*. In fact, a worldview may be precisely defined as *a way of looking at reality as a whole, based upon a particular set of answers to the questions of life*. The prominent place of religion and philosophy in human experience testifies to the fact that most of us actively seek a worldview. Furthermore, any old worldview will simply not do: What we really want is the *one true worldview*. Question by question, answer by answer, step by step, we would ascend to that intellectual vantage point from which alone we can at last see all of reality as it really is. And we do this not only because we desire to *see* reality, but also because we desire to *relate to it* as it really is. Deep in our hearts we sense that finding the one true worldview is a very special kind—indeed, the ultimate kind—of coming home.

But there is a problem. For though we all have a heart full of questions, we do not all have a heart full of answers. The answers we want and need are not self-evident; if they were, we would not be seeking them. To use a humble illustration, we find that our hearts are rather like an incomplete wooden jigsaw puzzle: The questions of life are the spaces, but the answers that fit into the spaces are nowhere in sight.

And so, in an effort to fill the voids, some among us have stepped forward with answers, often quite dogmatically.

Consider, for example, the question of the ultimate reality. Some today claim that the ultimate reality is the “time/space/energy-matter continuum,”

so that all of the things that we call things are simply an embodiment of this one primordial substance. This is the view of the *philosophical naturalist*.

Others, however, argue that the ultimate reality is an impersonal divine Mind or Spirit that, in the ongoing experience of billions of sentient beings, has somehow slipped into a cosmic dream. We *think* that we are souls, inhabiting bodies, living in a real material world. But that is an illusion. The truth is that we are simply tiny bubbles of consciousness, arising in the infinite ocean of Big Mind. Here is the view of *the pantheist*.

Meanwhile, still others assert that the ultimate reality is an infinite personal god—a god who formerly created and now sustains all things but remains metaphysically separate from them. This is the view of the theist.<sup>1</sup>

We see, then, that people hold different views of the ultimate reality. And what is true for the question about the ultimate reality is true for the other questions of life as well: There are always several possible answers, each answer differing significantly from the others. Thus, poor seekers after truth are in a quandary. They have a heart full of existentially urgent questions, but when they look around for truth they find a world full of contradictory answers! This situation is scandalous. Deep down we feel it ought not to be. But it is—and never more so than today, when sophisticated media have brought every conceivable answer and worldview directly to our doorsteps. How, then, are we to understand and respond to a philosophical situation such as this?

I see two basic possibilities, two perspectives.

First, there is what I will call *the mess perspective*. Sometimes referred to as postmodernism (and previously called skepticism), this view holds that life—religiously and philosophically speaking—is a mess. In other words, there is no such thing as objective truth or absolute values. The fact that different worldviews *do* exist proves that no one true worldview *can* exist. We are all stuck in our heads. The way we see things is relative to our language, history, imagination, culture, and perhaps even to our biology, all of which differ from place to place and time to time. Accordingly, religions and philosophies must be seen as big, all-encompassing stories or “meta-



narratives”—culturally determined word pictures designed to help people get a handle on the world around them. Now in the past, say the postmodernists, such intellectual handles may have had some survival value, but in today’s shrinking world we dare not take them too seriously. Even if we cannot learn the truth, at least we can learn to get along. Let us therefore come of age. Let us abandon our quest for true answers to the questions of life. Let us surrender our hopes of ever finding the one true worldview. Let us simply live and let live, tolerating and respecting each other’s stories. In sum, however disappointing or frustrating it may seem, let all the family of man accept and get used to the fact that life is mess.

Does this take on the human condition depress you? If so, good! That means you are an excellent candidate for a second and far more hopeful point of view. I call it *the test perspective*.

According to this view, life is a test placed before us by an unknown god. He himself has put the questions of life into our hearts, along with an abiding hope of finding the answers. But for wise reasons he has not made those answers self-evident. Moreover, he has also allowed a certain measure of religious and philosophical error to creep into his world. Thus, he has set the stage. What will his human creatures do now? Will they listen to their hearts and begin sorting through the various philosophical options till they find the truth? Or will they use the existence of options as an excuse not to seek truth but to do what they want? As each of us decides, this god is watching. If we seek, he will help us. If we find, he will reward us. The test is on. Our part is as simple as it is important: We must love the truth enough to seek it, and we must keep seeking it until we find it.

Now most folks would agree that this is indeed a more hopeful way of looking at life. They would like to know, however, if there are any good reasons to believe it is true. Here are a few that seem compelling to me.

First, there is *the lesson of natural hunger and thirst*. In the natural world there is an objective reality that corresponds to our hunger: food. There is also an objective reality that corresponds to our thirst: drink. Interestingly, we often have to seek out food and drink, and can usually find them if we

want them badly enough. Do these simple facts of daily life have a message for us? Is the natural world teaching us something important about the spiritual? Does our hunger for truth also correspond to an objective reality? Does it imply that truth exists? And does it imply that truth will supply both nourishment and pleasure if and when we seek and find it?<sup>2</sup>

Second, there is *the amazing makeup of the human mind*. How is it that we are all endowed with intellect, intuition, conscience, language, and curiosity? How is it that we often intently focus these faculties on the questions of life? And how is it that we are surrounded by other minds with whom we may readily discuss those questions? Viewed from one angle, it certainly looks as if we humans have been equipped for a search for truth. The tools are in us and around us. Our part, it would appear, is simply to use them.

Third, there is what I like to call *the manageable messiness of the religious/philosophical world*. The idea here is that our spiritual condition is not nearly so messy as our postmodern friends would have us believe.

We have already seen, for example, that the questions of life are relatively few—about nine in number. What’s more, they are easy enough to understand. Children and youth ask them all the time, even if we adults cannot answer them all the time.

Also, the possible answers to the questions are few and easy enough to understand. For example, to the question, “What happens when we die?” religion and philosophy repeatedly return to three basic options: The lights go out (the view of the naturalist), the soul reincarnates (the view of the pantheist), or the soul goes immediately to heaven, purgatory or hell (the view of the theist). We may not like some of these answers or find them equally plausible, but no one can say they are too numerous or too difficult to comprehend.

Of special interest here is the fact that the possible worldviews are *very* few, and also relatively easy to understand. Indeed, I would argue that there are really only three basic worldviews (naturalism, pantheism and theism), and that the shape of each one of them flows logically from their respective

understandings of the ultimate reality. Yes, some confusion arises because there are quite a number of spokesmen for each worldview, each with his or her unique twist. But in the end, nearly every religion or philosophy is easily identifiable as a species of naturalism, pantheism, or theism. Please reflect on this situation carefully. The more you do, the more you will find the paucity of worldviews to be a richly significant and deeply heartening fact of philosophical life.

<b>THE PROBATIONARY ORDER</b>	
<b>I. A SPIRITUALLY EQUIPPED HUMAN BEING...</b>	
A. Intuition	
B. Reason	
C. Language	
D. Community and communication	
E. Conscience	
F. Hope	
<b>II. CHALLENGED BY THE QUESTIONS OF LIFE...</b>	
A. Innate questions	
B. Curiosity about the answers	
C. Existential urgency	
<b>III. IGNORANT OF THE ANSWERS...</b>	
A. The answers are not within	
B. To find them we must look without	
<b>IV. SITUATED IN A MANAGABLY MESSY RELIGIOUS AND PHILOSOPHICAL WORLD...</b>	
A. The questions are few and easy to understand	
B. The possible answers are few and easy to understand	
C. The possible worldviews are very few and easy to understand	
<b>V. AND FREE TO SEEK THE TRUTH OR NOT!</b>	
<b>Let the Test begin!</b>	

Now in light of all this evidence I, for one, must conclude that mankind does not live in the midst of a philosophical chaos after all. To the contrary, it appears that human existence—though philosophically burdensome—is nevertheless *ordered*. Could it be, then, that just as we live in a natural order and a moral order, so too we live in a *probationary order*? Could it be that a rational supreme being—an unknown god—really is putting us to the test?

The thought that we are all on spiritual probation can be intimidating, for it is only natural to wonder what will happen if we should fail the test. On the other hand, the same thought can be profoundly encouraging, for it means that while our life may indeed be difficult, it is definitely not absurd. As a matter of fact, from within the test perspective a previously messy life is suddenly revolutionized—charged with new meaning, adventure, and hope. The meaning of life—or at least its highest meaning—would be to seek, find, and respond to the truth. The adventure would be to face and overcome every obstacle standing in the way. And the hope would be not only to find the truth, but—just perhaps—the divine Tester as well!

## **Hints of a Heavenly Hope**

Spiritually hungry souls—and especially souls entangled in post-modern despair—would doubtless rejoice to know that life is a test. But are there any further reasons to believe that an unknown god exists, and that he has indeed situated us in a probationary order? Again, I believe there are. And interestingly enough, the reasons largely consist of two more orders. Let us briefly look at both.

First, there is *the natural order*: the universe, life, and man. The more we ponder this order, the more we discover certain characteristics that not only point to an unknown god, but also reveal to us something of his nature.

For example, the universe and all things in it are marked by *dependency*. Their existence, cohesiveness, and motions—as well as the mystery of “life” within its many life forms—all seem to depend upon a power that lies beyond themselves. But what, or who, is that power?

Again, the physical universe is marked by *order*. From the tiniest atoms to the largest clusters of galaxies, nearly all things display structure, complexity, and beauty. And this is true not only of the forms of things, but also of their motions, behaviors, and relationships. It is counterintuitive in the extreme to hold that “nature” produced an asparagus fern, or a hummingbird’s feathers, or a human brain, or an ecosystem, or a solar

system, or the cosmos itself—all by accident. Inescapably, order in the universe evokes within us an awareness of a divine Orderer—an intelligent, powerful, and profoundly artistic unknown god.

Then too there is the *goodness* of the natural order—the tendency of all things not only to sustain life but also to contribute to its pleasure. Think, for example, of the sun, the air, the soil, the rains, the abundance of delicious foods in the world, and of all the materials suitable for building shelters or clothing bodies. Think of the hidden powers and principles of nature—mechanical, chemical, gravitational, electromagnetic, or nuclear—and how, by technological advance, they have all enriched our lives.

Yes, there is natural evil in the world: sickness, injury, famine, pestilence, earthquake, hurricane, and more. Such brute facts are problematic for any worldview, causing us to ask the third question of life, “What (if anything) went wrong?” It must be observed, however, that as a general rule goodness predominates in human experience. Moreover, goodness, rather than its opposite, is our instinctual expectation. I have yet to hear anyone ask, “What went right? Why is there so much goodness, pleasure, and life in the world?” So here—in nature’s goodness and in our expectation of it—we again catch a glimpse of the unknown god, a good god who delights in giving good things to all living beings, and especially to the sons and daughters of men.

Summing up, then, we find that the dependency, order, and goodness of the natural world all work together to unveil to human hearts an unknown god—a god who is personal, powerful, rational, and good.

Secondly, there is *the moral order*. Unlike the natural order, this order is spiritual rather than physical, invisible rather than visible. Nevertheless, all of us are well aware of its existence and of its mighty power to influence our lives for good or ill.

The several elements of the moral order press themselves upon our consciousness daily. We all know, for example, that there are certain universal *moral laws*: We ought not to commit murder, steal, lie, etc. Rather, we ought to love, serve, be faithful, courageous, industrious, etc. By

and large, all peoples agree about the content of the moral law, as any survey of world religion and philosophy will show. And even when they do not, this need not mean that the moral law does not exist, only that its hold upon some of us has been weakened—perhaps even dangerously so.

Next, there is *moral obligation*, an objective spiritual reality which somehow makes itself known to the subjective faculty we call conscience. Together with conscience, it speaks to us inwardly, urging us to live up to the moral law or to reconcile ourselves to it when we break it or fall short of its demands. Moral obligation may be invisible, but millions will testify that it is as real as any mountain they have ever climbed.

Finally, there is *the law of moral cause and effect*. Our innate awareness of this law assures us that good will ultimately triumph over evil; that we will always reap what we sow; that righteousness will bring reward and evil will bring retribution, if not in this life, then surely in the next.

Again, the moral order is spiritual rather than physical, but no less real or objective than the natural world itself. Like the wind, we cannot see it, but we can see its effects. Every day we observe people relating to it: striving to honor it, warring against it, stumbling over it, longing to be reconciled to it. It is just as pervasive, complex, powerful, and beautiful as the natural order. And like the natural order, it too manifests design and points to a person with a purpose. It too reveals a personal god who created it and sustains it. Here, however, we learn something different about this god: He is a holy, sovereign, and righteous judge—and he would have us live before him accordingly.

The natural and moral orders are, then, two powerful “hints of a heavenly hope,” solid evidence for the existence of an unknown god. I say “unknown,” yet because of these orders it appears we can actually know quite a bit about him: that he is personal, powerful, intelligent, wise, artistic, good, holy, sovereign, a respecter of our choices, and a rewarder of those who use them well.

And there is one thing more: He certainly seems to enjoy creating orders!

Could it be, then, that there really is a probationary order, and that the god of the natural and moral orders is its author as well? With so much evidence for an orderly god before our eyes, this certainly seems to be the case.

## **In Search of the Teacher**

Now suppose that in contemplating these three orders someone awakens to the existence of an unknown god who is holding them all together. Suppose he concludes that life is—or is very likely—a test. Suppose he decides to search out the answers to all the questions of life, and to learn all he can about the divine Tester. What then? How, practically speaking, is he to proceed?

To begin with, he should proceed by rejoicing, for now a seeker has been born, and a great journey—with great promise of great reward—is about to begin. If the test perspective is true, such things are a joy not only to man, but also to the unknown god himself.

But after the rejoicing, then what? What first baby steps is the newborn seeker to take?

In a sense, the answer to that question is already within him. For is it not the case that all of us, even from our childhood, seek truth at the feet of a teacher? Perhaps we turn to a parent, or to a pastor, or to a trusted professor. Whatever the case, it seems that we humans are “wired” to look for the truth outside of ourselves; to look for an authoritative “someone” from whom we can hear those special words that we know will bring us life.

Interestingly, this inclination makes excellent sense from within the test perspective. If we really believe that life is a test, then we also know—or at least strongly suspect—that the divine Tester is on our side. But if he is on our side, then surely he must have made some provision for us to find the answers we need in order to pass his test. In other words, he must have sent us some kind of teacher, or at least be planning to in days ahead. The seeker’s next step, then, is to begin looking for what I will call *god’s*

*appointed Teacher*—the phenomena, disciplines(s), person(s), or institution(s) authorized by the unknown god to bring us his true answers to the questions of life.

Now let us assume for the moment what is very likely the case, that such a teacher has *already* come into the world. How shall we find him (or them, or it)? And how shall we be certain that we have found him when we do? In asking these questions, the seeker's search begins.

As a rule, it also begins with some dead ends.

Soon enough, for example, a newborn seeker will realize that *nature* is not god's appointed Teacher. Now nature, as we just saw, does indeed tell us a few things about the unknown god, but not nearly enough. Nature does not tell us god's name (if he has a name). It does not tell us all we want to know about his character, or his plans for the cosmos. It does not tell us how evil entered the universe, or if, how, and when it will be removed, etc. And what is true of the natural order is true of the moral order as well: Neither is god's appointed Teacher, for neither fully discloses to us the answers to the questions of life.

Similarly, it will not be long before the seeker realizes that *natural science* is not the Teacher. This only makes sense, since natural science is limited to the study of nature—the physical world—whereas the questions of life have to do with what is spiritual, or at least with what is invisible and immeasurable.

With what physical tools, for example, shall scientists ascertain the nature of the ultimate reality, whether it is spirit or matter? With what instruments shall they observe the origin of the cosmos? With what experiments shall they discover the meaning of life or the moral laws by which we should live? What kind of scope will permit them to scope out the afterlife or to behold the end of the universe? Now it is all too true that some scientists try to lend the prestige of science to their philosophical opinions, asserting, for example, that there is no god, or that man has no soul, or that the universe will one day become a lifeless dust-bin. But such affirmations are completely unscientific, for the truth about these matters



lies completely beyond the reach of their disciplines, as indeed many honest scientists will frankly admit.

And so, because of its limited focus and methods, we must conclude that natural science is not and cannot be the Teacher sent by god. Aspiring cosmologists, hoping to discover a truly comprehensive “theory of everything,” should ponder this fact with utmost care.

But what of *philosophy*? Surely in this time-honored discipline we have an excellent candidate for god’s appointed Teacher. After all, what is philosophy supposed to do if not supply solid answers to the questions of life?

And yet it cannot. Such, in any case, was my own conclusion when, after devoting four years and thousands of dollars to the study of philosophy, I graduated from a major American university without a single conviction concerning even one of the great questions of life. My alarm and dismay were exquisite.

Interestingly, not a few professional philosophers have reached the same melancholy conclusion.

Diogenes Laertius (ca. 300 A.D.) quotes Socrates as saying, “One thing only I know, and that is that I know nothing.”

Montaigne agreed, asserting that “Philosophy is doubt.”

Henri Bergson confessed, “Intelligence is characterized by a natural incomprehension of life.”

R. D. Hitchcock concedes, “A modest confession of ignorance is the ripest and last attainment of philosophy.”

John Seldon, adopting the same minimalist approach, opines, “Philosophy is nothing but discretion.”

A story is told of the pessimistic German philosopher Arthur Schopenhauer who, while visiting a greenhouse in Dresden, became so absorbed in contemplating a plant that his peculiar behavior elicited the concern of an attendant. “Who are you?” the attendant asked suspiciously. Schopenhauer replied, “Sir, if only you could answer that question for me, I’d be eternally grateful.”

Similarly, someone once asked English philosopher Bertrand Russell if he would be willing to die for his beliefs. “Of course not,” Russell replied. “After all, I may be wrong.”<sup>3</sup>

Now all of this would be funny if it weren’t so sad. How is it possible that the one discipline charged with discovering answers to the questions of life can fail so completely in its mission? Are the post-modernists right after all? Is the greatest discovery of the “lovers of wisdom” that wisdom is not discoverable at all?

The test perspective, as we have already seen, supplies important answers to these urgent questions. It teaches us that man is indeed imbued with the philosophical spirit: Sooner or later we all want to know the truth about the questions of life. But it also teaches us that the answers are not innate; that they are not accessible by means of introspection or logic. And this is just as true for philosophers as it is for all the rest of us. All people—philosophers included—need a teacher sent by god.

The history of western philosophy only confirms these important conclusions. And yet, by surveying it for just a moment, we are encouraged to find that it does indeed supply a hint of a more fruitful road to travel.

Think of this history as a sandwich.

The bottom layer is the age of Greco-Roman philosophy (ca. 500 B.C. to 300 A.D.). It began when certain Greek philosophers cast off traditional mythological responses to the questions of life and sought to find answers through the use of unaided reason. Not surprisingly, as the years unfolded some of them turned to naturalism, others to pantheism, and still others to theism. In the end, however, they could not agree. Accordingly, as this period drew to a close, Greco-Roman philosophy was in a shambles, characterized by skepticism, cynicism, mysticism, and despair. The world was ripe for a new way of doing philosophy, a way that would not only revive the philosophical spirit, but also somehow satisfy it at last.

The middle layer of the sandwich is medieval Christian philosophy (ca. 300 A.D. to 1600 A.D.). During this era most people believed that a new way had indeed come. Philosophy thrived. Yes, there were differences of

opinion, say between traditional Catholics and various reformers. Nevertheless, all Christendom was united by a common philosophical culture. That culture was based on a common faith. All believed that God had revealed the answers to the questions of life by speaking to mankind through Christ and the Bible. For Christians, these two authorities were God's appointed Teacher. Men may have disagreed about how to interpret the words of this teacher, but they did not disagree that the words had come from the one true god. Accordingly, this lengthy middle season in western philosophy was marked by creativity, contention, and even occasional confusion. But it was never marked by skepticism or despair. Because they had found a trusted spiritual teacher, philosophers—and the philosophical spirit—were alive and well.

The top layer of the sandwich is modern philosophy (ca. 1600 A.D. to the present). For reasons we shall discuss later, this period began with a loss of confidence in the Bible, and indeed with a rejection of the very possibility of divine revelation. The battle cry of the so-called Enlightenment was "Reason, not Revelation!" Men felt that in casting off revelation they were casting off superstitions that had trammelled the mind and hindered its search for truth. Like the Greeks and Romans of old, they were determined to turn away from the ancient Hebrew myths and turn instead to science, logic, and introspection. Here alone was the way to discover whatever answers they might need—including the answers to the great questions of life.

Four hundred years of intellectual history now enable us to see what the *philosophes* of the Enlightenment could not—that their new way was actually an old way, and a counsel of despair as well. In taking the path of the Greeks and Romans, they arrived at the same destination as the Greeks and Romans. Just as before, some turned to naturalism, others to pantheism, and still others to speculative theism. And just as before, they could not agree. And so, beginning in the 1950s, many philosophers finally gave up on the "modern" quest for truth—the quest for truth apart from divine revelation. Note carefully, however, that most of them did not turn back to

revelation. Instead, they inaugurated the so-called postmodern era, an era in which philosophy now courts its own destruction by abandoning the idea of truth itself. Some have hailed this as a great discovery. History shows, however, that it is simply the age of modern philosophy ending like the age of ancient philosophy—in a shambles characterized by skepticism, cynicism, mysticism, and despair. And among some, at least, it is also characterized by a desperate longing for a new and life-giving way of doing philosophy.

So again, in this briefest of surveys we find that the history of Western philosophy confirms exactly what the test perspective teaches: The answers to the questions of life are not innate, so that all men need a divine revelation, a teacher sent from the unknown god. Accordingly, seekers cannot turn to philosophy—*or at least not to any philosophy that spurns divine revelation*. Rather, they must acknowledge the truth of G. K. Chesterton's words, who said that the mind is like a mouth: It is meant to bite down on something hard. That something is revelation. Revelation is the philosopher's true food. Just as the natural scientist was meant to feast on nature, so the philosopher was meant to feast on revelation. He can try to bite down on the world of nature, or on the contents of his own mind and emotion, but that will only hurt his teeth. What's more, if he continues to do so, he will starve. Here, then, is the philosopher's true wisdom: Feast on revelation and live.

## **The Rough Road of Revelation**

A seeker's journeys into all these spiritual *cul de sacs* can be deeply frustrating, but they need not be in vain. All that is necessary to make them profitable is for him to learn the lesson they teach: In his search for god's appointed Teacher, he cannot avoid traveling *the rough road of revelation*. In other words, no matter how daunting the prospect may seem, he must now begin to look for the person or group of persons through whom the unknown god may have been pleased to reveal his truth to the world.

Now concerning this final phase of the search, there is both good news and bad.

The good news is that there is lots of revelation in the world. For example, we have much *theistic revelation*—revelation purportedly given by an infinite personal god. Included prominently in this category are Judaism, Christianity, and Islam, along with their many sectarian offshoots.

Then too there is *pantheistic revelation*—revelation supposedly coming from spiritually enlightened men, or possibly from disembodied spirits living on spiritual planes beyond our own. In this category we have the teachings of Hinduism, Taoism, and Buddhism, as well as revelations coming to us through various New Age “channelers” or spiritists.

The bad news, of course, is that these revelations are largely irreconcilable. In other words, they consistently offer conflicting answers to some, most, or all of the questions of life.

Now if logic counts for anything, this situation necessarily involves three possibilities: One of the revelations may be true, some of them must be false, or (god forbid!) all of them could be false.

For mystics, however, logic doesn't count for much. It is, as Emerson famously said about consistency, the hobgoblin of little minds. Accordingly, the mystic sees another possibility: that world religions only *appear* to be contradicting each other; that in fact they all are “really” saying the same thing; and that it therefore doesn't much matter which religion we practice, so long as we practice it sincerely. In short, since all roads lead to Rome, one road is pretty much as good as another.

If this viewpoint seems attractive, it is because there is an element of truth in it. All religions—to the extent that they acknowledge a spiritual ultimate reality—do indeed seek to understand and relate to that reality. They have glimpsed the unknown god and are attempting to establish a closer connection with him. But even if all religions share this common goal, it does not follow that all religions succeed equally well in achieving it. For example, one religion may tell us the true name of the unknown god (assuming he has a name), while another may tell us that he has no name or

that he has many. One religion may describe him as he truly is, while another describes him as it thinks he is or as it wants him to be. One religion may enable seekers to establish a lasting connection with the (formerly) unknown god, while another may promise to do so yet continually leave them in shadow and frustration. In sum, one religion may actually be a dependable revelation in which a personal god reaches down to man, while another may be an undependable speculation in which man—peering through the semi-darkness of nature and conscience—falteringly reaches up to god. The result is that all religions may be one in aspiration yet not be one in attainment.

Observe also that the mystic's understanding of religious diversity is always based on a pre-existing religious commitment, and that that commitment is nearly always pantheistic. How does the mystic "know" that all religions are really saying the same thing? It is because he "knows" that pantheism is true; that just as there is one Big Mind back of all (seemingly different) things, so there is one Big Mind back of all (seemingly different) religions. And why does the mystic smile condescendingly at seekers who carefully compare and contrast the teachings of different religions, hoping to find the one that is true? It is because he already "knows" that comparing and contrasting them is futile; that the discriminating intellect is actually an enemy; that common sense, reason, language, and even conscience all tend to *divide* reality into (the illusion of) multiplicity, whereas the true spirit of religion tends to *dissolve* all things into (the reality of) oneness.

The seeker, however, has made no such religious commitment and therefore "knows" nothing of the kind. In particular, he is not at all certain that pantheistic revelations are true. Accordingly, he cannot agree that all religions are "really" expressions of the one "perennial philosophy"—pantheism. Indeed, he finds it both interesting and important that we must do great violence to the actual teachings of the theistic religions in order to pull pantheistic rabbits out of theistic hats. Reason, joined with careful study, persuades him that on nearly every question of life the theistic and pantheistic worldviews stand opposed; and from the test perspective he has

learned to listen hard to the voice of reason. He knows it is important equipment from the unknown god, vital in his search for truth. How, then, can he follow the mystic by casting aside reason—and all the rest of his discriminating faculties—as useless obstacles in the pursuit of spiritual reality?

But if mysticism is not the way, what is? Again, it appears there is only one answer: Seekers must turn to the rough road of revelation. Yes, human fallibility and duplicity have doubtless littered the spiritual landscape with religious refuse. And yes, it is even possible that evil spirits have contributed to the confusion as well—for nearly all world religions acknowledge the existence and deceptive activity of evil spirits. But none of this precludes the possibility that one of the religions is indeed god's truth, and none of it releases us from the obligation of finding out whether such is the case. Therefore, taking the rough road of revelation, the seeker must begin diligently to sort through all the competing revelations until, god willing, he finds the one that is true. If he wants it badly enough, he will.

## **Getting Started**

But how exactly is a seeker to proceed in this search? What principles should guide him? And perhaps most importantly, where in the world should he begin?

By way of response, let me draw from my own experience in this area to suggest some assumptions that a seeker won to the test perspective may reasonably make.

First, he may reasonably assume that the Teacher's identity will not clobber him over the head. From within the test perspective this assertion makes perfect sense, for if the unknown god made finding his Teacher too easy, the test would not be a test. Thus, a seeker should brace himself, understanding that a significant amount of effort will likely be required. In particular, he must plan to dig deep—deep enough to uncover any evidence

by which the unknown god may have been pleased to identify this or that teacher as his own.

But secondly, a seeker may also assume that the Teacher's identity will not be too obscure. This too makes sense. After all, the divine Tester is on our side. If he has sent us a teacher, it is because he wants us to find him. Yes, his Teacher may superficially resemble other teachers, just as wheat superficially resembles chaff or gold resembles pyrite. But in the end, anyone who really wants to find him can, even the simplest among us.

This assumption has practical ramifications. It means that god's appointed Teacher is likely to be a public person rather than a private, a herald rather than a hermit. It means that he will offer the kind of credentials that average people can respect; that he will use the kind of words average people can understand, and that he will make the kinds of demands with which average people can comply. In short, seekers may reasonably assume that god's appointed Teacher will not make himself available only to intellectual or spiritual giants, but to every honest soul, great or small, who is simply willing to keep his eyes open for truth.

Thirdly, a seeker may reasonably assume that the unknown god will direct us to his Teacher by means of supernatural signs. A little reflection reveals why such a method is to be expected. If a powerful, personal god who is also a divine Tester wanted to get our attention, how better than to use the unusual? If he desired to draw us to a particular teacher, how better than to surround that teacher with the miraculous? Furthermore, if he desired to test our love of the truth, how better than to use phenomena which the lazy or rebellious could easily shrug off as fraud or superstition, but which the diligent and open-hearted—*after careful investigation*—could finally recognize as the handiwork of heaven?

Again, seekers already understand that the natural, moral, and probationary orders all point to an infinite personal god—precisely the kind of god who *could* use supernatural phenomena to direct us to his Teacher. Believing this, they therefore have at their disposal an excellent way to



begin their search: They should keep their eye out for a teacher who is surrounded by supernatural signs.

Finally, a seeker may reasonably assume that if the Teacher has already come into the world, he will be surrounded by a large number of spiritually satisfied disciples who have followed the signs to his feet. How could it be otherwise? For if indeed this is god's appointed Teacher, he will surely have brought to mankind all the truths and all the spiritual experiences for which the unknown god has prepared the human heart. And if seekers have truly found such things at this one's feet, why would they want to leave in search of another? They are seekers no more, but finders—finders who have come home. So then, those who have not yet come home do well to keep their eyes out for those who have.

Now before continuing to the next section, please take a moment to ask yourself the following important question: Who among all the world's religious teachers that you are familiar with best fulfills these criteria? Who, above all others, had a notably public ministry, connected well with the common man, was surrounded by supernatural signs, gained a large and committed following, and claimed to be bringing to the whole world god's answers to the questions of life? Think about it, write down your top two or three choices, and then read on to see how one of your fellow-seekers answered this question many years ago.

## **Window on a World of Signs**

By and large, rumors deservedly have a bad reputation. Yet we must also admit that rumors are often true and occasionally of great importance. Indeed, in a world such as ours the unknown god himself may not be above starting an occasional rumor if he thought it could help a poor seeker to find his Teacher. He knows people talk. And he knows there is nothing like a few signs to get them talking—and moving toward the one whom he has sent.

So it happened with me back in the early 1970s. In those heady days of widespread spiritual inquiry I had become a seeker. I was deeply absorbed in the questions of life, especially the question of the ultimate reality. Through nature and conscience I had caught a glimpse of the unknown god. I had concluded that natural science and modern philosophy were indeed dead ends; that down those roads I would find no ultimate answers at all. And so my thoughts began to turn toward world religion. I realized that I must now journey down the rough road of revelation. But where in the world was I to begin?

As a matter fact, I began with what was then much “in the air”—Eastern religion. In my first year alone I studied and practiced Tibetan Buddhism, Hindu yoga, and Zen Buddhism. But it was not long before something caught my eye, something supernatural. As I considered the teachings of my gurus and Zen masters, it began to dawn on me that there was one teacher who somehow stood out from all the rest: Jesus of Nazareth. Though I had taken little religious training as a child and no biblical instruction at all in college, I had heard enough rumors about Jesus to sense that he was unique. After all, had he not performed many astounding miracles? Had he not predicted the future? Had not the common people received him gladly? Was he not revered as the wisest of teachers and the best of men? And did he not have a large and enthusiastic following even to this very day, even in Santa Cruz, California, where I lived?

And then there was the most amazing rumor of all—the story of his resurrection from the dead. Already I had read a great many “yogi books” about enlightened masters and god-intoxicated men. But never had I read or heard about any guru or teacher who had risen from the dead and then ascended bodily into the sky!

So, alerted by all these signs, I decided to go to where they pointed. I decided to learn more about Jesus and more about what he taught. This meant, of course, that I had to read the Bible. And so, for the first time in my life, I opened one up. When I did, I found to my amazement that I had actually opened a window—a window on a world of signs.

In a moment I will tell you more about the signs I saw. But first, for the sake of those who are unfamiliar with it, I want to offer a few introductory words about the window itself, the Bible.

The Bible is actually a book of books, sixty-six of them. It was written by about forty different Jewish authors (plus Luke, a Gentile doctor), in three different languages, in seven different literary genres, over the course of some 1600 years (from about 1500 B.C. to about A.D. 90). Importantly, the stories it tells reference hundreds of different historical persons, places, things, and events. For these and other reasons, the Bible displays a very great diversity.

Yet it also displays an extraordinary—some would even say miraculous—unity. For example, all of the books speak of *one god*. In the Old Testament (OT), he is called *Elohim*, the majestic creator and sustainer of the universe. There he is also called *Yahweh*, the covenant-keeping LORD of his people Israel. In the New Testament this same god is in view, but is further unveiled by Jesus and his apostles as a holy trinity, a three-in-one god eternally existing as Father, Son, and Holy Spirit.

Together, the books tell *one unfolding story*—a story of the *creation* of the universe, life, and man; their *fall* into evil, suffering, sickness, and death because of the sin of the first man, Adam; and their final rescue and restoration (i.e., *redemption*) by the triune creator turned redeemer. Needless to say, a story built around such themes should be of the greatest possible interest to seekers since it definitely touches on the questions of life!

Very importantly, the biblical books also affirm that the cosmic redemption is to be accomplished through *one central character*—the Messiah (or, in Greek, the Christ). This title means “The Anointed One.” It is a term first used by the OT prophets to declare that God, in days ahead, would anoint the promised redeemer with his Spirit, thereby enabling him to accomplish his great work of saving the world (Isaiah 42:1f, 61:1f).

As to his nature, the Bible teaches that the Messiah is both human and divine.<sup>4</sup> He is, in the picturesque language of the early Greek theologians,

the *theanthropos*, the God-Man. More particularly, he is at once the human son of David (an ancient prototype of the royal Messiah) and the divine Son of God (Mt. 22:41-46, Rom. 1:1-6). This, the mystery of the Incarnation, is one of the great themes of NT theology. Over and again, the apostles marvel that God the Father has sent his divine Son into the world through the womb of a virgin, so that her human offspring, Jesus of Nazareth, might become the Last Adam; that in behalf of God's chosen people he might do all the first Adam failed to do, and undo all he did; that he might live, die, and rise again to redeem and re-create a whole new cosmos (Mt. 1:18-23, Luke 1, John 1:1-18, Romans 5:12f, Phil. 2).

Concerning his work, the Bible portrays the Messiah as a cosmic redeemer who accomplishes his mission by occupying three offices familiar to Israelites of OT times: prophet, priest and king. As a *prophet*, he brings God's truth not only to Israel but to all nations, thus redeeming them from ignorance and error (Deut. 18:15-19, Isaiah 2:1-4, 9:2, 49:6). As a *priest*, he offers himself as an atoning sacrifice for the sins of his people, thus redeeming all who trust in him from divine wrath and condemnation (Psalm 110, Isaiah 53, Zech. 6:12-13). And as *king*, he rules from heaven in God's stead over the faithful of all nations, thus redeeming them from their sinful rebellion and autonomy (Psalms 2, 110, Isaiah 9, Dan. 7:9-14). One day the king will descend from heaven to redeem the material universe itself!

For the NT writers, the person and work of the Messiah are the central themes of all divine revelation. On this view, the primary characteristic of the so-called Old Testament books is that they look forward to the Messiah's coming. The primary characteristic of the New Testament books is that they celebrate his arrival in the person of Jesus of Nazareth, even as they continue to look forward to his return at the end of the age, when he will consummate God's redemptive plan by raising the dead, judging the world in righteousness, and renewing the entire cosmos.

And so, because of this amazing, multi-layered, Christ-centered unity, Christian interpreters see the sixty-six books as one book, *the* book, the

Bible. They also see it as the most important cosmological document ever written.<sup>5</sup>

But there is more. For the Bible also discloses *one (very large) body of supernatural signs*—signs attesting that Jesus of Nazareth is indeed the promised Messiah. And just here we find something to perk up the ears of every alert seeker. For if these signs are credible, would they not suggest that the unknown god and Israel's God are one and the same? Would they not also identify Jesus as his appointed Teacher? And if, after all this, Jesus actually *claimed* to be the Messiah, would he not be identifying himself as the supreme Prophet—which is to say, the god-appointed Teacher—of the entire human race?

All of this brings us back to the window and to what I saw when I first looked through it: I saw the *one body of Messianic signs*. Much indeed could be written about them (and has). Here, however, I want simply to list them, adding no more than a few explanatory notes. In so doing, I hope to give you a feel for their abundance, diversity, supernaturalness, and, most importantly, their amazing convergence in the person of Jesus of Nazareth. I also hope that they will impress you as much as they did me.

Note carefully that there are actually hundreds of signs, but that they readily fall into the following eight categories.

*Signs Surrounding Jesus' Birth*—These include angelic visitations, his birth to a virgin, a revival of the spirit of prophecy among certain devout Jews of Jesus' day, and the God-inspired journey of the Persian wise men to the place of his birth.<sup>6</sup>

*Angelic Visitations and Testimony*—These include angelic annunciations of Jesus' soon-coming birth, angelic ministry to Jesus in the wilderness and in the Garden of Gethsemane, and angelic appearances at his tomb and on the mountain near Jerusalem from which he ascended into the sky. Under this heading belong also the terrified confessions of demons—fallen angels with whom Jesus did battle in the days of his ministry to Israel.<sup>7</sup>

*Theophanies*—A theophany may be defined as an outward manifestation of God in which he sensibly displays his presence to men. During Jesus'

earthly ministry, God thus showed himself twice: once at Jesus' baptism and once again at his transfiguration on a high mountain in Galilee. The apostle Peter was present at Jesus' transfiguration when God manifested himself both visibly and audibly. Writing of this experience toward the end of his life, Peter commended it to his fellow Christians as one of the outstanding proofs that Jesus of Nazareth is indeed the God-authorized Teacher of the human race.<sup>8</sup>

*Miracles*—Miracles may be defined as extraordinary happenings that are designed by God to reveal his glory (i.e., the radiant beauty of the divine character) and help his people. According to the apostle John, Jesus performed so many miracles that all the books in the world could not contain them! These include healings, exorcisms, resuscitations of the dead, acts of power over nature, clairvoyance, and numerous predictions of the future. The New Testament authors speak of numerous miracles performed through the apostles, and also assume that at least some of Jesus' disciples will be empowered by Christ to perform them until his return at the end of the age.<sup>9</sup>

*The Resurrection*—Here is the most unusual and important of all biblical miracles—that Jesus died, was buried, and rose again from the dead after three days. His was not a mere resuscitation. The biblical authors record that after his resurrection he showed himself to hundreds of eyewitnesses over the space of forty days and then ascended visibly into heaven. In other words, they affirm that Jesus rose to eternal life. Not surprisingly, his followers attached great importance to the resurrection, citing it often as the preeminent sign of God's favor upon their master. For them, it was the single most important reason why seekers of divine truth should turn, come, listen, and learn at Jesus' feet.<sup>10</sup>

*Old Testament Messianic Types*—The Old Testament consists of the thirty-nine biblical books written before Jesus' coming. The work of many different authors over the course of about 1100 years, these books contain numerous Messianic types. A Messianic type (Greek, *tupos*: form or figure) is an OT person, place, object, event, or institution that symbolically points

ahead to the Messiah and to the events of his life. Jesus and his disciples firmly believed that he was the promised Messiah, and that the OT types all found, or will yet find, their fulfillment in him.

A single example will give a feel for the nature of such types. In the OT book of Numbers we learn that the Israelites, recently escaped from Egypt, were grumbling against God in the wilderness (Numbers 21). As a result, God judged them by sending poisonous serpents into their camp. When the people cried out to God for mercy, God told Moses to make a bronze serpent and suspend it on a pole. Looking upon it, those stricken by the serpents would be healed. Jesus saw this entire episode as a type of himself and his work. Like the serpent, he too would be lifted up on a pole, bearing the sins of his people, so that all who look upon him in simple faith may experience forgiveness, spiritual healing, and eternal life (John 3:1f).

The NT authors find many such types in the OT, while Christian interpreters down through the centuries feel sure they have unearthed many more.<sup>11</sup>

*Old Testament Messianic Prophecies*—These are explicit OT predictions of the person and work of the coming Messiah. Again, both Jesus and his disciples affirmed that the Messianic prophecies have been, or will yet be, fulfilled in him. Christian interpreters argue that *the entire course of Jesus' life was foretold in OT prophecy*: his divine preexistence as the Son of God, his virgin birth, his birthplace, his miraculous ministry to the downtrodden, his death on the cross, his resurrection, his ascension, his reign in heaven, and his coming again in power and glory at the end of the age. Note that OT types and prophecies point not only to Jesus but also to the divine inspiration of the biblical books in which they have been preserved.<sup>12</sup>

*The Church*—Jesus called his followers his Church, promising that they too would become signs. Their words, supernaturally transformed character, good works, growing numbers, and perseverance in the face of persecution and martyrdom would point seekers everywhere to the master whom his followers knew and loved. The book of Acts records the birth and early history of Jesus' Church. Two thousand years of Church history record the

rest. Here, then, is a unique sign, for it is seen not only through the window of the Bible but also down through the centuries and around us in the world today.<sup>13</sup>

As I said earlier, in my first reading of the Bible (and especially of the four Gospels) I was deeply impressed by all these Messianic signs. I did not, however, fully appreciate their importance. Enjoying now the benefit of years of further reflection, let me conclude this section with three observations that should be of special interest to seekers.

First, seekers should understand that *the Christian faith is altogether unique in commending its truthfulness to the world by signs*. All religions claim to be true. Some even ascribe supernatural phenomena to their founders. But none—with the exception of Christianity—issues its truth claims, cites a wide variety of supernatural evidences in their support, and then explicitly challenges people to examine them. Interestingly, Jesus himself laid down this very pattern (John 5:1f), while the New Testament reveals that his disciples faithfully followed it. So too have Christian preachers and teachers down through the centuries. In so doing, all have operated on the assumption that life is a test of our love of the truth, and that pondering and following the signs granted by Israel's God is one of the best ways to discover what that truth is.<sup>14</sup>

Second, *the biblical signs create a reasonable presumption that Jesus of Nazareth is indeed god's appointed Teacher*. This important conclusion follows logically from the very great abundance of signs, their amazing diversity, their having been spread out over some 6,000 years of human history, their appearance in numerous old and highly credible historical documents, and, above all, their marvelous convergence in one man, Jesus of Nazareth. This phenomenon is unprecedented and unparalleled in all religious history. If, as Christian philosopher Os Guinness has written, Jesus is the world's greatest magnet for seekers, it is because those seekers are drawn by the world's greatest collection of signs.<sup>15</sup>

Finally, Jesus confirms the implication of the signs by explicitly identifying himself as God's appointed Teacher. Here, the last piece of the



puzzle falls into place: The signs create a rational presumption that Jesus is the Teacher; Jesus confirms this presumption by declaring that he is indeed the Teacher.

His own words leave no doubt about his views on this crucial matter. Let us look at just a few of them.

First, Jesus saw himself as *a unique teacher*, “a greater than Solomon” who was sent into the world to unveil mysteries that the ancient prophets longed to see and hear (Mt. 12:42, 13:16-17).

Next, he saw himself as a teacher who was culminating God’s revelation to man, telling his disciples that he had given them God’s own words (John 17:6-8), and that in days ahead he would teach them “all things” (John 15:15, 14:26). In this confidence he also proclaimed that his words were henceforth to be the one rock upon which men may safely build their lives (Mt. 7:24-29, 28:18f). Indeed, henceforth men of every generation *must* keep building on them, even to the end of the age, when at last those same words will become the judge of all (John 12:48).

Very importantly, Jesus saw himself as bringing this revelation not only to Israel, but also *to all mankind*. Thus, echoing the ancient prophecy of Isaiah, he declared to the citizens of Jerusalem, “I am the light of the world” (John 8:12, Isaiah 49:6). On another occasion, when a Samaritan woman said to Jesus, “I know that the Messiah is coming...he will declare all things to us,” Jesus replied, “I who speak to you am He” (John 4:25-26).

Similarly, when Pilate interrogated him about his claims to royalty, Jesus answered, “You say correctly that I am a king. For this cause I was born, and for this cause I have come into the world, that I should bear witness to the truth. Everyone who is of the truth hears my voice” (John 18:36-8). Here Jesus sought to bring God’s truth to a Gentile—a Gentile who refused to hear his voice because he was not “on the side of the truth” (John 18:37, NIV).

Finally, and quite mysteriously, Jesus saw himself as God’s appointed Teacher *even to the end of the age*. This is reflected in his final words to his disciples. For example, Jesus warned them, “Do not be called Rabbi, for

One is your Teacher, and you are all brothers...And do not be called leaders, for One is your Leader, even Christ” (Mt. 23:8-12). Here we see that Jesus identifies himself as the Christ, and that as such he intends to be the Teacher of his people right up to the time of his return (Mt. 28:20). Elsewhere in the NT we learn how he plans to accomplish this spiritual feat: After his return to heaven, he will send the Holy Spirit, through whom he (Jesus) will enable his apostles to complete the written revelation of God’s truth. After that he will send the Spirit to all the rest of his disciples, so that they in turn may be able to understand it (John 14:15-18, 25-26, 16:12-13, 15; see Luke 24:45). Through the one Spirit, the one Teacher will teach them all.

Summing up, we find that Jesus of Nazareth saw himself as a unique teacher sent from above to bring a new and final revelation of God’s truth; a revelation that would complement and complete all previous revelation; a revelation that was therefore now ready to go out to all mankind; a revelation that he himself would enable his apostles to receive and write down, and the rest of his disciples to recognize, preserve, understand, obey, and delight in, even to the end of the age.

A testimony like this, confirmed by so great a wealth of supernatural signs, is a bright and shining star in the sky of world religion. It can hardly fail to turn a seeker’s compass toward Nazareth.

## **At the Feet of the Teacher**

On the strength of the signs, it is certainly reasonable for a seeker to begin his search for divine truth with Jesus of Nazareth. And on the strength of his testimony about himself, it is all the more reasonable to assume that Jesus is—or is very likely—god’s appointed Teacher.

Yet despite all the evidence, one vital step remains. For though all the world were filled with signs, a seeker could never be fully satisfied until he knew that Jesus had answered all or most of the questions of life, and that

he had answered them well. Thus, the seeker's next logical step is to come, sit at Jesus' feet, and hear and evaluate what he has to say.

Concerning this climactic stage of the journey, several important points may be made.

First, it is evident that any evaluation of Jesus' teaching must be undertaken with great thoughtfulness and deep humility. The reasons are many. We have already seen, for example, that mankind apprehends spiritual truth with considerable difficulty and that our thinking is vulnerable to error and bias. Thus, in the case of a supernaturally attested teacher like Jesus, the path of wisdom is surely to doubt one's own views before doubting his. This is all the more true when we step back and look at things in historical perspective; when we see how mankind's philosophical and scientific opinions are "in" one day and "out" the next, while in every generation Jesus' teachings continue to find skilled defenders and a large, devoted following. In short, many factors warn the wise against a rush to judgment.

On the other hand, despite the perils, we must also understand that critical investigation is absolutely necessary. For again, the seeker's ultimate goal is to find the truth and to see that it is true. How, then, can he avoid hearing and evaluating what purported truth-tellers have to say? On the premise that life is a test, the perils of judging god's appointed Teacher cannot possibly preclude an honest evaluation of his teaching since the test perspective positively demands it.

The necessity of such evaluation contributes richly to the drama of being human. Yes, our poor faculties may be wounded, perhaps far worse than we realize. And yes, in the process we may feel ourselves to be spiritual and intellectual midgets. Yet despite all that, we must still go forward, trusting that he who created our limited faculties will help us to use them effectively, if only we will do so humbly, honestly, and persistently. In short, Jesus may indeed be god's appointed Teacher, and any human evaluation of his views a kind of folly. But if the divine Tester has ordained

careful investigation as part of the test of life, then it is a sublime folly and ready to receive its just reward.

But how, precisely, is a seeker to go about evaluating Jesus' teachings—or the teachings of anyone who presumes to bring us a revelation from god?

Here again we are much helped by the test perspective. For if life really is a test of our love of the truth, then we may be sure that the unknown god has adequately equipped us to weigh the truth claims of different teachers and religions. Indeed, from within the test perspective we suddenly begin to see the wonderful workings of our minds as the appointed means to this very end. We see ourselves as having been fitted with certain “truth monitors”—faculties designed by the divine Tester for the express purpose of pondering and evaluating different answers to the questions of life. Ours is simply to use those faculties as best we can; his is to enable us to see the truth as we do.

But what exactly are these truth monitors? Thus far in my own journey, I have identified a closely related set of four: intuition, reason, conscience, and the human inclination to hope for the best. Accordingly, I would argue that a true revelation about cosmic origins, or any other question of life, must be:

1. *Intuitive*—That is, it must not offend but rather win the assent of our most basic intuitions about reality. Human intuitions may, of course, be flawed or weakened, which means that we cannot follow them uncritically. Nevertheless, on the premise that we are creations of an unknown god with a mandate to seek out his truth, it would be strange indeed for us not to listen to our intuitions, since they are not only given to us by god, but integrally involved in every religious and philosophical judgment we are called upon to make. In short, we may reasonably expect true answers to the questions of life to resonate with what might be called our “spiritual common sense.”
2. *Reasonable*—This criterion is actually three-fold. It means that a trustworthy divine revelation must be: a) *understandable*, b) *logical*,

(i.e., it cannot contradict itself, but must obey the laws of sound thought), and c) *supported with an abundance of good evidence*. All this does not, of course, rule out “mystery,” in the sense of truth that is hidden from our sight or from our complete understanding. It does, however, rule out mysticism, by which I mean any approach to discovering truth that disparages our god-given faculties (i.e., reason, language) in favor of irrational spiritual experience.

3. *Right*—That is, it must not violate our conscience, but rather commend itself to our distinctly ethical intuitions as being consistent with the good and holy god who created and sustains the objective moral order.
4. *Hopeful*—That is, it must awaken hope; not only the hope of finding trustworthy answers to the questions of life, but also of laying to rest the spiritual longings and anxieties associated with each one of them. In other words, a true revelation must not only affect us intellectually, but also existentially. It must offer us peace of mind, both for this life and the life to come.

## **The Journey Before Us**

With this we come, at long last, to the book you now hold in your hands. For *In Search of the Beginning* is, as I said earlier, a much-expanded chapter taken from that portion of *The Test* in which I introduce my readers to Jesus’ teachings on the nine questions of life, and then go on to evaluate them in light of the four criteria just mentioned. Needless to say, it’s a big job. Moreover, in working at that job, I soon discovered that one part was bigger than all the rest: the part that concerns the beginning—the origin of the universe, life, and man.

The difficulty here stems largely from the historical situation in which we now find ourselves. There was a time not long ago when, throughout much of the world, Jesus’ view of things cosmological was pretty much taken for granted. That time is past. Today—and for at least the last 100

years—the dominant view of origins among the western intelligentsia has been what I will hereafter call *cosmic evolution*. Indeed, many of us (myself included) were brought up hearing no other, simply taking it for granted that this was the truth. If, therefore, cosmic evolution is *not* the truth, I feel quite certain that millions of modern seekers like me will require a good deal of persuading to become convinced that such is the case.

Here, then, is my main reason for turning a single chapter into an entire book, and also for offering the extensive introduction that I have: I now believe that Jesus' cosmology is *very* much worth a respectful hearing; yet I also know from painful personal experience how difficult it is for him to get it. Modern seekers will never be shaken from their evolutionary slumbers—nor from their skepticism about creationist perspectives—apart from an outstandingly clear, thorough, and persuasive defense of the traditional biblical cosmology. A few have already been written. My goal in this book is to join that special little choir by adding one more voice.

In our epistemological ramble through the lowlands, I have already labored much toward this very end. In particular, I have set out a concise case for the existence of an unknown creator god. I have shown that in things cosmological, we need his help; that we cannot rely exclusively, or even primarily, upon empirical observation and scientific theorizing, but that we need a trustworthy divine revelation if we are ever to find answers to the great questions of cosmology. Moreover, I have tried to show why it is reasonable to believe that this unknown god and the God of Israel are one, and that Jesus of Nazareth and the Bible are his appointed teachers. In short, my goal has been to persuade seekers of cosmological truth that Jesus of Nazareth definitely deserves a seat—indeed, a seat of honor—at their investigative table.

Having done all this, we are now ready to begin our journey to the origin of the universe, life, and man. My approach will be as follows.

In Chapter 1 I set the stage, drawing from personal experience to put my readers in touch with their own innate desire to behold the beginning, and to awaken in them a lively faith that they really can.

In Chapters 2 and 3 I critically examine naturalistic views of the beginning, focusing at length upon the currently regnant hypothesis of a Big Bang followed by billions of years of cosmic evolution. Naturalists do not, of course, present their cosmology as a divine revelation, since naturalism by definition is an atheistic worldview. Nevertheless, they do present it as truth, or at least as the most reasonable approximation of truth that we now have. And perhaps, despite their atheism, there is some truth in what they say. Therefore, even if a seeker disagrees with a naturalist's atheism, he still will want to examine his claims in order to see just how trustworthy they are. This is all the more necessary in view of the tremendous influence that naturalistic cosmology has had upon modern thinkers, pantheists and theists included.

In Chapter 4 I go on to examine two views of special interest to spiritually minded people—the cosmologies of classical Hinduism and the modern New Age movement. These pantheistic versions of the universe are still much in the air. The latter in particular has attracted a large following, since it seems to invest the widely assumed cosmic evolution with spiritual significance and hope. Careful seekers will want to know, however, if these pantheistic cosmologies really do meet the the high standards of a trustworthy divine revelation.

In Chapters 5 and 6 we reach the climax of our journey, examining in some detail Jesus' views on a wide variety of cosmological themes: the identity of the creator; the origin and purpose of his creation; its spiritual and physical components; the origin of natural and moral evil in the universe; God's redemptive response to both; and the goal and eternal future of the cosmos. Also, in my critical evaluation of Jesus' teaching I discuss at some length two of the most fascinating and controversial aspects of biblical cosmology: the radical geocentricity of the universe, and its "young" age of some 6,000 years.

Finally, in Chapter 7 we examine some of the distinctly spiritual factors that contribute to the controversy surrounding cosmology today. Then, reflecting upon my own failures as a seeker, I conclude by suggesting a

five-fold way by which lovers of cosmological truth can make a satisfying personal journey to the beginning, where, at long last, they can see it—and all it involves—for themselves.

It remains only to add that I have included in the pages ahead a number of anecdotes taken from my own spiritual journey. These are largely drawn from a four-year period of intense spiritual searching that began immediately after my graduation as a philosophy major from the University of California at Santa Cruz (1970-1974). During a portion of that time I studied Christianity under the tutelage of a Franciscan priest, Father Gabriel Barry. During most of it, however, I assiduously believed and practiced various Eastern religions, especially Zen Buddhism. Reading the present book, you will no doubt guess how my journey ended. To know the whole story, however, you must first finish this book (no skipping ahead!), and then read *The Test*.

## NOTES

1. Throughout this book I use the word “god” when referring generically to the Supreme Being, the object of mankind’s inquiries and speculations about an ultimate spiritual reality. On the other hand, I use the word “God” when referring to the god of the Bible. In so doing, I am using the word as the Bible does (and as we in the West have traditionally done)—as a proper name, the English equivalent of the Hebrew *Elohim* and of the Greek *Theos*. Thus, God is the god of the Hebrew-Christian Scriptures. Though a bit irksome at first, this distinction will prove quite helpful in the pages ahead.

2. C. S. Lewis, in the following excerpt, concludes from the experience of natural hunger that our spiritual hunger for something like heaven is a good sign that heaven exists. So too with our hunger for truth.



Creatures are not born with desires unless satisfaction for those desires exists. A baby feels hunger; well, there is such a thing as food. A duckling wants to swim; well, there is such a thing as water. Men feel sexual desire; well, there is such a thing as sex. If I find in myself a desire that no experience in this world can satisfy, the most probable explanation is that I was made for another world

See C.S. Lewis, *Mere Christianity*  
(Harper San Francisco, 2001).

3. These quotes were included in an article by Dr. George Fox, entitled “The Philosopher’s Dilemma!” It appeared in *The Grace Messenger Newsletter*, (Fall, 2000). Contact Grace School of Theology, 40 Cleveland Road, Pleasant Hill, CA 94523.

4. Christian interpreters find both hints and explicit affirmations of the divine nature of the Messiah throughout the OT. See Psalms 2, 110, Isaiah 7:14, 9:6-7, Jer. 23:5; Dan. 7:9-14; Micah 5:2; Mal. 3:1.

NT passages affirming or implying the deity of Jesus of Nazareth include Matthew 1:23, 11:25ff, 22:41-46, 24:30-31, 28:20; Mark 2:1-12; John 1, 5:16-33, 6:44, 8:46, 8:58, 9:35-36, 16:30, 15:5, 20:28; Philippians 2, Col. 1, Hebrews 1-2, Revelation 1-3. The NT doctrine of the trinity is seen vividly in Matthew 3:13-17, 28:18ff, John 14:15-19, 23-24, 16:13-15, 17:20-21, 2 Corinthians 13:14, 1 Peter 1:1-2.

5. For many Christians, the Christ-centered unity of the Bible is the supreme proof of its divine origin and trustworthiness. How, they ask, could some forty different authors, writing over the course of 1600 years, manage to create a single story, about a single god, administering a single plan of salvation, through a single redeemer (the Messiah), who is attested by a single set of supernatural signs, and who is worshiped by a single people, according to a single (and eminently satisfying) worldview? Such intricate, multi-layered unity seems to permit but one answer: A single divine Author must have superintended not only the creation but also the preservation,

recognition, and final collection of the 66 books that we now call The Book, the Bible.

The unity of the Bible, so compellingly supernatural, also supplies a basis for much that Christians believe about the character of their Book. They say, for example, that the Bible's unity entails its divine *inspiration*—for how, apart from such inspiration, could its several authors have produced its many-faceted oneness (2 Timothy 3:16-17)? But if the Bible is inspired, then it must also be *inerrant* in all it affirms—for how could a divinely inspired book be in error (John 17:17)? And if the Bible is inerrant, then it must also be *complete*—for both Christ and his apostles (inerrantly) taught that through themselves, and themselves alone, God was at last completing his divine revelation and sending it to all nations (Matthew 28:18f; Ephesians 2:19-20; Jude 1:3; Revelation 22:18-19). It is, then, because of the Bible's astonishing unity that many Christians embrace it as the very Word of God. For a chart summarizing these points, see Appendix 1.

See also Dean Davis, "One Shot, One Book, One God," *Journal of the Christian Research Institute*, (December, 2004).

6. See Isaiah 7:10-14; Matthew 1:18-25, Luke 1 and 2; Matthew 2:1-18, 4:3, Mark 3:11.

7. See Luke 1, 2, 22; Matthew 28, Acts 1.

8. See Matthew 3; John 1; Matthew 17, Luke 9, 2 Peter 1.

9. See John 21:25, Acts 2:22, 3:1-10; 1 Corinthians 12:7-11.

10. See Psalm 16:10; Isaiah 53:11; Hosea 6:2; Mark 9:31, 10:34, John 2:18-25; Matthew 28; Mark 16; Luke 24; John 20, 21; 1 Corinthians 15:1-11.

11. See appendix #2.

12. Here are some key OT passages describing the Person and Work of the Messiah: *Divine Pre-existence* (Isaiah 7, 9, 48-49); *Virgin Birth* (Isaiah

7); *Birth Place* (Micah 5); *Miraculous Ministry to the Poor* (Isaiah 35, 61); *Atoning Death by Crucifixion* (Psalm 22, 69, Isaiah 53); *Resurrection* (Psalm 16, Isaiah 53); *Ascension* (Psalms 16, 24, 68, 110); *Heavenly Reign* (Psalm 2, Isaiah 52, Daniel 7); *Coming Again in Glory* (Isaiah 11, 63, Malachi 3).

[13](#). Acts 1:7-8.

[14](#). We have a striking example of this pattern in Peter's sermon on the day of Pentecost. Seeking to win his Jewish brothers to faith in Jesus, Peter declared:

Men of Israel, listen to these words: Jesus of Nazareth, a man attested to you by God with miracles and wonders and signs which God performed through him in your midst...this man you nailed to a cross by the hands of godless men and put to death. But God raised him up again.

—Acts 2:21f

Here, Peter commends the truth of Christianity to the Jews on the basis of Jesus' miracles and resurrection, and then goes on to cite several OT predictions of those very events. In all of this, Peter was simply following in the footsteps of his master, who had himself cited both his miracles and the OT scriptures as proof that the Father had sent him into the world as its authorized prophet (teacher), priest, and king. See John 5:31f; Acts 10:34-33, 17:22.

15. Many biblical scholars reject the virgin birth, angelic visitations, theophanies, miracles, and the resurrection of Jesus as myths and legends. They do so, however, not because solid historical evidence leads them to that conclusion but because they themselves do not believe that such things are possible. One among them, Rudolph Bultmann, declared flatly, "The continuum of historical happenings *cannot* be rent by the interference of supernatural, transcendent powers. Therefore, there is no 'miracle' in this sense of the word." Thoughtful seekers, however, find such dogmatic

skepticism impossible to embrace. They have glimpsed a personal god behind the natural, moral, and probationary orders. If such a god exists, why should he not be able to act supernaturally if he so desires? Indeed, it is only reasonable to expect that he *will* act supernaturally—for if life is a test, then supernatural signs are just the thing to lead us to the god-authorized Teacher who can help us pass.

We must, of course, be duly cautious in evaluating the world's miracle stories, for some miracles may indeed be legendary, while others may be historical in nature but demonic in origin. Still, we cannot simply rule out miraculous signs altogether. Rather, on a case-by-case basis, we must try to determine if there is credible historical evidence to support the sign, and also if this sign nourishes hope and stimulates godly living. The prospect of having to make such evaluations may seem daunting, but if the unknown god has in fact granted true signs we can trust him also to grant sufficient outward evidence and inward illumination for us confidently to distinguish the true from the false. The only condition is that we want to (John 7:17).

For more on the historical credibility of the New Testament Jesus, see Josh McDowell, *The New Evidence That Demands a Verdict* (Nelson, 1999), especially Parts 2 and 3. Also, Dean Davis, *The Test: A Seeker's Journey to the Meaning of Life* (Redemption Press, 2013), Chapter 7.

## Chapter 1

# IN SEARCH OF THE BEGINNING

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**I**t is, I now believe, the birthright of every child to behold the beginning: the origin of the universe, life, and man. But as my own story makes painfully clear, in today's world receiving the vision can be the work of a lifetime.

Like all children, I was fascinated with the beginning. I wanted to go back—all the way back—to that special place where I could see it for myself. I knew that such a place existed, that a journey to it was possible, and that the scenes awaiting me at its end were glorious. It was only a question of finding the right road. And with Dad, Mom, our pastor, and my trusted schoolteachers to point the way, there could be no problem at all. They would lead, I would follow. The future of my journey into the past looked exceedingly bright.

My first road passed by way of Sunday school. Though I attended only sporadically, I nevertheless was quite clear about what my Bible Story Book had to say about the beginning. To this day I can still see the picture of Adam and Eve. Nestled amidst garden verdure, surrounded by tame animals, youthful, clear-eyed, smiling, healthy, fair, and completely oblivious to a nakedness discreetly concealed by draping hair and strategically placed fronds—yes, the beautiful couple really were God's crowning touch, the capstone of his six days of creation. Moreover, they were clearly the *center* of his creation: Like the starry vault of heaven above the Earth, all things seemed somehow to revolve around them. To my

youthful mind, the picture made perfect sense. What's more, my heart received it gladly, for it was altogether bathed in light, order, clarity, simplicity, beauty, and (best of all) complete well-being.

It was not, however, affirmed by the world around me. I soon discovered, for example, that my parents did not believe it. Nor did my elementary school teachers. Indeed, I now doubt that even my Sunday school teachers believed it. All the authorities in my life seemed to admire the biblical beginning; none received it as the truth.

Now no matter how lovely the road, a child will not walk it alone for long. And so, in due season, the biblical story became just that—a story. Meanwhile, I found myself walking with the rest of the world down a very different path. The truth about the beginning, it appeared, was to be found at the end of a road called “evolution.”

That journey began with a two-volume set of big red books given to our family by my erudite Aunt Ethel. Entitled *A Child's History of the World*, the glistening tomes seemed to promise all that my budding young intellect longed for—a comprehensive look at “the big picture” of history from the beginning right up to the present. But as I opened to the first chapter (*How Things Started*), my zeal for universal history soon received a near-fatal blow.

Warming to his task, the author invited me to go back with him to a time so long ago that “...you might say ‘long, long, long’ all day and all next week and all next year and it would not be enough.” Yet despite this promising invitation, he never really did take me to the beginning. Instead, we regressed to a time when there was no world at all—only the stars, one of which was our sun. So, with the sun standing in for the creator, he now traced the origin of the world, life, and man.

The sun threw off a spark. The spark cooled and became our Earth, a bare rock swathed in steam. The steam turned to rain and the rain produced the oceans. Then, in the oceans, came the first living things, tiny plants. The plants eventually migrated to the rocks. Then came the first tiny animals, wee mites, like drops of jelly. Then came insects. Then came fish, and after that, frogs. Next came snakes and huge lizards, bigger than alligators, more like dragons. Then came

birds. Next came the mammals,...like foxes and elephants and cows that nurse their babies when they are born.

When the monkeys came, the stage was set for the *grand finale*:

And then, last of all, came—what do you suppose?—yes, PEOPLE—men, women and children! So here are the steps, see if you can take them: Stars, Sun; Sun, Spark; Spark, World; World, Steam; Steam, Rain; Rain, Oceans; Oceans, Plants; Plants, Mites; Mites, Insects; Insects, Fish; Fish, Frogs; Frogs, Snakes; Snakes, Birds; Birds, Animals; Animals, Monkeys; Monkeys, People. AND HERE WE ARE!

Already I was confused. Where had the stars and the sun come from? Just how did one thing “come” from another? Who or what was causing all this “coming” to come to pass? The red book seemed to raise more questions than it answered.

Finally, I arrived at the red book’s description of “early man.” And with this, my fervent hopes for a comforting vision of the beginning were dashed once for all.

These first Stone Age people were primitive. Primitive people were wild animals. Unlike other wild animals, however, they walked on their hind legs. They had hair growing, not just on their heads, but all over their bodies, like some shaggy dogs. They had no house of any sort. They simply lay down on the ground when night came. Later, they found caves where they could get away from the cold and storms and other wild animals. They spent their days hunting some animals and running and hiding from others. They lived on berries and nuts and grass-seeds. They robbed the nests of birds for eggs, which they ate raw, for they had no fire to cook with. They were bloodthirsty; they liked to drink the warm blood of the animals they killed, as you would drink a glass of milk.

They talked to each other by some sort of grunts—“Umfa, umfa, glug, glug.” They made clothes of skins of animals they killed. Though they were real men, they lived so much like wild animals we call such people savages. They were fearful and cruel creatures, who beat and killed and robbed whenever they had a chance. A cave man got his wife by stealing a girl away from her own cave home, knocking her senseless, and dragging her off by her hair, if necessary. The men were fighters but not brave...their only rule of life was hurt and kill what you can, and run from what you can’t. This is what we call the first law of nature—every man for himself.

Suppose you had been a boy or girl in the Stone Age, with a name like Itchy-Scratchy...Your cave would have been cold and damp and dark, with only the bare ground or a pile of leaves for

a bed. There would probably have been bats and big spiders sharing the cave with you... You might have had on the skin of some animal your father had killed, but as this covered only part of your body, and there was no fire, you would have felt cold in winter, and when it got very cold you might have frozen to death... There was nothing to do all day long but watch out for wild animals—bears and tigers—for there was no door with lock and key, and a tiger, if he found you out, could go wherever you went and “get you,” even in your cave.

And then some day your father, who had left the cave in the morning to go hunting, would not return, and you would know he had been torn to pieces by some wild beast, and you would wonder how long before your turn would come next.

Do you think you would like to have lived then?<sup>1</sup>

Yes, here was my first encounter with naturalistic evolution and its widely accepted version of the beginning. To my tender sensibilities it seemed the exact opposite of the Bible’s: confusing, meaningless, repulsive, and terrifying. This was particularly true of my brutal and short-lived ancestors. The more I contemplated it all, the more the distant past seemed like one of the caves in which they supposedly lived: dark, dangerous, and redolent of death. I recoiled. Yes, somewhere deep down I still longed to behold the beginning. But according to the big red book, that meant going back into a cave. No, it meant going back into a tomb. And as a comfort-oriented ten-year-old, I had little interest in returning to a tomb.

So I gave up my search for the beginning.

The surrender was not, of course, instantaneous. But it was inevitable. Every authority figure in my world reinforced this picture. Had not my learned aunt and trusted parents introduced me to it? Did I not see it in my textbooks at school? Was it not found in encyclopedias, newspapers, magazines, and in nearly every issue of the ubiquitous *National Geographic*? Why, even Walt Disney agreed (*Fantasia*), to say nothing of *The Flintstones*! Yes, the red book must be right. But if my origins really were to be found in evolution’s cave, that did not mean I had to visit often. Others could go back if they wished. As for me, I would turn to the light. I would live in the present and look to the future. Two-thirds of time would have to suffice.



This flight continued throughout my junior and senior high school years, even as the evolutionary picture of the beginning took stronger and stronger hold on my imagination. Now I was presented with the accepted scientific evidences for evolution: fossil remains in the geological column; human embryos “recapitulating” the stages of mankind’s evolutionary history; anatomical similarities between animals; “microevolution” in different species (e.g., Darwin’s finches, peppered moths, etc.); experiments in plant and animal breeding; vestigial organs—those useless remnants of our evolutionary past (e.g., tonsils, the appendix, wisdom teeth, etc.); and, most disturbingly, the skeletal remains of various “hominids,” the ape-like ancestors of man.

Had anyone around me challenged the reliability of these evidences (e.g., the recapitulation theory or the uselessness of vestigial organs), or suggested other ways of interpreting them (e.g., anatomical similarities based on common design rather than common ancestry), I might have realized that evolution was not a proven fact at all. But the “icons of evolution”—the verbal and artistic reconstructions of the evidence and events of evolutionary history—had done their work. These pictures, encountered over and over again throughout my childhood, became the lens through which I would henceforth view and interpret the actual facts of nature. No one I knew offered me another interpretation or another set of pictures. I therefore graduated from high school a convinced, if unenthusiastic, evolutionist.

The situation did not change in college. Now one might expect that at a major American university the evolutionary paradigm—so far-reaching in its implications for every department of human inquiry—would be subjected to the most careful scrutiny. Yet my experience was precisely the opposite. On my campus, like most in the nation, the evolutionary beginning had attained the status of a presupposition, an axiom, a self-evident proposition—so much so that no self-respecting intellectual would dare to question it. The once reigning biblical paradigm of divine creation, if mentioned at all, was dismissively cited as a relic of the ancient,

unenlightened past. It was understood to represent a primitive, mythological stage in mankind's (evolving) thinking about origins. Having no desire to associate myself with outdated myths, I remained an evolutionist.

Nor did I abandon evolutionism during my post-graduate years, when I attached myself to various pantheistic religions. I did, however, experience a fundamental change in the way I looked at it. By moving from a naturalistic to a pantheistic worldview, cosmic evolution suddenly took on a new and exciting meaning. Now there was nothing "random" or purposeless about it at all. Now, after so many eons of time, the hidden plan of Big Mind (the god of pantheism) was coming to light. Now, in man—who is the cutting edge of the evolutionary thrust—Big Mind was finally becoming conscious of itself as god!

This sudden conversion to evolutionary pantheism did not, of course, alter my basic understanding of the beginning. That remained hidden in the distant past, perhaps shrouded in a Big Bang. But had I ever paused to give my new cosmology some thought, I would soon have realized that reconciling Big Mind with a Big Bang requires a Big Leap of faith. Indeed, as we shall see later, such a reconciliation is impossible even to conceive, let alone demonstrate. But so great was my excitement that I did not pause—either to consider the metaphysical and ethical problems of evolutionary pantheism, or the slim and controversial scientific evidences supporting the Big Bang, or the troubled history of modern cosmology, or the increasingly vigorous debate as to whether cosmic evolution had occurred at all. No, I simply trusted my pantheist friends and teachers. They assured me that the marriage of Eastern religion and Western evolutionary cosmology was a good one, a match made in heaven. Besides, why get entangled in the arcana of science and philosophy when all such reasonings are actually obstacles to the supreme goal—a mystical experience of the ultimate reality that is completely beyond the reaches of word, image, and human thought itself?

So once again—this time as a newborn pantheist—I embraced cosmic evolution. Now, however, I gladly saw myself as part of it. True, I still

could not form a clear picture of the beginning. But no matter. The future was beckoning, and that was far better. My friends and I were sons of the Age of Aquarius. Now was the appointed season in cosmic history when tired old humanity, led by visionary youth such as ourselves, would make an evolutionary leap into divinity itself.

But what, I anxiously wondered as I began my catechism in 1971, would Father Barry have to say about THAT?!

## **Lessons to Learn**

My own turbulent history of seeking out, wistfully abandoning, fleeing from, reconciling myself to, and altogether ignoring various versions of the beginning has, of course, been played out in the lives of multitudes of modern men and women. What can we learn from this strange scenario? And how can the test perspective help us to understand it?

To begin with, we learn that man is perennially fascinated by the beginning. We humans have a mysterious capacity for time travel, as well as a powerful desire to go as far back in time as we possibly can. This desire first manifests itself when a child asks, “Daddy, Mommy, where did I come from?” or, “Where did people come from?” or, “Where did the world come from?” or, (if Daddy and Mommy are theistically inclined) “Where did God come from?” Happy are the parents who can confidently answer questions such as these!

The same desire is at work in adults. One person is strangely moved to go on a pilgrimage to the land of his ancestors, another to find her birth parents, another to flesh out his family tree by in-depth genealogical study. Observe also the scholars—historians, anthropologists, paleontologists, biologists, geologists, astronomers, and cosmologists—all trying to use present phenomena as a kind of telescope by which they might peer through the mists of time into the distant past. I call them adults, but in the end perhaps they too are children, children like Hansel and Gretel: Secretly feeling themselves to be lost in the forest deeps of the cosmos, they look

urgently for any crumb of evidence by which they might make their way home to the beginning and to the father/creator who awaits them there.

Second, through a close examination of the workings of our own mind, we learn that the search for the beginning is propelled by a richly significant connection between this and other vital questions of life.

To get a feel for the connection, suppose that someone has just loaned you his state-of-the-art time machine and granted you permission to use it for a single trip of your choosing. Being an earnest seeker, you mull the matter at length and finally decide that you would like to travel back through cosmic history in search of the origin of the universe, life, and man as we now know them. Why are you so excited about this trip? Because you understand that such a journey will likely reveal *many* things, things of the greatest possible interest to earnest seekers!

For example, assuming that you do indeed reach an absolute beginning, you will see for yourself *the nature of the ultimate reality*, whether it is the eternal “time/space/energy-matter continuum” of the modern naturalist (presumably compressed into a cosmic egg), or the impersonal Big Mind of the pantheists, or the infinite personal Creator of the theists.

Similarly, you will discover *the metaphysical nature of the universe*; whether it exists by way of a *transformation* of eternal matter, a *manifestation* of Big Mind, or a divine *creation* "out of nothing." Also, you will learn how *order* arose in the universe, whether instantaneously by some sort of divine creation, or gradually by some sort of evolution or progressive creation.

Beyond these things, you will also likely discover how evil, suffering, and death entered the universe. Indeed, you might even be able to learn something about its *purpose* (if there is a purpose), or about *the way we are intended to live in it* (if there is an intention), or about *its ultimate destiny* (if it has a destiny). Yes, the beginning really is a place rich with meaning, and (we sense) big with blessing. Therefore, with not a little existential urgency, time travelers of every stripe seek diligently to make their way back for a closer look.

As elsewhere, so here: The test perspective is both instructive and encouraging. For if indeed an unknown god has planted within us a desire to behold the origin of things, then no doubt he means to satisfy it. Can we not, therefore, count on him to grant us some kind of revelation enabling us to make the journey home? In other words, is not the *desire* to behold the beginning *an implied promise* that we really can—once we have sought and found the trustworthy revelation by which the unknown god is pleased to show it to us?

Here, by the way, is why I now believe that a vision of the beginning is the birthright of every child: because the test perspective implies that it is. And if the test perspective is true, then dads (such as myself), moms, teachers, clergy, scientists, publishers, journalists, film makers, and anyone else who presumes to educate children, all need to ask themselves some probing questions. Here is a sampling, guaranteed to make many of us uncomfortable:

Before teaching children about the beginning, do we not have a moral obligation to find out the truth of the matter for ourselves?

If we have not yet found it out—and if we feel compelled to give them some cosmological options—should we not at least refrain from representing our educated guesses about the unobservable past as the hard facts of science?

If there really is a divine Tester, would it not be wrong—and possibly quite injurious—for us to mislead his children about their origins? Indeed, would it not be a species of blasphemy to deposit in the sanctuary specially reserved for divine revelation the transient, erroneous, and confusing conjectures of mere men?

And finally, what might be the attitude of the Tester towards those who do?

But alas, for all their weightiness, considerations like these are not likely to temper the declarations of most modern educators. And if life really is a test, that, somehow, is as it must be. Speculative scientific cosmologies will continue to come and go. New “revelations” will continue to pour forth.

Even to the end of the world, children will meet with and be confused by different versions of the beginning. The unknown god, it would appear, has wisely ordained it so. Accordingly, children of all ages must settle it in their hearts that they are going to have to search—and persevere in searching—till they actually find what they are longing to see.

Thankfully, we have every reason to be hopeful about this endeavor. Yes, the search for god’s appointed Teacher may be difficult. And yes, receiving his revelation about the beginning may be more difficult still, challenging presuppositions deeply ingrained from childhood and widely established in the surrounding culture. Indeed, receiving his revelation might even threaten to marginalize a seeker, exposing him to ridicule, ostracism, and financial and vocational duress.

But if he truly is a seeker, all that would be as nothing compared to the promise held forth by the test perspective: a promise of finding god’s appointed Teacher, falling in at his side, and walking with him all the way back to the beginning; a promise of his lifting the shroud that has somehow settled over the cosmic past, and of viewing the primordial scenes for which the creator himself has prepared our childlike hearts; a promise of being able to make this journey over and again—with gratitude and joy—to the very end of one’s life; and (in some ways best of all) a promise of being able to help other children, both young and old, make the same life-giving journey for themselves.

In the pages ahead we shall see that Jesus of Nazareth invites us on just such a journey. Hopefully, all who learn of his invitation will judge the offer well worth any of the costs involved.

## NOTES

1. V. M. Hillyer, *A Child’s History of the World*, (Spencer Press, 1951), pp. 3-16.

## Chapter 2

# NATURALISM ON THE BEGINNING

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In seeking for truth about the beginning we venture onto the terrain of cosmology. This discipline may be broadly defined as the study of the origin, structure, purpose, and destiny of the cosmos. In the pages ahead we will touch on all of these weighty and inter-related themes. However, our primary focus will be upon *cosmogony*, the study of the origin of the universe, life, and man as we now know them.

Let us begin by surveying some of the main issues involved. I will frame these issues in terms of several deceptively simple cosmological questions. They are questions that every viable world-view must be able to answer, and answer well.

1. *What exactly do we mean by “the cosmos?”* As a rule, most folks think of the cosmos as *our own physical universe* at any given stage of its existence, along with any spiritual structures that it might contain (e.g., animal or human souls). However, in the pages ahead I will almost always have in view something wider still: *reality as a whole*, exclusive of any ultimate spiritual reality from which the rest of reality may have come (e.g., whether by theistic creation or pantheistic emanation). This broader understanding of “the cosmos,” which makes room for all kinds of spiritual phenomena, will enable us to consider the question of other spiritual realms (e.g., heavens, hells, and/or other “spiritual planes”), as well as any purely spiritual beings

that may inhabit them (e.g., angels, demons, disembodied human souls, etc.). It will also enable us to consider to possibility of other universes, or of a “multiverse” that is comprised of the totality of all universes.

2. *Did the cosmos have a true beginning?* By “true beginning” I mean a moment in time, or at the beginning of time, when the cosmos, in one form or another, *came into being*. The question here, then, is whether the cosmos, in one form or another, is eternal, or whether it somehow suddenly appeared.
3. *If the cosmos did have a true beginning, who or what caused it, and how did it come into being?* Here we must decide between several possibilities. Did a personal creator draw the cosmos into existence *ex nihilo*, “out of nothing,” (the view of theism)? Is the universe a manifestation or emanation of an impersonal Mind or Spirit (the view of pantheism)? Or is it the case, as some naturalists propose, that the universe sprang into existence altogether apart from divine agency, say through a purely naturalistic “quantum fluctuation of nothingness?” Also, if the cosmos did have a true beginning, when did it occur?
4. *When and how did the orderliness that we now observe in the physical universe arise?* Here again we must decide between a few basic alternatives. Is the order we see eternal—an essential characteristic of an eternal cosmos? Did it appear more or less instantaneously in a true beginning, presumably at the hand of a divine creator? Or did it arise gradually, as a result of various powers and processes, whether spiritual or physical? The question here, then, is whether order belongs essentially and permanently to the cosmos, or whether it is traceable to some kind of evolution or progressive creation.
5. *What is the basic structure of the cosmos?* This question involves a number of others. Does the cosmos contain multiple worlds or dimensions? What, if any, is the relationship between them? Is there a



basic plan or structure underlying the physical universe? Are there moral or spiritual structures in the universe? What is the difference between living and non-living beings? What is the difference between man and other living beings?

6. *Does the cosmos have a purpose and a goal?* This two-fold question necessarily involves ascertaining whether a personal god created the universe, through whom alone it could have a transcendent purpose and a final goal or destination. It also requires that we ask how this god might be pleased to reveal to us his purpose(s) and goal(s) for the universe, life, and man.
7. *Can we know with certainty the answers to these cosmological questions, and if so how?* Naturalists, pantheists, and theists all speak authoritatively about the beginning, yet their views differ dramatically. Even among leading scientists opinions differ sharply, so that one cosmology soon displaces another as king of the mountain. In such an environment, alert seekers will soon realize that they cannot avoid asking the following questions: Can anyone really know, with certainty, the answers to the great questions of cosmology? If so, from what quarter will such knowledge come: science, personal mystical experience, communications from sentient beings living on other planes, divine revelation, or some combination of the preceding? If trustworthy cosmological knowledge does come from spiritual sources, how can we know which source to believe? What kinds of evidence would reliably confirm the truth of a given spiritual revelation? In our introductory walk through the lowlands, we addressed these crucial yet much-neglected epistemological questions. In the journey before us, we will return to them time and again.

These, I trust, are the fundamental questions of cosmology and cosmogony. In the present chapter we will begin to grapple with them by examining and evaluating the answers supplied by naturalism. In

subsequent chapters we will explore pantheistic and biblical views. I should forewarn my readers here that all of this will take some time. And I believe that it deserves some time—more, actually, than I can give it. For as we are about to see, in the war of the worldviews, no battles are more fiercely fought than those over the beginning. Seekers must, therefore, be fully prepared to identify all the combatants, and to interact intelligently with their arguments and evidences. You know already that in my own hour of testing I was not. I have written what follows in hopes that you might be.

## A SHORT HISTORY OF NATURALISTIC COSMOLOGY

In mankind's long history of cosmological reflection, strictly naturalistic views are late, rare, and highly controversial. They first appeared in Greece, in the sixth century before Christ. Breaking with the mythological cosmology of Hesiod and Homer, the Milesian philosophers (i.e., Thales, Anaximander, Anaximenes) and the early Atomists (i.e., Leucippus, Democritus) sought to explain the origin and structure of the universe solely by the use of reason and observation.

These men were *monists*. They taught that there is a single physical substance underlying the varied objects of our universe. For Thales this substance was water. For Anaximenes, it was air. For Anaximander, it was a mysterious ultimate reality called “the Boundless.” For Leucippus and Democritus it was colorless bits of matter called atoms, whirling about in “the void.” These early naturalists all agreed that the underlying stuff of the cosmos was eternal and infinite. For them, nature was without a divine creator and without a true beginning.

Nevertheless, said the naturalists, the cosmos does indeed have a beginning of sorts. This is because the stuff of nature repeatedly congeals, combines, or otherwise shapes itself into various forms. How, precisely, does this occur? The Milesians, perhaps incorporating spiritual aspects of traditional mythology, believed that nature holds within her bosom an

unconscious, impersonal, but dynamic *life force* by which physical reality is shaped into things and worlds. The Atomists, embracing a more severe naturalism, denied the existence of a life force but held that eternally moving atoms come together according to certain necessary laws to produce a world of things. For them, all natural objects and their activities (including the human mind, will, and emotions) are ultimately reducible to the necessary motions of atoms.

Seekers should note carefully that the early naturalists (as well as their Epicurean successors in Greece and Rome) constituted a philosophical minority. On the one hand, they were surrounded by pantheistically minded teachers such as Heraclitus and Parmenides. On the other hand, they were actively opposed by theistically minded teachers such as Socrates, Plato, and Aristotle. Accordingly, we may safely say that it was not until the 19th and 20th centuries that atheistic naturalistic cosmology actually took a significant hold on the mind of man.

Modern naturalistic cosmology owes much to its ancient counterparts. Nevertheless, in order to understand it in its present form, we must briefly survey the fascinating and richly significant history that separates the two.<sup>1</sup>

With the birth of Christianity in the ancient world, early Greek naturalism was completely eclipsed by a powerful synthesis of biblical, Platonic, and Aristotelian perspectives. The resulting cosmology owed its view of the beginning to the Bible: The triune living God, for his own glory and the good of man, brought our orderly universe into being over the course of six literal days. But this cosmology owed its view of the structure and mechanics of the universe largely to Aristotle (384-322 BC) and Ptolemy (ca. 150 A.D.): Earth, with hell deep in its bowels, stands majestically at, or very near, the center of the entire cosmos. It is made up of four primordial elements: earth, air, fire, and water. Around it, like the layers of an onion, are the seven planetary spheres containing the Moon, Mercury, Venus, the Sun, Mars, Jupiter and Saturn. The planets, as Ptolemy had taught, also revolve in “epicycles” around an invisible point situated on their respective spheres, thus causing the peculiarities of planetary motion

(e.g., retrograde motion). Beyond these are the three heavenly spheres: the sphere of the fixed stars, the crystalline heaven and, finally, the Empyrean, or “fiery” abode of God. The heavenly bodies themselves, unlike the flawed and changeable Earth beneath them, are perfect and eternal, hierarchically arranged, and propelled along their courses by various orders of angels. By God’s design these moving bodies directly influence material objects and historical events on the Earth below.

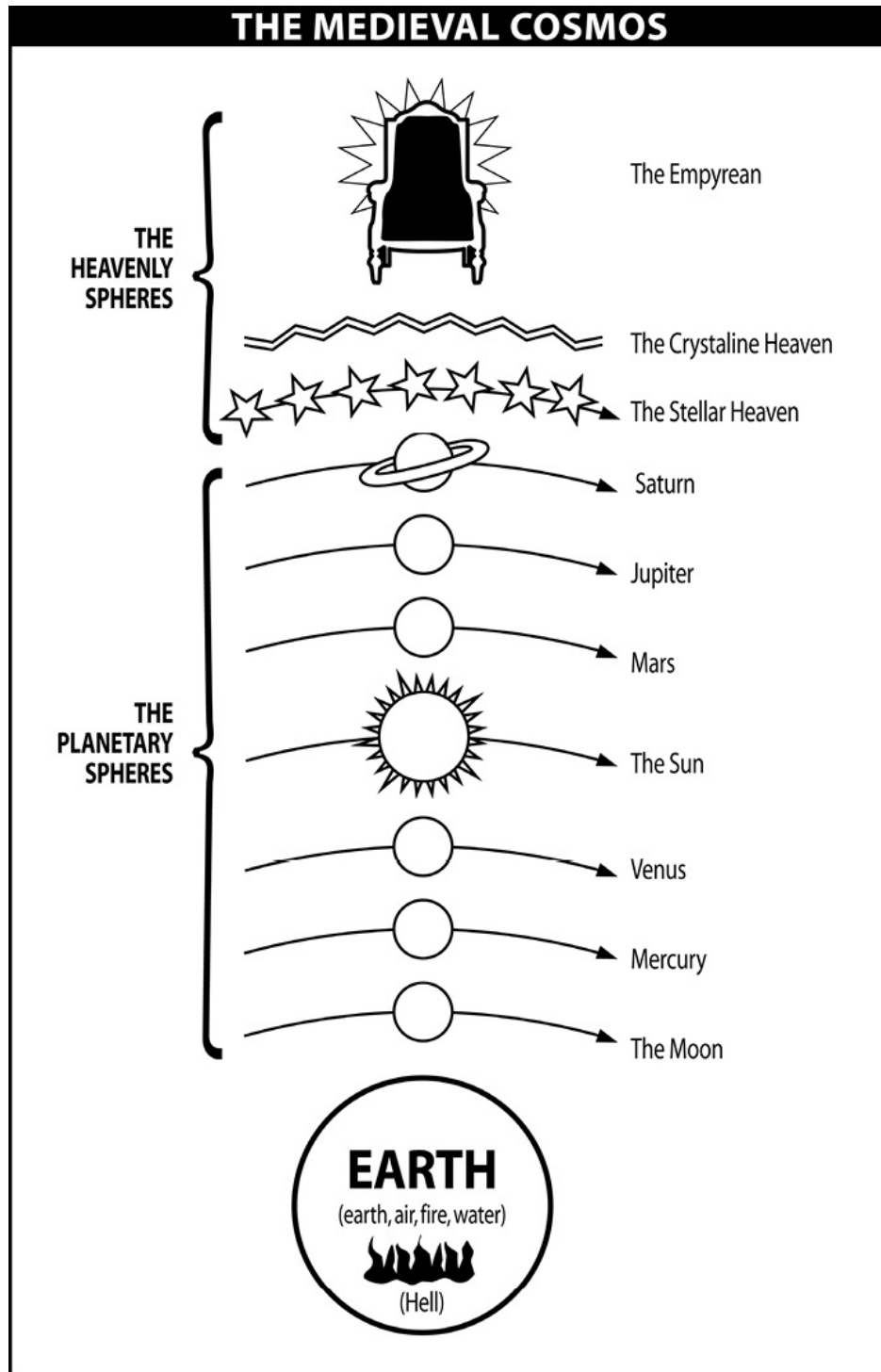
Here was a breathtakingly beautiful picture of the cosmos, a view that encompassed both the spiritual and material realms. To most Christian leaders, this Greco-biblical synthesis seemed like a match made in heaven. And indeed, the marriage, in one form or another, would last for nearly 1,500 years. Who, then, could ever have imagined that epoch-making developments in the 16<sup>th</sup> and 17<sup>th</sup> centuries would ultimately lead to an unspeakably painful divorce?

In part, the split was precipitated by fresh discoveries in the heavens. For example, with the help of better telescopes astronomers now saw what they thought to be new stars—*novas*—appearing in the sky (in fact, they were seeing stars die). They saw that the Moon, with its own mountains and valleys, was much like our own (imperfect) Earth. They realized that comets were not sub-lunar entities after all, but objects that passed through any number of the planetary spheres. And they saw that Jupiter had orbiting moons of its own. Such discoveries sharply challenged the Aristotelian picture of the cosmos. They meant that the starry heavens were not immutable, that the planets were not perfect, that the heavenly bodies were not embedded in crystal spheres, and that their motions (which were not necessarily circular) were not determined by those spheres. If, then, Aristotle was wrong on so many points, might he not also have been wrong by following the majority of antiquity in placing the Earth at the center of the universe? After all, if small moons are orbiting great big Jupiter, perhaps a small Earth is likewise orbiting a great big sun?

In the midst of this astronomical ferment, the heliocentrists stepped onto the stage of history. The first was Nicolaus Copernicus (1473-1543), a

Polish cleric and polymath with an interest in astronomy. Much influenced by the Renaissance spirit, he grew increasingly fascinated with the philosophical and cosmological ideas of Pythagoras, Plato, and other pagan thinkers. In particular, Copernicus sought to revive the heliocentric views of Aristarchus of Samos (ca. 310-230 BC), who placed the Sun at the center of the universe, with the Earth (like the other planets) revolving around the Sun, and also rotating on its axis beneath a distant sphere of fixed stars. Interestingly, Copernicus' model was actually more complicated than its predecessor, requiring more epicycles to explain the usual observations. Also, it could not put the sun, but only a point near to the sun, at the center of the universe. As Thomas Kuhn wrote, "Judged on purely practical grounds, Copernicus' new planetary system was a failure; it was neither more accurate nor significantly simpler than its Ptolemaic predecessors."<sup>2</sup>

Beset with opposition from many quarters, Copernicanism languished for a season. Moreover, during this time the highly respected Danish astronomer, Tycho Brahe (1546-1601), added further fuel to the fires of controversy by developing a new geocentric model. Seeking to consolidate the strengths of the Ptolemaic and Copernican systems, Tycho's "geo-heliocentric" cosmos had all the planets revolving around the sun, but the sun—along with the moon and the stellar sphere—revolving around a stationary Earth situated in the midst of all (some of Tycho's successors modified this picture by positing a daily rotation of the Earth on its axis beneath "the fixed stars"). Importantly, Brahe's model fit all the observed astronomical phenomena just as well as Copernicus', and was felt to constitute a genuinely geocentric universe. Not surprisingly, it received a warm welcome among Christian churchmen and scientists, both Catholic and Protestant.<sup>3</sup> As we shall see later, Tycho's model, in a slightly modified form, still has well-informed and persuasive adherents today.



Next came Johannes Kepler (1571-1630), a gifted German mathematician who embraced almost nothing of Copernicus' cosmology, save his heliocentrism. After acquiring some 30 years worth of careful planetary observations from the suddenly (and suspiciously) deceased

Brahe, Kepler worked out a new heliocentric model of the solar system based on elliptical motion. In time, however, it was realized that the greater usefulness of Kepler's system was not, in fact, a vindication of heliocentrism, since the ellipses could be made to work just as well in the Tychonic framework. Moreover, it also became clear, especially from observations of Jupiter and Saturn, that Kepler's ellipses gave at best an approximate description of planetary motion. Kepler was the first to seek a physical cause for this motion, coming quite close to articulating a theory of gravity that ascribed a central role to the more massive sun. It is worth noting also that in his last book, *Dream*, Kepler affirmed his belief in extra-terrestrial life. He even speculated about the inhabitants of the moon. Importantly, such interest in aliens is common among heliocentrists, as Carl Sagan and the American SETI program reveal. This is, of course, a natural result of one's abandoning the traditional biblical geocentrism, which affirms that mankind is indeed the sole instance of self-conscious, intelligent physical life in the universe.<sup>4</sup>

And then there was Galileo Galilei (1564-1642). By all accounts a proud, disagreeable, and even deceitful man, Galileo opposed Tycho and cast himself as the arch defender of the new heliocentric faith. Citing the satellites of Jupiter, the phases of Venus, rotating sunspots, and other freshly observed phenomena, he sought to persuade his contemporaries that the evidence weighed decidedly in favor of Copernicanism. Though opposed by a justly skeptical Church hierarchy, Galileo, by sheer *chutzpah*, began to win a following.<sup>5</sup>

Now it is clear that the heliocentric theory, more than any of the newly discovered phenomena used to justify it, spelled big trouble for the reigning medieval cosmology. If true, it meant that the Earth is in motion beneath the stars, rather than the stars in motion around the Earth. And if that is true, then the stars must be "fixed" and not revolving on a sphere after all. And if that is true, then perhaps the stars are scattered throughout the cosmic deeps, possibly even throughout an infinitely large universe. And if that is

true, where in the cosmos is heaven, the place of God's throne and the home of the holy angels?

In the face of such mind-boggling possibilities—and all the spiritual tumult they portended—it is hardly surprising that most Church leaders, both Catholic and Protestant, resisted the new heliocentrism. It should not be supposed, however, that their resistance stemmed from mere psychological attachment to the older view. No, the more fundamental bone of contention was the integrity and interpretation of sacred Scripture. As we shall see later, the Bible, like Aristotelian cosmology, does indeed favor a geocentric understanding of the universe. Why then, asked the Church authorities, should we depart from its plain teaching on this matter, especially when the arguments and evidences advanced by the heliocentrists seem so dubious and equivocal?

In response, Galileo replied that he did not find the evidence dubious or equivocal at all. As for the Bible, he allowed that it was a clear revelation of the way to go to heaven, but not of the way the heavens go. This is because, said Galileo, God has spoken figuratively about scientific matters, in order to "...accommodate (the complex truths of natural science) to the (limited) capacities of the common people, who are rude and unlearned." Accordingly, "true" cosmological truth must be discovered by "...sense experience and necessary demonstrations." In other words, scientific truth must be discovered by the methods of natural science alone. In reply, Church leaders objected that such a view of the Bible impugned the clarity, truthfulness, and epistemological necessity of God's words about creation. Moreover, they felt sure that such an approach to Genesis would eventually undermine people's confidence in the rest of divine revelation as well. Therefore they opposed Galileo, preferring instead to trust what they took to be the plain sense of the Word of God over the uncertain, ever-changing, and always conflicting words of men.<sup>6</sup>

In passing, it is well worth noting that Galileo himself felt the force of these arguments, so much so that by the end of his life he appears to have freely recanted his heliocentrism and returned to the geocentric view



endorsed by the Church. We learn this from his little-known letter to an enthusiastic Copernican friend, Francesco Rinuccini, in which the aged astronomer gives the reasons for his change of heart:

The falsity of the Copernican system should not in any way be called into question, above all not by Catholics, since we have the unshakeable authority of the Sacred Scripture, interpreted by the most erudite theologians, whose consensus gives us certainty regarding the stability of the Earth, situated in the center, and the motion of the sun around the Earth. The conjectures employed by Copernicus and his followers in maintaining the contrary thesis are all sufficiently rebutted by that most solid argument deriving from the omnipotence of God. He is able to bring about in different ways—indeed, in an infinite number of ways—things that, according to our opinion and observation, appear to happen in one particular way. We should not seek to shorten the hand of God and boldly insist on something beyond the limits of our competence.<sup>7</sup>

Since the genuineness of this letter is not in question, skeptics will often respond by saying that its remarkable statements are those of a man under duress from the Church hierarchy. But there is no good reason to doubt Galileo's sincerity, since over the course of his long life he had wrestled with at least three different models of the universe, all of which were more or less observationally equivalent. This salient fact apparently brought him face to face with the infinite ingenuity of God, and therefore to the humbling realization that apart from divine revelation finite man can know little or nothing about "how the heavens (actually) go" (Isaiah 55:8-9). And since both God and the Church leadership had clearly spoken up in favor of geocentrism, it was only natural for Galileo to relent in this matter.

Galileo's latter-day conversion notwithstanding, history had reached a crux. A new cosmology was clearly needed. But what role, if any, would the Bible play in its formation? Would the scientific community embrace the ecclesiastically sanctioned view of Tycho and his disciples or the accommodationist views of the early Galileo?

Those acquainted with the history of science know the answer well: Galileo's accommodationism definitely prevailed. The ensuing trajectory of western cosmology may therefore be likened to a planet that has slipped out

of its original orbit (around the Bible) and soon finds itself careening into the outer space of religious and scientific speculation.

Heliocentrist Thomas Digges (1543-1595), for example, with one eye to Scripture, imagined our solar system at the center of an infinitely extended universe full of stars. Heaven, he argued, was an invisible spiritual realm situated in the midst of the starry skies.

Sir Isaac Newton (1642-1727) also endorsed the new heliocentrism, developing a generally fruitful system of celestial mechanics based on Kepler's elliptical orbits and his own theory of universal gravitation. Despite his heliocentrism, Newton, like Digges, sought to remain loyal to the God of the Bible. Thus, in developing his own cosmology, he seems to have postulated that time and space are attributes of God, and that they are therefore infinite, corresponding to God's eternity and omnipresence. In these infinite media, God, several thousand years back, created and embedded a finite material universe. Our solar system lies at its center, surrounded by a little sea of stars that in turn is surrounded by an infinite ocean of empty space.

Alas, the long-term results of these quasi-biblical speculations would not have pleased Newton at all. John Byl describes them as follows:

Newton's followers soon let the material universe fill all of infinite space, since they saw no reason to limit God's creative activity to just a small portion of space. Similar reasoning led to the removal of restrictions on God's creative action in time. The created world became infinite in both space and time. (But) since an infinite and eternal world had no need of creation, God soon became superfluous as a Creator...In spite of Newton's aim to bolster a theistic concept of the universe, the cosmos that emerged from Newtonian mechanics had no need for God...God was gradually expelled from (the stellar) heaven, leaving only the stars. Thus, man was left alone, lost in an infinite maze.<sup>8</sup>

The process Byl describes was gradual and involved a number of intervening steps. Some of Newton's successors turned to mysticism, others to Deism. This opened the way for radically new cosmologies, cosmologies that were increasingly "dynamic" or evolutionary in nature. Emanuel

Swedenborg (1688-1772), for example, declared, on the authority of alleged angelic visitations, that our solar system was generated out of a cloud of swirling gas and dust. Immanuel Kant (1724-1804) and Pierre Laplace (1749-1827), though hostile to the idea of divine revelation, nevertheless agreed with Swedenborg's broadly theistic and evolutionary views. In his so-called nebular hypothesis Kant therefore proposed that god (but not the God of the Bible) initially created the void of space and filled it with whirling discs of amorphous gas. Over time, and in strict accordance with natural law, these distilled into a vast "systematic constitution"—a universe of "universes" (i.e., galaxies) all gathered around a common center, and in which multiple solar systems, planets, life forms, and intelligent (human) beings took their rise. Thus, Kant decisively tilted western cosmology away from the structurally static cosmos of the Bible towards the evolutionary cosmos of modern rationalist science. The later writings of geologist Charles Lyell (1797-1875), biologists Charles Darwin (1809-1882) and Thomas Huxley (1825-1895), and philosopher Herbert Spencer (1820-1903) only served to reinforce this bias towards evolutionism, and also to further exclude God and divine revelation from the cosmological equation.

### ***The Soil of Relativity***

At the turn of the 19th century, Albert Einstein (1879-1955) inaugurated the modern era of relativistic cosmology. Like many of his predecessors, Einstein was a true son of the Enlightenment: He did not believe in the transcendent, personal God of the Bible, nor in special revelation, nor in the traditional biblical cosmology, nor in biblical notions of redemption, heaven, or hell. Indeed, it may fairly be stated that both in word and life-style Einstein denigrated biblical religion as a hindrance to personal and societal fulfillment. Speaking about theistic faith towards the end of his life, he wrote:

Such notions are for the fears or absurd egoism of feeble souls. In their struggle for the ethical good, teachers of religion must have the stature to give up the doctrine of a personal

God, that is, give up that source of fear and hope which in the past placed such vast power in the hands of priests...The further the spiritual evolution of mankind advances, the more certain it seems to me that the path to genuine religiosity does not lie through the fear of life, the fear of death, and blind faith, but through striving after rational knowledge.<sup>2</sup>

And yet for all this, Einstein consistently cast himself as a spiritually minded man, even speaking on occasion of “the good Lord,” as though he were a personal being after all. Still, it is certainly best to characterize Einstein as a pantheist, for that is precisely how he characterized himself. Stating that he was a believer in “Spinoza’s god,” he described the ultimate reality as “...an illimitable superior Spirit...a superior reasoning Power...a superior Mind” that is the underlying “substance” of all things. This explains Einstein’s optimism about our some day coming to understand the origin and structure of the universe. For him, true scientific knowledge is, as it were, both a gift and an evolutionary destiny, arising from the depths of the one cosmic Mind. It is best attained through humble, persistent, and rational contemplation of the “creation” on the part of man.

In order to understand both the nature and appeal of Einstein’s Theory of Relativity, it is vital that we linger for a moment to consider the historical soil out of which it grew. Why? *Because doing so enables us to see that Relativity Theory (RT) was, in essence, an ideological response to a profound crisis in modern physics.* More particularly, it was a last ditch effort to salvage modern Copernican cosmology from a growing body of observational evidence indicating that the Earth is indeed—just as the Bible had taught and the medieval world had believed—stationed immovably at the center of the universe. A brief survey of the salient historical facts will make this dramatic thesis clear.

For well over 150 years—from the appearance of Copernicus’ *On the Revolutions of the Heavenly Spheres* (1543) to the publication of James Bradley’s work on stellar aberration (1728)—heliocentrists fully recognized that the arguments and evidences for their position were at best equivocal (and occasionally—as in the case of Galileo’s theory of the tides sloshing

back and forth in the basins of the sea—downright wrong). In part, this was because the now-falsified “paradigm baggage” of the medieval view was simply irrelevant to the question at hand. Yes, the sun has spots, the moon is pocked, comets pass through the celestial spheres, and Jupiter’s moons revolve around Jupiter, rather than the Earth. Yet none of this touches on the burning question: Does the Earth, the Sun, or any other heavenly body rest stationary at the heart of all?

In other words, the real crux of the problem was not the paradigm baggage of Aristotelian cosmology, but the widely accepted Galilean and Newtonian Principle of Relativity, which states that *there is no mechanical test by which we can determine which of two objects in an “inertial system” (i.e., two objects in uniform motion relative to one another) is really moving and which is at rest.* This principle figured prominently in discussions about cosmic structure. For example, the heliocentric scheme adequately explained the phases of Venus, but the Tychonic system, in which Venus also orbits the sun, explained those phases just as well. And much the same could be said about the retrograde motions of the exterior planets, the shape and motion of the Earth’s shadow on the moon, the occurrence of the seasons, the continuing visibility of the sun at high latitudes, and the circumpolarity of the motion of the stars at the North and South poles. All such “evidences” for the Earth’s revolution around the sun, or for its rotation on its axis, could be equally well explained by the Tychonic geocentric model. Thus, as time progressed, scientists became increasingly anxious to find a decisive proof for the heliocentrism that they had chosen to believe.<sup>10</sup>

Interestingly, for the space of a few years they felt that English astronomer James Bradley (1693-1762) had finally given them one. Bradley discovered that certain stars (e.g., *Gamma Draconis*)—presumed to be nearer the Earth than the motionless ones behind them—seemed to describe a tiny ellipse in the sky over the course of a year. Bradley hypothesized that this phenomenon was not due to the intrinsic motion of the star or of the

heavens, but was actually an optical effect caused by the revolution of the Earth around the sun. Philip Stott explains Bradley's view:

To see why he took his "aberration ellipse" as evidence for heliocentricity consider a telescope pointing straight at a star. A beam of light coming from the star strikes exactly in the very center of the objective lens (i.e., the outer lens at the "top" of the telescope). But the earth is moving, and the telescope is moving along with the earth. By the time the light reaches the eyepiece, the telescope will have moved slightly. Not very much, but because the speed of light is not infinite, it has moved a little. So although the light came in absolutely in the center at the top, it is not quite in the center at the bottom—the light is left behind. The direction in which it is left behind depends on the direction that the earth is moving, and since the earth moves in an ellipse around the sun each year, the star will appear to trace out a little ellipse in the eyepiece.<sup>11</sup>

It is noteworthy that in Bradley's mind, his careful study of *Gamma Draconis* did not quite succeed, since he failed to find what he was actually looking for: a clear example of *stellar parallax*, this being defined as a precise one-to-one correspondence between the shape of the Earth's (supposed) elliptical orbit around the sun and the shape of the star's "aberration ellipse." Nevertheless, he and many others thought that his work had definitely vindicated the heliocentric view.

However, controversy and uncertainty still remained—even after F. Bessel claimed, in 1838, that he had discovered an instance of true stellar parallax.<sup>12</sup> Yes, these developments *seemed* to support heliocentrism, but once again the followers of Brahe showed that the results could as well be explained in terms of the actual motions of the stars in the vault of heaven orbiting the Earth. Thus, heliocentrists still lacked the definitive proof of the Earth's motion through space that they desired.

Fascinatingly, the renewed efforts to confirm heliocentrism gave rise to a number of 19th and 20th century experiments that rocked the scientific world. Why? Because the experiments tended strongly to support the exact opposite of what they sought, showing as they did that the Earth is not in motion at all! The players in this drama are numerous, and the story too

long to relate here in detail. Nevertheless, we must touch upon at least a few of the key scenes.<sup>13</sup>

### ***Airy's Failure***

Let us begin with “Airy’s Failure.” Piqued by certain experiments of F. Arago (1786-1853) that were favorable to the idea of a stationary Earth, English astronomer G. Airy (1801-1892) set out to prove, once for all, that stellar aberration was indeed as Bradley had hypothesized: an optical effect caused by the motion of the Earth into and away from the (stationary) star’s light. To this end, he took up an earlier suggestion by Roger Boscovich (1771-1787) and filled one of his two telescopes with water. Since Airy knew that light travels 1.5 times slower when passing through water, he reasoned that if the Earth were indeed moving, he would need to tilt the water-filled telescope slightly more towards the lower end of the star than the normal telescope in order to get the same reading in his eyepiece. But to his shock and dismay, he repeatedly found that he did not need to tilt it at all! To all appearances, at least, aberration had nothing to do with the motion of the Earth. Indeed, to all appearances, the Earth was standing still!

### ***The Michelson-Morley Experiment***

Keenly aware of Airy’s Failure (and also of other experiments that led to the same geostationary conclusion), A. Michelson (1852-1931) and E. Morley (1838-1923) determined yet again to establish the motion of the Earth through space, thereby confirming Bradley’s view of stellar aberration. Happily, it appeared that Providence had at last given them a means of doing so. Only recently physicist James Clark Maxwell (1831-1879) had developed his elegant (and fabulously useful) theory of electromagnetism, according to which light consists of electrical and magnetic energy passing at a constant speed as waves through a universal sea of tiny particles that he called *the ether*. Reflecting on this view, physicists like Michelson and Morley soon realized that Maxwell’s fresh

understanding of the physics of light supplied a way to test for absolute rest and motion. More particularly, it provided a way to test for the widely assumed motion of the Earth through the ether.

With this end in view (and amidst great excitement in the scientific community), the two researchers built an ingenious device called an *interferometer*. The instrument, comprised of two perpendicular arms, is seated upon a table. A beam of light is discharged, then split at a half-silvered mirror into two beams, one moving vertically, the other horizontally. By the use of two more mirrors the beams are reflected and then reunited at a photographic plate near the light source. Michelson and Morley knew that if there was a difference in the speed at which the light beams arrived at the plate, there would be what is called an “interference,” a unique mingling of the out-of-sync light waves. Photographically, this would show up as a “fringe,” or a pattern of parallel black lines. Accordingly, they reasoned that if indeed the Earth were racing through the ether at 30 km./sec (the assumed speed of its revolution around the sun), then the beam of light heading into the ether would be slowed down, rather like a car is slowed by the air into which it is driving at high speeds. On the other hand, the beam of light running perpendicular to the line of the Earth’s motion would be slowed less. On this premise, the interferometer should definitely register a “fringe shift,” and this fringe shift would confirm the absolute motion of the Earth. Indeed, by rotating the table, one could use the maximum fringe shift to show the direction of the Earth’s motion, and also to establish experimentally the speed at which it passes through the ether.

The results of this experiment have been described in the annals of physics as nothing short of “convulsive.” Factoring in the supposed motion of the solar system through space, Michelson and Morley predicted shifts of at least 0.4 of a fringe width. However, the maximum change discovered was only 0.02, and the average change less than 0.01. These results were so close to the margin of instrumental error that the two scientists dismissed them as insignificant. Thinking that the motion of the solar system had



perhaps cancelled out the motion of the Earth around the sun, they repeated the experiment six months later. Still no change. Documenting their growing desperation, Stott writes, “They repeated the experiment at all seasons of the year. They repeated it all times of the day and night. They repeated it in Berlin, in Chicago, on the tops of mountains, and everywhere. No fringe shift.”<sup>14</sup>

And such would be the case for years to come: The interferometers—built with ever increasing sophistication—would continually register very small fringe shifts, enough perhaps to indicate a slight “ether drift,” but certainly nowhere near enough to vindicate the Copernican notion of an Earth revolving around the sun at 30 km/sec, or a solar system hurtling through space at 300 km/sec. Wrote Michelson when all was done, “This (experiment) directly contradicts the explanation of aberration which has been hitherto accepted, and which presupposes that the Earth moves through the ether, the latter remaining at rest.”

Again, the Michelson-Morley experiment—along with its sequels—precipitated a definite crisis in modern physics. It is not hard to see why. In essence, these astonishing results left scientists with three options, none of which they found palatable. The first was to say that the Earth is somehow dragging the ether on its journey through space, an implausible notion ruled out by a number of previous experiments. The second was that there is simply no such thing as the ether, a truly alarming prospect, since modern views of light, electricity, and magnetism—thoroughly established by Maxwell in his famous equations—were all built squarely upon the premise of an ethereal medium. And then there was the third possibility, namely that the Earth is at rest. This was, of course, the most repugnant option of all, being widely and swiftly dismissed as “preposterous” and “unthinkable.” Why? Because, if true, it meant not only that the Earth is at rest, *but also that it is the center around which everything else in the heavens is orbiting!* In other words, this experiment threatened completely to overthrow the deep-seated Copernican hypothesis, shatter the reputation of the scientific establishment, and (most frighteningly of all) force a direct confrontation

with the God and cosmology of the Bible. Fully aware of the narrow straits in which Enlightenment man was now sailing, relativist Henri Poincare' nervously mused:

Are we about to enter now upon the eve of a second crisis? These principles on which we have built all, are they about to crumble away in their turn? Alas, such are the indubitable results of the experiments of Michelson.<sup>15</sup>

### ***Mach's Principle***

This brings us to Einstein, or almost. For first we must say a few words about one of Einstein's most influential precursors, the German physicist and philosopher, Ernst Mach (1838-1916).

Though himself a professing Copernican, Mach well understood that from a purely observational and geometric viewpoint the Copernican and Tychoean models of the universe were equivalent. But this got Mach to thinking "outside the box." Could it be, he wondered, that the two models are also dynamically equivalent? In other words, could it be that the centrifugal and Coriolis effects that scientists typically ascribe to the rotation of the Earth on its axis (e.g., the Earth's equatorial bulge, the rise of air and water at the equator, the East-to-West motion of projectiles, the behavior of Foucault pendulums, the whirling air of cyclones, etc.) are all actually gravitational effects somehow induced by the rotation of the stars in the vault of heaven around a stationary Earth?<sup>16</sup>

Here, then, in what Einstein would later call "Mach's Principle," was a possible way of escape from the crisis brought on by Michelson, *et al.* For perhaps—as Airy, Michelson, Morley and others had certainly seemed to show—the Earth really does sit at rest in the center of the universe. Perhaps the ether—as the "negligible" results of the interferometer experiments repeatedly indicated—really is slowly revolving around the Earth. Perhaps gravity is an ether effect, and perhaps inertial and centrifugal forces are further ether-effects, somehow induced by the gravity and motion of the stars in the sphere of space, *a la* Tycho Brahe. Poincare' had cast all this as

a crisis. But with Mach, the crisis suddenly begins to look like a golden opportunity. Here, for all with eyes to see it, was an open door to a new understanding of the universe; to a new and more fully integrated physics; and—among the leaders of western science—to a new infusion of faith in the forgotten God of their fathers. But who, if anyone, would dare to lead the way? Who would venture to take even the smallest step into the luminous “new” world waiting just beyond this open door?

### ***Einstein’s Fateful Choice***

As we learn from his early writings, Einstein was a close student of Mach, so much so that he apparently gave serious consideration to the geocentric option that Mach had opened up—and that the interferometer experiments now seemed to confirm. In the end, however, he chose to turn away, following instead the lead of other theoretical physicists who were trying to save Copernicanism with radically counterintuitive *ad hoc* “explanations” of Michelson’s “null” results. Accordingly, in light of his outspoken convictions on spiritual matters, it seems only fair to conclude that Einstein’s fateful choice was motivated philosophically rather than scientifically. In other words, rather than follow the data into a well-deserved reconsideration of the venerable cosmology of his own Judeo-Christian heritage, he preferred instead to join with his Rationalist colleagues in creating a new, humanistic universe of his own.<sup>17</sup>

### ***Special Relativity***

The building project began in 1905, when Einstein set forth his Special Theory of Relativity (STR). It was based, in large part, on the work of two contemporaries. The first, physicist G. Fitzgerald (1851-1901), offered this astonishing explanation for the unwelcome results of the Michelson-Morley experiment: Their interferometer gave a null reading because the horizontal arm of the apparatus had “contracted” by just the right amount as it moved through the ether in the direction of the Earth’s motion! Alas, in 1932

physicists Kennedy and Thorndike used an interferometer with arms of differing lengths to test Fitzgerald's thesis, and showed it to be false. However, Einstein's forerunner in relativity theory, Dutch physicist H. A. Lorentz (1853-1928), responded to Kennedy and Thorndike by going even further: He hypothesized that the continuous motion of an object through the ether would not only cause its length to contract, but its mass to increase, and any clocks resting upon the object to slow! It was, then, these mysterious "Fitzgerald-Lorentz contractions" that had caused the interferometers to give the *appearance* of a stationary Earth. What actually *caused* the contractions? No one knew for sure, though all presumed that interaction with the ether was involved. And so, despite the uncertainties, many physicists welcomed the Lorentz hypothesis—largely, it would appear, because it offered a plausible way of escape from the "preposterous" geocentric option.

Enter Einstein and his STR. In it he proposed a still more radical solution for the "null" results of the interferometer experiments: Abolish the ether altogether! Indeed, he urged that, along with the ether, we also abolish *the very ideas of absolute space, motion, and rest*—ideas that physicists had presupposed from time immemorial. Yet it seemed to him a logical choice. Like Fitzgerald and Lorentz, Einstein found it "unthinkable" that the Earth should be stationary and central, the preferred frame of reference for the entire universe. Like them, he also judged it highly implausible that the Earth "entrained" the ether in its high-speed journey through space in just such a way as to give the impression that it (the ether) is not even there! But unlike them, he saw no need to assume a physical basis for the various contractions (i.e., the ether), a physical basis that left intact long-cherished notions of absolute space, motion, and rest. In other words, Einstein, departing both from Newton and Maxwell, daringly proposed to create a whole new physics based upon the idea of "pure relativity" (or, if one may so speak, "absolute relativity").

In order to carry out his program, he set forth two postulates (*i.e., assumptions*). The first, if I understand it correctly, was that there is no

“preferred” point of reference in the universe by which we might be able to make a determination of an object’s absolute uniform motion or rest. This was not the same as the far more humble Galilean-Newtonian principle of relativity, which simply stated that there is no mechanical experiment by which we can *detect* absolute motion. Rather, Einstein here affirms that because of the way the universe itself operates, absolute space, motion, and rest *do not even exist*. The result, not surprisingly, was his further declaration that no physical experiment of *any* kind (e.g., the Michelson-Morley experiment), based on any physical law (e.g., Maxwell’s laws of electromagnetism), can ever detect absolute motion.

His second postulate states that observers in all inertial systems will measure the same value for the speed of light (“c”) in a vacuum. This assumption is also quite counterintuitive. Imagine a space ship traveling towards the Earth at .5 c. The captain sends out a beam of light to prepare us for his arrival. The common sense view is that the light will reach us at a speed of 1.5 c. Yet Einstein says, “No, it will arrive at c.” How did he arrive at this strange conclusion? Again, he appears to have deduced it from the Michelson-Morley experiment. “Knowing” that the Earth is moving uniformly through space, Einstein saw that for some reason its motion had no effect on the observed speed of light in the interferometer. Therefore, abandoning the highly intuitive Theorem of the Addition of Velocities (upon which the experiment was based), he concluded that c must remain constant in all inertial systems.

Here Einstein introduces the one and only absolute in his new version of the universe: the speed of light. The Bible, as we shall see, gives us a central, stationary Earth as the divinely approved reference point for determining absolute place, distance, motion, and velocity. Newton gives us a cosmic center of gravity somewhere near the Sun. But Einstein, denying the Bible, Newton, and all other absolutes, gives us instead the absolute speed of light.<sup>18</sup>

The consequences of this latter-day substitution were mind-boggling. Imagine an inertial system comprised of two space ships, A and B. They are

headed towards each other, both traveling at  $.5c$ . Now suppose that space ship A sends out a flash of light as a warning to space ship B. Again, common sense indicates that the velocity of the light impacting an observer's eye in space ship B will be twice the speed of light:  $c + .5c$  (for the velocity of space ship A)  $+ .5c$  (for the velocity of space ship B)  $= 2c$ . But according to Einstein's STR, we must think about all this in a completely new way: relativistically. We must first isolate an inertial system (A and B). We must then choose a frame of reference (A or B), and we must also keep  $c$  constant. Now at this point, according to Einstein and his equations, one of the space ships (the one we assume to be moving) must undergo some very strange contortions. In particular, its length must contract, its mass must increase, and clocks on board the ship must slow down, all in just the right amount so as to preserve  $c$  as the one universal absolute! Here, then, is the theoretical basis for what relativists call "space-time," an elusive concept that Einstein would develop more fully in his General Theory of Relativity. Because of its strange behavior, moving rulers will contract, two people (one in a space ship, one on Earth) will age at different rates, and the speed of light that reaches us from a distant star will always be 186,000 mps, whether that star is racing away from us or towards us, even at the speed of light!

Observant seekers will realize that in developing his STR Einstein actually departed from the sphere of physical science altogether—a sphere that strictly holds itself to physical explanations and experimentally verifiable models of nature. Instead, he based his theory on what might be called "mathematical metaphysics." In other words, he apparently felt that his relativistic equations exist in the mind of god, and that god himself is the one who conforms the behavior of the phenomena of nature to the equations that his man Einstein had finally "discovered." Thus, to the question, "What actually causes your Lorentz contractions?" Einstein effectively replied, "The mathematics of god's universe causes them. That is all we know, and that is all we need to know."

In considering STR, seekers must also keep in view Einstein's underlying motive in developing the theory in the first place, which was to avoid the simplest and most natural interpretation of the null result of the Michelson-Morley experiment: cosmic geocentricity. This motive is evident in the many *assumptions* underlying his theory. They include the assumption that the Earth is in motion, that the universe has no center or "preferred reference frame," that there is no ether, that the laws of physics are invariant throughout the cosmos (which they surely would not be if the Earth were central and unique), and that  $c$  is a universal constant in the so-called "vacuum of space." However, as we shall soon see, there are excellent reasons for doubting all of these axioms of RT, as well as the results of the occasional experiments alleged to confirm it.

### ***General Relativity***

In 1916 Einstein propounded his General Theory of Relativity (GTR). This was, of course, a further modification of his earlier work, and one that would alter the shape of cosmological thought for at least a century to come. Interestingly, it too arose from a crisis.

As we just saw, in his STR Einstein had banished the idea of absolute motion. However, he well understood that the phenomenon of acceleration implies absolute motion. If I step on the gas pedal of my Maserati, I can feel myself in (accelerating) motion, even though I am not looking out the window, watching the world go by (this is strictly a thought experiment!). But such absolute motion clearly implies absolute rest. If I can accelerate at all, then obviously I can also be at rest. Thus, the phenomenon of absolute motion implies that something in the universe (e.g., the Earth, space, etc.) could be at absolute rest, with everything else in absolute motion relative to it. This, in turn, spells the end of pure relativity—and opens the door once again to the geocentric interpretation of the Michelson-Morley experiment.

In order to escape this dilemma, Einstein set forth his Principle of Equivalence, the very heart of GR. According to this principle acceleration

and gravity are equivalent. That is, they are really two ways of looking at the same thing. Imagine a space ship launching from the Earth. Upon acceleration, the astronauts feel a force pulling them back into their seats. According to the well-accepted Weak Equivalence Principle, acceleration, in this case, is behaving *like* gravity—pulling the astronauts earthwards. Though the two forces, according to classical physics, are not really the same, they are functionally equivalent. Newton accepted this idea gladly. But according to Einstein’s (Strong) Principle of Equivalence, the two forces really *are* the same; gravitational force appears only in conjunction with acceleration, and vice-versa. According to physicist Martin Gardner, this was a “staggering” assertion, one that Newton would have thought “mad.” Once again Einstein was striking out on his own, leaving the comfortable world of classical physics far behind.

In doing so, the universe got stranger still. To understand why, consider a problem that Einstein now faced. Suppose a rocket ship launches from the North Pole. According to GR, we can say that the force the astronauts feel is a result of gravity, the gravity generated by an Earth moving “downward” (i.e., in a direction opposite from the rocket). But now imagine another rocket launched simultaneously from the South Pole. According to GR, we can say that the force the astronauts feel is caused by the gravity generated by the Earth moving “upward.” However, it is obvious that the Earth cannot move upward and downward at the same time—even though the Principle of Equivalence requires it.

How did Einstein solve this problem? According to Stephen Hawking, he had the “brain wave” of realizing that the equivalence would work if the geometry of space-time were curved and not flat, as had hitherto been assumed. He writes:

Acceleration and gravity can be equivalent only if the massive body curves space-time, therefore bending the paths of objects in its neighborhood. His idea was that mass and energy would warp space-time *in some manner yet to be determined*. Objects such as apples or planets would try to move in straight lines through space-time, but their paths would appear to be bent by a gravitational field because space-time is curved.<sup>19</sup>



Are you having trouble fathoming this “explanation”? If so, you are not alone. However, at one level the reason for our confusion is quite understandable: Here Einstein and Hawking are completely leaving behind both us and our everyday concept of the “flat,” stable, three-dimensional receptacle that we think of as “space,” while they themselves follow speculative mathematicians such as B. Riemann (1826-1866) into a bizarre new world of non-Euclidean geometry, where space can move, warp, twist, or even grow! Under cover of these unimaginable notions, Einstein could seriously propose that so-called gravitational effects are actually caused by a curvature of space; a curvature that is itself caused by the acceleration of neighboring masses. In other words, he hypothesized that objects in accelerated motion would somehow bend—or possibly even create—the space-time around them, thus “gravitationally” influencing other objects in their vicinity, including light. Such notions would become the theoretical basis of a Big Bang cosmology soon to be born.

Again, if this kind of cosmos sounds fairly radical (not to mention unintelligible), that’s because it is. Underscoring the novelty and counter-intuitiveness of GR, science writer Lee Smolin states:

General Relativity...demands a radical change in how we think of space and time...All previous theories said that space and time have a fixed structure and that it is this structure that gives rise to the properties of things in the world, by giving every object a place and every event a time...GR is not about adding to those structures...It rejects the whole idea that space and time are fixed at all. Instead, in GR the properties of space and time evolve dynamically, in interaction with everything they contain.<sup>20</sup>

Not surprisingly, in the eyes of many physicists a worldview such as this seemed more like mysticism than hard science. Therefore, in the pages ahead we must examine their criticisms carefully. Before we do, however, let us complete our survey of 20th century naturalistic cosmology, carefully noting the profound influence of Einstein’s speculative thought.

## ***Towards the Big Bang***

Einstein and his disciples now sought to apply these new ideas to cosmology. In so doing, they began with two assumptions common in their day. The first asserts that the universe is *homogeneous*. This means that matter, on the largest scale, is evenly distributed throughout the cosmos. The second—which must be understood as a direct repudiation of geocentrism—states that the universe is also *isotropic from all points of view*. Sometimes referred to as the Cosmological (or Copernican) Principle, this means that the heavens will look roughly the same (i.e., spherically symmetrical and homogeneous) to an imaginary observer stationed anywhere in space. A profoundly important implication of this principle is that the universe has no center, no outer edge, and no place that is unique or “special.” Clearly, this arbitrary assumption would not have played well in the Middle Ages!

Now prior to Einstein, the only way to satisfy the assumed Cosmological Principle (i.e., to avoid a center and edges) was to think of the universe as infinite. Such, for example, was the cosmos of Digges and the successors of Newton. However, with the advent of GR the way was opened for a new view. If there were enough accelerating matter in the cosmos, then, according to GR, space-time may be so highly distorted that it actually “curves back on itself,” thereby creating a most unexpected result—a universe that is at once finite, homogenous, and isotropic from all points of view!

Once again, if you are having trouble visualizing this universe, you are not alone. Indeed, relativists themselves admit that curved-space models of the cosmos are, in strictness, unimaginable. However, to help laymen grasp them they will sometimes propose analogies. For example, they will liken the space-time-energy/matter continuum to the surface of a balloon, a surface that is both curved and stretchable. These theorists confess, however, that such analogies are always defective, and that they themselves can only “visualize” their new worlds mathematically, by means of the non-

Euclidean geometries mentioned above. Thus, curved-space models of the cosmos may be mathematically intuitive (to some), but the “picture” of the cosmos they yield is counterintuitive (to all), being contrary to our everyday experience and completely inaccessible to our imagination. More on this telling characteristic of modern cosmology below.

Early in his career, Einstein himself favored the view that our spatially curved universe is eternal, “closed” (i.e., finite), and essentially “static” (i.e., unchanging in its basic structure). However, since he felt that such a universe would have no way to protect itself from gravitational collapse, he argued that it is held in homeostasis by a mysterious repulsive force called “Lambda.”

In time, however, astronomers such as Edwin Hubble (1889-1953) began to notice that light emanating from (what they assumed to be) the more distant galaxies was consistently shifted towards the red end of the electromagnetic spectrum. Hubble interpreted this so-called “red shift” as a Doppler effect; that is, as an indication that the galaxies themselves are receding from us, with the result that light emitted from them is stretched towards the red end of the spectrum. Very importantly, Hubble realized that the most natural interpretation of the radial symmetry of the red-shifts was that the Earth lies at the center of the universe. It was not a thought he liked to entertain:

Such a condition would imply that we occupy a unique position in the universe, analogous, in a sense, to the ancient conception of a central Earth...This hypothesis cannot be disproved, but it is unwelcome and would only be accepted as a last resort in order to save the phenomena. Therefore, we disregard this possibility...The unwelcome position of a favored location must be avoided at all costs...Such a favored position is intolerable...Therefore, in order to restore homogeneity (i.e., to maintain the Cosmological Principle), and to escape the horror of a unique position...(the evidence) must be compensated by (accepting the hypothesis of) spatial curvature. There seems to be no other escape.<sup>21</sup>

So then, rejecting out of hand the very idea of geocentrism, Hubble, following Einstein and GR, rejected the traditional notion of space as a

“flat,” static receptacle, in favor of a spatially curved universe in which all the galaxies are receding one from one another.

It was, however, still necessary to explain the observations. *Why* were the galaxies (apparently) receding from one another? In the late 1920’s, the Belgian priest and cosmologist, Georges LeMaitre (1894-1966), stepped forward with an answer that, in due season, would capture the imagination of the world. The galaxies are receding, argued LeMaitre, because of the explosion of a “primeval atom” that God created in the beginning; an explosion by means of which he launched the universe on its appointed evolutionary journey, presumably towards the Kingdom of God. Here, for the first time, GR was pressed into the service of cosmogony. For if, as Einstein had argued, space, time, and energy/matter are all aspects of a single continuum—if, indeed, they are all modifications of a single (moving, accelerating) substance—then perhaps the great “dance” of the evolving universe actually arose from the stillness of a tiny primeval “singularity.” Wrote LeMaitre:

We can compare space-time to an open, conic cup. The bottom of the cup is the origin of the atomic disintegration (i.e., the point from which the cosmic expansion began); it is the first instant at the bottom of space-time, the “now” which has no yesterday, because yesterday there was no space.<sup>22</sup>

The theistic implications of this cosmogony were clear from the start: An expanding universe like this definitely had a beginning, and its beginning definitely needed an adequate cause. Therefore, at least in part because of the creationist implications involved, Le Maitre’s theory met with opposition from the likes of Einstein, A. Eddington, and F. Hoyle (who later relented his atheism, allowing that the nuances of cosmic order positively demand a divine Orderer). Interestingly, it was Hoyle who derisively dubbed Le Maitre’s primeval explosion “the Big Bang,” not realizing that it would be LeMaitre who enjoyed the last laugh.

Because evidence for a Big Bang was slender and equivocal, a lively debate ensued. Parting ways both with Einstein and Le-Maitre, Herman Bondi, Thomas Gold, and Fred Hoyle proposed a new model. In 1948 they argued that our eternal universe is both infinite and infinitely expanding. Its eternal uniformity is maintained by the continuous creation of new matter, from which new galaxies are ever being formed. Though no one had ever observed such continuous creation, or explained how and why it might take place, the Steady State model of the cosmos enjoyed a significant following for some twenty years.

However, in time a decisive blow was struck in favor of the Big Bang. George Gamow (1904-1968), a long-time defender of the theory, had for some years argued that a primeval explosion would leave behind a uniform radiation of about  $30^{\circ}$  K, a radiation that should reach the Earth from all directions. In 1965, A. Penzias and R. Wilson observed such a radiation—today called the Cosmic Microwave Background (CMB)—though at a much lower temperature than Gamow had predicted (i.e.,  $3^{\circ}$  K, the measurement that Eddington had expected based on the temperature of starlight). Since the Steady State model had difficulty interpreting this phenomenon, cosmological opinion swung decisively towards the Big Bang. As we shall see later, the Big Bang hypothesis is not without serious problems, formidable opponents, and viable alternatives. Nevertheless, it has undeniably remained king of the mountain ever since.

### ***Einstein on Einstein***

And what of Einstein, the preeminent Enlightenment man of the 20th century; the New Copernicus who would abolish all the old absolutes, both spiritual and physical, replacing them with  $c$  and “the observer;” the would-be mediator of a new god, a new universe, and a new humanity?<sup>23</sup> What became of him?

The sobering answer is well worth careful reflection. As the end drew near, Einstein increasingly found himself opposing the Big Bang, fending

off a growing chorus of disenchanted critics, struggling with doubts about the fundamentals of RT, and therefore questioning the substance of his legacy to science. In a melancholy letter to his confidant, Solervine, he wrote:

You imagine that I regard my life's work with calm satisfaction. But a close look yields a completely different picture. I am not convinced of the certainty of a simple (i.e., single) concept, and I am uncertain as to whether I was both a heretic and a reactionary who has, so to speak, survived himself.<sup>24</sup>

Early in his career, Einstein declared that he had one supreme goal: to know how god had created the world. In the end, however, the icon of modern humanistic genius who had no use for divine revelation was forced to confess that he really knew nothing at all about the origin of the universe, life, and man.

### ***Characteristics of Modern Cosmology***

Before passing on to a critique of naturalistic cosmic evolution (NCE), it is important that we pause to highlight yet again three important characteristics of modern cosmology. Seekers will do well to ponder them with great care.

First, the philosophical tendency of modern cosmology has been away from theism and toward naturalism. More particularly, there has been a three-century drift, first away from the God of the Bible, then from the god of Deism, and finally from any appeal to god at all. This does not mean that all modern cosmologists were atheists (though many were and are). It does mean, however, that ever-increasingly they declined to involve god, miracles, or divine interventions of any kind in their theorizing.

Secondly, modern cosmology is anti-revelational. That is, its proponents have generally taken the position that mankind cannot receive trustworthy knowledge about the beginning from “religious” sources. With a religious dogmatism of his own, Carl Sagan speaks for many when he asserts, “There

are no sacred truths...Arguments from authority are worthless.”<sup>25</sup> This means, of course, that we are henceforth shut up to “science.” In matters cosmological, scientists and scientific method are the only teachers we are allowed to have.

In passing, let us note that this conclusion is not, and cannot be, reached by logic. On the premise that there is no god, it does indeed follow that we cannot receive revelations from him. But how can finite human beings know for sure that that premise is true? And on the premise that there is a god, how do we know that he cannot or will not give us revelations—unless, of course, he reveals to us that that is not his way?

But if logic is not the source of this stance, what is? The answer here is complex. Some modern scientists assume the truth of atheism, and therefore automatically rule out divine revelation. Others, like Kant and Einstein, assume special kinds of gods, gods who by definition do not impart knowledge through special revelation, but who do impart it through the right use of reason in philosophy and science. Others, seeing that most religious cosmology is mythological and unscientific, assume that all religious cosmology is mythological and unscientific. Still others, assuming the truth of evolution, conclude that religious cosmologies belong to a primitive stage of man’s intellectual development, while “scientific” cosmologies belong to an advanced. Plainly, there is a whole lot of assuming going on around us. Just as plainly, the assumptions have produced a widespread bias against turning to divine revelation for cosmological truth. But are the assumptions valid? Are the conclusions drawn reasonable? Is this bias based on truth? Or could it be based on something far less noble? Could it even be based on an irrational aversion to admitting the unknown god into the citadel of modern, humanistic science?

Seekers must answer these questions with great care. And as they do, let them fervently hope that the bias against revelation is *not* based on truth. For in our journey thus far we have seen more than once what many modern scientists have not: Natural science has neither the calling nor the competence to take us to the beginning. Nor can it answer any of the other

questions of life. Nor can philosophy. If, then, divine revelation does not come to our aid, we are in the dark forever.

Finally, modern cosmology is largely committed to evolutionism. It tends to view the universe not as a static creation (as did the medieval mind) but as a continually evolving (or devolving) reality. It is, as it were, a growing, living, and dying material organism. This perspective, which was first seen in ancient Greece, fully emerged in the 19<sup>th</sup> century when evolutionary geology, biology, and philosophy won broad allegiance among the western intelligentsia. In time it overflowed into other areas of inquiry. Eventually, the idea of cosmic evolution so firmly took hold upon the Western imagination that today many treat it as an axiom and the organizing principle of all science and culture.

A few citations will demonstrate this important point.

Evolutionist Julian Huxley, tracing the history of evolutionism, wrote as follows:

The concept of evolution was soon extended into other than biological fields. Inorganic subjects such as the life-history of stars and the formation of the chemical elements on the one hand, and on the other hand subjects like linguistics, social anthropology, and comparative law and religion, began to be studied from an evolutionary angle, until today we are enabled to see evolution as a universal and all-pervading process.<sup>26</sup>

The pantheistically minded Teilhard de Chardin agrees:

Evolution is a general postulate to which all theories, all hypotheses, all systems must henceforward bow, and which they must satisfy in order to be thinkable and true. Evolution is a light which illuminates all facts, a trajectory which all lines of thought must follow.<sup>27</sup>

These are strong, even imperious words, echoed today by an intelligentsia that often ridicules anyone who dares to question the evolutionary paradigm. Careful seekers, however, will not bow to evolutionism simply because men assert that it is true or picture it as such. They will bow only if the evidence proves it to be true.



## ***Summary of Modern NCE***

All of this brings us at last to a brief statement of the modern, naturalistic cosmology. In setting it forth, I will incorporate the naturalist's responses to the basic cosmological questions cited at the beginning of this chapter.

According to most modern naturalists, the cosmos, in one form or another, is eternal. About 13.5 billion years ago it existed as a super-condensed "singularity" containing all the time, space, and mass/energy of the universe. For reasons not as yet understood, it exploded; or rather, it suddenly (and unimaginably) began to inflate like the surface of balloon, so that henceforth all the evolving material objects embedded in expanding space-time were moving away from each another at higher and higher speeds. After a *very* rapid initial inflation—perfectly timed so as to make the subsequent cosmic evolution gravitationally possible—the lightest elements (i.e., hydrogen and helium) began to form from energy and sub-atomic matter. By gravitational attraction, these gradually coalesced into primitive stars and galaxies. Inside the stars, nuclear reactions generated carbon and oxygen. In time a second generation of stars was born from the first, in which the heavier elements now began to form. In this process, there somehow arose in our neck of the woods a solar system of several planets orbiting an ordinary star that we call the sun. In still more time, one of those planets somehow evolved water, a primitive atmosphere, organic molecules, and plant and animal life. Finally, in a climactic triumph over the Second Law of Thermodynamics, the whole process produced man, whose unspeakably complex brain chemistry exuded the mystery of consciousness.

And so, quite apart from the activity of an intelligent creator, the universe was now able to look upon itself and think about the beginning. With characteristic literary flair, the late Carl Sagan expressed it this way:

We are the local embodiment of a Cosmos grown to self-awareness. We have begun to contemplate our origins. We are star-stuff pondering the stars! Our ancestors worshiped the

Sun, and they were not that foolish. It makes sense to revere the Sun and the stars, for we are their children.<sup>28</sup>

Importantly, Big Bang cosmology is currently embraced not only by naturalists but also by many pantheists and theists, as well. This is hardly surprising since the existence of the primeval particle, its delicate composition, its sudden explosion, its perfectly timed inflation, and the inexplicable development of raw energy into a complex, orderly, and seemingly purposeful cosmos all cry loudly for the participation of an intelligent and powerful supreme being.

Nevertheless, the strict naturalist does not (or will not) hear the cry. For him there is no god, no spirit (whether animal, human, or angelic), no spiritual realm, and no life force—in short, nothing supernatural. Nature, in one form or another, is all there is, eternal and uncreated. Accordingly, behind its evolutionary development there is no divine intelligence, purpose, plan, or activity. Rather, the material universe—by a fortuitous combination of explosion, mere chance, rigorous natural law, and (in the case of life) spontaneous generation, random mutation, and natural selection—somehow shaped itself into the orderly cosmos that we observe and contemplate today. It is a miracle without a miracle worker; the product—in Richard Dawkins’ famous phrase—of a “blind watchmaker.”

Naturalists freely admit that this view strains credulity, that it has worthy opponents, and that it is not without serious theoretical and observational problems. They even concede that we, who were not present at the beginning, can never really be certain whether it is so. But since they “know” there is no god, they also know that something like this must have taken place. And until they can come up with a better explanation, they are pretty much agreed in presenting this one to the world as the truth.

Given the pretensions, popularity, and problems of NCE, it clearly behooves every seeker of cosmological truth to evaluate this cosmology with the utmost care. On the next leg of our journey we will do that very thing.

## NOTES

1. My survey of the history of modern cosmology draws heavily upon three outstanding works. The first is by Dr. John Byl, author of *God and Cosmos: A Christian View of Time, Space, and the Universe*, (Banner of Truth, 2001) pp. 15-39. For depth and comprehensiveness, this is the single most helpful volume I have found. The second, written by Doctors Robert Sungenis and Robert Bennett, is entitled, *Galileo Was Wrong* (GWW). It is currently available in several formats @ [www.galileowaswrong.com](http://www.galileowaswrong.com). In the first of two volumes, the authors use copious scientific evidence to mount a devastating challenge to Relativity Theory and Big Bang cosmology. Along the way, they offer a scientific exposition and defense of modern biblical geocentrism. Though slightly marred by an appeal to extra-biblical revelation, this is without doubt an epochal work, sure to produce lively discussion in the years ahead. The third work is entitled *Geocentricity, Relativity, and the Big Bang* (Lindquist, 2008). Written by Dr. Russell Arndts, this readable volume is the best layman's introduction to and critique of Relativity Theory that I have found. It is available through [www.geocentricity.com](http://www.geocentricity.com).

2. Thomas Kuhn, *The Copernican Revolution*, (Random House, 1958), p. 171. Cited in GWW, p. 29. Observe from the following quotation that, as many historians of science have noted, Copernicus' attraction to heliocentrism was not rooted in a scientific spirit, still less a biblical, but in a philosophical, religious, and even mystical:

In the middle of all sits Sun enthroned. In this most beautiful temple could we place this luminary in any better position from which he can illuminate the whole at once? He is rightly called the Lamp, the Mind, the Ruler of the Universe. Hermes Trismegistus names him the Visible God; Sophocles' Electra calls him the All-seeing. So the Sun sits as upon a royal throne ruling his children, the planets, which circle round him. The Earth has the Moon at her service. As Aristotle says,

in his *On Animals*, the Moon has the closest relationship with the Earth. Meanwhile the Earth conceives by the Sun, and becomes pregnant with an annual rebirth.

—Cited in GWW, p. 609

3. Physicist I. B. Cohen explains the geometrical equivalence of the heliocentric and geocentric systems as follows:

There is no planetary observation by which we on Earth can prove that the Earth is moving in an orbit around the sun. Thus, all Galileo's discoveries with the telescope can be accommodated to the system invented by Tycho Brahe just before Galileo began his observations of the heavens. In this Tychonic system, the planets...move in orbits around the sun, while the sun moves in an orbit around the Earth (both daily and once) in a year. Furthermore, the daily rotation of the heavens is communicated to the sun and planets, so that the Earth itself neither rotates nor revolves in an orbit.

—I. B. Cohen, *Birth of a New Physics*,  
(Norton, 1955), p. 78. Cited in GWW, p. 33

4. The Bible does not teach the existence of other habitable worlds or extra-terrestrial beings (angels, yes; but rational physical creatures, no). To the contrary, its view is that all the heavenly bodies were created to serve mankind, and also to glorify God in the sight of mankind (Gen. 1:14-19). The universe is geocentric because it is anthropocentric. But the biblical case against extra-terrestrials runs deeper than this. The Bible also declares that “the whole creation” was cursed; that it was “subjected to futility” (i.e., to decay, death) due to the sin of Adam (Rom. 8:18-23). Moreover, because of this wounding, it will one day be destroyed—stars, planets, and all—prior to its eternal renewal (2 Peter 3:10-13). If, then, extra-terrestrials existed, they and their world(s) would be compelled to suffer the consequences of Adam's sin, though they themselves were not his offspring and stood in no spiritual relationship to him whatsoever (Rom. 5:12f). This

conclusion seems all the more inescapable when we remember that extra-terrestrials would have no savior. This is because the Bible consistently represents the cosmic Redeemer as having taken to himself, once for all, “the likeness of men” (Phil. 2:5f, 1 Tim. 2:5, Heb. 2:14f, Rev. 19f). It is as a man—and not as an extra-terrestrial—that the Son of God became the High Priest of his people, dying for them, rising for them, and interceding for them in Heaven to this very day (Rom. 8:34, Heb. 7:25, 9:24). So again, extra-terrestrials, having no connection with Adam and no connection with the Redeemer made in Adam’s likeness, would nevertheless all perish in the end time conflagration. Yet the Scriptures repeatedly assure us that God is not unrighteous to perform such a manifestly unjust act (Deut. 32:4, Isaiah 30:18, 61:8, 2 Tim. 4:8, Rev. 15:3). The conclusion, then, on biblical premises, is that extra-terrestrials cannot exist.

But what of all the alleged sightings of UFO’s and/or contacts with aliens? Biblically, the options are few, simple, and sobering: They are either scams, purely natural phenomena, or demonic deceptions (2 Cor. 11:14, 2 Thess. 2:9-12, 1 Tim. 4:1). For those who reckon the Bible to be a trustworthy revelation from God, this is useful information indeed, especially in our credulous times. For more, see *The New Answers Book* (Master Books, 2007), chapter 18. See also the book and/or DVD entitled *Alien Intrusion*, available at [www.creation.com](http://www.creation.com)

5. In the following historical sketch, Arthur Koestler gives us a Galileo whose reputation looms considerably larger than his accomplishments:

In rationalist mythography (Galileo appears) as the Maid of Orleans of Science, the St. George who slew the dragon of the Inquisition. It is, therefore, hardly surprising that the fame of this outstanding genius rests mostly on discoveries he never made, and on feats he never performed. Contrary to statements in even recent outlines of science, Galileo did not invent the telescope, or the microscope, or the thermometer, or the pendulum clock. He did not discover the law of inertia, or the parallelogram of forces or motions,

or the sunspots. He made no contribution to theoretical astronomy; he did not throw down weights from the leaning tower of Pisa and did not prove the truth of the Copernican system. He was not tortured by the Inquisition, did not languish in its dungeons, did not say “eppur si muove,” and he was not a martyr of science.

—A. Koestler, *The Sleepwalkers*,  
p. 358. Cited in GWW, p. 617

If all this is so, it is hard to escape the conclusion that Galileo was actually a scientific dilettante who loved the limelight more than the truth, and who would go to just about any lengths to stay in it. For more on his personal life, see GWW, Appendix 9.

6. *God and Cosmos*, pp. 27-34. Interestingly, Byl points out that Copernicus and Galileo actually stood on no firmer ground than Ptolemy when they declared the sun to be at rest at the center of the solar system. This is because all we can ever observe is relative motion. In other words, we can know that one heavenly body is moving relative to another, but, unless a creator god exists and tells us the truth, we cannot know which body is at rest and which is moving. Says Byl, “The question as to whether it is really the Earth or the sun that moves cannot be answered through scientific investigation...Ultimately, it is only God who can adequately answer the question of absolute rest and absolute motion.”

7. For a detailed account of Galileo’s return to geocentrism, see GWW, pp. 12f. As we shall see later, nothing has really changed in the 400 years since Galileo: Cosmological models keep multiplying like rabbits, with the clear implication that cosmological truth cannot be known apart from a gracious revelation from the one true god.

8. *God and Cosmos*, pp. 35-38.

9. A. Einstein, *The World as I See It*, (Citadel Press, 1993); *Ideas and Opinions*, (Wings Press, 1998). Cited in John Byl, *The Divine Challenge*,

(Banner of Truth, 2005), p.1. For further discussion of the personal life of Einstein, see GWW, Appendix 9.

[10](#). For a technical discussion of the various evidences for Copernicanism, both old and new, see GWW, Chapter 12. Also, see James Hanson, *The Bible and Geocentricity*, (Association for Biblical Astronomy, 2005), Chapters 8-10.

[11](#). Philip Stott, *Vital Questions* (Reformation Media Press, 2002), p. 119.

[12](#). While stellar aberration is easy to observe and measure, there seems to be considerable debate about the existence of true stellar parallax, since accurate measurements of the delicate stellar motions involved are difficult to make.

[13](#). For an excellent short survey of the history of scientific debate about geocentrism, see Stott's very readable book, *Vital Questions*, Chapter 6.

[14](#). *Vital Questions*, p. 124.

[15](#). H. Poincare', "The Principles of Mathematical Physics," *The Monist*, vol. XV, January 1905, pp. 6, 20. Cited in GWW, p. 160. Philip Stott quotes physicist D. Giancoli on the M-M experiment:

But this (null result) implies that the earth is somehow a preferred object; only with respect to the earth would the speed of light be  $c$  as predicted by Maxwell's equations. This is tantamount to assuming that the earth is the central body of the universe.

—Cited in *Vital Questions*, p. 124

Similarly, physicist Paul Davies wrote:

The M-M experiment failed to reveal any evidence at all for an ether stream (or "wind"). More precisely, the speed of the ether stream was not measurably different from zero. If there *is* an ether, the Earth is evidently more or less at rest in it. Since this implies that the sun and stars would have to go around the Earth, after the fashion of the

pre-Copernican cosmology, it was not long before physicists, taking Einstein's lead, decided the ether simply did not exist (and all motion was relative).

—Cited in Russell Arndts, *Geocentricity, Relativity, and the Big Bang (GRBB)*, Lindquist Books, 2008, p. 67

[16](#). In the following quote, Mach describes the general equivalence of the heliocentric and geocentric systems. Observe his openness to a brand new approach to celestial dynamics, one that is decidedly more holistic than the Newtonian, since it factors in the whole universe:

Obviously, it doesn't matter if we think of the Earth as turning round on its axis, or at rest while the fixed stars revolve round it. Geometrically these are exactly the same case of relative rotation of the Earth and the fixed stars with respect to one another. But if we think of the Earth at rest and the fixed stars revolving round it, there is no flattening of the Earth, no Foucault's (pendulum) experiment, and so on—at least according to our usual (Newtonian) conception of the law of inertia. Now one can solve the difficulty in two ways. Either all motion is absolute, or our law of inertia is wrongly expressed. I prefer the second way. The law of inertia must be so conceived that exactly the same thing results from the second supposition as from the first. But in this it will be evident that in its expression, regard must be paid to the masses of the universe.

—Cited in GWW, p. 280

[17](#). That Einstein knew of the growing body of evidence favorable to geocentrism is clear from the following quote, in which we see that his acceptance of Copernicanism was not determined by scientific fact but by personal preference:

Since the time of Copernicus we have known that the Earth rotates on its axis and moves around the sun. Even this simple idea, so clear



to everyone, was not left untouched by the advance of science. But let us leave this question for the time being and accept Copernicus' view.

—A. Einstein and L. Infeld, *The Evolution of Physics*,  
(Simon and Shuster, 1938), pp. 154-155. Cited in GWW, p. 1

18. Anthony Standen, with more than a touch of humor, comments on Einstein's absolute of choice, the speed of light:

Einstein made space and time relative, but in order to do this he had to take something else, which was the velocity of light, and make it absolute. The velocity of light occupies an extraordinary place in modern physics. It is *lese-majeste'* to make any criticism of the velocity of light. It is a sacred cow within a sacred cow, and it is just about the Absolutest Absolute in the history of human thought. There is a textbook on physics which openly says, "Relativity is now accepted as a faith." This statement, although utterly astounding in what purports to be a science, is unfortunately only too true.

—A. Standen, *Science is a Sacred Cow*,  
(Sheed and Ward, 1952), pp. 52-53. Cited in GWW, p. 179

19. Stephen Hawking, *The Universe in a Nutshell* (Bantam, NY, 2001), pp. 17-18. For more on GR, see GRBB, chapters 9 and 10. Also, GWW, pp. 199-203.

20. Lee Smolin, *Discover Magazine*, September 2004, p. 38. Cited in GWW, p. 202. Smolin's remarks sound very much like these, written by Einstein himself:

Physical objects are not *in* space, but these objects are spatially extended (as fields). In this way the concept "empty space" loses its meaning...The field thus becomes an irreducible element of physical description, irreducible in the same sense as the concept of matter (particles) in the theory of Newton...The physical reality of space is represented by a field whose components are continuous functions of four independent variables, the co-ordinates of space and time. Since

the theory of general relativity implies the representation of physical reality by a continuous field, the concept of particles or material points cannot play a fundamental part, nor can the concept of motions. The particle can only appear as a limited region in space, in which the field strength or the energy density is particularly high.

—*Metaphysics of Relativity*, 1950

Here we see clearly that Einstein has committed himself to *monism*, the idea that all of reality consists of a single substance. In this case, the substance is a time/space/energy continuum, wherein variations in energy density produce the phenomena that we call things and motion. As we have seen, Einstein, following Spinoza, ultimately identifies this single substance as god, and so becomes a pantheist. For more on pantheism, see Chapter 4.

21. E. Hubble, *The Observational Approach to Cosmology*, (Clarendon Press, 1937), pp. 50, 51, 58. Cited in GWW, p, 56.

22. The LeMaitre quote is found in his book, *The Primeval Atom: An Essay on Cosmogony*. OP. In a similar vein, he wrote to Eddington:

If the world has begun with a single quantum, the notion of space and time would altogether fail to have any meaning at the beginning; they would only begin to have a sensible meaning when the original quantum had been divided into a sufficient number of quanta. If this system is correct, the beginning of the world (i.e., the universe) happened a little before the beginning of space and time.

—*Nature*, May 9, 1931

Some have argued that this view finds support in Genesis 1:1, which allegedly speaks of the creation of time, space, and the universe. But as we shall see later, the similarity is only apparent, since the Bible does not teach that time is a creation, or that space is curved, or that the physical universe evolved from a primordial explosion. Le Maitre's view owes far more to Einstein than it does to Moses.

23. There is a sense in which it is not so much light, but the observer of light, that serves as the absolute in Relativity Theory. As Sungenis puts it, “If there is no immovable Earth, then each observer will act as his own immovable frame, and all the laws of motion will act upon him as if he were an absolute.” He then goes on to quote D. and S. Birks, who write, “In essence, Einstein theorized a ‘self-centric’ universe, where the entire universe of the individual conforms to the individual’s motion” (GWW, p. 181). All this raises the philosophical question of whether it is the universe itself, or the observer’s experience of the universe, that is continually adjusting so as to keep  $c$  constant. Here, then, is where we meet the mystical and pantheistic element in Relativity Theory, wherein the universe and the observer’s consciousness of the universe are one, the whole being governed by mysterious laws, apparently of matter, but ultimately of Mind. From this it appears that Einstein meant to give us not only a new physics, but also a new god. See GWW, pp. 277 f., for a discussion of the influence of Kant’s subjectivism on Einstein.

24. *Letters to Solovine*, (Philosophical Library, 1987), p. 111. Shortly before he died, Einstein expressed similar doubts to his friend Michel Besso, saying:

I consider it quite possible that physics cannot be based on the field concept, i.e., continuous structures. In that case, nothing remains of my entire castle in the air, gravitation theory included, (and of) the rest of modern physics.

—Cited in GWW, p. 56

25. Carl Sagan, *Cosmos*, (Random House, 1980), p. 62

26. Julian Huxley, “Evolution and Genetics,” Chapter 8 in *What is Science?* (J. R. Newman, ed., Simon and Schuster, 1955), p. 272.

27. Cited in Henry Morris, *The Long War Against God*, (Master Books, 2000), p. 22.

28. *Cosmos*, p. 243.

## Chapter 3

# A CRITIQUE OF THE NATURALIST BEGINNING

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**M**any who have traveled with me thus far are now in pain. Or at least they should be. In my earlier summary of *The Test* I introduced them to an impressive body of evidence suggesting that the Bible is a trustworthy revelation from the unknown god, and that Jesus of Nazareth is his appointed Teacher. This means, of course, that both the testimony of Jesus and the panoply of signs supporting it lend supernatural authority to the core affirmation of biblical cosmology: *Yahweh Elohim*, the LORD God of Israel, created a mature, fully-functioning, Earth-centered universe in six days, pronounced it good, and then “rested” from his creative work. Yet throughout their lives these seekers have also repeatedly encountered what appears to be a large body of scientific evidence supporting cosmic evolution, and have perhaps themselves become part of a widespread cultural consensus to the effect that cosmic evolution is an established scientific fact. In short, the two cosmologies seem well supported by good evidence, the two are completely irreconcilable, and the two, crashing together in one head therefore produce pain.<sup>1</sup>

I have felt it. Back in 1970, as I studied with Father Barry and seriously considered the Bible for the first time, I knew immediately that both cosmologies could not be true, and that at least one of them was a myth. How did I resolve the tension? I’m afraid that with an educational

experience such as mine, and with no one in my life to defend the biblical view, the result was all but inevitable.

Today, however, the situation is much changed. Yes, seekers are still in conflict over competing views of the beginning. But now the pendulum appears to be swinging in the other direction, so that many are actually quite open to seeing cosmic evolution as the myth and the Bible as the truth. Evolutionism remains, of course, the dominant cosmological model among the Western intelligentsia. And it is still purveyed as fact in our schools and media. But even the least alert among us realize that the theory of evolution has become highly controversial, that it is now “a theory in crisis.”<sup>2</sup> As we are about to see, this is because the traditional evidences and arguments for cosmic evolution largely have been discredited, and because much new evidence favors not only divine creation, but even divine creation of the biblical kind.

As a result of all this, some observers are suggesting that the signs of a cosmological “paradigm shift” are appearing all around us. Many scientists—both religious and nonreligious—have begun privately to express doubts about cosmic evolution. A few, daring to break with orthodoxy, have openly exposed its problems to the lay public.<sup>3</sup> The Intelligent Design Movement is now gaining a respectful hearing in our universities.<sup>4</sup> The older Biblical Creationist Movement is now much enlarged, strengthened, and streamlined by a new generation of zealous young scholars. Quality creationist books, magazines, and films are readily available to the public. Creation vs. Evolution debates are commonplace (or were, till evolutionists realized that they usually damaged their cause). Sophisticated creationist websites attract millions of visitors yearly.<sup>5</sup> Parents throughout the country, wondering why the Disestablishment Clause in the First Amendment means that their children cannot even hear about God-centered perspectives, continue to urge school districts to accommodate both sides of the Great Debate.

Could it be, then, that the thought-world of my own childhood is about to be turned upside down? Could it be that tomorrow’s children will look upon cosmic evolution as “the great cosmogenic myth of the twentieth century”?<sup>6</sup>

Could it be that generations to come will view one or another form of divine creation as well established scientific fact?

Time will tell. In any case, this much is sure: A great debate about the beginning is currently in progress. To thoughtful seekers it speaks of a test. Desiring to pass it, they also desire carefully to examine the evidence on both sides. Only then will they be able to decide what is myth and what is truth.

We must turn, then, to an evaluation of naturalistic cosmic evolution (NCE). In the space allotted to me I cannot, of course, do full justice to a controversy that now engages the attention of thousands of scientific professionals, many of whom have written extensively on this subject. Nevertheless, because of its great importance, it is vital at least to touch on the main issues and arguments involved. Beyond that, I must rely on copious endnotes to direct motivated seekers to valuable books, articles, videos, and websites where they may plumb the depths of the Great Debate to their heart's content.

### **Is NCE Intuitive?**

Is the naturalistic cosmogony intuitive? To judge from the ninety percent of Americans who reject it, apparently not.<sup>7</sup> This rejection stems not only from its inherent atheism, but also from the many cosmological propositions that necessarily flow from it. Let us consider a few of the most important.

First, NCE asserts that the cosmos, in one form or another, is eternal. It would have to be since, on naturalistic premises, there is no god to create it. But for whatever reasons, most of us balk at this assertion. We are comfortable enough ascribing eternity to a self-existent creator Spirit, but ill at ease ascribing it to the material cosmos itself. In part, this is because we sense that the physical cosmos is a *dependent* reality—that its very existence, as well as its marvelous order and proper functioning, all depend upon a distinctly spiritual reality higher than themselves.

NCE also denies the existence of any lesser supernatural entities such as spiritual realms, angels, demons, animal or human souls, and any kind of nonphysical life force animating matter. On atheistic premises, this denial again makes perfect sense: Where could such realities come from, if not from a spiritual creator? But here too most people do not accept the premises. Therefore, the naturalist's denial of lesser spiritual realities—and especially of the human soul—strikes them as counterintuitive.

Modern NCE declares that “in the beginning” all the time, space, and mass/energy of the universe were bundled up in a primeval particle. Such a proposition—to the extent that we can even conceive it—is highly counterintuitive. Yes, the *measurement* of the motion of a body is inseparable from considerations of time and space (e.g., the miles-per-hour it travels). But can we really leap from this simple fact to the conclusion of the relativists, that time and space themselves are inseparable from matter, or that they were once compressed together, substance-like, in a tiny singularity?

But since these matters are so weighty, let us consider them a bit more closely, beginning with the naturalist's idea of time.

## *Time*

Time, we are told, is an altogether natural phenomenon that began with the Big Bang and is strictly tied to motion and change—whether of light, objects in space, or (the stretching of) space itself. But again, while it is true that cosmological time must always be measured in terms of the motion of physical objects (e.g., the motion of the sun, enabling us to measure days), it does not follow that time itself is a purely natural phenomenon. Indeed, common sense insists that it is not. Observe, for example, the workings of your own mind as you try to understand the Big Bang: Though warned against it, you simply cannot keep yourself from imagining the singularity suspended in time and space, or from pondering how long it was there before it exploded, or from asking how it got there in the first place, etc.

Indeed, in their unguarded moments, naturalists themselves address these very questions! Why? Because we all have the same intuitive understanding of time: It is eternal and unchanging (and in this sense “absolute,” relative to nothing, unless perhaps to god), going infinitely far back into the past and infinitely far forward into the future. Therefore, try as we may, we cannot accustom ourselves to the idea of time having a beginning, or of slowing down or speeding up in any absolute sense.

And this is not all. For the more we ponder it, the more we also realize that time always has a subjective, or spiritual, dimension. In other words, we realize that time essentially involves *consciousness*. In particular, it involves consciousness of duration—an ineffable awareness in some person’s mind that both he and the world he lives in are moving out of the present, into the future, leaving behind the past.

To get a feel for this point, you may perform a humble thought experiment. Picture a rock in your back yard. You know intuitively that the rock is not conscious. Therefore, for the rock, time does not exist. This does not mean, however, that the rock does not exist in time. For if you are conscious of the rock, then it exists in time, since you are aware of its existing in time. What’s more, you know that even if you yourself are not conscious of the rock, it still exists in time. And reflecting on this, you finally realize that it continually exists in time only because there is a continually existing god who is continually conscious of it.

Time, then, as opposed to rates of physical change, is essentially related, not to the speed of light, or to the motion of physical bodies, or to the expansion of space, but to consciousness and self-awareness. In other words, it is not a natural but a *supernatural* phenomenon. Indeed, it may be that we humans find ourselves “in” time, not because we are in the universe, but because we (along with the universe) are in god, and because god allows us to share a limited awareness of his own eternally enduring self. If this is so, it is hardly surprising that statements about time “beginning” with the Big Bang—with neither god nor man upon the scene—scandalize our intuitions.<sup>8</sup>



## *Space*

The modern view of space is, if possible, even more unsettling. Big Bang cosmologists, borrowing from General Relativity, speak of space as though it were a physical substance or an attribute of matter. In a time before time, they say, all space was “compressed” into the primeval particle; then, after the Big Bang, it “stretched” or “expanded” (along with time and matter) to produce our present universe. Furthermore, if we are thinking of this space as expanding away from a center, we are getting it wrong. For according to the Cosmological Principle space has no center, no outer edge, and no fixed frame of reference. Instead, it is like the surface of a balloon with dots on it: As the cosmic balloon inflates, space stretches, thereby causing the material objects forming and moving in space (i.e., “dots” of matter—stars, galaxies, etc.) to recede from one another. And what is the structure of space-time as a whole? Appealing to exotic non-Euclidean geometries, some naturalists suggest it is a saddle, others a hypercube, others still a multi-dimensional toroid! In other words, no one really knows.

Again, it is important to remember that these torturous ideas were not generated by common sense, sound physical theory, or detailed astronomical observations. Indeed, as we shall see later, astronomical observations frequently militate against them. Rather, they were generated first by exotic, non-Euclidean geometries, and secondly by a stated philosophical bias against traditional Greek and biblical views that placed the Earth at (or very near) the center of a finite spherical universe. We saw this earlier when we quoted E. Hubble as saying, “The unwelcome supposition of a favored location (for our Earth or galaxy) must be avoided at all costs (and) is intolerable.” Cosmologists Stephen Hawking and George Ellis are equally candid:

However, we are not able to make cosmological models without some admixture of ideology. In the earliest cosmologies, man placed himself in a commanding position at the center of the universe. Since the time of Copernicus, we have been steadily demoted to a medium sized planet going round a medium sized star on the outer edge of a fairly average

galaxy, which is itself simply one of a local group of galaxies. Indeed, we are now so democratic that we would not claim that our position in space is specially distinguished in any way. We shall, following Bondi, call this assumption the Copernican (or Cosmological) Principle.<sup>9</sup>

Observe from these remarks that Hawking and Ellis admit that the Cosmological Principle is not generated by observations, but instead is an arbitrary assumption; that their preferred acentric model of the universe contains “some admixture of ideology,” having been “democratically determined” by a majority of scientists who do not like the idea that Earth’s position in space is “specially distinguished” in any way. One may be excused for wondering just how “scientific” this approach to cosmology really is!

But however the cosmologists may feel about this matter, most folks not only find the traditional view of space more comprehensible, but also more attractive. Why? Simply because it is second nature for us to reckon space as “Euclidean”—that is, as an essentially static receptacle that could easily exist independently of matter, and that could easily be filled with matter to a greater or lesser degree. Space, for most of us, is therefore rather like the unknown god himself: It is an unchanging element or medium in which changing material objects live and move and have their being. Furthermore, if it were one day shown that the universe is, after all, a vast sphere whose center is at or near the Earth, the common people would doubtless hear it gladly, for that is precisely how they feel when they gaze into the heavens. The same cannot be said, however, for the strange and imponderable universe of the modern relativistic naturalist.

## ***Matter***

But perhaps most counterintuitive of all is the naturalistic conception of the history of matter. NCE asserts that our orderly and (in some parts, at least) fantastically complex cosmos is actually the end result of an

explosion of raw energy, subsequently wrought upon by nothing more than (lots of) time, “chance,” and the impersonal laws of physics.

This scenario offends intuition at many points. Since when did an explosion ever produce anything but disorder? Why would raw energy, contrary to its observed behavior, congeal into matter rather than simply dissipate into space?<sup>10</sup> Why would it distill itself, not into one or two but into hundreds of different elements, molecules, and compounds? And how could these in turn congeal into innumerable discreet objects, intricately and (in some cases) vitally related to others? Yes, such a journey from chaos to cosmos could be accomplished by the hand of a personal god working upon exploding matter (hence the appeal of theistic evolution). But the idea that it is accomplished by exploding matter itself is so counterintuitive as to invite charges that someone is purposely resisting the obvious in order to avoid reckoning with an infinitely powerful and intelligent creator.

And what of the naturalistic idea of life? The naturalist assumes that physical energy/matter is all that exists. He therefore concludes that living beings must be aggregates of inorganic matter that have somehow crossed a certain threshold of complexity so as to be animated by a certain form of physical energy (i.e., electro-chemical).<sup>11</sup> But such a view frustrates common sense. Yes, most of us are prepared to admit that organic life involves matter and energy in special arrangements and kinds of motion. But few of us will admit that is *all* it involves. When, for example, we observe our pet cat stalking a bird, or arching its back beneath our outstretched hand, or circling our feet at dinnertime, we do not naturally ascribe the motions of her body to firing synapses and twitching muscles. No, we ascribe them to some kind of metaphysical principle animating the cat, whether her “soul” or something beyond her soul. This is the intuitive view of life, that it “rides” on chemistry and (rather like a hand in a glove) “takes hold” of chemistry, but cannot be reduced to chemistry alone.

Naturalists, of course, deny the existence of a supernatural life force. But for most of us, life is inconceivable apart from such a force. When this force is present, physical bodies grow, move, eat, reproduce, play, work,

etc. When it departs—no matter how complex they may be—the bodies die. We may not know how to explain all this, but we do know that life is something more than matter. It is a supernatural something, worthy of deep reflection and profound respect.<sup>12</sup>

## *Man*

Finally, we have the naturalistic view of man. For the naturalist, a human being is essentially a highly evolved organism, and the human mind—so serviceable in the organism’s struggle for survival—a byproduct of the electro-chemical activity of the brain. But again, while most of us will admit that mind and brain somehow work in tandem, very few will agree that mind can be “defined away” as brain activity alone. Why? Because we understand intuitively that the two realities are heterogeneous. The brain is a physical something, while the mind is a spiritual or metaphysical something. We can observe and handle the brain, but not the mind. Unlike the brain, the mind cannot even be located in time and space. The mind is not a part of nature at all. In fact, it is so supernatural that it can somehow take all of nature into itself, most especially when it is doing cosmology!<sup>13</sup> Knowing all these things to be true, we therefore quite naturally tend to resist naturalism’s understanding of man.

We find, then, that in many ways NCE proposes a highly counterintuitive version of the cosmos and its beginning.

## **Is NCE Reasonable?**

In probing the rationality of NCE we are asking if this hypothesis is both logical and well supported by good evidence. The discussion that follows, which cites key scientific issues in the modern debate about origins, will show that it is actually quite irrational—and why theories of cosmic evolution are now so controversial. The material is categorized under four main headings, with numerous illustrations cited under each. Note carefully

that much of the evidence speaks not only against naturalistic evolution but also against theistic and pantheistic evolution as well.

### ***NCE Violates Natural Law***

Since the advent of modern science some 400 years ago, our understanding of the so-called laws of nature has dramatically increased. Here are just a few of the well-established natural laws that conflict sharply with NCE.

#### **1. The Law of Cause and Effect**

According to this law, every event or state of affairs in nature is an effect that has a cause adequate to produce it. We have already seen, however, that NCE offers us no cause at all for the existence of the Cosmic Egg.<sup>14</sup> Moreover, NCE goes on to teach that a primeval explosion, (lots of) time, chance, gravity, spontaneous generation, random mutation, and natural selection all worked together on matter to produce the stupendous order and complexity of our cosmos. Yet modern science itself has shown that none of these causes is adequate to do so (see below), while it is self-evident that a divine creator is. This implies that order in the universe must be traceable to the active involvement of a powerful, supernatural intelligence. More particularly, the law of cause and effect requires that the mysteries of life, consciousness, and personality have a living, conscious, and personal cause. Dead matter is simply not adequate for the job. A living, conscious, personal god is.

#### **2. The Law of Universal Gravitation**

According to the Newtonian understanding of gravity, material objects are attracted to one another in inverse proportion to the square of their distance. This means that the closer they get, the more powerfully they are drawn and held together. If, then, all the mass of the universe were concentrated in a tiny singularity, the gravity holding it together would be

stupendous. What kind of natural force could overcome the enormous gravitational attraction holding it together? How could the singularity explode? Interestingly, modern relativistic notions of gravity are even more problematic, requiring as they do that the cosmic egg exist in a black hole of *infinite* mass and density. However, such an entity is inconceivable. Moreover, even if it were, how could it explode; and how could an egg of infinite mass and density give birth to the finite universe now envisioned by Big Bang cosmology?

### **3. The Second Law of Thermodynamics**

According to this law, first articulated in the 19th century, there is a natural tendency in all systems (e.g., stars, planets, rocks, DNA, cells, plants, people) to progress from order to disorder through the loss of energy available for their preservation and/or transformation. In other words, as time marches on, things lose heat and run down. As Russian physicist and cosmologist A. Friedman (1888-1925) realized over a century ago, the Second Law forces us to think of our orderly cosmos as having a *definite beginning*, and as gradually moving from a highly ordered state towards a disordered state, exactly what we observe in nature today. NCE, on the other hand, asks us to think of the cosmos as beginning in a highly disordered state (i.e., chaos) and moving towards a more ordered state, exactly what we do not observe in nature today.<sup>15</sup> The conflict is stark and recognized by all, friend and foe alike.<sup>16</sup>

There is, of course, an apparent exception to this principle—the case of living beings—but it actually scores important points against naturalism. Yes, for a season living beings do grow, develop, and increase in complexity, thus (temporarily) defying the Second Law. But this occurs only because highly complex, pre-existing energy conversion mechanisms (e.g., reproductive cells loaded with genetic instructions) are already in place, transforming food into chemical energy and directing the development and proper functioning of various molecules, organs, and

living systems. Furthermore, as we have already seen, it is not really the cells or organs that produce life, but life that produces (and animates) the cells and organs. Therefore, the case of living beings teaches us that cosmic evolution is inconceivable apart from the activity of a supernatural life force working through some pre-existing cosmic mechanism (analogous to cells and genes) by which raw energy from the Big Bang might have been transformed and built up into a complex functioning system. But NCE denies the former and cannot find the latter. For these reasons, its version of cosmic evolution is impossible.

It is also well worth noting that among living beings the Second Law operates not only at the point of death but also upon the mass of genetic material that shapes life. For example, we know that over the years the total gene pool of Earth's living beings has significantly decreased through the extinction of many life forms. Also, we have learned that in the transmission of genetic information from one generation to the next, there are ever-accumulating "failures of communication" (e.g., mutations, copying errors, etc.) that weaken or injure the offspring. This means that, given enough time, the Second Law will render all life extinct through the progressive decay of its genetic base.

These important biological facts speak powerfully against NCE. In particular, they imply that life is actually *devolving*, rather than evolving; that in the beginning it was healthy, but now is being slowly pushed by the Second Law toward sickness and death; that in the beginning there must have been a process of creation which now, for some reason, has ceased and given way to a process of destruction. Such a scenario is very far from the modern naturalistic worldview—and very close to the biblical.

It appears, then, that the Second Law of Thermodynamics, with its many profound cosmological implications, threatens to drive a stake into the very heart of NCE.

#### **4. The Law of Biogenesis**

More than a hundred years ago, Louis Pasteur first articulated this fundamental law of biology—that life always comes from life; that spontaneous generation, or life arising from non-life, never occurs. NCE teaches, however, that 1.5 billion years ago a single living cell spontaneously arose in a nonliving “pre-biotic soup.” Yet no scientist has ever discovered such a soup, or observed the spontaneous generation of a cell, or produced one under ideal laboratory conditions, or even advanced a credible theory about how such a thing could happen. These hard facts have led naturalists like Francis Crick to admit that,

An honest man, armed with all the knowledge available to us now, could only state that in some sense the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have had to have been satisfied to get it going.

Yet many of Crick’s naturalist colleagues still assert quite dogmatically—and quite irrationally—that “in the beginning” spontaneous generation really did occur. As Nobel Prize winner George Wald put it:

One has only to contemplate the magnitude of this task to concede that the spontaneous generation of a living organism is impossible. Yet we are here, as a result, I believe, of spontaneous generation.

## **5. The Laws of Probability**

Careful observation shows that the so-called “chance” events of nature are actually governed by laws of probability. As casino owners well understand, knowledge of these laws enables us to make predictions about what events may reasonably be expected to occur. What, then, is the probability that a single protein, gene, or cell might “spontaneously” form out of the random molecules of a pre-biotic soup? Because we now know that these “simple” building blocks of organic matter are so fantastically complex, mathematicians have repeatedly concluded that the probability is so small as to render such events impossible. Sir Fred Hoyle, for example, calculated that the likelihood of “life” forming from inanimate matter is  $1 \times$



$10^{40,000}$ . Dr. Emile Borel, who discovered the laws of probability, wrote that an event whose chances of occurring are beyond  $1 \times 10^{50}$  is an event that will not occur, no matter how much time or how many trials are allowed. Dr. Edwin Conklin, himself an evolutionist, concludes, “The probability of life originating by accident is comparable to the probability of the unabridged dictionary resulting from an explosion in a printing shop.” And all this is to say nothing about the probability of millions of different life forms accidentally evolving from the one original cell. Is it then reasonable for NCE to insist that such events actually took place?<sup>17</sup>

It is worth noting that this powerful argument does have a flaw, but a flaw that actually strengthens the case against NCE. This is because the argument grants to the naturalist his premise that the mere juxtaposition of simple molecules might be sufficient to “create” a (complex) building block of life. But in a universe governed by the Second Law of Thermodynamics, this is not possible. Simple molecules cannot simply “come together” to produce proteins, genes, or cells. Rather, they must be *brought together* and *wrought upon*. In other words, something—or someone—*must* overcome the Second Law in order to create a complex organic base for life. Furthermore, we should again remember that life involves more than organic complexity. A living cell, as I have argued, is more than a functional assemblage of organic molecules. It is an assemblage assembled by life, held together by life, and animated by life. It is a metaphysical as well as a physical entity. The naturalist, however, denies the supernatural, by which alone organic evolution could occur. Accordingly, even if there were an astronomically high number of naturalistic universes filled with simple molecules (as some speculative naturalists now propose), none of them would ever produce a living organism. The probability of this event is not very, very small. It is zero.

The complex orderliness of living things, so recently unveiled by biological science, has roused many a modern skeptic from his naturalistic slumbers. An outstanding case in point is Dr. Anthony Flew, arguably the most influential atheistic philosopher of the 20th century. Having rejected

all the classical proofs for the existence of a god for over 60 years, he finally found, at age 81, that the complexity of life (and especially of the DNA molecule) compelled him to embrace the theistic position. Labeling the naturalistic scenario for the origin of life “improbable,” Flew concluded:

Science has shown, by the almost unbelievable complexity of the arrangements that are needed to produce life, that intelligence must have been involved. I have been persuaded that it is simply out of the question that the first living matter evolved out of dead matter and then developed into an extraordinarily complicated creature. My whole life has been guided by the principle of Plato’s Socrates: follow the evidence wherever it leads. The conclusion is—there must have been some intelligence.<sup>18</sup>

## 6. The Law of Genetic Stasis

Though they were contemporaries, Charles Darwin and Gregor Mendel had very different views about how living beings acquire their individual characteristics. Darwin believed that a “new” characteristic (e.g., a new color, size, shape, structure, etc.) was not acquired from the living being’s parents, but somehow arose in response to changing environmental conditions, after which it was passed on to the next generation. Mendel, however, concluded from his extensive experiments in breeding plants that *all* characteristics are latent within the parents; that certain of the characteristics may dominate in an offspring, but that others may “pop up” down the line; and that there is therefore really nothing “new” under the biological sun.

Mendel found, for example, that if he crossed a red and a white sweet pea he would always get a red. But if he bred two of the resulting red, one in four of their offspring would be white. From this he gleaned certain principles of biological inheritance. Clearly, some kinds of genetic material in the parents are “dominant” (e.g., that producing red leaves), while other kinds are “recessive” (e.g., that producing white). Also, this material will combine in mathematically predictable ways, so that sooner or later recessive traits will appear. Most importantly, “new” characteristics (e.g. white leaves) will never arise by simple environmental pressure (as Darwin

believed), *but instead are traceable to pre-existing genetic materials in the parents that combine in such a way as to produce a “new” trait*. Biologist Kenneth Patman summarizes the profound significance of Mendel’s work as follows:

Mendel showed that while traits might be hidden for a generation, they were not usually lost; and when new traits appeared it was because their genetic factors had been there all along. Recombination (of pre-existing genetic material) makes it possible for there to be limited variation within the created kinds. But it is limited because virtually all of the variations are produced by a reshuffling of the genes that are already there.

From these remarks we may justly conclude that Mendel actually discovered a *law of genetic stasis*. According to this law, the various “kinds” of life are essentially static. Yes, their genetic make-up allows for small variations (sometimes—and quite erroneously—referred to as *microevolution*). However, it does *not* allow for big changes that would alter their identity (sometimes referred to as *macroevolution*). Genes can combine to produce a rose that is larger, darker, or more fragrant; but according to the law of genetic stasis, they can never combine to produce a rabbit, a roughy, or a road-runner.

Now it is clear that this law favors the creation model, which easily explains where the original parents of each “kind” came from, and why they were genetically endowed with a *limited* capacity for variation (e.g., adornment, positive adaptation to their changing environment, intentional breeding by man, etc.). On the other hand, the same law obviously rules out NCE, since NCE asserts, contrary to all evidence, that macroevolution really does occur; that one “kind” gradually transitions into another; and that generational changes arise, not from the combination or reshuffling of *pre-existing* genetic material, but from the creation of altogether *new* genetic material by random mutation. If, then, Mendel’s well-established Law of Genetic Stasis is true, it is certain that NCE is false.

## **7. The Law of Irreducible Complexity**

Ever-increasingly, biologists have come to realize that organic life is composed of complex systems. One important characteristic of these systems is that they are “irreducibly complex.” That is, they require a minimum number of components in order to function properly. Cells cannot survive without their DNA, membranes, mitochondria, nucleus, etc. The human eye cannot function without the lens, retina, optic nerves, or brain centers for sight. The complex navigational systems of dolphins, bats, birds, and insects would be useless if all their components were not present and operative. The philosophical implications of irreducible complexity are weighty and only now coming into full view. Irreducible complexity means that biological systems *must* have been intelligently designed, and that they *must* have sprung into being fully formed and functioning. How could the systems function and the organisms survive if they had not?

Naturalists, of course, reject this (creationist) conclusion. But their view—that such systems evolved piecemeal by way of small mutations—is impossible. This is because small mutations would correspond to the appearance of “incipient structures” in an already viable organism—a tenth of an eye, a half of a wing, a proto-leg, etc. The problem here is that such structures would definitely be useless and probably deadly. In the competition for survival, creatures with useless and burdensome incipient structures would be at a disadvantage. They would quickly be “selected out” and perish, while the population of “normal” parents and offspring (whose existence is inexplicable on naturalistic grounds) would endure. It appears, then, that NCE cannot be reconciled with the phenomenon of irreducible complexity, while sudden, theistic creation actually predicts it. Which of the two, then, is more reasonable for us to believe?<sup>19</sup>

### ***NCE is Overthrown by the Defects of Relativity Theory (RT)***

The Big Bang cosmology of modern NCE stands or falls with Einstein’s Theory of Relativity. RT currently provides the theoretical basis for such ideas as the time/space/energy-matter continuum, the ultra-dense primeval

singularity that once contained it, curved space-time, a centerless and edgeless finite universe that satisfies the Cosmological Principle, cosmic expansion, and more. Yet from the very beginning, Einstein and his disciples have had their critics, and never more so than today. In what follows, I will briefly survey some of the main complaints, using end notes to send more technically minded readers to the excellent resources from which I have so liberally drawn.<sup>20</sup>

## **1. RT is Unnecessary**

Einstein himself recognized that there is no scientific necessity for RT. Being a good student of Mach, he knew, for example, that a stationary Earth could well be the absolute center of a revolving universe filled with ether. Moreover, he knew that, scientifically speaking, this view actually had a lot going for it. It could (with Tycho Brahe's help) account for the observed motions of the heavens. It could explain the various inertial forces that we experience here on the Earth. It could allow for a generous use of Newtonian mechanics, while both eliminating its deficiencies and illuminating its physical basis (i.e., a revolving ether, the basic cause/condition of gravitational and inertial forces). And last but not least, it could leave in place one of the main pillars of modern physics: the ether, the physical medium of light, electricity, and magnetism that Maxwell hypothesized as the basis for his now time-honored equations.

We have seen, however, that Einstein did not like this option. He preferred, instead, an acentric universe. Thus, when the interferometer experiments seemed once and for all to put a nail in the coffin of a moving Earth, Einstein went in search of another view. And when the idea of pure relativity finally came to him, he described it as one of the happiest thoughts of his life. The reason is clear: This idea supplied a way of escape, both for himself and the Copernican establishment, from an unwelcome confrontation with cosmic geocentricity, the God of the Judeo-Christian scriptures, and their own scientific fallibility.<sup>21</sup> We may justly conclude,

then, that RT may be “necessary” to preserve the reputation and philosophical peace of certain scientists, but it is definitely not necessary as a matter of science itself. Indeed, as we are about to see, there is little if any evidence to support it, much to contradict it, and other models of the universe that fit the evidence better.

## 2. RT is Counter-intuitive

Earlier we saw that the modern relativistic view of time, space, and matter is highly counter-intuitive. The test perspective teaches us to perceive this as a red light, for it may be reasonably assumed that as a general rule the unknown god would not cause the truth about his universe to violate the most fundamental intuitions of his human creatures. Therefore, seekers should listen hard to their “first impressions” as they consider the kind of world into which Dr. Einstein invites them. After explaining the origin of that world, Robert Sungenis characterizes it as follows:

Since, on the one hand, an Earth-centered cosmos was “ruled out,” but, on the other hand, Einstein was forced to answer both the results of the interferometer experiments and Maxwell’s electromagnetic equations, his only alternative was to invent a whole new physics. In fact, it was necessary to adopt a whole new way of looking at the world. If the Earth wouldn’t budge, then science had to budge. Consequently, RT advanced principles and postulates that would have been considered completely absurd by previous scientists, things such as matter shrinking, clocks slowing down, and mass growing larger; that two people could age at different rates, that space was curved, that light travels at the same speed for all observers (even observers moving at the speed of light); that time and space are one entity, and many other strange and bizarre concepts, all in an effort to answer the numerous experiments that showed the Earth was motionless in space. In that day, *The Times of London* called Einstein’s Relativity “an affront to common sense.” Indeed it was, and still is.<sup>22</sup>

In passing, we do well to observe yet again that the so-called Cosmological Principle is *radically* counter-intuitive. History indicates that naturalists have conceived and embraced it simply to dodge an ever-growing body of evidence favorable to cosmic geocentricity. Accordingly,

we are asked to imagine the unimaginable: a finite universe without a center or edges. We are asked to believe the unbelievable: that no matter where we are stationed in a finite universe, we will see galaxies, quasars, gamma-ray burst sources, etc., all arranged neatly on rings around us! And we are asked to accept all of this, not because it has been scientifically tested or proven (for it cannot be), but simply because the modern cosmological guild has agreed that it would be “immodest” and “undemocratic” for us to think of ourselves at the center!

Is the modern Einsteinian cosmos an affront to common sense? Does it grate against intuition? And if so, is it likely that the unknown god has really fashioned his world this way? Listening hard to his own heart, every seeker must answer these crucial questions for himself.

### **3. RT is Illogical**

To say that a theory is illogical is simply to say that it is radically counter-intuitive with respect to reason; that it violates the laws of sound thought. RT fills this bill very well, plunging its disciples into serious contradictions and impossibilities from which the rational mind recoils. Herbert Dingle, an early proponent of RT but later one of its most severe critics, scores its irrationality in the following comments about “time dilation:”

It would naturally be supposed that the point at issue...must still be too subtle and profound for the ordinary reader to be expected to understand it. On the contrary, it is of the most extreme simplicity. According to the theory (STR), if you have two exactly similar clocks, A and B, and one is moving with respect to the other, they must work at different rates, that is, one works more slowly than the other. But the theory also requires that you cannot distinguish which clock is the moving one; it is equally true to say that A rests while B moves and that B rests while A moves. The question therefore arises: How does one determine, consistently with the theory, which clock works the more slowly? Unless this question is answerable, the theory unavoidably requires that A works more slowly than B and B more slowly than A, which it requires no super-intelligence to see is impossible. Now clearly, a theory that requires an impossibility cannot be true, and scientific integrity requires, therefore, either that the question just posed shall be answered, or else that the theory shall be acknowledged to be false.<sup>23</sup>



Dingle's penetrating remarks open up a Pandora's box, out of which many other problems arise. What if one of the clocks was situated on Jupiter? Would Jupiter's *orbital* motion around the sun have any effect on its time dilation? Also, this illustration involves only two clocks. But what if we add a third—C—moving at a speed different from the other two? Now clock A is simultaneously dilating *vis-à-vis* two other clocks moving at different speeds. Which clock, B or C, gets to determine the amount of A's time dilation? And what exactly *is* a clock? Does an electron orbiting its nucleus at (or near) the speed of light count? If so, what is its effect on clock A? And on all the other clocks in the universe?

Observe from Dingle's illustration not only that STR quickly entangles us in many logical problems, but also that our minds instinctively look for an object and/or place of absolute rest, from which it will be possible for us to make absolutely true determinations of motion, distance, speed, and the passage of time. The Bible gives us such a place: the Earth. Einstein gives us none.

There are other difficulties as well. For example, the mathematics of Einstein's GTR predicts that stars (and perhaps the universe itself) will collapse into infinitely dense singularities, or "black holes." Obviously this is problematic, since the very idea of an infinitely dense mass is inconceivable. Also, how logical is it that a finite mass should collapse into an infinite one? Moreover, since  $c$  is no longer constant inside a black hole (for light cannot even escape from such an environment), and since gravity in a black hole allegedly becomes a repulsive force (because nothing more can get into it), RT becomes self-refuting. Popular physicist, Stephen Hawking, admits as much:

We already know that GR must be altered. By predicting points of infinite density—singularities—classical general relativity predicts its own downfall...When a theory predicts singularities such as infinite density and curvature, it is a sign that the theory must somehow be modified.<sup>24</sup>



Finally, it appears from in-house debates among the physicists that there are fundamental contradictions between the special and general theories of relativity. Philip Stott observes:

Interestingly enough, there are a number of explanations for problems in Einstein's STR that appeal to his GTR. Now STR cannot have an ether and must have a constant velocity of light. On the other hand, GTR is, as Einstein put it, "unthinkable without the ether," and cannot tolerate a constant velocity of light! The two theories are mutually exclusive. At least one must be wrong. To solve difficulties for one by calling in the other is clearly invalid.<sup>25</sup>

#### **4. RT is not Confirmed by Good Evidence**

Relativists continually point to a large body of "evidence" that they feel supports their theory. The problem, however, is that in every case the evidence is either disputed or equally well explained by other models, especially the geocentric. A few examples will suffice to illustrate this important point.

First, it is claimed that Einstein's so-called "field equations" prove that relativistic gravity (i.e., gravity due to the curvature of space) is a fact because they give an accurate description of the behavior of objects in space. However, this is only partly true, since, as we shall see below, the equations "work" only for objects near the Earth. More importantly, it is widely recognized that Einstein arrived at these equations simply by working the classical Newtonian formulas into a new format. In other words, he worked them backwards towards Newton. Not surprisingly, Einstein's equations therefore do no more than what Newton's did. They adequately describe the behavior of gravity (though only in our neck of the cosmic woods), but prove nothing whatsoever about the nature of gravity. In short, they do not confirm the physics of the GTR.

In language that physicists will appreciate, Reginald Cahill makes this very point:

It has been repeatedly claimed that the Hilbert-Einstein GTR has been confirmed many times, but this is untrue. All but one of the so-called “tests” merely used the geodesic equation that determines the trajectory of a particle or an electromagnetic wave in a given metric. That metric has in all cases been the external Schwarzschild metric. But apparently unknown to most is (the fact) that this metric is nothing more than the Newtonian inverse square law in mathematical disguise, namely, with the metric expressed in terms of the particular velocity vector flow field corresponding to Newton’s inverse square law. So these tests of GR were confirming, at best, the flow formalism for gravity, and had nothing to do with the dynamical content of GR.<sup>26</sup>

It is not necessary to understand all of Cahill’s physics-speak to grasp his main point: He is saying that there only is a “formal” or mathematical equivalence between the Newtonian and Einsteinian equations describing gravity, *an equivalence that Einstein actively sought*. This may prove that Einstein was a good mathematician, but in and of itself it tells us nothing new about the nature of the real world. In short, it does not vindicate the GTR.

Secondly, we have what is arguably the most famous experimental proof of RT, the 1919 solar eclipse, photographed (among others) by Einstein’s disciple, Sir Arthur Eddington on Principe Island, West Africa. Theorizing that the mass and motion of the sun would curve the space in its vicinity—and thereby deflect any starlight passing through that space—Einstein used his GR equations to predict the exact amount of relativistic deflection. The measurements that Eddington released to the public matched Einstein’s almost perfectly, thus seeming to vindicate GR and causing a great stir in the scientific world.

Upon further inspection, however, it soon became clear that the results were more in the nature of a propaganda campaign than solid science. Drawing heavily upon the careful researches of C. L. Poor, Sungenis summarizes the evidence, showing that a) Eddington’s photos were taken in the midst of bad weather, b) anomalous data were simply discarded, c) starlight displacement was very random (some even moved away from the sun), d) the average deflection of all the samples differed by 19% from

Einstein's prediction, and e) only 15% of the deflections were consistent with his predictions. Poor concludes, "The observed shifts in the star images, if real, do not coincide with the Einstein effect, either in amount or direction." Thus, the results of this experiment do not at all vindicate GR, but show rather that the starlight likely was deflected by simple Newtonian gravity, as well as by its collision with matter emanating from the surface of the sun. Notably, relativists have pretty much given up trying to confirm spatial curvature from solar eclipses, since the data are consistently unreliable and therefore cannot be used to confirm their theory.<sup>27</sup>

The story is much the same with regard to a second experimental proof of GR, the observed motion of Mercury's perihelion. The perihelion is the point at which a planet's orbit passes closest to the sun. Observations show that Mercury's perihelion moves (or "precesses") a little each year. Astronomers have been able to account for most of this motion by calculating the influence of the other planets, especially Venus, upon Mercury's orbit. Still, about 10% of the precession remains unaccounted for. Einstein claimed that GR does the job, showing from his field equations that spatial curvature caused by the sun predicts the exact residual amount. Critics soon realized, however, that there may well be alternative causes, such as the oblateness of the sun, or the rapid rotation of the interior of the sun, or the presence of invisible masses in the solar system. Also, historians now know that Einstein changed his equations several times so as to arrive at the preferred numerical value for the perihelion. Moreover, when this equation is applied to the perihelion of other planets (e.g., Venus or Mars), or even to that of binary stars, the predicted values are hugely and embarrassingly off the mark. In sum, far from corroborating GR, the actual behavior of various perihelia soundly refutes the theory.

In passing, we should note here that, contrary to popular opinion, the famous formula expressing the equivalence of energy and mass ( $E=mc^2$ ) does not stand as a valid proof for Einstein's STR. Late in his career, Einstein himself finally admitted that the formula was already present in Maxwell's equations. The Italian physicist, Olinto de Pretto, published it

two years prior to Einstein's 1905 paper on relativity. Moreover, the formula can be, and has been, derived in several different non-relativistic ways. Finally, some critics charge that Einstein's uniquely relativistic derivation is flawed. So again, the thoroughly vindicated  $E=mc^2$  must not be thought to vindicate STR.

Neither space nor competence permit me to critique the other experiments adduced by physics textbooks as proof of RT. Happily, Dr. Robert Bennett has already risen to that challenge. In the technical section of his book *Galileo Was Wrong*, he examines about two dozen of them, including those of Kennedy and Thorndike (1932), Ives and Stilwell (1938), Frisch and Smith (1962), Hafele and Keating (1971), and Holger and Muller (2002). His discussion shows that these "proofs" of RT are either deeply flawed, equivocal, or more simply illumined by the geocentric model. He—and many like him—would therefore agree with the conclusion of a 1964 article that appeared in the journal *Nature*, stating:

In spite of the great aesthetic and philosophical appeal of Einstein's general theory of relativity, it is still, after 50 years of widespread acceptance, one of the least well-founded theories in physics as far as experimental confirmation is concerned.<sup>28</sup>

## **5. RT is Refuted by a Growing Body of Evidence**

In the years since Einstein set forth his theories, technological advances have led to a number of experiments and observations that directly challenge the three main pillars of SRT: 1) the non-existence of an absolute frame of reference, 2) the constancy of the speed of light, and 3) the non-existence of a physical ether. Let us touch briefly on a few of the most impressive.

First, there is a rich body of evidence to suggest that the Earth is at or near the center of the universe. We will discuss such geocentric indicators at greater length in Chapter 6. They include the structure of the Cosmic Microwave Background (CMB); the geocentric distribution of galaxies, galactic mega-walls, quasars, gamma ray burst sources, etc.; cosmic fine

tuning; the uniqueness of our solar system; the uniqueness of life on Earth; and the uniqueness of man. Such phenomena are highly problematic for RT, especially those that seem directly to contradict the Cosmological Principle (e.g., the uniqueness of the solar system, Earth, and man). Moreover, taken together they create an enormous presumption that there is indeed a cosmic center somewhere in our neck of the woods, a center designed to serve as the God-given standard of universal rest, motion, time, and place.

Secondly, there is much good evidence to the effect that the speed of light does indeed vary in a given medium; that it is not “absolute,” as Einstein claimed.

One outstanding example—the so-called Sagnac Effect—has never been refuted. In 1913, the French physicist, G. Sagnac, devised a special kind of interferometer experiment by which he sought to determine if Einstein was right in declaring  $c$  a constant. He placed the two arms of an interferometer on a turntable. A beam of light, entering the device, is split in two. Reflecting off several mirrors, one beam travels clockwise around its course and returns to a photographic plate; meanwhile, the other beam travels counterclockwise in its course, also returning to the plate. When the two beams meet, they create an interference fringe. Now if Einstein was right and  $c$  always arrives at its destination at the same speed, then the measurement of the fringes should be identical, *whether or not the device is at rest or rotating*. If, however, the speed of the device’s clockwise rotation is added to that of the beam going clockwise; and if it is subtracted from that of the beam going counter-clockwise, then the light will arrive at the photographic plate at different speeds, thus registering a fringe shift. This is exactly what Sagnac found. He reported a definite fringe shift, thereby proving that  $c$  is not a constant after all, and thereby disproving RT.

Notably, the Sagnac Effect is observed daily by technicians maintaining the Global Positioning Satellite System. Signals arriving from a satellite approaching a ground station do so 50 nanoseconds sooner than those from a satellite receding from the station, though the distances traveled are the same. Thus, in a rotating system,  $c$  clearly travels at different speeds—so

predictably that if the GPS computers do not compensate for this effect, the system will not work!<sup>29</sup>

Other observations challenge the constancy of  $c$  as well. Several different scientists, using data collected over the last 300 years, claim that  $c$  has not only decayed, but decayed dramatically.<sup>30</sup> Events in the quantum realm appear to occur much faster than  $c$ , indeed, virtually instantaneously: the “quantum leap” of electrons from one shell to another; the influence of certain “paired particles” one upon the other, even at a significant distance; etc. Some have argued that the force of gravity acts at a speed  $20 \times 10^9$  faster than  $c$ . In 1994 astronomers Mirabel and Rodriguez discovered that an x-ray source in our own Milky Way galaxy suddenly produced several blobs that expanded in pairs at speeds faster than  $c$ .<sup>31</sup> Similarly, in 2000, Lijun Wang succeeded in propagating light at a speed some 300 times higher than its usual velocity!<sup>32</sup> Einstein once remarked to Freundlich, an astronomer friend, “If the speed of light is in the least bit affected by the speed of the light source, then my whole theory of relativity and theory of gravity is false.”<sup>33</sup> But as we have just seen, observations reveal that the speed of light seems to be affected by a good many things: decay over time, the motion of the light source, ethereal impedance, explosive power, and more. Thus, hard science shows that  $c$  is not constant and that the STR is indeed false.

Thirdly, we have a fascinating array of modern evidences for the existence of a physical ether. Following Maxwell, we may define the ether as “...a vast, homogeneous expanse of isotropic matter...fitted to be a medium of interaction between distant bodies.” Thus, for Maxwell the gross atomic matter that we humans perceive as galaxies, goldfish, and grains of sand is actually suspended in an invisible Sea of infinitesimally small particles, so densely packed together that:

When a molecule of hydrogen vibrates in the dog-star, the medium receives the impulses of these vibrations, and after carrying them in its immense bosom for several years, delivers them, in due course, regular order, and full tale, into the spectroscope of Mr. Huggins at Tulse Hill!<sup>34, 35</sup>

This ether—thought by many of Einstein’s contemporaries to be the stationary substance of Newton’s “absolute space”—was the ether that Einstein abolished, and whose abolition necessitated his STR. However, evidence for the banished ether refuses to go away. We have already seen, for example, that the Michelson-Morley experiment did not, in fact, give a “null” result, since both it and its sequels consistently measured a small “ether drift.” Such readings could either mean that the Earth is moving slightly relative to the ether, or that the ether is moving slightly relative to Earth, but certainly not that the ether isn’t there!

Interestingly, this result was confirmed yet again in 1925, when Michelson teamed up with H. Gale to perform an experiment much like that of Sagnac. Philip Stott describes it thus:

They built a tunnel of pipe sections at Chicago. The tunnel was in the form of a large rectangle. They reasoned that if there were an ether, then the rotation of the earth from west to east through it should cause a beam of light traveling clockwise round the tunnel to take slightly less time to get round than a beam traveling anticlockwise. If there were no ether, then both beams would take the same time. They measured a difference. Existence of ether established.<sup>36</sup>

And then there is the work of physicist Dayton Miller, a contemporary and very formidable opponent of Einstein who devoted the better part of his career to studying the ether. Using thousands of readings from highly sophisticated interferometers, Miller was able to ascertain the presence of an ether, the velocity of its drift, the fact that it moves faster at distances farther from the Earth, and the fact that it moves in sync with the stars. Needless to say, Einstein was noticeably worried about his work.<sup>37</sup>

Later discoveries continued to proclaim the ether, though general acquiescence to RT blinded many scientists to their meaning and importance. One thinks, for example, of the work of Carl Anderson, who, in 1932, discharged a 1.022 million electron-volt gamma ray at a point in “empty” space. To his amazement, he saw from their trails that two particles, an electron and (a correspondingly small) “positron,” had



suddenly appeared in his cloud chamber, flying in opposite directions.<sup>38</sup> Here, then, was excellent evidence for a hidden layer of minutely small particles that constitute, at least in part, the fabric of “space.”<sup>39</sup> Moreover, in years to come other experiments (e.g., the so-called “double-slit” experiments) would lead scientists to postulate tinier particles still, variously called “the quantum substrate,” “plancktons,” “gravitons,” and “maximons.” Thought by some to exist at a density of  $3.6 \times 10^{93}$  gm/cm<sup>3</sup>, these would be the most fundamental particles in the universe, filling both the vastness of outer space and the interior of atoms, serving the universe as the hidden cause and/or medium of all light and force.

In *Galileo Was Wrong*, Dr. Robert Bennett discusses at considerable length a number of experiments and phenomena pointing to an all-pervasive physical ether. These include the Aspden Effect (1995), the Marinov Plasma Tube experiment (1996), Magnetic Memory (1997), the Casimir Effect (1997), and Gravito-Magnetic London Moment (2006).<sup>40</sup> To read about these is to see not only the grounds for a firm belief in the ether, but the prospect of a whole new understanding of physics, not based upon magical contractions, dilations, and curvatures of space-time, but upon the behavior of the fine-particle substratum of the universe. The interferometers pointed the way to this new ether-based physics. One can only imagine what might have happened had Einstein walked in it.<sup>41</sup>

Finally, we should not fail to mention here a most troubling evidence, an evidence that does not seem to exist! I refer to so-called Dark Matter, held by Big Bang theorists to constitute some 95% of the matter in the universe. Such matter is absolutely necessary to make the Big Bang cosmogony work. Without it, the universe would have quickly flown apart, allowing no time for gravity to induce cosmic evolution. Also, if there were just a little too much of it, the universe would have soon collapsed back into a Black Hole. Similarly, Dark Matter is needed at the center of whirling galaxies to hold them together, and also in the midst of the constellations. The problem for relativists, however, is that there is simply no sign of this invisible cosmic glue. As one writer put it, “Dark matter is needed if one assumes



Einstein's field equations to be valid. However, there is no single observational hint at particles which could make up this dark matter.”<sup>42</sup>

## 6. The Opinion of the Experts

Our discussion in this section, which has only scratched the surface of the debate over RT, suggests nonetheless why so many people, both lay and professional, have found it to be unnecessary, counter-intuitive, illogical, unscientific, observationally challenged, and ideologically motivated. It is hardly surprising, then, to learn, as Robert Sungenis reports, that Einstein's views were not exactly welcomed with open arms:

Prior to 1919, most of the major players in physics either rejected or did not fully embrace Relativity. Ernst Mach rejected it outright. Henri Poincare' never publicly supported Einstein in print. Hendrik Lorentz encouraged Einstein, but never fully embraced Relativity. Walter Ritz, who at first collaborated with Einstein, expressed doubts about SR as early as 1909. Max Planck...accepted SR (but) rejected GR. Frederick Soddy said it was an “arrogant swindle” and “an orgy of amateur physics.” Albert Michelson, who performed one of the very experiments that led to Einstein's theory, said he was sorry that his work may have had a part in creating such a “monster.”<sup>43</sup>

For a season, Einstein's predictions concerning the 1919 solar eclipse and Mercury's perihelion gave RT a new lease on life. But as the facts about those experiments came to light, and as new observations began to pour in, the defects in RT became increasingly obvious. In a recent article in *Discover Magazine*, Karen Wright breaks the bad news about “The Master's Mistakes” to an unsuspecting and often adoring public:

Albert Einstein got it wrong. Not once, not twice, but countless times. He made subtle blunders, he made outright goofs, his oversights were glaring. Error infiltrated every aspect of his thinking. He was wrong about the universe, wrong about its contents, wrong about the inner workings of atoms.... In 1911, Einstein predicted (by Relativity) how much the sun's gravity would deflect nearby starlight and got it wrong by half. He rigged the equations of General Relativity to explain why the cosmos was standing still when it wasn't. Beginning in the mid-1920's, he churned out faulty unified field theories at a prodigious rate. American physicist Wolfgang Pauli complained that Einstein's “...tenacious energy guarantees us on the average

one theory *per annum*,” each of which “is usually considered by its author to be “the definitive solution.”<sup>44</sup>

In view of all these considerations, I close by reiterating what was said at the outset: Modern cosmology is built upon the foundation of RT and therefore stands or falls with it. Given that disillusionment with RT is widespread and growing, one wonders: Can the fall of the Big Bang and other relativistic models be far behind? Perhaps, then, it would be wise for seekers to find their way forward by going backwards—backwards to the crisis proclaimed by Poincare’, and backwards to an honest look at the great questions raised by Arago, Airy, Michelson, Morley, Sagnac, Miller, and the rest. Could it be that the Earth really is at rest in the center of a revolving universe filled with ether? Could it be that the Earth is the cosmic Absolute, and that all other things are relative to it? Could it be that the God of the Bible is the one true god—the Absolute God—after all?

### ***NCE is not Supported by Good Evidence***

Down through the years evolutionists have cited a number of further evidences in favor of their theory. In the following survey, we look at a few of the more important ones. As we do, we will discover one of the main reasons why NCE is now so controversial: The evidences advanced to support it are either equivocal or now falsified.

#### **1. Galactic Red Shifts**

Astronomers have observed that light from the galaxies is usually (but not always) shifted towards the red end of the spectrum, with what are presumed to be the most distant galaxies showing the greatest amount of red shift. Here Big Bang cosmologists find support for their theory. They argue that the light is “stretched” primarily because space itself is expanding, and that space is expanding because of a Big Bang.

There are, however, some problems. For example, certain objects with high red shifts (e.g., galaxies or quasars) are observationally connected with

other objects of low red shifts (e.g., other nearby galaxies). But if these objects are really traveling at such different speeds, and if red shifts correlate with distance from an observer, how can they be so close to each other?

Also, if red shifts are the result of objects accelerating away from us, we would expect measurements of the shifting to be “smooth”—spread out evenly over a wide range of numerical values. In fact, however, it is now known that the red shifts are “quantized”—that they cluster around specific, regularly spaced metric values. This has led some astronomers to propose other explanations for red shifts. One is that the stars and galaxies are arranged in expanding shells, a view that entails the shells having the Earth, or at least the Milky Way, at their center. Another, and the most popular, is the “tired light” view—namely, that red shifts occur as photons interact with one another and lose packets of energy during their journey through space. If this view is correct, it means that the universe may not be expanding at all. Still other theoreticians variously trace red shifts to the alleged curvature of space, a decrease in the speed of light, the gravitational attraction of the stars in a geocentric cosmos, or the motion of the stars orbiting the Earth in the vault of heaven.

Finally, if red shifts indicate that all things are receding from one another due to the expansion of space, how is it that we cannot observe any such expansion in our own neck of the woods, that is, in our own galaxy and solar system?

In sum, red shifts clearly do not prove that the universe really is expanding. And even if it is, this does not necessarily prove that a Big Bang has caused it to expand. A Big Bang is the favored interpretation for galactic red shifts, but it is neither the only interpretation nor the best.<sup>45</sup>

## **2. Cosmic Microwave Background (CMB)**

Astronomers have observed a uniform radiation of heat (2.73 degrees K) coming to us from all directions. Big Bang cosmologists argue that this

radiation is a “snapshot” of the universe shortly after the Big Bang, when energy/matter had not yet clustered into galaxies and stars but was uniformly distributed in space. The problem here, however, is to explain how such uniformly distributed energy/matter could so quickly congeal into heavenly bodies, bodies which are not at all evenly distributed in our exceedingly “clumpy” universe. The recent discovery of slight “anisotropies” (i.e., irregularities) in the CMB has been hailed as a solution to this problem. But such anisotropies, themselves inexplicable, are far from being able to account for the observed clumpiness of the cosmos, or the amazing course of cosmic evolution. Thus, because the difficulties are so acute, some astronomers propose other explanations for the CMB: It is the “temperature of space” produced by starlight; it is the energy residue of tired light; it comes from the magnetic field or cosmic rays of our own galaxy; or (for those of a more biblical mindset) it is the temperature of the (icy) waters at the outer edge of the firmament. Though differing among themselves, these scientists all agree that the CMB is far better explained by something other than a Big Bang.<sup>46</sup>

### **3. Fossilized Geological Column**

As we learn from places like the Grand Canyon, the surface of the Earth in many places is layered. These layers of sedimentary rock often contain the fossil remains of dead creatures. As a general rule, we find simpler creatures in the lower layers and more complex creatures in the higher. Darwin and his followers argued that these strata were laid down gradually over millions of years, and that the fossils prove that life evolved slowly from simple to complex forms. Today, however, more and more scientists are willing to admit that the so-called geological column not only fails to demonstrate evolution but has become instead a positive embarrassment to the theory. The reasons for this are many.

First, *there are clear indications that the strata were laid down suddenly and catastrophically.* These include mass animal graves, live action fossils

(e.g., fossils of fish eating other fish or giving birth), polystrate fossils (i.e., fossils that pass vertically through several layers as, for example, whole trees embedded in layers of coal), contiguous layers of different material with no evidence of erosion between them, upwarped parallel strata indicating that the layers were soft and pliable when bent, etc.

Second, *out-of-place fossils repeatedly contradict the standard evolutionary scenario*. For example, land animals, flying animals, and marine animals have been found side by side in the same rock; horse footprints have been found in rocks dating to the era of the dinosaurs; human footprints and artifacts have been found in strata “millions of years old,” etc. On evolutionary premises, such things ought not to be.

Third, *the evolutionary tree has no trunk*. In other words, there is no evidence that multitudes of complex life forms evolved from a few simple life forms. Instead, fossilized life appears “...suddenly, full-blown, complex, diversified, and dispersed world-wide.”<sup>47</sup> The lowest life-bearing layers (i.e., the Cambrian) include fish, worms, corals, plants, and even some vertebrates. Beneath them there is nothing at all. Tellingly, the Cambrian layers also reveal *more* life forms than exist today, while the standard evolutionary scenario predicts fewer.

Finally, *there are the notorious “gaps” in the fossil record*. If evolution were true, we should be able to find millions of transitional forms bridging the gap between the basic kinds of life (e.g., forms linking bacteria to plants, plants to fish, fish to amphibians, amphibians to reptiles, reptiles to birds and mammals, cows to whales, apes to men, etc.). After 150 years of studying billions of fossils, scientists now know that such transitional forms simply do not exist. The late Stephen J. Gould wrote:

The extreme rarity of transitional forms in the fossil record persists as the trade secret of paleontology. The evolutionary trees that adorn our textbooks have data only at the tips and nodes of their branches. The rest is inference, however reasonable, and not the evidence of the fossils.

Here we have what is arguably the single most important piece of empirical evidence against the theory of biological evolution. Why do the textbooks not speak of it?

In sum, the geological column supplies no solid evidence for NCE, and much against it. It does, however, harmonize well with the biblical claim that all kinds of life were simultaneously created “in the beginning” and later destroyed in a global flood that both quickly laid down the geological column and completely transformed the face of the Earth.<sup>48</sup>

#### **4. Homologous Structures**

Living beings have similarities. All of them begin as simple cells whose growth is determined by their DNA. Many are generated sexually and pass through similar stages, from zygote to embryo and onward. Many have structural similarities: skeletons, nervous systems, respiratory systems, circulatory systems, etc. Evolutionists argue that this “Structural resemblance signifies blood relationship.” In other words, evolutionists contend that common (or homologous) structures are evidence of common origin.

It is clear, however, that common structures could just as well point to a common designer. Indeed, this is the better alternative, since we may reasonably suppose that a single creator would want to teach us that he is the sole author of all forms of life by using a single basic plan (e.g., genetic coding) modified by creative variations. Evolutionists, on the other hand, posit no such designer and therefore cannot explain why living things should have the similarities they do. Their theory of random changes predicts a “chaos” of life-forms, whereas what we actually observe is a “cosmos” of life-forms—an ordered family of living beings characterized by unity and diversity of structure.

Also, it is well worth noting that homologous structures often speak *against* common origin. This is especially evident at the molecular level. For example, crocodile hemoglobin is more similar to chicken

hemoglobin than to that of snakes and other reptiles. The cytochrome-c structure of a rattlesnake is closer to that of a man than to that of a snapping turtle or bullfrog. Human lysozyme (an enzyme for digesting food) is closer to chicken lysozyme than to that of any other mammal. If similarity of (chemical) structures indicates common origin, then on the traditional evolutionary “tree” crocodiles should be closer to chickens than to snakes, rattlesnakes should be closer to men than to turtles, etc. But they are not. Perhaps, then, the evolutionary tree is in error. And perhaps similarities in chemistry are actually based on a common designer who has incidentally supplied the world with powerful evidence against the hypothesis of common ancestry!<sup>49</sup>

## **5. Microevolution**

Scientists have observed minor adaptive changes in the structure of various organisms. Darwin’s finches, peppered moths, pesticide resistant mosquitoes, as well as the varieties of plants and animals bred by man—all are cited by naturalists as proof that living things evolve. But such claims involve a serious (and possibly willful) misunderstanding. Evolution, by definition, means the appearance of more complex organisms from simpler organisms due to an increase in genetic information. In the cases just cited there is no such increase, only a reshuffling of information, or possibly a loss of information due to mutation. In other words, so-called “microevolution” is not evolution at all, but, as Mendel showed, simply variation within a pre-existing kind of life. Variation is observed—and even intentionally produced—all the time. Evolution is never observed, and has never been produced.

Therefore, “microevolution” is not solid evidence for NCE. It can, however, readily be seen to testify to the goodness and ingenuity of a divine creator who provides for the survival of specific “kinds” by endowing them with a limited genetic capacity for adaptation.

## **6. Hominid Fossils**



Nothing has more powerfully promoted faith in evolution than artistic reconstructions of “early man.” It is, then, all the more shocking when serious inquirers discover that there is little or no good fossil evidence to support them. The fossils of so-called “hominids” (man-like precursors to *homo sapiens*) are few and fragmentary (all of them would fit nicely on a single pool table). In some cases they have been exposed as frauds (e.g., Piltdown Man). In others, they have been identified as (extinct) apes (e.g., *Ramapithecus*, various australopithecines, and the suspicious Java and Peking Man). In still others, they are now seen as fully human (e.g., *Homo Erectus* and Neandertal Man). It is true that some paleontologists still argue that Lucy and her kin (*Australopithecus Afarensis*) were transitional. Others, however, (including her discoverer, Donald Johanson) assert that she is too different structurally to be related to man, though she is very much like a pygmy chimpanzee or bonobo.<sup>50</sup> In sum, despite their best efforts to find them, evolutionary scientists have been unable to discover a single transitional form linking man to the apes.

Seekers should understand, however, that the debate about human origins has actually shifted onto new terrain, terrain that is even more unfavorable to the evolutionary proposition. Think back to Darwin and his immediate successors. Possessing only crude scientific instruments, these early biologists had no real grasp of life at the cellular and molecular level. For them, the various forms of life were little more than highly plastic aggregates of protoplasm. Consequently, they thought that human evolution was quite plausible, and looked eagerly for the fossilized transitional forms that would confirm their view. Now, however, we have realized that life is staggeringly complex, and in particular that *there is a vast genetic chasm between apes and human beings*.<sup>51</sup> Moreover, we are also beginning to realize, as Mendel’s work showed, *that the chasm is fixed*; that it simply *cannot* be bridged by such feeble and non-creative processes as random mutations or natural selection (see below). In short, the lack of hominid fossils tells us *that* the hominids didn’t exist, but the law of genetic stasis tells us *why* they didn’t exist: They never could.



## 7. Outmoded Arguments

Because of scientific advances over the last 150 years, many evidences and arguments for evolution have been discarded. Unfortunately, some of these still appear in high school and college textbooks. We must, therefore, mention them briefly.

***Vestigial Organs:*** Older evolutionists cited over 150 apparently useless structures as proof that evolution is presently occurring, bringing in new, more functional structures even as it casts off the old. Today we know the function of nearly every one of them, (e.g., appendix, thyroid gland, pituitary gland, thymus gland, pineal body, coccyx, tonsils, wisdom teeth, etc.). Furthermore, even if these structures were gradually disappearing, they would only prove *devolution* (i.e., a loss of genetic information and its corresponding structures), and not evolution (i.e., an increase of the same).

***Laboratory Life:*** In the famous Miller-Ulrey experiment, an electrical charge passing through a mixture of gases produced simple amino acids. Since amino acids are the building blocks of proteins, and proteins are the building blocks of “life,” it was felt by many that science was not far from synthesizing life itself. Today we know better. Scientists cannot even synthesize complex amino acids, let alone proteins or the fabulously complex universe of a single living cell. And even if they could, it would only prove that intelligence is required to produce them. Also, we must not forget that life is more than the physical structure that carries it. It is only when “life” lays hold of a physical carrier that we have a living being. Therefore, even if scientists could create the carrier, they would still have to create “life” and infuse it into the carrier. And if, as theists believe, life implies the presence and activity of a living god, it is certain that we human beings—even the smartest among us—will not be able fill that particular bill any time soon.

***Embryology:*** Years ago, evolutionists held that developing embryos traverse the entire course of their evolutionary history, that “ontogeny recapitulates phylogeny.” A common proof for this assertion was the so-

called “gill slits” of mammal embryos, purportedly showing their ancestry from fish. Today we know that the “slits” are actually folds that develop into various parts of the mammal’s face and head. Scientists have discovered no useless, purely “commemorative” stages in the development of living beings. Furthermore, if some embryos temporarily have similar appearances, why do such similarities (which are not reflected in their genetic makeup or at other stages of development) prove a common evolutionary ancestry? Surely a more reasonable conclusion would be that they were created by a common designer.

***The Races of Man:*** Early evolutionists, seeking to contradict the biblical teaching that all mankind descends from Adam and Eve, argued that the existence of different “races” (e.g., Caucasoid, Mongoloid, Negroid and Australoid) proves that man evolved from several different hominid ancestors. Today, however, we know that the human race is indeed a single genetic “kind,” with a built-in capacity for minor variations (e.g., in stature, skin color, hair texture, shape of eyes, nose, lips, etc.).<sup>52</sup> We also know that such variations can appear quite rapidly over the course of just a few generations. There is, then, nothing in our present knowledge of genetics to preclude the possibility that the human race descended from an original created pair. Indeed, given the fact that evolutionists can supply neither proof nor mechanism for the so-called “ascent of man” from (genetically) simpler creatures, the biblical model appears to be the more reasonable of the two.<sup>53</sup>

## **8. Deep Time**

The currently favored version of NCE proposes that our evolving universe is about 13.5 billion years old. In the popular imagination, such “deep time” (i.e., lots of time, billions of years) lends credibility to NCE. People assume that given enough time anything can happen—even the emergence of a complex and orderly universe from an explosion. Thus, speaking of the origin of life, Harvard biologist George Wald boldly

declares, “Time is in fact the hero of the plot...Given (enough) time the impossible becomes possible, the possible probable, and the probable virtually certain. One has only to wait: time itself performs the miracles.”<sup>54</sup> Now Wald could be right, but only if a powerful and intelligent creator god were involved in the ordering process. We have already seen, however, that in the godless universe of the naturalist—a universe fully subject to the Second Law of Thermodynamics and having no known mechanisms for transforming raw energy into complex material systems—such evolution (as the odds makers have unanimously declared) is impossible. Therefore, on naturalistic premises, deep time actually works *against* evolution since time plus the Second Law will always produce a loss of order in any physical system not preserved by “life.” Deep time is no friend of NCE. Accordingly, its real relevance in the origin’s debate does not lie in the fact that it supports NCE, but that, if true, it refutes recent creation. We must, therefore, revisit this subject below.

### ***There Is Weighty Evidence against NCE***

In our critique thus far we have seen that NCE violates not a few well-established natural laws and that there is little good evidence to support it. We must now conclude our evaluation by examining a few of the weightier evidences that positively speak against it. These evidences fall under two main categories, astronomical and biological.

#### **1. Astronomical**

***Missing Mass:*** As we just saw, Big Bang cosmology requires a very specific amount of mass in the universe. If there were too much, the universe would have collapsed shortly after the Big Bang. If there were too little, the gravitational attraction of rapidly accelerating matter would have been insufficient to allow stars and galaxies to form. Calculations show that there is far too little mass to permit cosmic evolution from a Big Bang. Thus, in order to save the patient, cosmologists have rushed to its aid with a

speculative *ad hoc* remedy: They postulate the existence of Dark Matter, an invisible substance, or complex of substances, that allegedly constitutes some 95% of the mass of the universe. Now as we shall see later, there is indeed considerable evidence for the existence of an all-pervading ether composed, presumably, of the tiniest particles in creation. However, as presently understood, it appears that the ether cannot stand in for Dark Matter, since Dark Matter, to be capable of gravitationally influencing galactic formation, must be atomic (or baryonic), whereas ether particles are infinitesimally smaller than atomic, and (according to some) the *cause* of gravity itself (see below)! Furthermore, some Dark Matter must be situated in space in clumps, so as to provide centers of gravity for developing galaxies and constellations. But again, no Dark Matter has actually been detected anywhere. Therefore, a reasonable conclusion from the actual evidence (or lack thereof) is that Dark Matter does not exist, the universe did not expand, and the galaxies and constellations did not evolve.<sup>55</sup>

***Our Clumpy Universe:*** As we saw earlier, Big Bang cosmology argues that the CMB provides a snapshot of the universe shortly after its birth. If so, the energy in the newborn cosmos was homogeneous—evenly distributed throughout space. Looking into the heavens, however, we find that today’s universe is very “clumpy.” Stars and galaxies are found in clusters and other large-scale structures, all separated by great voids. Moreover, the *way* in which they are spread out is both surprising and theologically provocative. Describing the results of various sky surveys, physicist Robert Bennett states the case this way: “Huge clumps and dark voids stretch out along our line of sight from Earth; galaxies line up in filaments pointing at us—(what astronomers call) the fingers of God.”<sup>56</sup> In other words, matter in the universe is *not* homogenous; it is *not* uniformly spread out in all directions; instead, it is spread out in such a way as to make Earth look like the center! What can account for phenomena so contrary to the predictions of Big Bang cosmology?

Big Bang theorists suggest that further explorations into deep space will yet demonstrate the universe to be homogeneous and isotropic on the largest scale. For the moment, however, the evidence is decidedly against it; and even if it were not, the CMB would still be too smooth to allow for the kind of clustering that we actually observe among the galaxies. In short, the known structure of the cosmos indicates that neither the CMB nor the cosmos arose from a Big Bang.<sup>57</sup>

In this connection it is interesting to note that the uneven distribution of stars and galaxies also speaks against one of the fundamental assumptions of Big Bang cosmology, the Cosmological Principle. As we have seen, this principle posits that the universe has no center, no edge, and no place that is “special” or atypical. Now if this were so, we would expect matter in the universe to be spread out more or less evenly so that no place looks special or atypical. As a matter of fact, however, some places do look special—and the Earth, as we shall see, looks *very* special. In other words, the actual structure of the cosmos speaks powerfully against the Cosmological Principle. This opens the way for a return to the more intuitive and traditional view—that the universe is a sphere in which our Earth may well be at or near the center, just as the Bible seems clearly to teach in so many different ways.<sup>58</sup>

***A Cosmic Squall:*** Big Bang cosmology predicts that the motion of galaxies will be uniformly “outward,” with all galaxies moving straight away from one another. Observations from Earth show that this is not always the case. In recent years astronomers have discovered what appears to be tangential motion in millions of galaxies. That is, some galaxies—perhaps representing as much as a tenth of the universe—are not only (apparently) moving outward (as predicted), but also sideways (as not predicted). Researchers differ on the cause of this stellar “squall.” But all agree on one thing: It causes big problems for the Big Bang.<sup>59</sup>

***Galactic Evolution:*** It is very difficult to explain how galaxies could have arisen from a Big Bang. How could mere gravity, acting upon smoothly distributed energy, produce such diverse structures? Evolutionists

respond with highly speculative answers. First, there was a brief but unimaginably rapid “inflation” during the earliest instants of the cosmos. This produced fluctuations in the energy field that served as “seeds” for the galaxies. But since these seeds were too small to account for a necessarily rapid galactic formation, the primordial gases must also have gravitated around huge clumps of Dark Matter that do not register in the CMB. These are, of course, all *ad hoc* solutions, patently designed to save a theory in trouble. Moreover, they involve theoretical problems of their own, have little or no evidence to support them, and therefore remain highly controversial.

There are other questions, as well. Why are there different kinds of galaxies? How did the beautiful spiral galaxies acquire their distinctive form and rotational motion? Why do the spiral galaxies, (presumed to be) situated at vastly different distances from the Earth, all look pretty much the same? That is, why do their arms all show roughly the same amount of coiling, when the further ones should show less and the nearer ones more? Why do galaxies sometimes appear in strings, at other times in clusters, and occasionally in huge walls? And why aren't these massive structures distributed uniformly throughout space? Having ruled out a divine creator, naturalists are at a loss to answer such questions. Natural laws, gleaned from the observation of existing astronomical structures, describe how these structures presently behave; they cannot describe how they came to be.

Of special importance here is the problem of large, complex structures appearing where they should not: at—or very near—the beginning of (the assumed) cosmic evolution. One thinks, for example, of the extraordinary 1995 photograph taken by the orbiting Hubble telescope, called Hubble Deep Field North. Aiming their telescope at a tiny patch of the northern sky in which they had formerly detected only the faintest wisps of light, astronomers were stunned to discover over 3,000 mature galaxies, as well as galactic clusters. These faint, highly red-shifted objects supposedly reached their massive size and complex forms only a couple of billion years after the Big Bang. Yet on Big Bang premises, that is impossible, since a

couple of billion years is much too short a time to allow for such advanced galactic evolution.

In yet another later study, members of the *Gemini Deep Deep Survey* received a similar surprise. Hoping to view scenes of the cosmos as it existed only 3-5 billion years after the Big Bang, astronomers pointed their telescope towards the so-called “Red Shift Desert,” a portion of the sky thought to be among the oldest in the heavens. They too were shocked to find over 300 mature galaxies, many of them just like our own “young” Milky Way. One of the researchers involved, Dr. Karl Glazebrook, expressed his frustration this way:

We expected to find basically zero massive galaxies beyond about 9 billion years ago, because theoretical models (based on the Big Bang theory) predict that massive galaxies form last. Instead, we found highly developed galaxies that just shouldn't have been there, but are.<sup>60</sup>

More than spelling trouble for the Big Bang, evidence like this offers positive support for creationist cosmology. Everywhere we look, whether near or far, we find large, mature galaxies, galactic strings, and (according to some) super-massive black holes. On Big Bang premises, many of these structures had far too little time to evolve—even if the cosmos were several times older than the presently favored 13.5 billion years. Thus, to use the picturesque words of one bemused observer, it looks as if someone simply “switched on the stars.” Creationists couldn't have said it better themselves.

***Stellar Evolution:*** Big Bang cosmologists theorize that the stars evolved when huge clouds of primordial gas condensed under the force of gravity and “ignited.” However, astronomers have observed no such births, though they should be able to do so.<sup>61</sup> Furthermore, there are good reasons to believe that such births are impossible. We know, for example, that molecular pressure normally causes gas to disperse before gravity can act to concentrate it. Also, interstellar gas clouds typically have a high degree of angular momentum and would therefore give birth to stars rotating far more rapidly than the stars we actually observe. Finally, the magnetic fields

surrounding gas clouds would powerfully resist their collapse into stars. In view of these problems many astronomers candidly admit that they do not know how stars came to be.<sup>62</sup>

***Chemical Evolution:*** According to Big Bang cosmology, the elements evolved. This process involved several stages. First, raw energy from the Big Bang distilled into subatomic particles. Next, those particles distilled into clouds of hydrogen and helium gas, coexisting in a ratio of about 75% to 25%. Then the clouds of gas coalesced into a first generation of stars (Population 3 stars). In time, rising temperatures and pressures in the interior of these stars somehow produced heavier elements, such as carbon and oxygen. Finally, when these stars exploded or ejected matter into space, the residues coalesced into a second generation of stars that in turn produced within themselves the heaviest elements. This, we are told, is the origin of the Population 1 and 2 stars that we observe in galaxies today—stars whose spectra typically report high levels of “metallicity” (i.e., spectra of all but the lightest elements).

But again, this scenario is beset with many theoretical and observational difficulties.

First, it is widely accepted that the initial conversion of energy into matter should have produced an equivalent amount of what is called “antimatter”—particles just like matter only with opposite charges, magnetic moments, etc. The difficulty, however, is that astronomers have been unable to locate any clusters or domains of antimatter in space. Says antimatter researcher Samuel Ting, “There have been theoretical speculations about the disappearance of antimatter, but no experimental support.” Here is yet another blow to the Big Bang.<sup>63</sup> Also, it is well worth noting that according to relativistic and quantum mechanical views of matter and antimatter, the Big Bang should have produced equal amounts of both, after which they should have more or less immediately proceeded to annihilate one another. The fact that we are here, then, definitely suggests that there are some flaws in the prevailing view!<sup>64</sup>



Secondly, chemical evolution is contradicted by the Second Law of Thermodynamics. From all we can really observe, raw energy never spontaneously turns itself into matter. To the contrary, the typical effect of raw energy on matter is to destroy it, producing still more heat diffusion and still less material structure. Theoretically, energy could turn into matter—or simple elements into complex elements—if there were a pre-existing mechanism of some kind to effect the transformation. But naturalistic cosmology knows of no such mechanism. How, then, could raw energy from a Big Bang transform itself into more than 100 chemical elements?

And there is more. We have just seen, for example, that stellar evolution cannot occur. But even if it had, we should be able to observe at least some of the Population 3 stars with zero metallicity. We do not. Similarly, on Big Bang premises, stars with very high red shifts should be primordial and therefore have few, if any, heavy elements. Observations, however, reveal the contrary. For example, light from certain remote quasars, thought to have been emitted when the universe was less than a billion years old, tells us that these objects contain more iron than our own sun! Also, certain types of stars lack helium altogether, raising further doubts about the Big Bang scenario. For these and other reasons it appears that the elements did not evolve, though they may well have been suddenly created.<sup>65</sup>

***Planetary Evolution:*** According to many textbooks, our solar system evolved about 4.5 billion years ago when the force of gravity, acting upon a large cloud of swirling gas and dust, produced the sun, its several planets, and their seventy-two moons. Astronomers know, however, that this popular scenario is beset with many difficulties. For example, on these premises all the planets should spin in the same direction; in fact, three rotate backwards. All the moons should orbit their planets in the same direction; in fact, eight or more orbit backwards—and Jupiter, Saturn, Uranus, and Neptune have moons orbiting in both directions! All the moons should orbit in their planet's equatorial plane; in fact, many are in inclined orbits. All the planets should have the same basic chemical composition as the sun (98% hydrogen and helium); in fact, their compositions are

radically different, not only from the sun but from each other. And so too are those of Earth and its moon. The sun should have 700 times more angular momentum (i.e., high-speed spin) than the planets; in fact, the planets together have fifty times more than the sun. If the planets were formed from dust particles, we should see clear evidence of residual particles falling into the sun; in fact, we see very little. Also, observation teaches that swirling clouds of particles behave much like gas: in their gravitational interactions they do not tend to coalesce, but rather to fragment and diffuse. For these and other reasons it is hardly surprising to find astronomer Harold Jeffreys stating, “I think that all suggested accounts of the origin of the solar system are subject to serious objections. The conclusion in the present state of the subject would be that the system cannot exist.”<sup>66</sup>

*A Geocentric Cosmos?* We have seen that Big Bang cosmology presupposes the Cosmological Principle—the (unimaginable) idea that our finite expanding universe has no center, no edge, and therefore no place special. We have also seen that this presupposition does not result from direct astronomical observations, but from a confessed bias against Earth-centered cosmology, as well as from exotic mathematical models that seem to offer a way of avoiding it. Seekers should realize, however, that the preponderance of the evidence decidedly favors the Earth-centered view. Some of it we have touched on already: the observed isotropy of the CMB, the geocentric structure of red shifts, and the geocentric distribution of galaxies and other heavenly bodies. However, because this evidence is so abundant and so significant, we must discuss it at greater length in Chapter 6. There we shall see that hard scientific observation joins with the Bible, common sense, and even Relativity Theory itself to teach that the Earth does indeed sit at rest in the center of the universe.

## **2. Biological**

***No Sign of Evolution:*** If evolution really produced the cornucopia of life forms that we see around us, we should be able to observe it at work in the present. That is, in the slice of evolutionary time we now occupy we should see multitudes of transitional life forms. These forms would display “incipient structures,” structures that are not presently useful but which might (chance willing) develop into functional organs that would enhance the organism’s survivability. The truth, however, is that in nature we find no such organisms. We do not find, for example, animals with useless proto-eyes, legs, wings, fins, etc. We do not find them in the present, and we do not find them in the past (i.e., in the fossil record). Wherever we look, the “evolutionary clock” appears to have stopped. There is no sign of evolution.<sup>67, 68</sup>

***No Mechanism for Evolution:*** Since it rejects all forms of the supernatural, NCE seeks purely natural mechanisms by which raw energy from the Big Bang is progressively transformed into simple matter, complex matter, plant and animal life, and self-conscious human beings. They are notoriously hard to find—most particularly at the stages where non-life gives rise to proto-life and where organic matter gives rise to the mystery of mind.

The proposed mechanisms for this astonishing biological transformation are *spontaneous generation* of the first cell (or cells), followed by organic evolution by means of *chance mutations* and *natural selection*. As for spontaneous generation, it is not a mechanism at all, but simply another name for a miracle without a miracle worker. As we have already seen, spontaneous generation does not and (on naturalistic premises) cannot occur. Furthermore, even if it did, chance mutations in proto-life could not have caused it to evolve, since long observation has demonstrated conclusively that mutations never increase the genetic endowment of an offspring, thereby introducing new biological structures. Instead, they actually decrease the amount of usable information—a loss that usually results in injury or death to a mutant progeny. Says Dr. Paul Grasse of the University of Paris, “The mass of evidence shows that all, or almost all,

known mutations are unmistakably pathological, and the few remaining ones are highly suspect.”<sup>69</sup>

Concerning natural selection, even evolutionists agree that it has no creative power whatsoever. That is, it adds nothing to the genetic endowment of a given species but simply eliminates its unhealthy members while preserving variations that are well suited to their environment. For example, in northern climes light-skinned people tend to thrive since their bodies can absorb vitamin D from the sun. Dark-skinned people, on the other hand, tend to pass from that environment since the high levels of melanin in their skin prevent absorption of vitamin D, thus exposing them to sickness. In other words, nature “selects” light-skinned people over dark-skinned people for northern climes. However, in so doing it does not create the genes that produce light skin. They were already there. Nature simply favors the survival of organisms in which those genes are dominant. Invariably, natural selection either preserves or eliminates the genetic information that is the basis of life; it cannot create it. As Dr. I. L. Cohen writes, “No one has ever produced a species by the mechanisms of natural selection. No one has ever gotten near it.”<sup>70</sup>

We find, then, that mutation and natural selection presuppose the existence of complex, genetically based life. They work on what is already there and can only explain the deterioration, extinction, or preservation of what is there. They cannot explain how what is there got there in the first place. The theory of NCE, therefore, has no viable mechanism for the origin or evolution of life.<sup>71</sup>

## **The Testimony of the Experts**

Our survey of evidences, which opens but a tiny window on the scientific debate about origins, nevertheless suggests that it is quite unreasonable to embrace any evolutionary scenario, particularly the one advanced by philosophical naturalists. Interestingly, not a few of today’s scientists now agree. Indeed, because of the wealth of evidence contrary to cosmic

evolution, some say the theory is in its death throes. The following quotes from respected modern scientists and commentators—none of them biblical theists—suggest that the end may be near:

1. The Big Bang today relies on a growing number of hypothetical entities, things that we have never observed. Inflation, dark matter, and dark energy are the most prominent examples. Without them, there would be a fatal contradiction between the observations made by astronomers and the predictions of the Big Bang theory. In no other field of physics would this continual recourse to new hypothetical objects be accepted as a way of bridging the gap between theory and observation. It would, at the least, raise serious questions about the validity of the underlying theory.<sup>72</sup>

—Cosmology Statement,  
signed by over 300 professional scientists

2. In my opinion, the observations speak a different language; they call for a different view of the universe. I believe the Big Bang theory should be replaced, because it is no longer a valid theory.<sup>73</sup>

—Dr. Halton Arp

3. Perhaps never in the history of science has so much quality evidence accumulated against a model so widely accepted within a field. Even the most basic elements of the theory—the expansion of the universe and the fireball remnant of radiation—remain interpretations with credible alternative explanations. One must wonder why, in this circumstance, that four good alternative models are not even being comparatively discussed by most astronomers.<sup>74</sup>

—Dr. Thomas van Flandern

4. A growing number of respectable scientists are defecting from the evolutionist camp...Moreover, for the most part these “experts” have

abandoned Darwinism, not on the basis of religious faith or biblical persuasions, but on strictly scientific grounds, and in some instances regretfully.<sup>75</sup>

—Dr. Wolfgang Smith

5. I suppose that nobody will deny that it is a great misfortune if an entire branch of science becomes addicted to a false theory. But this is what has happened in Biology...I believe that one day the Darwinian myth will be ranked the greatest deceit in the history of science.<sup>76</sup>

—Soren Lovtrup

6. The explanatory doctrines of biological evolution do not stand up to an objective, in-depth criticism. They prove to be either in conflict with reality or else incapable of solving the major problems involved. There is no law against daydreaming, but science must not indulge in it.<sup>77</sup>

—Dr. Pierre Grasse

7. “Can you tell me anything you know about evolution, any one thing that is true?” I tried that question on the geology staff at the Field Museum of Natural History and the only answer I got was silence. I tried it on the members of the Evolutionary Morphology seminar in the University of Chicago, a very prestigious body of evolutionists, and all I got there was silence for a long time. Eventually one person said, “I do know one thing: It ought not to be taught in high school.”<sup>78</sup>

—Dr. Colin Patterson  
speaking in 1981 to members of  
the Museum of Natural History

8. We are skeptical of claims for the ability of random mutation and natural selection to account for the complexity of life. Careful examination of the evidence for Darwinism should be encouraged.<sup>79</sup>

—A Scientific Dissent from Darwinism,  
signed by over 500 Ph. D's in various  
natural sciences from around the world

9. Despite the fact that we have no convincing explanation of how random evolutionary processes could have resulted in such an ordered pattern of diversity, the idea of uniform rates of evolution is presented in the literature as if it were an empirical discovery. The hold of the evolutionary paradigm is so powerful that an idea which is more like a principle of medieval astrology than a serious twentieth-century theory has become a reality for evolutionary biologists.<sup>80</sup>

—Dr. Michael Denton

10. I have come to the conclusion that Darwinism is not a testable scientific theory, but a metaphysical research program.<sup>81</sup>

—Karl Popper

11. I have often thought how little I should like to have to prove organic evolution in a court of law.<sup>82</sup>

—Errol White

12. Evolution is a fairy tale for grown-ups. This theory has helped nothing in the progress of science. It is useless.<sup>83</sup>

—Dr. Louis Bounoure

## **The Attraction of NCE**

Now if evolution really is as unreasonable as the arguments (and the experts) say, why does it seem reasonable to so many in our culture? The answers to this question are many. Here are a few of the most important.

First, evolution seems reasonable because it seems analogous to the development of living beings. All of us have observed a small, simple seed

growing into a big, complex plant or tree; or a small, simple zygote growing into a big, complex human being. Such is the case, we are told, with the universe. It too has developed from an unimaginably small and simple “singularity” into the vast and complex cosmos we now inhabit—a cosmos that, just like the tree and the human being, will one day die and return to the dust.

But unfortunately for NCE, the analogy is completely false. Indeed, beneath the light of fresh discoveries in molecular biology, we now can see the development of living beings as a positive testimony *against* evolution, especially evolution of the naturalistic variety. Why is this so?

As we have already seen, a living being, genetically considered, always begins as a highly complex entity. The cosmos, according to NCE, did not.

A living being, genetically considered, does not increase in complexity as it develops. The cosmos, according to NCE, does.

A living being, at its inception, is programmed with information (i.e., its DNA) that will be used to guide its development. The cosmos, according to NCE, was not.

Specific kinds of living beings, as they develop and reproduce, do not turn into other kinds of living beings. The cosmos, according to NCE, is filled with beings that continually do this very thing.

Most importantly, a living being does not develop because of its genetic endowment but because of the mysterious force we call “life.” It is “life” that grows and animates the being in accordance with its genetic endowment. But the cosmos—at least according to naturalists—has no such force working in it at all.

We find, then, that the proposed analogy between organic development and cosmic evolution does not hold. At first glance it seems reasonable enough, but in the light of important biological and metaphysical truths it is finally seen to be false. Ignorance of these truths can, therefore, transform a simple perceptual error into a profoundly misplaced faith.

Second, we find that throughout our culture this (false) analogy is continually taught and reinforced by pictures. All of us have seen them



—“artist’s conceptions” of stellar evolution, planetary evolution, geological evolution, and plant and animal evolution. How well I remember from my own youth the pictures of human evolution—chains of hominids rising from stooped to upright, ugly to handsome, brutish to smart. In today’s high-tech, image-driven society, such pictures have multiplied a million-fold. They appear in textbooks, posters, magazines, movies, television shows, web sites, computer games, and more. Not realizing that the pictures have no basis in observed reality, or that they are contradicted by good science, many of us simply receive them as truth. We regard them as photographs and documentaries of cosmic history. It becomes “reasonable” to believe in evolution because, after all, we have seen it for ourselves!

Seekers ought never to underestimate the power of the “icons of evolution.” They can grip and dominate the imagination, especially the imagination of the young. They can shape our perception of reality. They can do our thinking for us. They can define what is “reasonable” and “unreasonable.” They can quickly frame other points of view as bizarre, absurd, fantastic and even heretical, no matter how intuitive or scientifically reasonable they may be. In short, the icons can become icons indeed—religious symbols, sacred images, forming and controlling our interpretation of all reality. Let us therefore choose our pictures with great care, for it appears that false ones can hold us as tightly as we hold them, leaving little or no access for truth.

Third, cosmic evolution seems reasonable because we assume, along with the shapers of modern cosmology, that the universe is billions of years old. Most of us have grown up hearing nothing else. Like the icons of evolution, the widespread presumption of “deep time” works its way into our imaginations. It prepares the mind for evolution: what else could the cosmos do for billions of years if not evolve? It makes evolution possible: after all, anything can happen, given enough time (or so we think). The doctrine of deep time makes evolution seem necessary, true, reasonable. But is deep time really a friend of evolution, especially evolution of the naturalistic kind? The Second Law of Thermodynamics, as we have seen,

says it is not. And is time really deep? Could the evidences for billions of years be as slender, equivocal, and fallacious as those for evolution itself? Careful seekers will want to know, and will work hard to find out.

Finally, cosmic evolution seems reasonable because it is believed, taught and defended by many respected authority figures in the world around us. As I sought to relate through my own story, a child's heart is prepared to trust the words of those over him—parents, teachers, pastors, journalists, authors, filmmakers and more. If such authorities tell us evolution is true, we are naturally inclined to believe them. Also, the western world accords special honor to its scientists. The marvels of technology dispose us to trust them. We feel, naturally enough, that if these men understand *how* the world works, surely they must also understand *how it came to be*. Therefore, if most scientists say the world evolved, who are we non-scientists to question them? History, of course, shows that scientists can be wrong. And a little philosophy shows that “operations science” (i.e., science engaged with observable objects in the present) is fundamentally different from “origins science” (i.e., science engaged with unobservable events of the past). But most of us pay little attention to such matters. We would rather defer to those who are more intelligent, more educated, and more important than we are. It seems the reasonable thing to do—unless, perhaps, an unknown god sometimes allows the intelligentsia to stumble into foolishness; unless he expects us all to certify the truth for ourselves; unless life is a test.

There is another reason for the popularity of NCE, a reason more troubling than mere human error, gullibility, or laziness. This, however, is more appropriately discussed in another context. For now, then, we must continue with our evaluation.

### **Is NCE Right?**

Is NCE “right”? That is, does the naturalistic creation story supply a satisfactory foundation for mankind's ethical awareness and activity? More

particularly, does it adequately explain the phenomenon of conscience? Does it supply concrete moral guidance, defining for us what is good and what is evil? Does it in any way encourage goodness and restrain evil? As we are about to see, NCE does none of these things, and by its very nature it never can.

Our evaluation must begin with conscience. As we saw earlier, this mysterious faculty is actually a powerful “hint of a heavenly hope.” When we carefully examine conscience at work, we see that man is situated in an objective moral order—an order that absolutely requires a holy god to explain its existence and operation. This order includes three basic elements: moral absolutes, moral obligation (perceived by the faculty we call conscience), and a law of moral cause and effect. Intuitively and inescapably, we know that certain moral absolutes exist; that we ought to align ourselves with them; that we are free to do so or not, and that, depending upon our choices, we will certainly face reward or retribution either in this life or the next. Though it is spiritual rather than physical, the moral order is no less real than the natural, and we know it. Furthermore, knowing that it is both real and spiritual, we also know that it must have been created by a god who actively rules and judges both individuals and nations through it. In short, the first three elements entail a fourth: a holy and sovereign god.

NCE, however, rules out each and every element of this order. Listen, for example, to existentialist Jean-Paul Sartre, who bluntly denied both the existence of god and moral absolutes:

God does not exist, and we must face all of the consequences of this. The existentialist says it is very distressing that God does not exist because all possibilities of finding any values disappear. There can be no *a priori* good since there is no infinite and perfect consciousness to think it. So nowhere is it written that we must be honest; nowhere is it written that we must not lie, because the fact is we are on a plane where there is only us human beings. Dostoyevsky said, “If God does not exist, everything is permissible.” That is the starting point of existentialism. If God does not exist, anything within or without can legitimize anything we do.<sup>84</sup>

But if god and moral absolutes do not exist, where do such ideas come from? What is conscience, if not the voice of god in our soul? Why do we feel free and responsible for what we do? Why do we feel that our actions are always being weighed, and that what we sow we shall surely reap? Atheistic philosopher John Allegro replies:

For what religious man came eventually to think of as “conscience” is simply the faculty that enabled his hominid ancestors to inhibit their programmed response to stimuli in the interests of some longer-term advantage. “Guilt” is the unease that accompanies and sometimes motivates that control, and “god” is the idealist projection of the conscience in moral terms.<sup>85</sup>

In other words, god, moral law, and conscience are really just biological phenomena, “designed” by life to promote the mere physical survival (or pleasure) of the living. Though it may seem otherwise, in reality our ethical ideas and intuitions have no connection whatsoever to a holy transcendent Spirit. There is no one in the cosmos (besides man) to define what is good and evil, normal and abnormal, beautiful and ugly, etc. There is no one laying down the law, no one encouraging us in our hearts to do what is right and eschew what is wrong. There is no one rewarding good or punishing evil. Indeed, there is no such thing as objective good or evil at all. Since the “good” is simply what promotes survival, the same action can be both good and evil. If lying, theft, and murder contribute to my survival (or pleasure), I have every right to call them good. Who, besides my victims, can say they are wrong?

The answer, of course, is that we all can say they are wrong, because we all know they are wrong. We know the objective moral order exists; we know we exist in it; and we know (or fear) that it exists in a holy and sovereign god. It is precisely for this reason that people will frequently take an action that endangers their survival. The conscience of a murderer, for example, may move him to surrender to the authorities—a decision that will obviously jeopardize both him and his progeny. Or again, whole communities may expose themselves (including their children) to imprison-

ment, torture, and death, rather than compromise their honor or faith. Cases like these show that conscience is (or can be) attuned to something higher and more vital than biological life itself. And it is the awareness of just such transcendent realities that inclines most people of conscience to flee the godless, amoral universe of the naturalist. Understanding that a cosmology must be right to be true, they also understand that NCE must certainly be false.<sup>86</sup>

In passing, I would again remind seekers that it was not until the twentieth century that mankind, in anything like significant numbers, embraced philosophical naturalism. Accordingly, the twentieth century supplies an excellent laboratory in which we may observe and evaluate its moral and societal fruits. As a matter of historical fact, these fruits appeared on the different ideological branches of NCE: Marxism, Leninism, Maoism, Nazism, Social Darwinism and Freudianism. Fair-minded observers agree that they include imperialism, racism, genocide, eugenics, coercive medical experimentation, abortion, infanticide, and euthanasia. They also include the devastating aftermaths of the sexual revolution: increased premarital and extra-marital sex, divorce, homosexuality, pederasty, and pornography—all of which contribute directly to the disintegration of the physical and spiritual womb of the next generation, the nuclear family.

Is such fruit good or evil? And if it is evil, can the philosophy that spawned it be true?

## **Is NCE Hopeful?**

Is there anything in the naturalistic creation story to communicate hope? If hope has anything to do with satisfaction of the spiritual longings underlying the questions of life, then apparently not. The reasons for this are many and clear.

Above all, NCE is hopeless because it is godless. In particular, it withholds from us a wise, good, and omnipotent creator. Such a god would

himself be mankind's chief hope, and the guarantee of every other hope we might entertain as well.

Denying this creator, NCE necessarily denies the existence of a transcendent purpose for the universe, life, and man. How could such a purpose exist without a divine Someone to purpose it? Thus, in the universe of the naturalist, man has no hope of discovering his purpose, only of heroically creating one on his own. Though an occasional existentialist has bravely tried to do so, most would agree that it is a counsel of despair.

Similarly, NCE dashes our hopes of discovering how we ought to live, of attaining moral clarity for everyday life, of winning temporal and eternal rewards for resisting evil and doing good. All this, as we have seen, depends upon the existence of a holy god who, in the act of creation, establishes unchanging norms and consequences for the attitudes and actions of his free spiritual creatures. NCE denies them all.

And what of the future? There is no hope here, either, says the naturalist, since there is no supernatural soul to survive death, and no god or Heaven to whom it might return. Similarly, there is no hope for the cosmos as a whole. Since there never was an original paradise, obviously there is no hope that the cosmos will revert to it. And since there is no god, obviously there is no hope of his creating one for us up ahead.

What hope, then, is left? The answer is clear. Having ruled out the spiritual, the naturalistic creation story shuts us up to the material. We are left by ourselves to manage ourselves as best we can amidst the mindless, purposeless engines of evolution—an explosion of matter, chance aggregations of matter, spontaneous generation of living matter, random mutation of matter, natural selection of matter, etc. How these lesser gods defied the terrible inevitability of the Second Law is beyond us. Perhaps for a while they will continue to do so. And perhaps, if we manage it well, evolution will even grant us a brief season of outstanding health and prosperity. In the end, however, the Second Law must prevail. All order, beauty, life, and consciousness must be extinguished.

Seeking to accommodate modern man to such a vision, Bertrand Russell once wrote:

That man is the product of causes which had no prevision of the end they were achieving; that his origin, his growth, his hopes and fears, his loves and his beliefs are but the outcome of accidental collocations of atoms; that no fire, no heroism, no intensity of thought and feeling can preserve an individual life beyond the grave; that all the labors of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius are destined to extinction in the vast death of the solar system, and that the whole temple of man's achievement must inevitably be buried beneath the debris of a universe in ruins—all these things, if not quite beyond dispute, are yet so nearly certain that no philosophy which rejects them can hope to stand. Only within the scaffolding of these truths, on the firm foundation of unyielding despair, can the soul's salvation henceforth safely be built.<sup>87</sup>

In a ghastly universe like Mr. Russell's, it is clear that poor humans have no choice but to rein in their hopes. But will they? Can they? Yes, a few stoic souls may try, but certainly not those who have come to see life as a test. For these have learned to listen to their hopes, and to hear in them the voice of an unknown god who promises that the hopes can indeed be fulfilled. Seeing, then, that the naturalistic creation story only destroys hope, they conclude that it must be false and turn away. Though uncertain of where to look next, they feel sure that somewhere out there, waiting for the earnest seeker's eye, lies a trustworthy revelation of the beginning—a revelation that will confirm their best hopes for a happy ending to the story of the universe, life, and man.

In hope they press on to find it.

## **Conclusion**

It has been provocatively argued that in any given culture those who define the beginning are, *de facto*, that culture's true high priests. If this is so, then for a long season the high priests of Western culture have been cosmic evolutionists—usually of the naturalistic variety. Our lengthy evaluation has shown, however, that there is good reason to believe these priests have not spoken to us truly. Upon close examination, NCE turns out

to be highly counterintuitive, unreasonable, ethically problematic, and devoid of any real hope. Surprisingly, there are few good reasons to be an evolutionist.

More importantly, our survey of NCE has already uncovered not a little evidence favorable to the biblical cosmology. Could it be, then, that this is the most reasonable cosmology after all? Perhaps. But before investigating it more closely we must turn aside in our journey to visit yet another popular version of the beginning—the pantheistic cosmology of classic Hinduism and the modern New Age Movement.

Take a moment to catch your breath. Though brief, this will be a tough climb!

## NOTES

1. Many theists have, of course, tried to reconcile the two views. Some argue for what is called “theistic evolution”—the idea that God used continuing evolutionary processes in the formative side of his creative work. Others defend “progressive creation”—the idea that God created the cosmos piecemeal, bringing in new kinds of creatures at discrete intervals over the course of billions of years. Still others advocate “the gap theory”—the idea that there is a vast temporal gap between God’s original creation of the universe (Gen. 1:1) and the subsequent reconstruction of a world ruined by (Lucifer’s) ancient sin and judgment (Gen. 1:2f). All such theories are motivated by a desire to harmonize the biblical creation account with (key elements of) cosmic evolution. Unfortunately, the Bible plainly contradicts them at many points. Therefore, all who embrace such theories implicitly (and sometimes explicitly) deny either the truthfulness or the clarity of the Bible on creation. In so doing, they also contradict the cosmogony of Jesus and his apostles. Seekers expecting the unknown god to grant us a clear, trustworthy revelation of the beginning will not be inclined to follow them. For a brief survey and critique of the major non-traditional views see Henry



and John Morris, *The Modern Creation Trilogy: Scripture and Creation* (vol. 1), (Master Books, 1996), pp. 35-64.

2. This phrase comes from the title of Michael Denton's excellent book, *Evolution: A Theory in Crisis*, (Harper and Row, 1986). Denton, a molecular biologist, is not a creationist. Like many other professional scientists, his doubts about biological evolution arise strictly from an honest interaction with the evidence, or the lack thereof.

3. A good example is Dr. Jonathan Wells, whose book *Icons of Evolution*, (Regnery, 2000) documents his progressive realization that the traditional, textbook evidences for biological evolution are either fraudulent, inconclusive, or better explained by intelligent design.

4. Proponents of the Intelligent Design Movement include Phillip Johnson, William Dembski, Michael Behe, Stephen Meyer, David Berlinski, and Jonathan Wells. Focusing largely on biological phenomena, these men show in their books, lectures, and videos that our fantastically complex, orderly, and "anthropic" cosmos self-evidently betrays the activity of a good, powerful, and intelligent Designer; that purely naturalistic evolution is impossible; and that cosmic and biological evolution themselves are *far* from being scientifically established, but rather are open to many devastating criticisms. For more information, visit the website for The Discovery Institute, [www.discovery.org](http://www.discovery.org).

5. Among the best are (1) [www.answersingenesis.org](http://www.answersingenesis.org) (2) [www.icr.org](http://www.icr.org) (3) [www.creation.com](http://www.creation.com), (4) [www.creationscience.com](http://www.creationscience.com)

6. The phrase is Denton's.

7. Since the early 1980s, the Gallup organization has regularly polled Americans about their beliefs on origins. The results have changed little. In 1997, slightly less than 50% of Americans believed in recent, biblical creation. About 40% believed in theistic evolution. The remaining 10% affirmed naturalistic evolution. Among scientists, the percentages differed radically: 10% chose recent creation, 40% theistic evolution, and 50%

naturalistic evolution. However, the growing popularity of the Intelligent Design Movement suggests that many modern scientists are increasingly open to theistic perspectives.

8. We may perform this experiment upon our own selves. I know that if I am asleep or knocked unconscious, time still exists. But if it still exists, it must still exist in a person. That person would have to be god. Therefore, when I finally wake up, I find my self once again “in” time, because I am in god, sharing (mysteriously enough) something of his own temporal awareness of himself.

9. E. P. Hubble, *The Observational Approach in Cosmology* (Clarendon, 1937), pp. 50-51. See also S. Hawking and G. Ellis, *The Large Scale Structure of Space-Time*, (Cambridge University Press, 1973), p. 134.

10. As we learn from the burning log in our fireplace, the tendency of matter is to release energy while losing structural complexity and integrity. Rarely, if ever, do we observe the opposite in nature. But NCE teaches that this is precisely how the entire universe took shape. Hence, it scandalizes our intuition.

11. This is the hidden premise of all naturalistic theories about the origin of life. When, for example, Stanley Miller, back in the 1950s, succeeded in synthesizing two amino acids by sending an electric spark through a mixture of gases thought to approximate the earth’s early atmosphere, a cry of triumph rose from the Darwinist camp. Many thought we were near, not only to discovering the origin of life but to creating it! But subsequent science has not vindicated their hopes, nor can it, since the naturalistic premise of their work is wrong: that “life” is simply an electro-chemical soup with no need of a supernatural touch to transform it into a living being.

12. The following poem by Dylan Thomas is a meditation upon the mysterious forces of life and death that hold the poet and his world in their grip. Though the writer is “dumb to tell” these forces (i.e., explain them), it is clear that he respects and even reverences them well enough.

## **The Force That Through the Green Fuse Drives the Flower**

*The force that through the green fuse drives the flower  
Drives my green age; that blasts the roots of trees  
Is my destroyer.  
And I am dumb to tell the crooked rose  
My youth is bent by the same wintry fever.*

*The force that drives the water through the rocks  
Drives my red blood; that drives the mouthing streams  
Turns mine to wax.  
And I am dumb to mouth unto my veins  
How at the mountain spring the same mouth sucks.*

*The hand that whirls the water in the pool  
Stirs the quicksand; that ropes the blowing wind  
Hauls my shroud sail.  
And I am dumb to tell the hanging man  
How of my clay is made the hangman's lime.*

*The lips of time leech to the fountain head;  
Love drips and gathers, but the fallen blood  
Shall calm her sores.  
And I am dumb to tell a weather's wind  
How time has ticked a heaven round the stars.*

*And I am dumb to tell the lover's tomb  
How at my sheet goes the same crooked worm.*

[13](#). C.S. Lewis, in his book *Miracles* (Macmillan, 1963) shrewdly observed that "...the knowledge of a thing is not one of the thing's parts."

In other words, man's knowledge of nature (and, therefore, his mind itself) is supernatural.

The following poem by Emily Dickinson seems to capture the exhilaration of a mind that has just made this astonishing discovery:

*Exultation is the going  
Of an inland soul to sea,  
Past the houses—past the headlands—  
Into deep Eternity.  
Bred as we, among the mountains,  
Can the sailor understand  
The divine intoxication  
Of the first league out from land?*

For more on the mystery of mind, see Lee Strobel, *The Case for the Creator*, (Zondervan, 2004), Chapter 10: The Evidence of Consciousness.

[14](#). Feeling the need of a cause for the existence of the primeval singularity, Edward Tryon, in 1973, stepped onto ground where angels fear to tread:

I conjectured that our universe had its physical origin in a quantum fluctuation of some pre-existing true vacuum, or state of nothingness...This proposal variously struck people as preposterous, enchanting, or both.

—E. Tryon, 'What Made the World?'  
*New Scientist*, vol. 101, March 8, 1984

In making his conjecture, Mr. Tryon apparently had in mind the arcane conjectures of Quantum Mechanics, according to which tiny sub-atomic particles allegedly spring into existence out of nothing. Yet in Quantum Mechanics the particles do not really arise "out of nothing," but rather out of pre-existing energy that supposedly converts itself to matter. So Tryon's view is likely misstated. If, however, he meant what he said literally, it is

indeed preposterous. As Maria, of *Sound of Music* fame, so wisely concluded, “Nothing comes from nothing, nothing ever could...” And we all know she’s right.

15. John Byl writes, “Since the Second Law requires order at the beginning of the cosmos, some proponents of the Big Bang assert that the original singularity was indeed orderly; that it contained ‘seeds’ (i.e., tiny variations of energy density) leading to the present structures. But they are baffled as to where this original order came from.” They should be baffled, since such cosmic DNA needs an infinite intelligence to design it and an infinitely powerful intelligence to imprint its image upon exploding matter.

16. Science writer Sydney Harris, recognizing this fundamental problem, wistfully asks:

How can the forces of biological development and the forces of physical degeneration be operating at cross purposes? It would take, of course, a far greater mind than mine even to attempt to penetrate this riddle. I can only pose the question because it seems to me the question most worth asking and working upon with all our intellectual and scientific resources.

—Cited in Henry Morris

*The Modern Creation Trilogy: Science and Creation*, (Vol. 2)  
(Master Books, 1997), p.137. Hereafter cited as MCT

17. The citations in this paragraph are all taken from Joe White, *Darwin’s Demise*, (Master Books, 2001), pp. 23-50.

18. See Gene Veith, “Flew the Coop,” *World Magazine* (December 26, 2004).

19. See Michael Behe, *Darwin’s Black Box: The Biochemical Challenge to Evolution* (New York, NY: The Free Press, 1996). Also, for a comprehensive critique of cosmic evolution, see Walt Brown, *In the Beginning: Compelling Evidence for Creation and the Flood* (Center for Scientific Creation, 2001) p. 17. This book, containing the fruit of years of

scientific research, is a *tour de force* of creationist evidences and theorizing. I will cite it repeatedly (as ITB). It may be purchased on-line at [www.creationscience.com](http://www.creationscience.com).

20. As subsequent notes will show, my critique of Relativity Theory draws heavily upon GWW and GRBB. I would urge scientifically oriented seekers to study these fascinating volumes in depth, since both supply a clear, well-documented, and powerful exposition and critique of RT.

21. Probing the motives of modern scientists for eschewing the geocentric option, Robert Sungenis writes:

We can, however, sympathize with their plight. One can imagine the sheer embarrassment modern science would face if it were forced to apologize for 500 years of propagating one of the biggest blunders since the dawn of time. This is not the Middle Ages, a time in which mistakes can be excused due to primitive scientific tools and superstitious notions. This is the era of Newton, Maxwell, Faraday, Darwin, Einstein, Edison, Planck, Hubble, Hawking, and scores of other heroes of science. If heliocentrism is wrong, how could modern science ever face the world again? How could it ever hold to the legacy left by these scientific giants if it were forced to admit it was wrong about one of its most sacrosanct and fundamental beliefs? Admitting such a possibility would put question marks around every discovery, every theory, every scientific career, every university curriculum. The very foundations of modern life would crumble before their eyes. Not only would Earth literally become immobile, but it would figuratively come to a halt as well, for men would be required to revamp their whole view of the universe, and consider the most frightening reality of all: that a supreme Creator actually did put our tiny globe in the most prestigious place in the universe, since only fools would dare to conclude that Earth could occupy the center of the universe by chance.

—GWW, p. 1

These words remind us that one of the conditions for the discovery and enjoyment of truth is simple humility, even unto the utterance of the three most difficult words in ours or any language: I was wrong.

[22](#). GWW, p. 49.

[23](#). H. Dingle, *Science at the Crossroads*, (Martin, Brian and O’Keeffe, 1972), pp. 185-186. Cited in GWW, p. 188.

[24](#). S. Hawking, *A Briefer History of Time*, (Bantam Dell, 2005). Also, *Black Holes and Baby Universes*, (Bantam, 1994), p. 82. Cited in GWW, p. 50.

[25](#). Philip Stott, *Vital Questions*, p. 129.

[26](#). R. Cahill, *Novel Gravity Probe B, Gravitational Wave Detection*, (Flinders University, 2004), p. 4. Cited in GWW, p. 50.

It is appropriate here to observe a more general principle concerning the relationship between mathematics and science. As noted in the quotes below, there is no necessary correlation between a mathematical model of reality and reality itself. A mathematical model becomes “scientific” only if it is confirmed by scientific method (i.e., observation, experiment, prediction, technological application, etc.). This basic idea can be applied to RT. For example, just because it is possible to conceptualize a non-Euclidean geometry, or to construct a curved-space model of the universe, that is no guarantee that the model is scientifically sound. At times in his career, Einstein was so intoxicated by the mathematics of his theory that he dismissed the very thought that observations could refute it. History shows, however, that they repeatedly did—and that Einstein’s confidence, like his theory, was simply not grounded in the truth about nature. Karl Popper and Herbert Dingle warn us of this peril as follows:

Properly understood, a mathematical hypothesis does not claim that anything exists in nature which corresponds to it...It erects, as it were, a fictitious mathematical world behind that of appearance, but without



the claim that this world exists. (It is) to be regarded only as a mathematical hypothesis, and not as anything really existing in nature. (Karl Popper, *Conjectures and Refutations*, (Routledge, 1992), p. 169. Cited in GWW, p. 50)

In the language of mathematics we can tell lies as well as truths, and within the scope of mathematics itself there is no possible way of telling one from the other. We can distinguish them only by experience or by reasoning outside the mathematics, applied to the possible relation between the mathematical solution and its supposed physical correlate. (Herbert Dingle, *Science at the Crossroads*, Martin Brian & O’Keefe, 1972, p. 33. Cited in GWW, p. 50)

[27](#). GWW, Appendix 4, pp. 574f.

[28](#). *Nature*, 202, 1964, pp. 432. Cited in GWW, Appendix 5, pp. 584f.

[29](#). *Vital Questions*, p. 128. See also GWW, Appendix 7: Do the Global Positioning Satellites Prove General Relativity? pp. 600f.

[30](#). See D. Kelley, *Creation and Change*, (Mentor, 1997), pp. 144-150.

[31](#). GWW, p. 498f.

[32](#). GWW, p. 518.

[33](#). Found in R. Clark, *Einstein: The Life and Times*, (Harper Collins, 1984), p. 207. Cited in GWW, p. 574.

[34](#). In view of the fact that the ether is making a notable comeback in modern physics—and especially in the new geocentric models—it is worthwhile to cite Maxwell’s remarks at length, since they are prescient, poetic, and full of faith:

Ether (is)...a material substance of a more subtle kind than visible bodies, supposed to exist in those parts of space which are apparently empty...Whatever difficulties we may have in forming a consistent idea of the constitution of the ether, there can be no doubt that the



interplanetary and interstellar spaces are not empty, but are occupied by a material substance or body which is certainly the largest, and probably the most uniform body of which we have any knowledge... This vast homogeneous expanse of isotropic matter is fitted...to be a medium of physical interaction between distant bodies, and to fulfill other physical functions of which, perhaps, we have as yet no conception...The vast interplanetary and interstellar regions will no longer be regarded as waste places in the universe, which the Creator has not seen fit to fill with the symbols of the manifold order of His kingdom. We shall find them to be already full of this wonderful medium; so full, that no human power can remove it from the smallest portion of space, or produce the slightest flaw in its infinite continuity. It extends unbroken from star to star. (Encyclopedia Britannica, 9th edition, (Cambridge, 1890), "Ether." Cited in GWW, p. 243)

35. Maxwell's researches into electromagnetism uncovered a physical principle that made it possible for scientists to test for absolute rest and absolute motion. This meant, of course, that they could now try to test for the motion of the Earth through space. Between 1901-1903, physicists F. Trouton and H. Nobel performed experiments aimed at this very thing. Philip Stott writes:

Maxwell found that when electric charges are "stationary" the force field between them is directly from centroid to centroid (i.e., from the center of one charge to the center of the other); there is only an electric force and only an electric field. However, when the charges are moving, there is also a magnetic field and a magnetic force *that does not act in the line joining the centroids*. The faster the motion of the charged particles, the greater the force perpendicular to the motion, *and the more the particles will attempt to move perpendicular to the motion*. This phenomenon reminds us of Oersted's experiment in which one can set up a circular coil around a compass needle. If the compass needle is orientated North-South, then placing the coil over it

(in a) North-South (direction) makes the needle swing East-West; orientating the coil East-West makes the compass needle point North-South. From this it is deduced that the magnetic field is perpendicular to the current flow of charged particles.

This brings us to Trouton and Nobel. They had lots of charged particles in a capacitor (a device for holding charges apart). They suspended the capacitor by a thread. The expected speed of the Earth's presumed motion around the sun should have produced a force large enough to turn the suspended capacitor. For again, such turning arises because the moving charges are reacting to the magnetic force between them, a force that is generated by their motion, a motion that is generated by the moving Earth. Thus, the capacitor should have orientated itself perpendicular to the Earth's motion. It did not. This experiment has been repeated with increased sensitivity over the years. Always no force.

—See *Vital Questions*, p. 122.

Interestingly, a few researchers have now claimed that very recent experiments with super-sensitive capacitors do indeed produce some turning. However, the amount of turning is far too small to vindicate modern notions of an Earth racing through space. It may, however, indicate a slight rotation of the Earth on its axis, *or a slight rotation of the ether around a stationary Earth, just as the Neo-Tychonic model of the cosmos posits (see Chapter 6).*

While many scientists claim that the Trouton-Noble experiment confirms Special Relativity, it is clear that it—along with other similar experiments—is far more simply and reasonably explained by a stationary Earth.

[36.](#) *Vital Questions*, p. 130.

[37.](#) Speaking of Miller's experiments in a letter to Robert Millikan, Einstein wrote:

I believe that I have really found the relationship between gravitation and electricity, assuming that the Miller experiments are based on a fundamental error. Otherwise, the whole relativity theory collapses like a house of cards. (Cited in *GRBB* p. 211; cf. Ronald Clark, *Einstein: the Life and Times*, Avon Books, p. 400).

For a thorough discussion of the Dayton Miller experiments, see GWW, pp. 229-237.

[38](#). Physicists Crease and Mann capture the drama of Carl Anderson's discovery of the positron:

On August 2, 1932, Anderson obtained a stunningly clear photograph that shocked both men. Despite Millikan's protestations, a particle had indeed shot up like a Roman candle from the floor of the chamber, slipped through the plate, and fallen off to the left. From the size of the track, the degree of the curvature, and the amount of momentum lost, the particle's mass was obviously near to that of an electron. But the track curved the wrong way. The particle was positive. Neither electron, proton, nor neutron, the track came from something that had never been discovered before. It was, in fact, a "hole," although Anderson did not realize it for a while. Anderson called the new particle a "positive electron," but "positron" was the name that stuck. Positrons were the new type of matter (antimatter) Dirac had been forced to predict by his theory. The equation, he said later, had been smarter than he was.

—Cited in GWW, p. 412

[39](#). Both Einstein and Heisenberg, representing Relativity and Quantum Mechanics respectively, were philosophically opposed to the idea of an ether, and so asserted that the blast of electric energy actually created the electron/positron pairs, per the equation  $E=mc^2$ . Dirac himself, however, postulated a continuing sea of "electropon" pairs, filling the universe. That is, he espoused an ether. Sungenis and Bennett argue cogently that this is

the better hypothesis; that the ether, at least in part, is comprised of a stable “electropon lattice” that serves as an underlying medium and cause of various physical forces and effects. Supported by evidence from plasma physics, this view, they suggest, opens the way for a truly physical explanation of many still-puzzling phenomena, including inertia, gravity, and electromagnetism. See GWW, pp. 252f.

[40](#). See GWW, Chapter 12.

[41](#). Realizing that an intelligible physics absolutely requires an ether, Einstein was compelled to reintroduce one in his GTR.

According to the GTR, space is endowed with physical qualities; in this sense, therefore, there exists an ether. According to the GTR space without ether is unthinkable; for in such space there would not only be no propagation of light, but also no possibility of existence for standards of space and time (measuring rods and clocks), nor therefore any space-time intervals in the physical sense. But this ether may not be thought of as endowed with the quality or characteristics of ponderable media, as consisting of parts which may be tracked through time. The idea of motion may not be applied to it.

—A. Einstein, “Geometry and Experience,” in *Sidelights on Relativity*, Dover, 1983, p. 30. Cited in GWW, p. 244f.

In these impenetrable remarks it appears that Einstein is trying to have his cake and eat it too. On the one hand, he obviously wants to preserve the idea of an ether, recognizing that an intelligible physics cannot do without it. On the other hand, he refuses to concede that the ether is anything like the sea of tiny moving physical particles envisioned by classical physics, for to do so would be to deny a major pillar of his own STR. Therefore, he (torturously) attempts to redefine the ether, asserting that it consists of the “physical qualities” of the space-time continuum. This seems to mean that what we call “the ether” is not really an objective physical substance, but rather a mere phenomenon; it is the *way* that the one ultimate reality (i.e.,

the space-time continuum) behaves or presents itself to scientific observers. But surely the simplest and most reasonable position is that the classical physicists were right; that ethereal particles do indeed exist in (or as) space; and that Einstein—in both of his relativistic theories—was wrong. For further discussion, see GWW, pp. 400f.

[42.](#) Lammerzahl, Preuss, and Dittus, “Is the Physics Within the Solar System Really Understood?” Cited in GWW, p. 52.

[43.](#) GWW, pp. 209-210.

[44.](#) Karen Wright, “The Master’s Mistakes,” *Discover Magazine*, Sept., 2004, p. 50. See also GWW, p.51. To purchase Russell Arndts’s geocentric exposition of RT, visit [www.geocentricity.com](http://www.geocentricity.com).

[45.](#) Using the 200-inch Mt. Palomar telescope, Dr. Halton Arp photographically verified that galaxy NGC4319 and the quasar Markarian 205 are physically connected by a bridge of luminous gas filaments. Interest here centers on the fact that the two objects have drastically different red shifts. If, as many assume, red shifts are indicators of recessional velocity, then according to Hubble’s law the galaxy is 107 million light years away, while the quasar is 1.2 billion! But the observed physical connection shows that this is impossible. Accordingly, Arp and others now contend that red shifts do not indicate recessional velocity. But if this is so, what evidence do we have that the universe is expanding, or that a Big Bang really occurred?

Commenting on Arp’s work, astronomer William Kaufmann writes:

If Arp is correct (about the red-shifts not being distance indicators)...he will have single-handedly shaken all modern astronomy to its very foundations...One of the pillars of modern astronomy and cosmology will come crashing down in a turmoil unparalleled since Copernicus dared to suggest that the sun, not the earth, was at the center of the solar system.

This quote is found in ITB, p. 25. To visit Halton Arp's website, go to [www.haltonarp.com](http://www.haltonarp.com). See also, *God and Cosmos*, pp. 49f; Don De Young, "The Big Bang: A Reality Check," Bible-Science News, May, 1995; and Jonathan Sarfati, *Refuting Compromise*, (Master Books, 2004), p.156; Paul Davies, "Cosmic Heresy?"—*Nature*, 273:336, 1978.

[46](#). *God and Cosmos*, p. 55f.

[47](#). ITB, p. 10.

[48](#). ITB, pp. 9-10; *Demise*, p. 77f.

[49](#). *Demise*, p. 25; ITB, p. 14. See also K. Graham, ed., *Biology: God's Living Creation* (A Beka Books, 1986) p. 361.

[50](#). See Don Batten, ed., *The Revised and Expanded Answers Book*, (Master Books, 2000), p. 127. Also, J. Sarfati, *Refuting Evolution*, Vol. 1, (Master Books, 2000), p. 80; *Demise*, p. 99ff. Also, Marvin Lubenow, *Bones of Contention*, (Master Books, 1992).

[51](#). Scientists have calculated that four percent of the genetic information in man differs from that of an ape (and now that they have finished mapping the ape genome, the percentage appears to be larger). This sounds small, but actually corresponds to the amount of information contained in forty 500-page books!

[52](#). Failure to acknowledge the crucial difference between variation and evolution ensnared many 19th and 20th century evolutionists in a deadly racism. Charles Darwin pointed the way:

The civilized races of man will almost certainly exterminate and replace the savage races throughout the world...The break between man and his nearest allies will then be wider, for it will intervene between man in a more civilized state even than the Caucasian and some ape as low as a baboon, instead of as now between the Negro or Australian and the gorilla.

—Charles Darwin, *The Descent of Man*

Following his lead, many whites henceforth perceived themselves as a distinct and more highly evolved race, while viewing Asians, Africans, “Aboriginals,” Jews and Gypsies as inferior races, poorly fitted for survival. Had these “thinkers” honestly reckoned with Mendel’s work (today so thoroughly vindicated), they would have realized that there is, in fact, only one race, the human race; and that in this genetically unique family, all men, despite minor variations in appearance, are brothers.

[53](#). One outstanding piece of evidence for the unity of the human race is found in the recent discovery of Mitochondrial Eve. Though most human genetic material is located in the nucleus of our cells, a small strand of DNA may also be found in another cellular component called the mitochondria. Mitochondrial DNA (mtDNA) comes only from the mother. Though different families around the world display slight variations in their mtDNA, geneticists studying it have concluded that all human beings have descended from a single female ancestor—Mitochondrial Eve. Fascinatingly, recent studies in the rate of mutation of mtDNA indicate that Mitochondrial Eve lived about 6000 years ago! See ITB, pp. 229-30. See also, *Demise*, pp. 23-49; MCT, pp.161-202; *Answers*, p. 219ff.

[54](#). G. Wald, *Scientific American*, August, 1964, p. 48.

[55](#). ITB, pp. 25, 35, 72, 82; *God and Cosmos*, p. 63.

[56](#). GWW, p. 519.

[57](#). ITB, pp. 25, 70-71; *God and Cosmos*, pp. 59f, 61-63.

[58](#). *God and Cosmos*, pp. 68-70.

[59](#). De Young, op. cit., p. 3.

[60](#). Echoing Dr. Glazebrook, astronomer James Trefil speaks of galactic evolution as follows:

The problem of explaining the existence of galaxies has proved to be one of the thorniest in cosmology. By all rights they shouldn’t be



there, yet there they sit. It's hard to convey the depth of frustration this simple fact induces in scientists.

—ITB, pp. 26-7, 73-74, 232-237

See also Andrew Rigg, "Galaxy Games," *Creation Magazine* (December-February, 2005), pp. 18-19.

[61](#). Displaying spectacular photos of the Eagle and Horse Head nebulae, astronomers sometimes claim we are here seeing star formation in stellar nurseries. The truth, of course, is that we are simply seeing nebulae. Moreover, there are good reasons for believing that these clouds of gas cannot collapse into stars. See Sarfati, *Refuting Compromise*, pp. 167-8; ITB, pp. 26-27.

[62](#). *God and Cosmos*, pp. 53-55; ITB, pp. 25-27

[63](#). For further reading on antimatter and the Big Bang, see the article by Michael Oard, "Missing Antimatter Challenges the Big Bang Theory," [www.answersingenesis.org](http://www.answersingenesis.org).

[64](#). The following quote shows how the Big Bang hypothesis is undermined by the discovery of antimatter, and why it is preferable to think of matter and antimatter in terms of electron/positron pairs; that is, as part of a continuing ether:

Whenever a normal particle and an antiparticle meet, they annihilate each other, converting all their mass into energy in a pyrotechnic demonstration of Einstein's famous law,  $E=mc^2$ . And therein lies the source of one of the greatest dilemmas of science. Physicists believe that by the time the universe was just  $10^{-33}$  of a second old...the temperature had dropped from unimaginably hot to a mere 18 million billion billion degrees. This was cool enough for the first particles of matter and antimatter to condense from pure energy. But to balance the cosmic energy books—and to avoid violating the most fundamental laws of physics—matter and antimatter should have been created in exactly equal amounts. And then they should have



promptly wiped each other out. Yet here we are. Somehow, a bit of matter managed to survive.

—Tim Folgers, “Antimatter,”

Discover, August 2004, pp. 67-68; cited in GWW, p. 416.

[65](#). ITB, pp. 27, 71, 74.

[66](#). ITB, pp. 21-23, 67.

[67](#). MCT, pp. 25-44.

[68](#). NCE, with its theory of incremental change by successive small mutations, invites us to look for a continuum of life forms with no gaps between them. In the real world, however, we find categories of life forms with numerous gaps between them. It is because of these largely self-evident categories (e.g., fish, birds, insects, animals, people, etc.) that we know there is order in biological nature—an order that makes the science of taxonomy possible. The doctrine of evolution by mutation and natural selection predicts a chaos of life forms. The doctrine of divine creation predicts a cosmos of life forms. The real world definitely favors the latter.

[69](#). Cited in *Demise*, p. 40. Dr. Lee Spetner, of Johns Hopkins University, writes:

In all the reading I’ve done in the life-sciences literature, I’ve never found a mutation that added information...All point mutations that have been studied on the molecular level turn out to reduce the genetic information and not to increase it...Information cannot be built up by mutations that lose it. A business can’t make money by losing a little at a time.

—Cited in *The New Answers Book*, p. 12

[70](#). *Demise*, pp. 38-43; MCT, pp. 33-45. Richard Lewontin, an outspoken naturalist, concedes that:

Natural selection operates essentially to enable organisms to maintain their state of adaptation rather than to improve it...Natural

selection over the long run does not seem to improve a species chances of survival but simply enables it to “track” or keep up with the constantly changing environment.

—Cited in *The New Answers Book*, p. 12

[71](#). Using X-rays, scientists have been able to produce mutations in fruit flies at a greatly accelerated rate. But even after simulating many millions of years of evolutionary influences, they have been unable to produce anything other than a fruit fly. (See MCT, Vol. 1, p. 44).

[72](#). To view the entire Cosmology Statement, and its distinguished signatories, visit [www.cosmologystatement.org](http://www.cosmologystatement.org).

[73](#). Arp’s meticulous work on red shifts and his outspoken disenchantment with Big Bang cosmology brought him into disfavor with the scientific establishment in the U.S. In order to gain access to telescopes, he was forced to migrate to Europe where he continued his labors. Despite such peer pressure, other scientists have joined him in speaking up against the Big Bang. These include Hannes Alfvén, Geoffrey Burbidge, Fred Hoyle, J. V. Narlikar, A. J. Kembhavi, Eric Lerner, Robert Oldershaw, Anthony Peratt, and Tony Rothman. None, to my knowledge, are biblical creationists. For a recent examination of other non-biblical cosmologies, see Halton Arp, Roy Keys, and Konrad Rudinicki, *Progress in New Cosmologies: Beyond the Big Bang*, (New York: Plenum Press, 1985). And again, be sure to visit [www.cosmologystatement.org](http://www.cosmologystatement.org).

[74](#). Tom van Flandern, *The Top 30 Problems with the Big Bang*, found at [www.metaresearch.org/cosmology](http://www.metaresearch.org/cosmology) (cited in *GRBB* p. 200). See also: Robert Oldershaw, “The Continuing Case for Hierarchical Cosmology,” *Astrophysics and Space*, vol. 92 (1983); Eric J. Lerner, *The Big Bang Never Happened* (Random House, 1991); Fred Hoyle, *A Different Approach to Cosmology* (Cambridge, 1999).

[75](#). See *Demise*, pp. 47.

[76.](#) Soren Lovtrup, *Darwinism: The Refutation of a Myth* (New York: Croom Helm, 1987), p. 422.

[77.](#) Pierre Grasse, *Evolution of Living Organisms* (New York: Academic Press, 1977), pp, 202, 103.

[78.](#) Cited in P. Johnson, *Darwin on Trial*, p. 10.

[79.](#) The full statement, with its distinguished signatories, may be viewed at the website for The Discovery Institute, [www. discovery.org](http://www.discovery.org).

[80.](#) *Evolution: A Theory in Crisis*, pp. 353-354

[81.](#) Cited in *The Journal of Summit Ministries*, available @ [www.summit.org](http://www.summit.org).

[82.](#) Cited in Duane Gish, *Creation Scientists Answer Their Critics* (Master Books, 1993), p. 379.

[83.](#) Cited in *Demise*, p. 134.

[84.](#) Jean-Paul Sartre, *Existentialism and Humanism* (Methuen Publishing Ltd., 1974).

[85.](#) John Allegro, "Divine Discontent," *American Atheist*, vol. 28, (September, 1986), p. 26.

[86.](#) Since notions of moral good and evil properly belong to the theistic worldview alone, it is inconsistent, but tellingly human, to hear evolutionist Arthur Falk judge NCE as fervently as he does:

Nature makes everything in vain. After all, what is evolution? A mindless process built on evil; that's what it is...Natural selection seems smart to those who see only the surviving products; but as a design process, it is idiotic. And the raw brutality of the process is offensive...The mix of good and evil in evolution is diabolical...In the long run, all good loses out to evil...We can believe in evolution and yet not condone it. We ought to combat it.

—*The Humanist*, vol. 55  
Nov./Dec. 1995, pp. 23-25

[87](#). Bertrand Russell, “A Free Man’s Worship,” an essay found in Campbell, Gundy, and Shrodes, eds., *Patterns for Living* (Macmillan, 1947), p. 653. Russell’s youthful confidence in naturalistic religion collapsed in his later years. Revealing not only the spiritual poverty of naturalism, but also man’s profound need of God, he wrote:

The centre of me is always and eternally a terrible pain—a curious, wild pain—a searching for something beyond what the world contains, something transfigured and infinite.

—Cited in John Byl  
*The Divine Challenge*, Banner of Truth, 2004, p. 294

## Chapter 4

# PANTHEISM ON THE BEGINNING

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A diligent search for the beginning will soon confront seekers with an impressive historical fact: Mankind has *always* been attracted to pantheistic visions of the cosmos. Broadly speaking, they have appeared in three different forms, each arising at a different stage of world history. It is important that we examine them carefully, for if indeed naturalistic cosmology cannot satisfy mankind's hunger for spiritual truth, then it is only reasonable to expect that many modern seekers will once again turn to pantheistic alternatives. My goal in this chapter is to help them do so with eyes opened wide.

### THE VARIETIES OF PANTHEISTIC COSMOLOGY

#### **Ancient Mythic Pantheism**

Let us begin with what I will call *ancient mythic pantheism*. Cosmogonies falling into this category arose (or were finally transcribed) just before and during the second millennium before Christ (ca. 2250 B.C. to 1000 B.C.). Though geographically widespread, anthropologists largely agree that the earliest and most influential among them were the creation myths of ancient Mesopotamia.

Of special interest here is the cosmogony of *Enuma Elish*, a paean to the Babylonian creator god, Marduk. In the beginning, says the poet, Apsu (the primordial fresh waters) and Tiamat (the primordial salt waters) dwelt side

by side. When, for reasons unexplained, they came together, they gave birth to a first generation of gods. These in turn gave birth to a second, the second to a third, and so on. In time, the old and irritable Apsu decided to exterminate his younger and more boisterous offspring. However, one among them—clever Ea—divined Apsu’s evil intent and succeeded in slaying him first. Thereafter, Ea took over his father’s domain, set up his own temple on top of the primeval waters, and, in union with his consort Damkina, gave birth to the handsome and powerful Marduk.

As more time passed, the rest of the gods grew impatient with Marduk’s playful ways. Finally they moved Tiamat and her son Kingu to destroy him. An epic battle ensued, in which Tiamat herself was slain. Upon her demise, the now-sovereign Marduk split her body into two halves, “like a dried fish.” From one half he formed the dome of the heavens, and also the sun, moon, and stars, moving around within them. From the other he formed the earth. Tiamat’s breasts became the mountains, and out of her eyes there flowed—blood-like—the Tigris and Euphrates rivers. As for Kingu, Marduk split open his veins, mixed his blood with clay, and thereby created Man (Lullu). Alas, man’s destiny was “to bear the drudgery of the gods, so that they can relax at their leisure.”<sup>1</sup>

Importantly, other ancient cosmogonies bear a strong family resemblance to what may well be the Mesopotamian prototype. The Egyptians, for example, taught that in the beginning—again for reasons unexplained—a great mound appeared upon the surface of the primeval waters. Out of the mound came the god Atum, who soon engendered several more gods. One of them was Nut (sky) and another Geb (earth). Infuriated by their overly intimate union, the god Shu (air) finally separated them, thus creating the (shell of the) cosmos.

One thinks also of the creation myth of the Greek poet, Hesiod. He taught that in the beginning the five primordial elements—Gaia (earth), Tartarus (the underworld), Erebus (the gloom of Tartarus), Eros (passion), and Nyx (night)—arose out of a dark, yawning void called Chaos. The union of Nyx and Erebus produced Day, Aether (air), and a host of other

gods. Meanwhile, Gaia alone brought forth Uranus (the starry heaven), Pontus (the sea), and Mountains. “Thus,” says one commentator, “Gaia was not only the physical body of the earth, but also its essence and power, just as her children were, at the same time, divinities and elements of the cosmos.”<sup>2</sup>.

Though conflicting as to details, it is clear that these cosmogonies share a common metaphysic: Whether we think of the gods, the primordial elements, the orderly universe as we now know it, or the family of man that now inhabits it, all things are seen as embodiments of a single, living, and divine (or potentially divine) substance. Again, this was the outlook of the vast majority of ancient cultures, including the Egyptian, Mesopotamian, Phoenician, Greek, European, and Indian. On the surface their cosmogonies are polytheistic; beneath the surface, they are pantheistic, or at least pre-pantheistic.<sup>3</sup>.

## **Ancient Religious and Philosophical Pantheism**

As we saw earlier, in the midst of the first millennium B.C. many around the world began to grow weary of polytheism and myth. Henceforth, these free thinkers would try to probe the mysteries of the cosmos by the use of unaided reason and/or mystical insight. History reveals that not a few of them were pantheists, or something very close to it. Their cosmogonies arose from ca. 800 B.C. to 300 A.D., a period that may be thought of as the era of *ancient religious and philosophical pantheism*.

In the East, this trend first appeared among the Hindu Brahmins, whose metaphysical and cosmogenic speculations were set down in the Vedic *Upanishads* (ca. 800 B.C.). Though Gotama himself (ca. 550 B.C.) did not propound a cosmogony, after his passing certain of his disciples did, clearly borrowing heavily from the developing Hindu system. Because of its abiding influence, we will examine the Hindu/Buddhist cosmology at greater length below.

Eastern pantheism finds an especially poetic embodiment in Taoism, a Chinese religion founded by the philosopher/mystic Lao Tzu (ca. 500 B.C.), and later developed by his disciple, Chuang Tzu (ca. 350 B.C.). Seeking to return the violent and fragmented Chinese society of their day to the harmony of previous centuries, these teachers urged each person to realign himself with the ultimate reality, which they called the Tao.<sup>4</sup> Perhaps reflecting the theism of earliest China, they occasionally spoke of the Tao as a personal being, capable of love and forgiveness. Nevertheless, their overall theology is decidedly pantheistic (and not naturalistic, as some have argued). This is because in the beginning the Tao manifested out of itself “the ten thousand things” (i.e., the cosmos). It is also because the Tao mysteriously imparts a unique personal nature and “way” to each individual thing—its *Te*. And it is because the Tao, in fashioning the cosmos, infuses it with a rational principle of polarity, so that each “thing” (i.e., phenomenon) takes its place somewhere on a spectrum between two primal opposites (*yin/yang*): female or male, cold or hot, passive or active, negative or positive, dark or light, etc. Obviously, then, the tendency of classical Taoism is to assign spiritual and divine attributes to the Tao, of which the universe is a manifestation or emanation, and by which it is governed. And this is pantheism.

The Taoist metaphysic paves the way for the Taoist ethic. Borrowing from the language of Buddhism (with which Taoism has a strong philosophical affinity), one might say that for reasons unexplained the Tao has fallen from his/its undifferentiated spiritual oneness into a multitude of “sentient beings” (i.e., centers of consciousness). In each sentient being the Tao is now dreaming a phenomenal world. To each sentient being the Tao has given a unique nature. Upon the dream world of each sentient being the Tao has imposed (or would “like” to impose) a certain kind of order, a unique way and a balance of yin and yang. Knowing all this, the wise man—and the good society—tries to be true to his own nature, tries to let others live according to theirs (the principle of *Wu-Wei*), and tries to live at the elusive point where the opposites meet, where *yin* and *yang* are held



together in proper balance, and where peace, harmony, and proximity to the Tao are most to be enjoyed.

As we are about to see, classical Taoist cosmology is similar to that of Hinduism and Buddhism, though considerably less comprehensive. In particular, it offers suffering humanity no clear doctrine of salvation, no hope of immortality, and no instruction as to how sentient beings may attain complete release from the fetters of dualistic consciousness in order to experience final absorption into the undifferentiated oneness of the Tao. Thus, Taoism appears in mankind's religious history as an inarticulate cry for a personal god, and for an authoritative Teacher who will show us the way back to him.

During this same period, pantheistic cosmologies also appeared in the West. Historians agree that the most influential ones come to us from Heraclitus (ca. 500 B.C.), Parmenides (ca. 480 B.C.), the Stoics (e.g., Zeno, Seneca, and Epictetus), and the Neo-Platonists (Plotinus and his disciples, ca. 300 A.D.). Though we cannot linger to examine their systems in detail, it is quite worthwhile to touch briefly upon certain philosophical characteristics that were common to all or most of them.<sup>5</sup>

First, these cosmologies are *monistic*. That is, they envision a single ultimate reality, of which all "things" are manifestations. Sometimes this reality is seen as ineffable and is therefore simply called "the One." Other times it is identified with a single element, such as fire. In any case, the manifold world of nature is viewed as the embodiment of a single primordial substance. That substance is eternal. And because the cosmos flows from it, the cosmos, in one form or another, is also eternal.

Secondly, these cosmologies view the primordial substance as identical with, or indwelt by, a distinctly spiritual principle. Heraclitus, for example, declares that the world is "*an ever-living fire.*" The Stoics agree, not hesitating to call this fire "god." Plotinus teaches that the One (from which the manifold world springs forth) is inseparable from Intellect and Soul. Here then is where these philosophies get their pantheistic feel: The

ultimate reality is—or is at least animated by—something very much like a divine Mind or Spirit.

Thirdly, these cosmologies declare that the inner spiritual principle produces the order that we observe in the universe. In Heraclitus, for example, the *Logos* (Greek for *word, reason*) bestows upon fire the orderly forms and processes that we see in nature. It transforms the primordial fire into water, and the water into earth. It governs the mingling of these elements. It maintains each element in its proper measure. It holds all the opposites in a proper balance. It maintains the rhythms of nature. Thus, as one commentator put it, “Fire is not only the material substance of all things, but a guiding and controlling intelligence (*Logos*). Nature wears the physical aspect of fire and the spiritual aspect of a cosmic reason.” In short, nature is god, manifesting himself/itself as a visible and rational cosmos.<sup>6</sup>

Finally, these cosmologies usually envision the history of the universe in terms of cycles. In the Stoics we find the most severe illustration of this principle. The Stoics believed that at the beginning of each cosmic cycle the divine fire manifests itself as the four elements, and that these in turn develop into a new universe. When fully matured, the universe immediately begins to disintegrate, eventually reverting to the primordial fire in a great conflagration. Then the cycle begins again. Since the same absolute law of cause and effect govern all cycles, each successive universe will be an exact replica of its predecessor. The universe obeys an inviolable law of eternal recurrence.

Later we will see that modern pantheistic views are strikingly similar to their ancient predecessors. Thus, even in the case of pantheistic theorizing, wise Solomon spoke truly: There is nothing new under the sun.<sup>7</sup>

## **Modern Religious and Philosophical Pantheism**

Earlier we remarked that the sudden triumph of Christianity in the West brought a virtual halt to speculative philosophy in general, and to pantheistic philosophy in particular. When, however, the Copernican

Revolution and Enlightenment Rationalism combined to undermine confidence in biblical revelation, pantheistic systems once again began to flourish. Having appeared repeatedly throughout the last 400 years, they are both numerous and diverse. Happily, they are fairly easy to categorize, enabling us succinctly to profile modern religious and philosophical pantheism as a whole.

Fundamentally, the categories are two.

First, we have what might be called *static* or *non-evolutionary* pantheistic cosmology. As in the case of Hinduism and Taoism, so here: The sole and ultimate reality is said to be an absolute impersonal Spirit. In the ongoing conscious experience of multitudes of living beings, this Spirit is dreaming what we call “the world.” Such a metaphysic has definite cosmological implications. It entails that “the world” can appear only when sentient beings awaken to consciousness. It also entails that the world appears to them in pretty much the same form from generation to generation. In other words, static pantheistic cosmologies have little or no interest in the idea of cosmic evolution. Importantly, only a few modern pantheists fall under this heading. In addition to a small minority of Eastern philosophers, they include thinkers like B. Spinoza (1632-1677), A. Schopenhauer (1788-1860), and R. W. Emerson (1803-1882).

The second category may be called *dynamic* or *evolutionary* pantheistic cosmology (EPC). Proponents of this view are quite numerous. Indeed, it is safe to say that the salient feature of modern pantheism is that, with the rarest of exceptions, *it consistently presupposes cosmic evolution.*

Though evolutionary pantheists differ among themselves, their basic message is clear enough. There is a single ultimate reality or Absolute. For some, it is pure Mind or Spirit. For others it is a mysterious two-sided substance, involving *both* matter and mind. In either case, what we call Nature or the Universe is simply the embodiment of this one eternal being. Looking around at the phenomena of change, growth, and development, we realize that the Absolute has embarked upon a great cosmic journey. On the one hand, it is evolving outwardly from simple to complex, lifeless to

living. On the other hand, it is also evolving inwardly, from dimly conscious to fully conscious, and from fully conscious to super-conscious. To date, it appears that the supreme manifestation of this process—its cutting edge, so to speak—is man, who is very highly evolved both outwardly and inwardly. His evolution will continue until the Absolute has fully awakened to its “divine” nature. Thus, in man the Absolute is becoming god.

These introductory remarks enable us to identify three basic forms of modern EPC.

First there are the “pure” evolutionary pantheists, thinkers who identify the Absolute as pure Mind or Spirit, containing no admixture of matter. Prominent in this group are the so-called German idealists, philosophers like J. Fichte (1762-1814), F. Schelling (1775-1854), G. Hegel (1770-1831), and perhaps also the liberal Protestant theologian, F. Schleiermacher (1768-1834).

Next there are the “semi-pantheists.” These thinkers hold to a view called *panpsychism* or *process theology*. The idea here is that the ultimate reality is indeed one, *but that “the one” is always and essentially two-sided*. In other words, it *always* involves both matter and mind. Thus, for the semi-pantheist even the tiniest atom has a tiny (i.e., very dim) consciousness. More complex collections of atoms—as, for example, the human brain—have a much fuller, richer consciousness. The further living beings evolve, the further their consciousness evolves. If and when these beings reach the end of their evolutionary journey, a super-conscious “god” will be born. For some semi-pantheists, this god is eternal. For others, he lives and dies over and over again, as one universe succeeds another. Philosophers who fit more or less well into this category include H. Bergson (1859-1941), S. Alexander (1859-1938), Teilhard de Chardin (1881-1955), A. N. Whitehead (1861-1947), C. Hartshorne (1897-2000), S. Ogden (b. 1928), F. Dyson (b. 1923), P. Davies (b. 1946), and F. Tipler (b. 1947).

Finally, we have the New Age pantheists. These daringly eclectic thinkers are well known for their attempts to synthesize key elements of

Eastern religion, Western science, and ancient paganism. As a rule, they are quite optimistic about the future, believing that evolving mankind is about to enter a New Age of heightened consciousness, global unity, and universal well being. Among the most popular New Age pantheists are Fritjof Capra, Deepak Chopra, Marilyn Ferguson, Ervin Laszlo, Peter Russell, David Spangler, John White, Ken Wilber, and Gary Zukav.

## **HINDU COSMOLOGY (HC)**

Having now surveyed the several stages and forms of pantheistic cosmology, let us take a closer look at two of the most popular: the ancient Hindu/Buddhist cosmology and the modern New Age cosmology. My plan is to give a brief exposition of each, followed by a simple critique. Hopefully, this will prove helpful to modern seekers who, though attracted to the spirituality of pantheistic cosmologies, nevertheless desire to make sure that they really are intuitive, reasonable, hopeful, and right.

### **Exposition of HC**

The classic Hindu cosmology is a powerful picture of reality that, with some modifications, survives today not only in modern Hinduism, but also in (many branches of) Buddhism, Theosophy, and the New Age Movement. Because of its central place in pantheistic thought, we must examine it with some care.

### ***Hindu Creation Myths***

In one sense, it is impossible to speak of “the” Hindu cosmology since India’s sacred writings—with a seemingly blithe disregard for consistency—set forth a bewildering array of “creation” myths. For example, in the old Vedic literature (ca. 1500 B.C.) the cosmos is represented as a building constructed by a divine carpenter, the offspring of a marriage between Heaven and Earth, and—most prominently—the residue of a primal

sacrifice, whether of the god *Visvakarman* (Maker of All) or *Purusha* (The Cosmic Man).

The influential story of Purusha merits a retelling. When the first gods and sages issued from Purusha's being, they turned against him, pinning him down and cutting up his body. This was the primordial sacrifice, the prototype of all that will and must come thereafter. As in the case of *Tiamat*, so here: Purusha's bodily members were now suddenly transformed, being turned into the earth, the sky, the sun, the moon, and more gods. Here too was the origin of mankind: From Purusha's head, trunk, loins, and feet there came respectively the four great castes of men: priests, warriors, tradesmen and servants. Observe that the *Purusha* myth supplied a very comprehensive cosmogony, revealing the origin of the gods, the world, mankind, the social order, and the ritual sacrifices necessary to maintain the proper functioning of all things.

We see then that Hinduism offers not one but many different versions of the origin of the cosmos. Further study would show that it gives us different versions of its structure as well. Yet later Hindu philosophers were not much troubled by all this diversity, since they did not really regard these myths as true histories of the cosmos. Rather, they understood them as religious and poetic attempts to express the inexpressible: *the sudden appearance of the phenomenal world(s) in the mind of Brahman*. In other words, they understood the many stories as various human attempts to tell the one story. Thus, it is indeed possible to speak of a single Hindu cosmology, though, as we are about to see, this is a story whose telling proves difficult indeed.

### ***Brahman's Dream***

Classical Hindu cosmology—the philosophical cosmology that is rooted in the *Upanishads* (and sometimes called *Advaita Vedanta*)—begins with *Brahman*, the ultimate reality of Hindu theology and philosophy. The *Upanishads* state that Brahman is “He whom speech cannot express.”

Nevertheless, most Hindu teachers would agree in describing Brahman as an infinite impersonal Mind or Spirit. The *Bhagavad Gita*, for example, declares, “An invisible and subtle essence is the Spirit of the whole universe. That is Reality. That is Truth. Thou art That.”

Prior to the beginning, Brahman dwelt in an unimaginable state of pure, blissful, undifferentiated, spiritual oneness. This was *Nirguna Brahman*, or Brahman-Without-Attributes. Then, for reasons unexplained, something happened: Brahman “fell.” Hindus speak of this fall by declaring that a veil of illusion, or *Maya*, settled upon Brahman. The result for Brahman was the beginning of a long and troubled cosmic dream in which he had, so to speak, forgotten his true identity. The result for Brahman’s offspring was the appearance of the cosmos. But again, we must not think of the (newborn) cosmos as an objective physical reality existing “out there,” independently of anyone’s mind. Rather, we must think of it as a vast hierarchy of phenomenal worlds, worlds existing only in the minds of a hierarchy of sentient beings, sentient beings existing only in the one mind of Brahman.<sup>8</sup>

To better understand all these things, let us look more closely at five essential characteristics of the Hindu/Buddhist cosmos.

### ***Consciousness***

The first characteristic is *consciousness*. When Brahman fell, consciousness arose. That is, Brahman himself (or itself) awoke to consciousness—but only in (or as) a host of living, sentient beings.

On the one hand, these beings were, to a greater or lesser extent, conscious of themselves. They thought of themselves as individual souls, not realizing that what they took to be their soul (Sanskrit: *Atman*) was actually Brahman. In other words, they awoke to consciousness, but were ignorant of their true spiritual identity. They did not know that *Atman* (soul or subjectivity) and Brahman are one.

On the other hand, the living beings were also conscious of the particular world in which they found themselves. They thought of themselves as having physical bodies and as living in a world full of physical bodies. This world seemed real enough, just as if it were an orderly assemblage of material objects existing “out there” in space. But again, *Maya* had done her work. The sentient beings were deceived. They did not realize that their world was merely phenomenal, that it existed only as a dream in their mind, and that their mind was, in fact, the mind of Brahman.

Here, then, is the essence of the Hindu cosmology: The cosmos is actually a vast network of interrelated dreams, all of which simultaneously sprang into existence when the One fell into the Many; when Brahman fell into consciousness; when, as it were, Brahman *fell asleep* to his own true nature and eternal bliss.

### ***Hierarchy***

Brahman’s cosmic dream also involved *hierarchy*. When the living beings awoke they found themselves inhabiting one or another of a large number of different worlds or planes (*lokas*). The sentient beings on the Earth plane were arranged in a hierarchy of different populations ranging from the lowliest insect all the way up to the highest saint. Humans on the Earth plane were arranged in a hierarchy of castes—social groups differentiated by birth, occupation, and rank. Meanwhile, the Earth itself, usually thought of as the center of the cosmic drama, lay amidst a host of still other planes. These planes range from the lowest “hells” all the way up to the highest “heavens.” Various kinds of spiritual beings, each at its own stage of spiritual development, inhabit them: gods (*devas*), demons (*asuras*), hungry ghosts (*pretas*), etc. Some are pure, others impure; some are blissful, others tormented; some are wise, others ignorant. But all, knowingly or not, await reincarnation onto the Earth plane, from which



alone (according to many traditions) ultimate release (*moksha*) from the dream of individuality is possible.<sup>9</sup>

## ***Suffering***

Next, we observe that Brahman's dream is also characterized by *suffering* (*dukkha*). This suffering is ultimately traceable to the *dualistic consciousness* pervading the cosmos now that Brahman has fallen from his perfect unity. Because of this fall, living beings experience all reality in terms of dichotomies: subject-object, soul-body, mind-matter, good-evil, true-false, beautiful-ugly, healthy-sick, alive-dead, pleasure-pain, joy-sorrow, etc. Like flies in a spider's web, all creatures are stuck among them. At the start of their long journey they naively cling to one or the other side of the dichotomies. In time, however, (i.e., when they become spiritually awakened human beings) they begin to realize that they cannot experience one side without the other and that their entanglement in dualistic experience is the true source of all their suffering. Accordingly, they now begin to ask how they might escape this terrible bondage. Finally, they realize that *they* are not the ones seeking escape: It is actually Brahman himself, struggling to cast off *Maya*, struggling to awaken completely from the dualistic consciousness that binds him to suffering and keeps him from his original oneness and bliss. With the dawning of this awareness, sentient beings have become "path-winners." Now they are on the road to salvation.

We find, then, that in Hinduism "creation" itself introduces evil, suffering, and death into the cosmos. Here, creation and fall are one. It is a truth ever to be borne in mind when comparing the Hindu and biblical cosmologies.

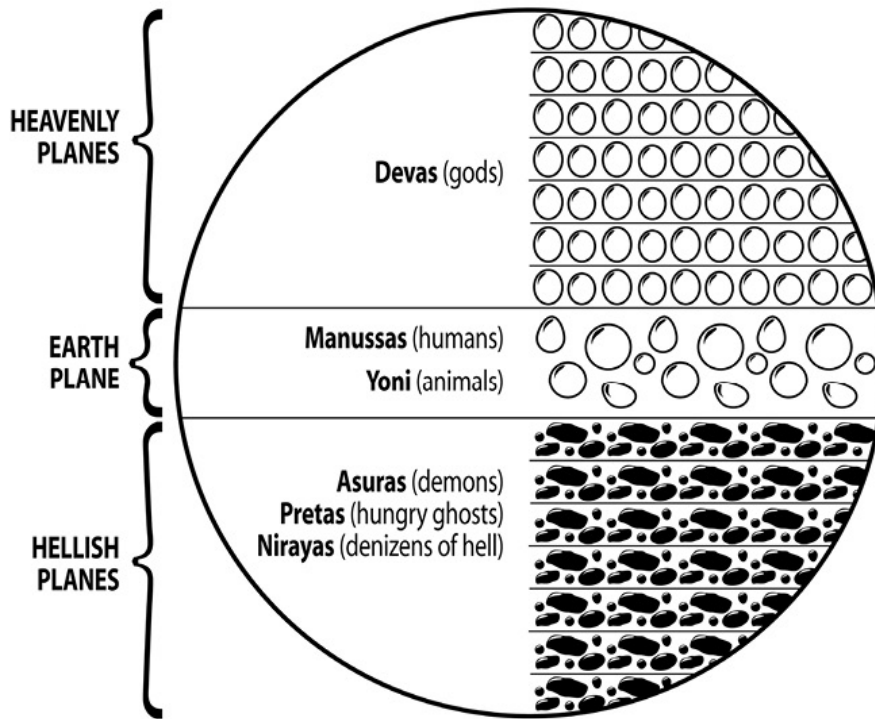
## ***Spiritual Ascent***

This brings us to a fourth characteristic, namely that the cosmic dream is governed by a principle of *spiritual ascent through reincarnation* (*samsara*). That is, all living beings, whether aware of it or not, are

somehow being called upward to “salvation.” This salvation involves *deliverance* from the illusion of finite existence (*moksha*), and *awakening* to one’s true (divine) identity (*samadhi*). Salvation is the goal of all lives, deaths, and rebirths (i.e., reincarnations). The quality of each incarnation is determined by one’s *karma*, the total spiritual merit or demerit that an individual has accumulated in his previous lives. Lives basely lived will result in base incarnations, perhaps even as an unworthy animal or insect. Lives nobly lived will result in more exalted incarnations, perhaps as a Brahmin or (in the Buddhist tradition) a *bodhisattva* (a savior). In the end, however, the upward call will prevail in all living beings. Having accumulated enough good *karma*, they will gain a final incarnation as a human being and then, through traditional spiritual practices and good works, achieve final salvation: complete absorption into the unconscious bliss of Brahman.

In passing, we should note that this principle of ascent through reincarnation is not to be confused with cosmic evolution. In classical Hinduism there are, from the beginning, a set number of forms. Living beings, depending on their *karma*, may take different forms, but the forms themselves do not change or evolve into other forms. For this reason, many modern Hindus reject cosmic evolution. They believe that when Brahman fell, he fell into the same static cosmos (or cosmic dream) that we see around us today. Thus, Hinduism is the outstanding example of static pantheistic cosmology.

## THE HINDU/BUDDHIST COSMOS



The Hindu scriptures supply different pictures of the cosmos. The diagram above attempts to capture their philosophical sense. The large circle represents Brahman, the ultimate spiritual reality who is one with the cosmos. At the beginning of each cosmic cycle, Brahman “falls” from his perfect oneness and is differentiated into myriad circles of consciousness, or sentient beings. In each sentient being, Brahman is dreaming a phenomenal world.

There are different kinds of sentient being. Each is arranged in a hierarchy, with its members sharing a common plane (of consciousness). Over the course of millions of lifetimes, individual sentient beings take on different forms, ascending like bubbles through the different planes. Finally, they “reach the surface,” where they burst the confines of individual consciousness and dissolve into Brahman. In some traditions, salvation is from the earth plane alone — the center of the cosmic drama. Thus, Hindus and Buddhists count it a great privilege and opportunity to be incarnated as a human being.

### *Eternal Recycling*

Finally, we may say that the Hindu cosmos is characterized by *eternal recycling*. The idea here is that Brahman himself is subject to a law of eternal recurrence. We see this, for example, in the Hindu conception of the days, nights, years, and lives of Brahma, the creator god. In the beginning, Brahman emanates Brahma. Brahma now begins his life. A single “day of Brahma” is a *kalpa*, and lasts about 4 billion years. At the end of one such day, Brahma dissolves the cosmos into a watery chaos and sleeps. Then, after a single night (another 4 billion years), he “awakes” and recreates the cosmos once again. Sentient beings that were not liberated during the first day are re-created on the second and continue their ascent to enlightenment. As for Brahma, he continues to wake and sleep for 100 years—the equivalent of approximately 292 trillion Earth years. Since he is now at the end of his life, he himself is received back into Brahman in the centennial dissolution. But then, after a cosmic sleep of another 100 years, a new Brahma is born. Thus the cycle begins again—and so repeats forever.<sup>10</sup>

In closing we should note that in the voluminous Hindu pantheon three gods hold special cosmological significance: Brahma, Vishnu, and Shiva. These constitute what is called the *Trimurti*, or the “three manifestations” of Brahman. Brahma, as we have just seen, is the creator god, Vishnu the preserver, and Shiva the completer or destroyer. Today in India there are still lively cults devoted to Vishnu and Shiva, both of whom are sometimes represented by their disciples as the true creator of the universe.

But again, the Hindu philosophers teach us to look beyond these three deities to the one Brahman. Some of them say that the *Trimurti* must be understood poetically as a metaphor for the threefold activity of Brahman: In each cosmic cycle, Brahma is Brahman *manifesting* a new (phenomenal) universe, Vishnu is Brahman *sustaining* it, and Shiva is Brahman *destroying* it—dissolving all “things” once again into the primordial spiritual unity. Others allow that the members of the *Trimurti* are indeed true sentient beings, *devas* (gods) of very high order. Yet for all their loftiness, these too are entangled in the web of *Maya*, just as we poor humans. Therefore, they

too are seeking salvation—release from the burdens of conscious existence and final re-absorption into the ineffable One.<sup>11</sup>

It is clear that the Hindu *Trimurti* reflects India's very human longing for a personal god who benevolently oversees the history of the cosmos. So also does the polytheistic worship of her multitudes, who fear and serve millions of lesser deities. But, say her philosophers and gurus, all such gods and all their worship must pass away. In the end it is vain to look up, for there is really no one there. To find the true source—the true place of the beginning—one must look within.

## **Evaluation of HC**

Having surveyed HC at some length, let us now use our four criteria for a trustworthy divine revelation in order to evaluate it.

### ***Is HC Intuitive?***

At first glance, HC seems intuitive enough. We can (albeit with some difficulty) imagine a very clever Big Mind somehow “programming” himself to slip into an intricate nexus of interrelated dreams, and then, from within each individual dream, to awaken to his divine nature over a long and arduous journey through many incarnations. Strange as it may seem, this view definitely makes more sense than naturalism, for here there is at least a purposeful divine mind back of the cosmos, a mind that supplies an apparent rationale for the existence and operations of the natural, moral, and probationary orders.

Yet the more we reflect upon it, the more we realize that this is *not* what HC teaches. Our natural tendency, as reflected in the language of the last paragraph, is to think of Brahman as a person—a “he” who purposes, plans, and continually executes his blueprint for the cosmic dream. The difficulty, however, is that Brahman is *not* a person. Indeed, in Hinduism everything that smacks of personality—consciousness, intelligence, purpose, planning, creative activity, etc.—belongs to the (dualistic) realm of illusion (*Maya*).

If, then, Brahman truly is an *impersonal* cosmic Mind or Spirit, the Hindu beginning—indeed, the entire course of cosmic history—is altogether inconceivable and therefore profoundly counterintuitive. On the other hand, if Brahman really is a person, then Hinduism has seriously misrepresented his true nature.

But let us assume for the moment that Brahman is what he must be for this cosmology to be thinkable: a personal god. In that case we are driven to one of two cosmological options. The first is that Brahman is a kind of sado-masochist who, by intentionally slipping into a cosmic dream, subjects himself to eons of deception and suffering. This option is metaphysically conceivable but morally repugnant. It is radically counterintuitive at the moral level. The second is that there is another “god” just as powerful as Brahman (e.g., *Maya*), who has somehow been able to subject him to the age-long sorrows of the cosmic dream. But in that case, the ultimate reality of Hinduism would not be one after all. Instead, there would be *two* ultimate realities eternally warring with one another as, for example, in the case of Zoroastrianism.

We find, then, that far from being intuitive, HC is actually confused and contradictory. It requires what it does not teach—a personal god. And even if it did teach a personal god, it would turn him into a victim of himself or some other god more powerful than he. Such a god is many things, but he is not the intelligent, powerful, and holy god revealed to us in the natural, moral, and probationary orders.

### ***Is HC Reasonable?***

Three problems make it impossible to answer this question in the affirmative.

First, as we have just seen, *HC is plagued with philosophical and theological contradictions*. It envisions personal sentient beings emerging from the ground of an impersonal Being. It posits an orderly cosmos governed by rational principles of spiritual ascent and eternal recycling, yet

offers no rational, transcendent god to plan, order, and sustain it according to those principles. Also, it propounds a universal law of moral cause and effect (*karma*), yet denies us a divine Moral Lawgiver and Governor who is watching over his law—and his subjects—to implement it. These kinds of philosophical contradictions arise from the one fatal flaw of *any* pantheistic cosmology: an unwillingness on the part of its adherents to receive the testimony of nature, conscience, and the probationary order to the effect that the ultimate reality is an infinite *personal* Spirit; an intelligent, powerful, and holy god who is separate from, yet closely related to, his creation.

Secondly, *there is no single Hindu cosmogony* (i.e., doctrine of origins). Instead, the Hindu scriptures set forth a number of different creation myths. Feeling this difficulty, the *Rig Veda* itself asks, “Who truly knows, who can here declare when this creation was born (and) whence it comes?” Yes, philosophically minded Hindus, looking beyond the differing myths to a single ineffable beginning, agree that the cosmos is an emanation of Brahman. But they cannot agree as to when, how, and why the (present) emanation occurred. Therefore, as opposed to its biblical counterpart, the Hindu cosmogony is vague and ill defined. But if Hindu cosmogony is ill defined, are we wise to believe the worldview that Hindus have built upon it?

Finally, *HC is without supporting evidence*. Unlike the Bible, the Hindu scriptures manifest little or no unity, and supply no body of supernatural signs—no system of objective historical evidences—to inspire confidence in their (often conflicting) revelations about god and the universe. In other words, Hinduism—to the extent that we can even define it—asks us to accept its worldview strictly on its own say-so. But seekers operating within the test perspective—and therefore duly cautious about mere speculation and/or spurious revelation—will not find that a reasonable thing to do.

***Is HC Right?***

Here we are asking if HC wins the assent of our deepest ethical intuitions. On a positive note, we can say that the Hindu idea of *karma* does indeed resonate with our moral sense. Man innately knows, as the doctrine of *karma* states, that a law of moral cause and effect is at work in the universe. However, Hinduism does not supply the law of karma with a proper metaphysical foundation. This is because it repudiates the other elements of the objective moral order. Above all, it does not teach that a holy and righteous personal lawgiver created and sustains the moral order. Accordingly, it also declines to articulate a detailed system of moral law. Likewise, it fails to explain the origin and meaning of our sense of moral obligation. Indeed, the primary ethical concern of HC is neither to define good and evil, nor to separate us from the latter to the former, but rather to transcend both through mystical experience.

Most problematic of all, however, is the metaphysical relationship of the Hindu god to moral and natural evil in the cosmos. Pantheism, as we have seen, teaches that all is one, all is god. Therefore, all that we call natural evil—plague, famine, predation, injury, sickness, and death—is a manifestation of god. Similarly, all that we call moral evil—pride, lust, deceit, murder, sexual perversion, etc.—is also a manifestation of god. The logic here is inescapable: The cosmos is both good and evil; the cosmos is a manifestation of Brahman; therefore, Brahman is both good and evil.

The gurus, however, have an answer. They say that notions of good and evil belong to the (dualistic) world of illusion; that god is beyond all dualities, including good and evil. We simply cannot apply such categories to the ultimate reality. Thus, Swami Muktananda declares, “Our concepts of sin and virtue...alienate us from our true Self. That which you see as impure is pure...You imagine ideas of sin and virtue through ignorance.” Swami Adbhutananda agrees. “Good and evil have no absolute reality.”<sup>12</sup>

Against all this, however, is the voice of human intuition, assuring us that the true god is *only* good and not at all evil. Indeed, this awareness is so fundamental that pantheists themselves wind up using ethically charged language to describe what must surely be called the goodness of Big Mind:



He (or it) is *pure, adamantine, luminous, blissful, compassionate, peaceful*, etc. Now if Big Mind is good, his cosmic dream should be good as well. But in fact, the cosmos is a mix of good and evil. Therefore, the cosmic dreamer is himself a mix of good and evil.

In this connection, observe also that it is quite literally nonsense to speak of *anything* that is “beyond good and evil.” The human mind, by its very constitution, seeks out and weighs the value in all it contemplates.<sup>13</sup> To know an object is to evaluate it, inescapably.<sup>14</sup> For this reason, a god “beyond good and evil” is a god beyond human conception. What our minds *can* conceive is a god that is *both* good and evil. This is the god of pantheism. Intuition assures us, however, that this is *not* the god who initially created and now governs the objective moral order.

Since this point is so important, let me here inject a personal word.

In my four-year experiment with eastern religion, the problem of the good-and-evil god of pantheism continually haunted me. It was easy enough to scan the sky or the sea and say, “Yes, all is god.” Or to peer into the throat of an orchid and say, “Yes, we are one.” But I found that such affirmations caught in my own throat when evil unexpectedly intruded. I remember, for example, an afternoon in a San Francisco cafeteria when I saw a poor man fall to the floor with an epileptic seizure and nearly drown in his own vomit. That lurid scene undid months of meditation and shook my pantheistic convictions to the core. Or again, I remember browsing an issue of *Time* magazine with all due “mindfulness,” only to be stung by the doleful eyes of a hungry little girl looking up into my own. Seeking a sponsor for her, the child’s advocates (*World Vision*) were busy trying to alleviate evil. I was busy trying to see god’s face in it. I quickly closed the magazine.

The problem with pantheism, I repeatedly discovered, was that it kept me hiding from part of reality. Part of reality is evil, and try as I would, I simply could not believe that the evil part was god. Evil, therefore, became a threat to my pantheistic faith. Had I truly loved the truth, I would have

tried to learn from evil and from my powerful intuitions about it. Because I did not, I ran from it every time we met.

### *Is HC Hopeful?*

The answer here is: Yes and no—but mostly no. Positively, HC offers us hope in its doctrine of *samsara*, the principle of spiritual ascent through reincarnation that permeates all worlds and secretly determines the destiny of all sentient beings. In the short term, *samsara* promises us an afterlife—or rather many lives, one after another. Since, however, each of those lives is characterized by some degree of suffering, the true hope of *samsara* lies in its promise of eventual release from the wheel of life altogether, leading to a final reunion with Brahman. Furthermore, the doctrine of *samsara* assures us that this hope is certain and universal: No sentient being will remain in (a consciousness of) hell forever. In time, all souls will work out their *karma*, all will awaken to their true nature, all will attain salvation—affirmations that have proved attractive to many seekers over the years.

On further reflection, however, one wonders just how hopeful this “hope” really is. Would most people really want to live—let alone suffer—through millions of lifetimes over billions of years? Can they truly take hope, not knowing for sure which will predominate in the incarnations ahead: pleasure or pain? Can they fully rejoice, knowing that even after their enlightenment the great cosmic cycle must begin again and again and again? And can this hope, such as it is, really flourish in their hearts when the truth of Hinduism is subject to so much doubt?

But even this is not all. For if we focus, not on a distant hope *beyond* this world, but upon the character of our lives *within* this world, then we must confess that Hindu cosmology brings us to the very brink of despair. This follows necessarily from its view of the beginning. The Hindu cosmos is *not* a purposeful creation of a holy, personal god; rather, it is the product of an inadvertent fall of an amoral, impersonal spirit. This means that the world is *not* man’s eternal, god-given home, but rather a fleeting and

troubled dream in the mind of Brahman. If, then, man was never *intended* to live in the world, how can he possibly hope to find happiness or fulfillment in it? Even to try would be an exercise in futility, a needless entanglement in the web of *Maya*. In and of itself, the world is without god or god-consciousness. In and of itself, it is without meaning or purpose. In and of itself, it will never really change or improve. In and of itself, it is a realm of bondage, illusion, and suffering. Beyond this world, there is hope. In it there is none at all.<sup>15</sup>

## NEW AGE COSMOLOGY (NAC)

Having laid a good foundation with our study of Hindu cosmology, let us now turn to its popular kissing cousin, the evolutionary cosmology of the modern New Age Movement.

### Historical Roots

NAC is a westernized and highly eclectic version of the perennial philosophy, pantheism. Three main streams feed into the New Age river. First, there are eastern religions (Hinduism, Taoism, and Buddhism), supplemented by western philosophies that were often influenced by their eastern counterparts (e.g., Transcendentalism, Theosophy, and the Mind Sciences). Secondly, there is contemporary western science, and in particular such fields as general systems theory, evolutionary cosmology, relativity theory, quantum mechanics, and para-psychology. Finally, there is ancient paganism (or animism), reflected in the New Age fascination with Wicca, spiritism, and nature worship. Believing as they do in the essential oneness of all things, New Age teachers look, naturally enough, for an essential oneness in all religion, philosophy, and science. Therefore, they draw freely from all kinds of sources, seeking to find and articulate the Holy Grail of human intellectual endeavor: the one, true Theory of Everything; the one, true Integral Vision of all reality.

But are New Agers wise in turning to these sources? Do the sources really support their worldview? And do New Age theories stand up to close critical scrutiny?<sup>16</sup>. Our purpose in this section is to find out.

## **Exposition of NAC**

We begin with a brief exposition of the New Age worldview. My approach here will be to examine New Age answers to those questions of life that bear most heavily upon cosmogony and cosmology.

### ***What is the Ultimate Reality?***

Though New Age teachers sometimes differ in their views of the ultimate reality, all agree that it is *not* the infinite personal Spirit of the theistic religions. Marilyn Ferguson states the case this way: “In the emergent spiritual tradition, God is not the personage of our Sunday School mentality.”<sup>17</sup>.

How then *do* New Agers see god? Again, there is significant disagreement on this crucial matter. Some, following the lead of eastern religion, say that god is an infinite impersonal (or “transpersonal”) Spirit, the unimaginable and indescribable spiritual ground of all personal consciousness and all phenomenal worlds. This appears to be the view of Ken Wilber who, sparing no rhetorical flourish, seeks to convey to us his mystical vision of god and the cosmos:

Indeed, indeed: let the self-contraction relax into the empty ground of its own awareness, and let it there quietly die. See the Kosmos arise in its place, dancing madly and divine, self-luminous and self-liberating, intoxicated by a Light that never dawns nor ceases. See the worlds arise and fall, never caught in time or turmoil, transparent images shimmering in the radiant Abyss. Watch the mountain walk on water, drink the Pacific in a single gulp; blink and a billion universes rise and fall; breathe out and create the Kosmos, breathe in and watch it dissolve.<sup>18</sup>.

What then is Wilber’s ultimate reality? To judge from the above, it is “the Abyss,” the “empty ground” out of which the phenomenal world (along with its antipode, the consciousness of the mystic) continually arises,

and to which it continually returns. In other words, Wilber's ultimate reality is an impersonal divine Mind that, in each sentient being, is dreaming a phenomenal world; a world that is "empty" of any external or objective material existence because it is, despite appearances to the contrary, pure spirit. This is precisely the teaching of the classical eastern religions (Taoism, Hinduism, and Buddhism), and of all "pure" pantheists, whether from east or west.

There is, however, another New Age view of the ultimate reality. Very significantly, it *alone* is metaphysically compatible with the second great pillar of NAC, cosmic evolution. As we learned earlier, it is called *semi-pantheism*, or *panpsychism*. Embraced in the west by a number of modern philosophers and process theologians, panpsychism teaches that the ultimate reality is a single, eternal, *two-sided* substance, having both material and mental aspects. In the words of panpsychist Teilhard de Chardin, the ultimate reality—and all the things that flow from it—has both a "within" and a "without," a psychic side as well as a physical side.

Seeking to wed Teilhard's basic thesis to the doctrines of modern physics and cosmology, philosopher Ervin Lazlo gives us his version of panpsychism as follows:

The panpsychist thesis of universal consciousness is not the thesis that consciousness of the kind I myself experience is universal. Rather, it is the thesis that the roots and potentials of the kind of consciousness I experience are inherent in every particle and every atom in the cosmos. It is the thesis that consciousness *evolves*: it takes on complex forms in complex systems. It is an important thesis, because it questions the primacy of the physical aspect of the cosmos. Ultimately...the cosmos must be conceived as neither just physical nor as purely mental. It is best viewed as psycho-physical: endowed with equally fundamental mental and physical aspects.<sup>19</sup>

But is this two-sided ultimate reality—let us refer to it as Mind/Matter—properly to be called god? Yes and no. Yes, if we simply *define* god as the ultimate reality; but no, if we define god as a powerful, intelligent, self-conscious being who can influence the shape and course of the

universe. *That* kind of god, according to the panpsychist, appears only at the end of the great evolutionary journey of the cosmos, when at last—in man—he *comes into being*. Thus, for the panpsychic—and indeed for virtually all New Agers—the supreme goal of evolution is a conscious and powerful god who has at last come into his own as ruler of the universe.

### ***What is the Origin of the Universe, Life, and Man?***

Corresponding to these two views of the ultimate reality, there *should be* two New Age views of the origin of the universe, life, and man. As we are about to see, however, there are not.

On the one hand, there is the cosmogony of the pure pantheist. *If his cosmogony is consistent with his view of god*, then he really has only one option: The universe, life, and man sprang into existence when Big Mind fell from its primordial, pre-conscious unity into a host of sentient beings who are now dreaming their respective phenomenal worlds. This, as we saw above, is the cosmogony of the classical eastern religions. And again, it *should be* the cosmogony of New Agers like Ken Wilber, who asserts that the universe arises out of the “empty ground” of Big Mind into the consciousness of man; or of New Agers like John Lilly, who, while high on LSD, saw that personal selves “...are creating energy, matter, and life at the interface between the Void and all known creation; we are facing into the known universe, creating it, filling it;” or of New Agers like Peter Russell, who concurs with Swami Muktananda in saying, “You are the entire universe. You are in all, and all is in you. Sun, moon, and stars revolve within you.”<sup>20, 21</sup>

But strange to tell, neither these men nor the vast majority of New Agers embrace the classical eastern cosmogony. Instead, they embrace a hybrid and deeply westernized cosmogony, a cosmogony that does *not* assert that the (phenomenal) universe suddenly appears in someone’s consciousness, but asserts instead that *consciousness slowly evolves and emerges from some pre-existing, pre-conscious substance*. For this reason, most New

Agers are unwittingly entangled in a profound metaphysical contradiction: As pure pantheists, they want Big Mind to precede the universe and to give birth to it as a mere phenomenon in little minds; but as evolutionists, they want (something in) the universe to precede both Big Mind and little minds, and to give birth to them as a result of cosmic evolution. Such metaphysical confusion—which can be exquisitely painful to thoughtful seekers—clearly stems from an attempt to achieve the impossible. For again, one simply *cannot* graft western evolutionary cosmology (which presupposes that matter gives birth to mind) onto the rootstock of classical eastern cosmogony (which presupposes that mind gives birth to the phenomena that we call “matter”). It is both a mental and a metaphysical impossibility.<sup>22</sup>

This brings us to the cosmogony of the New Age panpsychists, and also to the cosmogony of the pure pantheists who inconsistently follow them. I will sketch it by looking briefly at each of its six main elements.

First, there is *monism*. As we have seen, all New Agers believe that the universe, life, and man are manifestations of a *single* underlying substance. Panpsychists call it Mind/Matter, pure pantheists call it pure Mind or Spirit. But all agree that it—and not a personal transcendent god—is the ultimate reality. Interestingly, some New Agers teach that only one universe arises out of this mysterious ground of being: ours. Others, following speculative modern cosmology, teach that there are many; that the one cosmic substance gives birth to a whole network of universes—a Multiverse. But again, all are agreed in affirming that our universe—and all universes—are simply embodiments of the one ultimate reality.

Secondly, there is the *Big Bang*. Having turned to western science rather than to eastern religion for their cosmogony, nearly all New Agers accept the Big Bang hypothesis. Some, like Laszlo, venture even further, embracing the idea of serial Big Bangs and many universes. As we have seen, only the panpsychists can hold to Big Bang cosmogony with any kind of metaphysical consistency. Nevertheless, virtually all New Agers—most of whom are pure pantheists—accept the Big Bang.



Thirdly, there is *cosmic evolution*. New Agers teach that the Big Bang itself is simply the initial manifestation of a teleological principle that lives in the bosom of the One—a principle of *cosmic* or *emergent* evolution. Very importantly, this principle is not personal. In other words, in NAC “creation” (i.e., the Big Bang) and cosmic evolution are *not* the result of the activity of an infinite personal god, as in theistic evolution. Instead, they are the result of an impersonal principle that (mysteriously enough) *seems* to have a goal, and *seems* to be working towards it by imposing order, structure, and higher and higher levels of consciousness upon the emerging universe.

Fourthly, there is *the trend towards holarchy*. According to many New Agers, the principle of cosmic evolution just discussed has a special “method” for lifting the underlying substance of the universe from simple to complex, and from less conscious to more conscious: It likes to create systems, or *holons*. These systems start simply enough with atoms, molecules, and compounds. Later they become more complex, including genes, cells, tissues, organs, and organisms. Importantly, each new holon incorporates its predecessor. In this way, simple holons (i.e., material systems) give rise to more complex holons, even as the latter incorporate the former into an emerging “holarchy,” or Great Chain of Being. Thus, “the holarchy” is the hierarchy of all the holons (systems) in the universe, nesting as they do one inside the other.<sup>23</sup>

Running parallel to all this physical evolution is spiritual or psychic evolution. With each advance to a new level of material complexity, a correspondingly higher level of consciousness is attained. To date, it appears that human consciousness is the cutting edge of psychic evolution in the universe (though some New Agers claim contact with more highly evolved aliens). In due season, cosmic evolution will reach its goal and produce the supremely conscious holon: god.

Fifthly, there is *punctuated equilibrium*. Generally speaking, New Agers follow evolutionary paleobiologists S. Gould and N. Eldredge in embracing the idea of “punctuated equilibrium.” According to this (controversial)



hypothesis, living organisms do not evolve slowly, bit by bit, but suddenly, by leaps and bounds. Thus, New Agers teach that each successive holon emerges by way of a “quantum leap,” a leap that not only brings in a higher level of physical complexity, but also a higher level of consciousness. However, they also teach that in the case of man, a new pattern has emerged: The quantum leaps have become purely spiritual, having no (significant) physical component. Punctationalism also enables New Agers to cast the tumultuous evils of our day in a positive light: Far from heralding destruction, they actually signal the final quantum leap to the final holon; they are the painful but necessary precursors to an imminent paradigm shift in man’s thinking and an imminent transformation of his very nature; they reflect—unlikely as it may seem—the universe itself laboring to bring to birth a new age of perfect health, harmony, and god-consciousness.<sup>24</sup>

This brings us to a sixth and final element of NAC, *conscious (or intentional) evolution*. This idea seems to have originated with Indian philosopher Sri Aurobindo, who said, “Man occupies the crest of the evolutionary wave. With him occurs the passage from an unconscious to a conscious evolution.”<sup>25</sup> What Aurobindo means—and what New Agers enthusiastically affirm—is that man has now evolved to the point where he can *purposely* and *intelligently* guide the evolutionary process. Indeed, with the reins of evolution now passing into his own hands, man will soon become his own god and his own redeemer, able to deliver himself from the painful consequences of wrong thought and perception, and therefore able to transform the entire universe into the world of his dreams.

### ***What, if Anything, Went Wrong? Why are Evil, Suffering, and Death in the World?***

The New Age response to this question is confused—and even contradictory—largely because it again oscillates between the two perspectives discussed above (i.e., static vs. evolutionary pantheism).

Thus, speaking as optimistic evolutionists, New Agers reply that nothing really went wrong. Universal history is unfolding exactly as it must. Evil, suffering, and death are simply unpleasant but necessary elements and steppingstones in the great evolutionary ascent to godhood. Happily, such ugly and hurtful phenomena are only temporary, being subject to elimination when man awakens to his divine nature, lays hold of his divine powers, and brings in a perfect paradise. For this reason, *as evolutionists* New Agers are inclined to *oppose* evil, suffering and death, and to seek to *eradicate* them by every means at their disposal.

However, speaking *as pure pantheists*, New Agers also reply that something *must* have gone wrong, since, quite clearly, something *is* wrong. Precisely why, when, and how that mysterious “something” occurred, they cannot say. They do know, however, *what* occurred: Big Mind got entangled in Maya, in self-consciousness, in *dualistic* perception. Moreover, we humans—who are very special manifestations of Big Mind—are the main locus of this error in perception. Here then is the problem: We *think* that god and nature exist “out there,” external to our individual selves; but the truth is that these three (god, nature, and self) are one, and the one is (in) Big Mind. Again, this is the classic Hindu theology. Partly embracing it, Barbara Hubbard therefore anathematizes our “dualistic” habit of thought and perception, declaring that it is “...the fatal human flaw: the illusion that we are separated from each other, from nature, and from the creative processes of nature herself.”<sup>26</sup>

As Hubbard’s words reveal, dualistic consciousness is the “original sin” of New Age theology, as well as the driving force behind its diagnosis of all modern ills. Here is how the diagnosis reads: *In the west, the great dualistic error—so endemic to “fallen” human nature—was tragically reinforced by biblical theism. In time, this perfect storm of illusion gave rise to modern science and the Newtonian vision of a clockwork cosmos. That in turn led to an ethic of domination and exploitation, whether of nature or of one’s fellow man. And that in turn has produced the great disruptions which currently trouble modern society, whether mental, physical, economic, political, or*

*environmental*. In short, New Agers trace virtually all evils to the dualistic illusion, and to the outmoded theological paradigm that so harmfully strengthens it (i.e. biblical theism). Yet they do not despair, but actually take heart. For now a whole new paradigm is emerging, a pantheistic paradigm that will soon eliminate all evil and bring in a whole New Age.

But how *exactly* will the new paradigm “eliminate” evil, suffering, and death—and to what extent? Here, the answer is not so clear. For again, *as evolutionists* New Agers are inclined to oppose and eradicate evil phenomena. Yet *as pure pantheists* they are *not* inclined to oppose and eradicate them, but rather to *see through* them and thereby *transcend* them. From the latter angle, evil phenomena can trouble us only to the extent that we *perceive* and *accept* them as real; only to the extent that we are still trapped in dualistic perception. In other words, when at last, through mystical experience, we see such phenomena for what they really are—mere dreams arising from the depths of Big Mind—their ugliness will simply melt away. Speaking of this dramatic shift in spiritual and ethical perception, R. M. Bucke writes:

This consciousness (i.e., “cosmic consciousness”) shows the cosmos to consist not of dead matter governed by unconscious, rigid, and unintending law; it shows it on the contrary as entirely immaterial, entirely spiritual and entirely alive; it shows that death is an absurdity, that everyone and everything has eternal life; it shows that the universe is god and that god is the universe, and that no evil does or ever did enter into it.<sup>27</sup>

To sum up, most New Agers identify evil, suffering, and death as mere phenomena, as bad dreams in little minds that inhere in Big Mind. Why Big Mind should be subjected to such dreams—or why it should subject itself to them—they cannot tell us. They do believe, however, that we can transcend these dark dreams, whether by a mystical experience that sees through them, or by a future deification of the race that will one day enable us to awaken from them altogether.

***What, if Anything, Can Be Done?***

This question lies at the heart of *soteriology*, the study of how man and nature can be rescued from evil and restored to the joy of perfect wholeness. As we just saw, though New Agers typically seek after mystical experience, their notion of salvation is different from that of classical Hinduism or Buddhism. Their goal is not so much to transcend the dualistic realm of *samsara*, as to transform it; not so much to escape the world, as to see it perfected.

New Age salvation comes at the hand of three benefactors.

First, there is *evolution*. In the end, it is evolution that will save us. The evolving cosmos *will* reach its appointed goal, and we should take great comfort in that great inevitability. Indeed, as the rise of the New Age movement itself indicates, the end is now upon us. Says John White:

Higher human development—evolution—has been accelerating in the last few centuries. The pace of change now is unprecedented in the life of our species, and what is to come is, in fact, a new species. We are witnessing the final phase of *Homo Sapiens* and the simultaneous emergence—still quite tentative because of the nuclear threat to all life—of what I have named *Homo Noeticus*, a more advanced form of humanity...As we pass from the Age of Ego to the Age of God, civilization will be transformed from top to bottom. A society founded on love and wisdom will emerge. The change of consciousness underlying this passage involves transcendence of ego and recognition of the unity of life.<sup>28</sup>

For White, accelerated evolution leads to pervasive stress, stress leads to a quantum leap in human consciousness, and the quantum leap in consciousness leads to a new (pantheistic) paradigm, a new man, and a new world.

Secondly, salvation is by *manipulation*. That is, New Age man has a central role in bringing in the emerging paradise. Once having apprehended its divine nature, the human self is henceforth positioned to participate consciously in its own evolution and in the evolution of the phenomenal world. Breathlessly, Marilyn Ferguson shares her hope this way:

For the first time in history, humankind has come upon the control panel of change, and of understanding how change occurs. We are living in the change of change, the time in which we

can intentionally align ourselves with nature for rapid remaking of ourselves and our collapsing institutions.<sup>29</sup>

Similarly, John Lily writes:

In the province of the mind, what is believed to be true is true, or becomes true, within limits to be found experientially and experimentally. These limits are further beliefs to be transcended. In the province of the mind, there are no limits.<sup>30</sup>

Remember, for Lily *all* is mind, the phenomenal world included. Therefore, he is saying that the only impediment to our transforming the phenomenal world into the world of our dreams is the naïve belief that we are mere humans, with little or no power to influence the “external” universe. When, however, we realize that we are god, *everything* can change. As a popular maxim from the Mind Sciences has it, “Thoughts control the image of thought.” Therefore, by creative visualization and positive mental attitudes New Agers hope to bring in heaven on earth.

And what might evolving mankind be able to do once it has mastered such techniques? Casting caution (as well as humility) to the four winds, Jack Underhill offers this radical reply:

They can turn off the sun and turn it back on. They can freeze oceans into ice, turn the air into gold, talk as one with no movement or sound. They can fly without wings and love without pain, cure with no more than a thought or a smile. They can make the earth go backwards or bounce up and down, crack it in half or shift it around... There is nothing they cannot do.<sup>31</sup>

Heady thoughts! Undoubtedly, they are exciting. Predictably, they are popular. But before embracing them, it would definitely be wise to find out if they are true!

Finally, New Age salvation is by *cooperation*. This stands to reason, since an ethic of tolerance, pacifism, and cooperation flows naturally from any cosmology that sees spiritual unity as the great goal of universal history. Practically speaking, this ethic involves an emphasis upon cooperating with nature through good stewardship of the environment, and also upon co-laboring with one’s fellow man through communal activity.

Additionally, some New Agers seek to advance our salvation through cooperation with spiritual entities living on planes other than our own, whether so-called ascended masters, bodhisattvas, allies, spirit guides, or aliens from other planets and galaxies.

The New Age soteriology gives great hope and purpose to the lives of its followers. No longer do they see themselves as mere human flotsam, tossed about in a swirling sea of lifeless energy/matter. Instead, they see themselves as living parts of a living cosmos, infallibly advancing towards godhood and paradise. Confidence in so great a destiny is not, however, a license for passivity. Much work remains to be done. Spiritual disciplines and techniques must be mastered. The new paradigm must be articulated in all spheres of human endeavor: theology, philosophy, science, economics, politics, medicine, psychology, etc. Men and nations must be won to it. Alternative communities, therapies, arts, sciences, and businesses must embody it. Indeed, society and nature herself must be saved and fulfilled by it. Expressing the New Ager's exhilaration at working towards such lofty ends, David Spangler writes, "The individual has a sense of being a co-creator with history, of being involved in a process of conscious and participatory evolution."<sup>32</sup>

### ***Where is History Heading?***

From what we have seen so far, it is clear that virtually all New Ager's would agree with Scott Peck in saying, "It is god who is the source of the evolutionary force, and god who is the destination."<sup>33</sup> But what exactly will things look like when god becomes god?

Tellingly, New Ager's do not agree.

The spirit that gave channeler Helen Schucman her *Course in Miracles* declared that in the final state, "Every person will be absorbed into a divine abstract where there are no distinctions, where no words are communicated, and where there are no events—only a static eternal now."<sup>34</sup> Presumably, this is the New Age "heaven," though such a state, when carefully

considered, sounds more like sleep than awakening, more like unconsciousness than super-consciousness, and more like death than (eternal) life.

Jesuit philosopher and paleontologist, Teilhard de Chardin (1881-1955), one of the founding fathers of New Age cosmology, argued that Mind/Matter is evolving towards what he called “the Omega Point” and “the Christ.” When the cosmic god-substance reaches the Omega Point, something almost unimaginable will occur:

We are faced with a harmonized collectivity of consciousness, equivalent to a sort of super-consciousness. The idea is that of the earth not only becoming covered by myriads of grains of thought (as at present), but becoming enclosed in a single thinking envelope so as to form, functionally, no more than a single vast grain of thought.<sup>35</sup>

In other words, one day up ahead individual human consciousness will finally be dissolved into a unified field of god-consciousness, an event that will effectively create a whole new order of (human) being. New Age philosopher John White concurs, declaring, “A new race, a new species, will inhabit the Earth—people who *collectively* have the same stature of consciousness that Jesus had.”<sup>36</sup>

Peter Russell, however, thinks that the collectivization of man’s consciousness is only the beginning:

Evolutionary trends...suggest a further possibility: the emergence of something beyond a single planetary consciousness or Super-mind: a completely new level of evolution, as different from consciousness as consciousness is from life, and life is from matter.<sup>37</sup>

More heady thoughts! Yet one cannot help but wonder: Will these cosmic mutations ever stop; will the journey to deity ever really end; will god ever finally settle down to being god?

Still another vision of the future comes from New Age prognosticator Jean Houston, an intellectual disciple of Teilhard de Chardin, Carl Jung, and Joseph Campbell. Houston’s eschatology gives even the most imaginative



science fiction writer a run for his money. James Sire summarizes it as follows:

For twenty-five years, Houston has spoken the same message: Human beings evolve toward higher consciousness; societies and cultures evolve toward greater comprehensiveness.

Now...she says we may already be in the first few years of a Type 1 High-Level Civilization, during which our great-great-great-great-grandchildren are going to be on other planets or (in) space colonies, "... creating paradise, creating a viable ecology and a world which we mutually nourish and which nourishes us to the fullest of our capacities."

After that will come "...Type-II Level Civilizations in which we become responsible, on the sensory level, for the orchestration of the resources of the solar system...We will mythically probably also be coming close to in some way incarnating the archetypes. We will become the gods that we have invoked."

Later still in Type-III Level Civilizations, "...we will join the galactic milieu and become the creators of worlds, capable of Genesis."<sup>38</sup>.

In comparison with Houston's psychedelic reveries, the popular cosmological speculations of Hungarian philosopher, musician, and scientist, Ervin Laszlo, almost seem humdrum. Like Teilhard, Laszlo is a panpsychist. For him, the ultimate reality is a single eternal substance with three dimensions: Information, Energy, and Consciousness. This substance constitutes what he calls the Metaverse—also known as the Akashic Field (from Hinduism), the Zero Point Energy Field, the Quantum Vacuum, and the Plenum Void.

Laszlo thinks of the Metaverse as a kind of cosmic womb, an ocean of tiny bi-partite quantum droplets from which all individual universes are born in serial Big Bangs, and to which they all return again in serial Big Crunches. Thus, like so many ancient and modern pantheists, Laszlo too embraces the idea of eternal recurrence. Acknowledging that for most people the doctrine of eternal recurrence paints a rather "dismal picture" of our cosmic future, he seeks to offer us hope:

The evolution of life in the Metaverse is a cyclical process *with a learning curve*. Each universe starts without life, evolves life when some planets become capable of supporting it,



and wipes it out when planetary conditions pass beyond the life-supporting range. *But the quantum vacuum is shared by all universes, and it records and conserves the wave-form traces of all the life that has evolved.* As the cosmic vacuum becomes more and more modulated with traces of life, it becomes more and more favorable to life. It speeds up evolutionary processes wherever they get under way.

Progressive evolution in the Metaverse offers a positive prospect for the future of life in the cosmos. Although life appears and disappears in a cyclical progression, it continues in one universe after another. And it evolves further and further in universe after universe.<sup>39</sup>

Here is the doctrine of *samsara* writ large—indeed, cosmically large. Each new universe is a reincarnation of its predecessor (and of all other predecessors). Yet it is not a mere replica. That’s because the Akashic Record—a kind of cosmic memory bank comprised of information-waves embedded in a sea of quantum particles—somehow introduces a principle of progress into the eternal cycle, guaranteeing that each new universe builds upon its (remembered) predecessors, and that it will evolve faster and farther than the one(s) before it. How did this process get started? How exactly does it work? Where exactly is it headed? Laszlo doesn’t say.

As they interact with all these different visions of the future, astute seekers will realize that New Agers are definitely not shy about speculation. But this raises an important epistemological question: How can New Agers—or anyone else—be sure about which, if any, of their speculations are true? This brings us to the New Age answer to the final question of life.

### ***How Can We Find Trustworthy Answers?***

At first glance, it may seem that New Agers reject all forms of external philosophical authority. What else should we conclude when we hear David Spangler say, “We can take all the scriptures, and all the teachings, and all the tablets, and all the laws, and all the marshmallows, and have a jolly good bonfire and marshmallow roast, because that is all they are worth.”<sup>40</sup>

However, as the verbiage of Spangler’s caustic remarks makes quite clear, New Age hostility to religious authority is actually quite narrowly focused upon the scriptures of the theistic religions, and in particular upon

the Bible. This is understandable, since a straightforward reading of the Bible confronts us with an infinite personal God who commands his human creatures to humble themselves before him, and to believe and obey his revealed words. Needless to say, such commands fall hard on the ears of folks who like to think that *they* are god. And so, to ease the tension, New Agers typically interpret the Bible “esoterically” rather than theistically. That is, they interpret it as teaching pantheism. Once having done so, they are at liberty not only to believe it, but even to cite it as yet another spiritual authority favorable to New Age cosmology!<sup>41</sup>.

And as a matter of fact, such authorities are legion. As we have seen, they include the sacred texts of the ancient pantheistic religions: Hinduism, Taoism, and Buddhism. They include esoteric versions of Judaism (e.g., Kabbalah), Christianity (e.g., the Mind Sciences), and Islam (e.g., Sufism). They include the (channeled) teachings of personal spirits living on other planes, whether ascended masters, spirit guides, or aliens from other worlds. They include various kinds of personal mystical experience, such as out of body experiences, near death experiences, past life regression, and altered states of consciousness. And finally, they include some of the (alleged) discoveries of modern science, (e.g., relativity theory, quantum mechanics, general systems theory, ecology, etc.).

One’s overall impression, then, is that if it supports—or can be made to support—pantheism and/or evolutionism, it qualifies as “proof” for the truth of the New Age vision. Thus, despite frequent claims to the contrary, New Agers do indeed presuppose the existence of absolute philosophical truth, and they do indeed try to defend their version of truth with appeals to evidence. This, however, is implicitly to invite both friend and foe to reason together with them about the truthfulness of their worldview.

## **Evaluation of NAC**

Let us therefore accept their invitation and take a few moments to evaluate NAC, seeking, as in the case of Hinduism, to see if it really does

meet the requirements of a trustworthy revelation from god.

### ***Is NAC Intuitive?***

At first glance, NAC can seem fairly intuitive because, unlike naturalism, it acknowledges a spiritual principle at work in the universe. However, upon closer inspection it soon becomes clear that in fact it is not. Here, very briefly, are some of the main reasons why.

First, the god of NAC is *impersonal*. Again, this theological premise is highly problematic for any pantheistic worldview, since nature, conscience, and the probationary order all reveal an infinite personal Spirit. However, in the case of New Age pantheism the problem is especially acute. This is because NAC gives us an orderly evolving universe, yet *withholds from us a divine Orderer and Evolver*. Why? Because the conscious, intelligent, and powerful god of the New Age arrives on the scene *only at the closing stages of cosmic evolution*.

Obviously, this raises many troubling questions. Who was there at the beginning of the cosmic journey to plan and launch it? Who was there during the middle stages of the journey to guide it to its appointed goal? Who was there to erect, throughout billions of years, the great hierarchy of holons? Who was there to fill the universe with its manifold tokens of order, design, and purpose? In short, NAC veritably cries out for a *personal* god who is actively superintending each and every stage of cosmic evolution. Yet New Agers do not seem to hear the cry. Or is it that they hear it, but simply prefer not to reckon with a personal creator—and a moral governor—who is metaphysically different from (and greater than) themselves?

Here, by the way, is why the Intelligent Design movement has made such remarkable strides in recent years: Unlike the New Age movement, it draws the most natural, intuitive, and obvious conclusion from the order, design, and teleology we see in the universe: A powerful and intelligent Designer *must* be on the scene whenever and wherever such things appear.<sup>42</sup>

Secondly, the “god” of NAC is *one with nature*. This is true for both pure pantheists and panpsychists. Their view is that the ultimate reality is a single substance, whether pure Spirit or Mind/Matter; that this substance is god; and that god and nature are therefore one. However, their *monistic* premise is counterintuitive. Our natural inclination is to view god as *related* to nature, but also as *different* from it; as *immanent*, yet also *transcendent*. This “dualistic” understanding of the universe, which draws a sharp metaphysical line between god and nature, underlies all the theistic religions. The greater popularity of those religions stands as proof positive that theistic metaphysics is more intuitive than that of the New Age.

Thirdly, the god of NAC is *mutable*. That is, “he” is ever changing, ever increasing in consciousness and power, ever *becoming* god. However, the more intuitive notion is that god is immutable: *always* self-conscious, *always* omniscient, *always* omnipotent, etc. When, following the New Agers, we identify god with the (allegedly) evolving universe, god is immediately shackled to the course of his creation. When, following the theists, we distinguish god from his creation, he is free to be god at all times, full and complete. And again, the greater popularity of theistic religion tells us that an immutable god makes far more sense to the mass of men.

Fourthly, there is the core thesis of the panpsychists, namely that all matter has mind or consciousness. Now at first glance, this notion may seem plausible enough, since we humans are self-evidently a union of matter (body) and mind (soul). But further reflection soon reveals that it is actually quite counterintuitive. For example, we strongly tend to balk at the suggestion that inorganic substances are conscious at all (e.g., earth, air, fire, water). Also, while we are ready enough to agree that plants and trees are alive, few of us would agree that they are conscious. Furthermore, while everyone will admit that animals are conscious, few will admit that they are *self-conscious*, and still less that they are endowed with the unique faculties that make us humans human.

It appears, then, that the panpsychist thesis does not harmonize well with our common sense impressions of the universe, life, and man. However, as we shall see later, the biblical view does, teaching us that all matter is unalive and unconscious, but that the living God infuses some kinds of matter with life, others with life and soul, and others still with life, soul, and human personality. Such a cosmology—which traces all three of these supernatural entities (i.e., life, soul, and soul with personality) to a supernatural creator and sustainer—is certainly more intuitive than panpsychism.

Finally, we have the most counterintuitive assertion of all, namely, that man is god, or that he is evolving into god. Now no matter how ingeniously New Agers try to soft-pedal or blunt the force of this thesis, most folks, once they understand it, find it shocking. Why? Simply because we know ourselves—and even the unknown god—far too well to view this claim as anything other than false, arrogant, and even blasphemous. Yes, intuition tells us that man has certain god-like qualities: self-consciousness, intelligence, freedom, creativity, etc. But it also tells us that god has certain “incommunicable” qualities that man—his creature—does not and cannot ever have: self-existence, eternity, omniscience, omnipresence, omnipotence, immutability, etc. Furthermore, we all know intuitively that god is good, just, and sovereign—and therefore the rightful ruler of his entire creation. Meanwhile, we also know that man is god’s deeply flawed, self-centered, and polymorphously perverse subject, who all too often refuses to obey his rightful ruler. In short, for most folks, god is indeed “the personage of our Sunday School mentality.” And this is true, not so much because our perceptions of him have actually been shaped by Sunday School (for how many people today still attend Sunday School?), but because the God of the Bible is so very like the unknown god whom we all know intuitively from nature, conscience, and the probationary order. Accordingly, the New Age thesis of the divinity of man often troubles conscientious seekers far more than it attracts them.

## ***Is NAC Reasonable?***

For a number of compelling reasons, it is impossible to answer this question in the affirmative. Here are a few of the most important.

First, the sources of New Age revelation are not trustworthy. As we saw at the beginning of our journey, the road of revelation is “rough,” littered with useless human—and possibly even demonic—error and deception. This is why seekers need to be extremely cautious about the spiritual sources of NAC. For example, it is true that the ancient scriptures of Hinduism, Taoism, and Buddhism broadly agree in teaching pantheism. Nevertheless, it is also true that they disagree in many particulars, and that *none* of them even hints at the second great pillar of NAC: cosmic evolution. Meanwhile, the scriptures of the theistic religions directly contradict the pantheistic, *and one of them, unlike all the rest, is powerfully attested by a wide variety supernatural signs*. Where, then, would a seeker of trustworthy cosmological knowledge most reasonably turn: to the well-attested scriptures of a theistic revelation, or to the unattested and contradictory scriptures of pantheistic revelation?

Even more caution is necessary in evaluating the revelations that New Agers receive from spirit-guides, ascended masters, and/or aliens from other planets and galaxies. Assuming that such entities actually exist, who is to say that they are benign and truthful? If they really are trustworthy, why do their utterances so often contradict one another? Is it wise (or safe) to heed them when we learn from at least one reliable source—the Bible—that demonic spirits are indeed “in the air” around us, that they come to their victims as “angels of light” (i.e., as winsome purveyors of spiritual truth), and that they do so with a malicious intent to deceive and destroy (John 8:44, 2 Cor. 11:14, Eph. 2:1-2, 1 Tim. 4:1)? And should we not be all the *more* circumspect when we learn that virtually *all* world religions—whether theistic, pantheistic, or animistic—agree that evil spirits are continually at work behind the scenes of our troubled world, eagerly seeking to tempt, deceive, and destroy the sons of men?

Secondly, NAC is riddled with logical contradictions. We have just seen, for example, that it is impossible to wed cosmic evolution with pantheism; that the two doctrines are mutually exclusive, since cosmic evolution requires mind to evolve from a previously existent substance, whereas pantheism requires all “substances” to exist as mere spiritual phenomena in someone’s mind. Also, we have seen that in one breath New Agers declare that something did indeed go wrong (i.e., Big Mind fell prey to dualistic thinking), whereas in the next they say that nothing went wrong (i.e., cosmic history is unfolding precisely as it should). This in turn elicits conflicting advice as to how we should address evil: fight it by way of visualizing and affirming the good alone, or transcend it by way of a mystical experience that takes us “beyond good and evil.” These are just a few examples of how NAC entangles itself in logical contradictions when it seeks to wed classical eastern religion with western evolutionism.

Thirdly, NAC is overthrown by the case against cosmic evolution. Having already set this forth at length in the previous chapter, I will not repeat myself here. Suffice it to say that (unlike the personal god of theistic evolution) the impersonal, immanent, mutable, and emerging god of NAC can add nothing whatsoever to the plausibility of cosmic evolution. Meanwhile, the arguments and evidence against the factualness of cosmic evolution speak just as powerfully against New Age cosmology as they do against naturalistic.

But what of the distinctly scientific evidences for NAC? In particular, what of punctuated equilibrium, general systems theory, relativity theory, and quantum mechanics? Don’t these pillars of modern science support the New Age worldview?

As a matter of fact, they do not. Let us spend a few moments with each one to understand why.

## **Punctuated Equilibrium (PE)**

As we have seen, NAC embraces a modified version of Gould's theory of punctuated equilibrium, asserting that man has ceased to evolve physically by genetic leaps and bounds, but that he is now evolving spiritually by leaps and bounds in consciousness. However, there is not a shred of hard scientific evidence to support this view, and much against it. As for its theoretical basis—Gould's *biological* punctuationalism—everyone agrees that this is simply an *ad hoc* hypothesis designed to rescue classical Neo-Darwinism from the inconvenient fact that there is no sign whatsoever of gradual evolution in the fossil record. Indeed, biological research has shown that in obedience to the Second Law of Thermodynamics man is actually “devolving” through a gradual accumulation of harmful mutations over the generations. As for “quantum leaps in consciousness,” this seems to be pure wishful thinking, a grasping at spiritual straws in the face of the distressing tumults of modern life. Yes, New Agers do effectively use drugs, meditation, spiritism, and other techniques to attain altered states of consciousness. But as they themselves will admit, what goes up always comes down. And yes, there are occasional “quantum leaps” in our scientific *understanding* of nature. But this is nothing more than simple intellectual progress—one generation of thinkers standing on the shoulders of its predecessors—and hardly constitutes a change in the very nature of the human race. If New Agers, through the exercise of purely spiritual powers, could consistently turn lead into gold, or empty the cancer wards of their patients, or actually bring in even a little of the world peace that they keep urging us to visualize, folks would be far more inclined to listen to their claims about a spiritually evolving humanity. However, as things presently stand, it certainly appears that man—in all his glory *and* all his depravity—is still very much man. There is nothing new under the sun.

## **General Systems Theory (GTS)**



Concerning general systems theory, all parties agree that recent scientific discoveries have only strengthened our common sense impression that the world is indeed a unified whole, a system of systems. As Fritjof Capra puts it:

The universe is no longer seen as a machine, made up of a multitude of objects, but has to be pictured as one indivisible, dynamic whole whose parts are essentially interrelated and can be understood only as patterns of a cosmic process.<sup>43</sup>

True enough. The question, however, is what the unity, systematicity, and processes of the cosmos actually imply. Capra and his New Age colleagues say that they imply monism and pantheism; that the *systemic* unity of the cosmos entails its *substantial* unity (monism); that because consciousness is an integral *part* of the cosmos, consciousness must somehow be the true and underlying *substance* of the cosmos (pantheism). In short, for New Agers the universe is a unified system because it exists as a unified dream in the mind of the one god.

But is this the only possible conclusion, or even the best? I think not. Let us grant with Capra that “The systems view of life is spiritual in its deepest essence and thus consistent with many ideas held in mystical traditions.”<sup>44</sup> However, we must probe a little further by asking *which* spiritual tradition is *most* consistent with the systems view of life: theism or the “mystical traditions” of pantheism.

The answer, quite clearly, is theism. For New Age pantheism, with its emphasis upon an immanent, impersonal, and evolving god, cannot give us a viable Cosmic Systematizer. Meanwhile, theism, with its emphasis upon a transcendent, intelligent, powerful, and personal god, can. Observe also that cosmic systematicity makes even *more* sense if the unknown god happens to be the God of the Bible, a three-in-one god who, through his creation, seeks to illustrate the mystery of his tri-unity by weaving several different individual systems together into a single super-system. With such points in mind, theologian Elliot Miller concludes as follows:

The biblical picture of physical creation is perfectly compatible with the now obvious fact that the universe is one enormously vast system...However, the holistic perspective (on man and nature) that we have (all) agreed would be beneficial for society pertains (only) to *this* world; it need not include God (as being himself part of the world)...<sup>45</sup>.

The conclusion, then, is that while general systems theory may indeed be somewhat consistent with NAC, it certainly does not prove it. Meanwhile, the actual facts of the matter turn out to favor theism, especially theism of the biblical kind.

## **Relativity Theory (RT)**

In a number of different ways New Agers argue that the modern theory of relativity supports their pantheistic vision. Here, for example, is Gary Zukav seeking to press Einstein and General Relativity (GR) into the service of Taoism and Buddhism:

We have said, up to now, that matter distorts or causes a curvature of the space-time continuum in its vicinity. According to Einstein's ultimate vision, which he never "proved" (i.e., demonstrated mathematically), a piece of matter *is* a curvature of the space-time continuum! In other words, according to Einstein's ultimate vision, there are no such things as "gravitational" fields and "masses." *They are only mental creations.* No such things exist in the real world. There is no such thing as "gravity"—gravity is the equivalent of acceleration, which is motion. There is no such thing as "matter"—matter is a curvature of the space-time-continuum. There is not even such a thing as "energy"—energy equals mass, and mass is space-time curvature.

What we considered to be a planet with its own gravitational field moving around the sun in an orbit created by the gravitational attraction (force) of the sun is actually a pronounced curvature of the space-time continuum finding its easiest path through the space-time continuum in the vicinity of a very pronounced curvature of the space-time continuum.

There is nothing but space-time and motion, and they, in effect, are the same thing. Here is an exquisite presentation, in completely western terms, of the most fundamental aspect of Taoist and Buddhist philosophies.<sup>46</sup>

Truly, this is a breathtaking monistic juggernaut. Time, space, matter, gravity, energy, force, motion, the physical universe itself—what are they? From one angle, says Zukav, they are simply “mental creations,” useful but ultimately illusory patterns of perception and theoretical thought that man’s mind imposes upon a single, ineffable, ultimate reality. And yet, from a different angle they may actually be seen as manifestations of that reality, indispensable steps in the great “dance” (*Lila*) of the phenomena that we call the universe. Now if Zukav is right, obviously it remains only for us to throw consciousness itself into the mix, so that henceforth the single ultimate reality turns out to be Big Mind, while the dance of the phenomena turns out to be a dream in Big Mind. This is, of course, precisely what Zukav does, with the result that his monistic physics finally becomes what he wants it to be: a testimony to the truth of Taoism, Buddhism, and pantheism.

Unfortunately for Zukav, these conclusions are far from reasonable. Even if we grant that he is only following Einstein—who was indeed a pantheist—the fact remains that the vast majority of scientists do *not* follow Einstein (or Zukav) in reading GR as a mandate for pantheism. Indeed, many who embrace GR are philosophical *naturalists*, men who believe that the physical universe is all there is, and that GR happens to provide an accurate description of the way it behaves. More to the point, as we saw earlier, Relativity Theory itself is highly suspect, being unnecessary, counterintuitive, illogical, supported by faulty “evidence,” contradicted by much good evidence—and therefore rejected by many scientists.

Also, as we shall see more fully in chapters 5 and 6, there are many rich veins of evidence favorable to biblical cosmology, a cosmology that explicitly contradicts the fundamental axioms of GR. In particular, biblical cosmology affirms the existence of absolute astronomical time (which began on the first Day of the creation); absolute space (which is finite, structurally static, and does indeed have a “preferred frame of reference”—the central Earth); and absolute ontological distinctions between time, space, and matter (i.e., these are not aspects or manifestations of a single

substance, as in Einstein's unified field theory, but distinct beings with distinct natures).<sup>47</sup> In sum, even if it were true, GR does not necessarily support the pantheistic cosmology of the New Age. Meanwhile, much sound evidence speaks up loudly against GR, even as it points seekers of cosmological truth in another (theistic) direction altogether.

## Quantum Mechanics (QM)

Not a few New Age leaders appeal to Quantum Mechanics as evidence for the truth of NAC. In this effort, Fritjof Capra fired the opening salvo with his book *The Tao of Physics* (1971). Since then, other writers—usually non-scientists—have followed suit (e.g., G. Zukav, M. Talbot, L. LeShan, I. Bentov, etc.). Though most professional physicists decry these efforts as pseudo-science, the works themselves have proven popular and influential. Therefore, we must take a little time to plunge into this fascinating discussion.

The New Age argument here is based upon the strange behavior of “quanta,” the tiniest entities in nature. These include photons, atoms, electrons, and other kinds of sub-atomic particles. In some observational settings (e.g., in a double-slit experiment), these entities behave like waves, spreading out over a large area and causing interference patterns. However, in other settings they behave like particles, being limited to a confined area and traveling in a straight path. Though Quantum Mechanics has been around for 70 years, scientists still do not understand why quanta manifest this mysterious “wave/particle duality.”

They have, however, developed some useful tools for describing quantum behavior. One of them is called the *wave function*. John Byl describes it as follows:

In mathematical terms, QM represents a quantum entity—say an electron—using a *wave function*. The wave function is a mathematical formula that computes the probability of the electron being in any particular spot. Since the wave function effectively spreads out over all of space, the unseen electron seems to be everywhere, although the probability is largest near the position where it was last observed. On the other hand, we cannot say precisely where the

electron is between observations. The electron seems to be everywhere and nowhere at the same time...From any initial conditions we can precisely predict the future behavior of the wave function. (However)...the wave function yields only a set of possibilities. To find out which possibility actually happens in an experiment, one has to make a measurement. When a particular measurement is made, the electron will be found to be in one precise location. The wave function, with all its infinite possibilities, is then reduced to one particular outcome. This is called the “collapse of the wave function” or the “quantum jump.” Quantum theory predicts, not the exact outcome of any particular measurement, but only the statistical distribution of many measurements...The mathematical equations of QM...can account for all quantum experimental results...However, QM does not explain how the wave function collapses to a particular value, how that value is chosen, or what the electron actually does between observations. Answers to such questions depend very much on how one *interprets* QM.<sup>48</sup>

In order to discern unwarranted claims about the spiritual significance of QM, it is crucial for us to understand what Byl is saying here, and what he is not. He is saying that the wave function is simply a mathematical tool. It is a way of describing the probable results of a given experiment with a given electron. It is a way of telling us the likelihood of that electron’s appearing here or there in a certain experimental setting. However, Byl is *not* saying that the wave function tells us anything about the underlying nature of reality.<sup>49</sup> In particular, he is not saying that the electron does not exist until someone measures it (an oxymoron if ever there was one). Nor is he saying that the electron exists as a wave, or as “pure possibility,” until an experimental observation “collapses” it into a particle (for perhaps it exists as a particle that somehow causes waves, say in an ethereal medium). Now it is true that a few physicists have gone down these exotic routes.<sup>50</sup> Meanwhile, the majority of physicists have gone down others.<sup>51</sup> But, as Byl points out, their views are all *interpretations* of quantum behaviors, speculative efforts to understand what is really going on in a realm that is beyond our ability to observe.

What, then, is the conclusion of the matter? I would agree with Byl when he says:

It seems prudent to concur with Bohr that quantum mechanics surely puts a limit on *human* (but not divine) knowledge about the sub-quantum world. We can only speculate as to what

exists beyond what we can observe. Here we must be guided by our basic philosophical convictions.<sup>52</sup>

In other words, it appears that QM is a kind of scientific Rorschach Blot in which it is indeed possible to see a reflection of one's own philosophical convictions. Perhaps those convictions are true. Moreover, if they are true, and if we *know* they are true, we will be much helped, for we will be able to rule out other interpretations that are inconsistent with truth. Nevertheless, because of the radical inaccessibility of the quantum realm, the science of QM *cannot* be used to “prove” the truth of any of our metaphysical preferences.

With these few thoughts as background, we are now in a position to hear and evaluate Capra on the spiritual significance of QM. He writes as follows:

At the subatomic level, matter does not exist with certainty at definite places, but rather shows “tendencies to exist.” And atomic events do not occur with certainty at definite times and in definite ways, but rather show “tendencies to occur.”...At the subatomic level, the solid material objects of classical physics dissolve into wave-like patterns of probabilities, and these patterns, ultimately, do not represent probabilities of things, but rather probabilities of interconnections. A careful analysis of the process of observation and atomic physics has shown that the subatomic particles have no meaning as isolated entities, but can only be understood as interconnections between the preparation of an experiment and the subsequent measurement. *Quantum theory thus reveals a basic oneness of the universe.* It shows that we cannot decompose the world into independently existing smallest units...Properties of any atomic object can only be understood in terms of the object's interaction with the observer. This means that the classical ideal of an objective description of nature is no longer valid.<sup>53</sup>

Quite evidently, Capra's goal is to enlist QM in the service of monism and pantheism. However, in order to reach his goal he must force monistic and pantheistic interpretations upon the non-partisan data themselves. Thus, where QM simply says that we humans can only know where a particle will tend to appear (e.g., when passing through a slit to a photographic plate), Capra reads this as saying that the particle itself only “tends to exist!” Again, where QM says that the wave function is a purely mathematical

construct designed to compute the probability of a particle's being in a particular spot, Capra reads this as saying that subatomic matter itself exists as "wave-like patterns of probabilities of interconnections." (Capra's thought here seems to be that one pole of the interconnection is consciousness; but what is the other?) And again, where QM says that human measurements will "collapse the wave function" by telling us where a particle actually happens to be, Capra reads this as saying that human measurements (or is it really our *conscious intention* to make measurements) will mystically bring the particle out of the realm of "probability" into (phenomenal) existence. In short, Capra repeatedly distorts the actual data of QM by forcing a pantheistic interpretation upon them.

Seekers should understand that New Age interpretations of QM violate not only common sense, but also some of the most fundamental axioms of natural science. These include the idea that the universe exists objectively (i.e., independently of our consciousness of it), and also that it (usually) operates according to certain natural laws that are discoverable by the right use of scientific method. Because New Age teachers challenge these bedrock assumptions, most scientists challenge the New Age teachers, and sometimes quite forcefully. Physicist John Wheeler, for example, calls New Age ideas "crazy," further labeling them as "moonshine," "pathological science," and "charlatanism."

Nevertheless, philosophical honesty compels us to give the New Agers their due. Since scientists, like all human beings, are indeed *always* locked up inside their own conscious minds, we must admit that no scientific theory, instrument, or experiment can ever disprove the central New Age thesis: "There is no physical world 'out there'; consciousness creates all."<sup>54</sup> Thus, for natural science to rest secure upon its cherished foundations—and, God willing, for it to unravel the mysteries of the quantum realm—it needs to know with certainty that theism is true. But for that, it needs a trustworthy revelation from the one true God.



As for the positive evidence *against* NAC, we have already discussed it at some length. This includes the various philosophical objections to pantheism, the extensive scientific case against (naturalistic) cosmic evolution, the panoply of supernatural and providential signs favorable to biblical theism, and the extensive scientific evidence favorable to biblical creationism (to be discussed later). In sum, it appears that the overall case for NAC is very weak, while the overall case against it is very strong. If, then, reasonableness is important to a seeker of cosmological truth, he will want to think long and hard before embracing New Age cosmology.

### ***Is NAC Right?***

How well does NAC explain, guide, and conform to our distinctly ethical intuitions? The answer is: not well at all.

As we have seen, New Agers deny the existence of an infinite personal god who acts as the moral governor of his free creatures, a god who lays down the law, strives with us in our conscience, rewards good, and punishes evil. Instead, they identify god with all that exists, thus making “him” both good and evil; or else they identify him as the yet future goal of evolution, thus depriving us of an intelligible explanation for our present consciousness of moral law, moral obligation, and moral cause and effect. In short, having turned its back on an infinite personal Lawgiver and Judge, NAC cannot make sense of the moral universe.

The result is that New Agers, for all practical purposes, lay down their arms in the battle against evil. Is a husband abusing his wife? Is a student doing drugs? Is a businessman polluting the air or cheating his customers? Is a vicious dictator decimating his own citizens? “Such things,” says the New Ager, “are indeed ‘evil’ because they go against the flow of evolution, which is always towards the harmony, peace, and health of perfect unity.<sup>55</sup> And yet, from another angle they are not really evil at all, since the abuser, the addict, the cheat, and the dictator are all (manifestations of) god; they are “knots” of (deluded) self-consciousness (and self-centeredness),



working out their *karma* lifetime by lifetime, and thereby moving towards enlightenment along the unique evolutionary path to which they have been destined. By our enlightened words and deeds we New Agers can try to show them a better way, but we cannot, in all justice, judge their way as evil, or turn to laws or force to stop them in it. For since all is god, and since all ways lead to god-consciousness, who are we to judge another traveler's way, or to force that traveler to take our way."<sup>56</sup>

Such ethical relativism and passivity are perfectly consistent with the (pantheistic) worldview that serves as its foundation. But what if that foundation is made of sand? What if the theistic foundation is made of stone? What if there really is a holy god who expects us to fight against evil, whether in ourselves or in our world? And what if he really does authorize governments to institute and enforce just laws? Under those sobering circumstances, the weak pantheistic response to evil would not only be wrong-headed, it would be suicidal.

### ***Is NAC Hopeful?***

As we have seen, most New Agers anticipate nothing less than the deification of man and the universe. Things will get better and better as man—awakening to his divine nature, wisdom, and power—begins to steer the evolving universe toward the everlasting Paradise of his dreams.

All this means that NAC is not only hopeful, but also far more hopeful than Hinduism and Buddhism, and *vastly* more hopeful than naturalism. Nevertheless, we have repeatedly seen that there are few good reasons to believe that it is true, and many good reasons to believe that it is not. This is important. Hope is good, but only if it is true. Hope is true only if it is anchored to the true future—the future that the true god truly has in store. And hope is powerful only if we *know* it is anchored to god's true future. But the New Age hope meets none of these criteria. Therefore, it can neither fill the soul with peace, nor guide it confidently through life, past death, and safely into its eternal home.

## Conclusion

In the preceding evaluations of naturalistic and pantheistic cosmology I have intentionally lingered long, citing many important facts and arguments relevant to the Great Debate about origins. My goal has been to persuade seekers that the debate is far from over, that cosmic evolution may indeed be “the great cosmogenic myth of our time,” and that a paradigm shift in our thinking about origins may well be underway. Now if all this is so, seekers of cosmological truth can hardly afford to do as I did back in the seventies: ride along carelessly on the wave of the prevailing academic consensus, making no personal effort at all to ascertain the truth for oneself. Hopefully, no one who reads these pages will.

More than this, however, I have sought to demonstrate yet again the rich fruitfulness of the test perspective. As we have seen, the investigation and evaluation of different cosmologies (or competing views on any question of life) is hard work. But if we have embraced the test perspective, our load is much lightened. By it we are taught *realism*: to expect differences of opinion and a measure of difficulty in finding the truth. But by it we are also taught *optimism*: to expect that the truth *can* be found; that there is indeed a personal god; that he was present at the beginning; that he is both willing and able to give us a (much-needed) revelation of how it all came to be; and that this revelation will be understandable, intuitive, logical, supported by much good evidence, satisfying to conscience, and rich with spiritual hope.

If then the test perspective is true, I judge that our journey thus far has shown us that the naturalistic and pantheistic versions of the beginning are not.

It is time now to see if Jesus’ version is.

## NOTES

1. Scott Littleton (ed), *Mythology*, (Duncan Baird, 2002), p. 88.

2. *Mythology*, p. 138. Cosmogonies like these account for the great importance attached to astronomy and astrology by ancient cultures. In such disciplines men were tracking nothing less than the motions of the heavenly gods, trying to determine their significance for dwellers upon the earth below.

3. While a quick survey of the most ancient cosmogonies does indeed leave an impression of universal pantheism, a closer look at the overall data reveals a more nuanced picture. On this score, three important points may be made.

First, a number of the oldest cosmogonies are explicitly monotheistic and creationist. The most prominent instance here is, of course, the Hebrew creation account, inscripturated by Moses around 1500 B.C. Note, however, that Genesis itself actually takes us back much further, showing that any number of ancient Gentile nations were well aware of “God Most High, Possessor (and Creator) of heaven and earth,” in the days of Abraham (ca. 2000 B.C., Genesis 14:18-20; 12:17, 20:3-4).

A still older theistic tradition is found among the Chinese who, under the leadership of Emperor Shun (fl. 2250 B.C.), worshipped *Shang Di*, the Heavenly Ruler. As part of the annual Border Sacrifice to *Shang Di*, the emperor would declare, “You made heaven, You made earth, You made man. All things, with their reproducing power, got their being (from You).”

Other cultures honored a high creator god, as well. The Maori of New Zealand worshipped *Io*, the eternal Parent of creation and the holy Giver of all. The Sulawesi of Indonesia, in a cosmogony highly reminiscent of Genesis 1-2, spoke of “He Who Formed our Fingers,” and who also situated the first human pair in “a beautiful place.” The Incas of Peru—a moral and devout people who prayed, offered sacrifices, pondered the afterlife, and even believed in the resurrection of the body—worshipped *Viracocha*, whom they described as “the Age-old Creator Lord, Instructor of the World.” According to Cheyenne beliefs, “In the beginning the Great Medicine created the Earth, and the Sun, Moon, and Stars.” In sum, we find

that in the ancient world theistic cosmogonies not only existed side by side with pantheistic, but in some cases even pre-dated them.

Secondly, a number of cosmogonies that interpreters might call pantheistic are actually better described as “semi-creationist.” That’s because they do not envision the (creator) gods as emerging from the primordial substance, but rather as existing eternally and fashioning the cosmos out of some pre-existing material. For example, the Maya believed that *Hurricane* (the sky god) and *Gucumatz* (the sea god) fashioned the world by speaking together over the primeval waters. Similarly, the Tututni Indians of North America honored Giver and Watcher, two divine creators who, in the beginning, sat outside their sweat lodge above the Ocean. From there they presided over the formation of the land, trees, grass, animals, and the original human pair (one of whom was the Watcher himself, who became a man). As for the Apaches, they believed that the eternal *Hactcin* (personal gods) fashioned (mother) earth and (father) sky out of original Darkness, Water, and Cyclone. Legends such as these clearly occupy a middle-ground between monotheistic creationism and pantheistic emanationism.

Finally, it appears from recent anthropological investigations that the myths and cosmologies of virtually all ancient cultures reflect at least a faint memory of a single “high god” who was the true creator of the world. This is the case not only in the Ancient Near East, but also in India, Africa, China, Europe, and even the Americas. As Wilhelm Schmidt, world-renowned researcher into the origin of religions, put it:

A belief in a (single) Supreme Being is to be found among *all* the peoples of the primitive culture; not indeed everywhere in the same form or the same vigor, but still everywhere prominent enough to make his dominant position indisputable.

—Cited in *The Long War Against God*, p. 293

What all this means is that over the last 150 years, cultural anthropologists have experienced a radical transformation in their thinking

about the development of world religion. Back in the mid-nineteenth century, scholars such as Sir Edward Taylor and Sir James Taylor postulated that human spirituality, like the human body, was evolving to higher and higher levels of complexity; that the religious trajectory of mankind was, roughly, from primitive animism, to polytheism, to pantheism, and finally to monotheism. In time, however, it became clear that the evidence actually points in a very different direction; that in their earliest known stages all cultures were monotheistic and creationist; but that somehow the original monotheism degenerated progressively into pantheism, polytheism, animism, and even (primitive) atheism. Speaking of this “devolutionary” tendency, Oxford anthropologist Stephen Langdon wrote:

In my opinion, the history of the oldest civilization of man (i.e., the Sumerian) is a rapid decline from monotheism to extreme polytheism and widespread belief in evil spirits. It is in a very true sense the history of the fall of man. (*Ibid*, p. 294)

If, then, monotheism prevails today among the majority of mankind, it is certainly not because this is our evolutionary destiny, but rather because some powerful force—clearly at work among the pious Jews of old, and later among mission-minded Christians—has preserved a growing number of monotheists from the natural human tendency to sink into pantheism, polytheism, animism, and atheism.

It remains only to point out that these conclusions accord perfectly with the biblical picture of man’s religious “progress” after the Flood (see Chapter 5 on The Bad Beginning). When Noah and his family exited the Ark, they built an altar to the Most High God, reverently offering sacrifices to Him who had created—and now terribly judged—the world (Gen. 8:20-22). In time, however, the power of indwelling sin would again assert itself, so that Noah’s seed would again rebel against God, and God would again judge them, confounding their language and scattering them to the four corners of the earth (Gen. 11:1-9). For a season, some of these people groups would retain a memory—and a holy fear—of God Most High (Gen.

12:17, 14:7-20, 20:3-4). Others, however, would soon forget, with the result that succeeding generations would plunge deeper and deeper into pagan idolatry (Psalm 9:17, Micah 4:5). And yet, despite the powerful downward drag of sin, God would never leave himself without a witness (Acts 14:17), but would faithfully preserve a chosen people for his Name (Gen. 12:1f, 14:18-20, Acts 15:14). Moreover, through that people he would one day send a Redeemer into the world (Rev. 12:1f), and through that Redeemer dethrone all other gods and abolish all other names, so that at the last the LORD alone would be King over the whole earth, and his Name the only name (Zech. 14:9, Phil. 2:5-11).

For more on this fascinating subject, see Henry Morris, *The Long War Against God* (Master Books, 2000), chapters 5 and 6; C. Scott Littleton, Gen. Ed, *Mythology* (Duncan Baird, 2002). Also, see the articles: “The Original Unknown God of China,” by Ethel Nelson; and “Maori Memories of the Creator,” by Peter Dennis. Both are available at [www.creation.com](http://www.creation.com). Also, see “The Power of the Creation Message,” by Bob and Cecilia Brown, available at [www.icr.org](http://www.icr.org).

4. In the *Tao Te Ching*, Lao Tzu himself speaks of the ultimate reality as follows:

The Tao that can be told of is not the eternal Tao. The name that can be named is not the eternal name. There was something undifferentiated, yet complete, which existed before heaven and earth. Soundless and formless, it depends on nothing and does not change. It operates everywhere and is free from danger. It may be considered the Mother of the universe. I do not know its name. I call it Tao.

5. Though not strictly pantheistic, the philosophies of Anaxagoras (ca. 450 B.C.) and Empedocles (ca. 450 B.C.) are noteworthy. Anaxagoras taught that the cosmos is the handiwork of *Nous* (Mind), an intelligent and powerful force that imposes order upon primordial “seeds” (i.e., eternal particles, lingering in the void). Similarly, Empedocles taught that the four irreducible elements (earth, air, fire, and water) are “mixed” and held in

creative tension by two cosmic forces, Love and Strife. Such dualistic cosmologies, which posit a union of the material and spiritual, are usually called *panentheistic*. They argue that all things exist in, and are shaped and moved by, a god or intelligent spiritual power. Here, the material universe is, as it were, god's body. Among the ancients, Plato is the most famous proponent of panentheistic cosmology.

6. Gordon Clark, *Ancient Philosophy*, (The Trinity Foundation, 1997), p. 37.

7. See Byl, *God and Cosmos*, pp. 133-152 for a discussion of "The Strange Gods of Modern Cosmology." Modern they are, strange they are, but new they are not.

8. New Age author Gary Zukov gives us his own version of the pantheistic beginning, one that may serve to illuminate the Hindu idea of Brahman's "fall:"

All that is can form itself into individual droplets of consciousness. Because you are part of all that is, you have literally always been, yet there was the instant when that individual energy current that is you was formed. Consider that the ocean is god. It has always been. Now reach in and grab a cup full of water. In that instant, the cup became individual, but it has always been, has it not? This is the case with your soul. There was the instant when you became a cup of energy, but it was of an immortal original Being. You have always been because what it is that you are is god, or divine intelligence; but god takes on individual forms, droplets, reducing its power to small particles of individual consciousness.

—Cited in David Nobel, *Understanding the Times (UTT)* (Summit Ministries, 2006), p. 78

Observe here that "god" or divine intelligence does not become conscious and personal until, mysteriously enough, it "forms itself" into souls and "takes on individual forms." When the souls come into being, so

too do the (phenomenal) worlds that are really within them but seem to be around them. Thus does the pantheistic universe begin.

9. One (Buddhist) version of the Hindu cosmos postulates a hierarchy of three great worlds (*lokas*): the Immaterial, the Fine Material, and the Sensuous. In the first there are four heavenly realms, populated by four different kinds of *devas* (gods). In the second there are sixteen heavenly realms, also populated by miscellaneous *devas*. The third contains eleven happy realms populated largely by *devas*, though one of them—the lowest—is the habitation of human beings. This world also contains four painful realms inhabited by demons, hungry ghosts, animals, and the denizens of hell. Importantly, there is only one realm among all thirty-one from which a sentient being can attain release from the cycle of life, death, and rebirth. That is *manussa loka*, the realm of man.

Tellingly, the author who presents this cosmology in such meticulous detail concludes by admitting, “It is pointless to debate whether these realms are real or merely fanciful metaphors describing the various mind-states we (humans) might experience in a lifetime.”

The important thing, he suggests, is that this cosmology teaches us to seek enlightenment. But if we cannot trust (or understand) the cosmology, are we wise to trust the path to enlightenment that it recommends?

For more detail, visit [www.accesstoinsight.org](http://www.accesstoinsight.org).

10. *Mythology*, p. 332. Many thanks to Miss Julianne Kopriva, who helped me with the mathematical calculations found in this and other parts of the book.

11. According to the Buddhist tradition referred to in note 9, one of the denizens of the fine material world is The Great Brahma, “...a deity whose delusion leads him to regard himself as the all-powerful, all-seeing creator of the universe.” In so speaking, the author of this cosmology expresses his preference for the impersonal “god” of pantheism and his disdain for the (deluded) personal gods of popular Hinduism and Buddhism. However,



visitors to Hindu and Buddhist cultures will soon discover that the people themselves do not share this persuasion.

12. Cited in John Ankerberg and John Weldon, *Encyclopedia of New Age Beliefs (ENAB)*, (Harvest House, 1996), p. 231.

13. Our minds even evaluate inorganic objects, not for moral good or evil (which attaches only to free personal agents and their acts), but for aesthetic good or evil—for beauty, for wholeness, for approximation to the mysteriously known ideal.

14. Biblical religion grounds this tendency in God himself. God evaluates all things, declaring that he is always good; that the world, in the beginning, was good; and that the world, subsequent to man's fall, is still fundamentally good but now infected with evil. Because God created man in his image and likeness, man also evaluates all things. This is his nature, burden, and glory. To do it well is seen as an essential mark of spiritual maturity (Heb. 5:14). If, then, biblical religion is true, there is nothing in all reality that is "beyond good and evil"—neither God nor his universe. Such a condition is a metaphysical impossibility.

15. In an utterance calculated to destroy human hope for a happy life in this world, guru Rajneesh declares:

There is no purpose in life...Life is a meaningless, fruitless effort leading nowhere...The whole of life is non-sense...You simply live; there is no purpose.

—Cited in *ENAB*, p. 220

This dreadful conclusion sets the stage for the great project of Hindu spirituality: the destruction of the human personality with a view to its final dissolution in Brahman. Having walked too many miles down that road, I would respectfully issue a solemn warning to seekers everywhere: Before embracing Hindu spirituality, be absolutely certain that the cosmology upon which it is built is true. And even if you think you're sure, steer clear of that road anyway.

16. For a brief survey of the history and sources of the New Age Movement, see James Sire, *The Universe Next Door (UND)* (IVP, 1997), pp. 144-145. I am indebted to Sire for many of the quotes and insights found in this section of chapter 4.

17. Cited in *UTT*, p. 75.

18. Ken Wilber, *The Essential Ken Wilber* (Shambhala, 1998), p. 1.

19. E. Laszlo, *Science and the Reenchantment of the Cosmos (SRC)* (Inner Traditions, 2006), p. 60. In defense of his position, Laszlo quotes Freeman Dyson as saying:

Matter in Quantum Mechanics is not an inert substance, but an active agent, constantly making choices between alternative possibilities...It appears that mind, as manifested by the capacity to make choices, is to some extent inherent in every electron.

Unfortunately for Dyson, this is a misreading of the actual data of Quantum Mechanics. What physicists really know is that in some experiments quantum entities (e.g., electrons) behave like particles, while in others they behave like waves. Also, they know that we cannot predict exactly where a particle will appear (say on a photographic plate), but only where it is likely to appear. To conclude from such unpredictable behaviors that electrons have mind or the power of choice is simply to turn a convenient metaphor into a preferred metaphysic.

20. Cited in *UND*, p. 147.

21. Cited in *SRC*, p. 155.

22. Interestingly, some modern Hindus recognize this problem and therefore reject attempts to unite evolutionism with their faith. A case in point is the work of M. A. Cremona and R. L. Thompson, archeologists who have written at length to show that humans have been present throughout world (and cosmic) history, just as classical Hinduism requires. See M.

Cremona and R. Thompson, *Forbidden Archeology* (Bhaktivedanta Institute, 1993), pp. 797-814.

23. See *The Essential Ken Wilber*, pp. 55-64.

24. See E. Miller, *A Crash Course on the New Age (CC)* (Baker, 1999), p. 68. Sire quotes New Age futurist Jean Houston as saying that when evolving mankind learns "...to play upon the vast spectrum of consciousness...we (will) have access to a humanity of such depth and richness as the world has not yet known, so that our great, great grandchildren may look back upon us as Neanderthals, so different will they be." (*UND*, p. 139).

25. Cited in *CC*, p. 69. Miller also gives us New Age psychologist Barry McWater's definition of conscious evolution:

*Conscious evolution* is that latter phase in the evolutionary process wherein the developing entity becomes conscious of itself, aware of the process in which it is involved, and begins voluntarily to participate in the work of evolution. This can happen in a number of dimensions, in a number of ways, and in fact has been happening for a long while, both in individuals and small groups. We are now approaching that moment in evolutionary history when Humanity as one self-conscious entity will assume this role.

26. Cited in D. Halverson, *Compact Guide to World Religions* (Harvest House, 1996), p. 63.

27. Cited in *CC*, p. 36. Writing in the same vein as Bucke, G. Zukav states:

A vital aspect of the enlightened state is the experience of an all-pervading unity. "This" and "that" no longer are separate entities. They are different *forms* of the same thing...*We* are the manifestations of that which is...It is neither well nor not well. It simply is what it is. What it is, is perfectly what it is. It couldn't be anything else. It is

perfect. I am perfect. I am exactly and perfectly who I am. You are perfect.

—Cited in *ENAB*, p. 511

Observe the disturbing flaw in Zukav’s argument, which says that all (phenomenal) beings (including Zukav himself) are “perfect” simply because they are “exactly and perfectly” what they are. In this failed attempt to turn evil into good (and everything into god), he subtly confounds ontological perfection with ethical perfection. Yes, Hitler was “exactly and perfectly” Hitler—a (trivial) ontological truth. But does that make Hitler “perfect” in an ethical sense? Similarly, a god who dreams (billions of times over) that he is a cancer patient or a sexual pervert is indeed perfectly a god who dreams such things. But does that make him “perfect” in an ethical or aesthetic sense? As Zukav’s argument makes clear, pantheism may not be the end of god, but always and everywhere it is the end of a holy god.

[28](#). Cited in *CC*, p. 66

[29](#). M. Ferguson, *The Aquarian Conspiracy* (J. P. Tarcher, 1980), p. 71.

[30](#). Cited in *UND*, p. 151

[31](#). Cited in *UTT*, p. 115

[32](#). Cited in *UTT*, p. 420

[33](#). Cited in *UTT*, p. 418

[34](#). H. Schucman, *A Course in Miracles*, (Foundation for Inner Peace, 2007).

[35](#). Cited in *CC*, p. 71

[36](#). Cited in *UTT*, p. 197

[37](#). Cited in *UTT*, p. 198

[38](#). Cited in *UND*, p. 72.

[39](#). *SRC*, p. 51.

[40](#). Cited in *UTT*, p. 72.

[41](#). For an in-depth exposition and critique of esoteric interpretations of Christianity, see Ron Rhodes, *The Counterfeit Christ of the New Age Movement* (Baker, 1990).

[42](#). It is astonishing to observe the lengths to which New Age teachers will go in order to avoid embracing the simplest explanation for design in the universe: an Intelligent Designer. Thus, we find Laszlo discussing example after example of cosmic fine-tuning, admitting that “chance” cannot possibly explain any of them, acknowledging that they could indeed be the work of a transcendent Creator—and then, amazingly enough, turning his back on the Creator option by ascribing the appearance of design to “trans-universe information” that is somehow stored up as waves in the Akashic Field and is somehow passed along to each new universe when it somehow bangs into being! Reading all this, one cannot help but ask: Wouldn’t it be easier—not to mention far more reasonable—to give a little nod to God?! (See *SRC*, pp. 38f.)

[43](#). Cited in *CC*, p. 59.

[44](#). Cited in *CC*, p. 63.

[45](#). Cited in *CC*, p. 81.

[46](#). Gary Zukav, *The Dancing Wu Li Masters*, (Bantam, 1979), p. 179.

[47](#). In Chapters 5 and 6 we will discuss more biblical and scientific evidence against GR and in favor of the traditional creationist cosmology.

[48](#). John Byl, *The Divine Challenge* (Banner of Truth, 2004), pp. 70-71.

[49](#). Byl writes:

The quantum wave function is just an abstract, mathematical representation of reality, not reality itself. Indeed, strictly speaking, it represents, not even reality, but only our limited knowledge of reality.

The mathematical formulation of QM yields only the probabilities of various outcomes of a given experiment. *We must thus be careful not to confuse the wave function with the real world, for then the real world is demoted to a mere probabilistic shadow, until collapsed into concrete form by an observation* (my italics). Rather, we must discard any interpretations that treat the wave function as a real entity rather than as a mere mathematical tool.

—*The Divine Challenge*, pp. 79-80

As we shall see, Capra and his followers can only arrive at their mystical, pantheistic cosmos by doing precisely what Byl warns against here.

[50](#). Many New Age theoreticians follow the lead of mathematician John von Neumann (1903-1957) in affirming that the entire physical world is a wave-function that is collapsed by (human) consciousness of it. Says Byl:

Von Neumann considered the entire physical world to exist in a state of pure possibility, except in those limited regions where some conscious mind collapses it into an actual existence. Consciousness thus creates reality.

—*The Divine Challenge*, p. 77

However, even this view (which sounds very close to Capra's) is not pure pantheism, since consciousness only “creates” reality by interacting with—and thus collapsing—something that is already outside of itself. Also, as Byl points out, experiments have been performed to detect the possible influence of conscious intention on quantum events, but have found none at all.

[51](#). Underscoring the philosophical and metaphysical neutrality of the actual data of QM, physicist Nick Herbert writes:

The quantum reality problem is, strictly speaking, not a physics question at all, but a problem in metaphysics, concerned as it is, not with explaining phenomena, but with speculating about what kind of reality lies behind and supports the phenomena...Each of these eight

“realities” (i.e., eight extant interpretations of the quantum realm), from Bohm’s neo-realist particle-plus-wave model to von Neumann’s consciousness-created world, is perfectly compatible with the same quantum facts. We cannot use experiments—or at least experiments of the usual kind—to decide among these conflicting pictures of what lies behind the phenomenal world.

—Cited in *The Divine Challenge*, p. 79

Observe from this that while scientific experiments cannot rule out a pantheistic interpretation of “the quantum reality problem,” a trustworthy divine revelation can, if it clearly states that there is indeed an external physical world, and that God created it.

52. *The Divine Challenge*, p. 79.

53. F. Capra, *The Tao of Physics* (Shambhala, 1975), p. 68.

54. This quotation of Michael Talbot is cited in *ENAB*, p. 65.

55. Laszlo—asserting that spiritual entities such as god, angels, and demons are merely “personifications” of human ethical intuition—tries to explain conscience in terms of evolution. His premise is that Mind/Matter, in the later stages of evolution, somehow communicates the *goal* of evolution (i.e., wholeness, health, coherence) to our minds in terms of perceived values and obligations. Thus, it is the universe itself that teaches us that “The good is intention and action that is constructive in regard to the evolutionary process, and the evil is intention and action that is destructive.” Astonishingly, Laszlo’s great confidence in evolution even emboldens him to say that, despite the horrific “incoherence” of human behavior in recent centuries, such manifestations of moral evil are “...not part of human nature,” and that “...with more awareness...our generation and the next could pull out of (them).”

However, Laszlo’s view raises more questions than it answers. To be sure, psychological, physical, and relational “coherence” (i.e., integrity) are good. But how exactly do we *know* that they are good? Can Mind/Matter, or

evolution, or the goal of evolution really whisper into our hearts, saying, “This is how I want them to be?” No, moral intuitions clearly require (and reveal) the inward activity of a *personal* god, a divine creator and moral governor who makes known to us his chosen norms for motivation, behavior, and physical and spiritual wholeness. If, then, we find ourselves conscious of having violated those norms, it is not because we have transgressed against evolution or the universe; it is because we have transgressed against the one who created the universe, and who created it to be a certain way. Furthermore, contrary to Laszlo, mankind’s chronic moral failure does indeed imply that something is wrong with human nature; that a principle of evil has invaded the human heart and taken hold of it; and that mankind needs *lots* of help from the good creator god to “pull us out.” (See *SRC*, pp. 61-61)

[56](#). Shakti Gawain writes, “I believe that every being chooses the life path and relationships that will help him or her to grow the fastest.” (Cited in *UTT*, p 153). Now if every being is god, and if every being is choosing for itself “the best life path,” how can any choice be wrong? And how can we judge any choice as wrong? Conscience, ethics, law, government—in a pantheistic universe—make no sense whatsoever. But in a theistic universe—where a holy creator god is king and man is his rightful subject—they make all the sense in the world.



## Chapter 5

# THE TEACHER ON THE BEGINNING

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**W**e come now to the last remaining stop on our journey to the beginning: the cosmological teachings of Jesus of Nazareth. History shows us that they are inexhaustibly rich, intellectually challenging, and culturally influential. In part, this is because Jesus was not content simply to reiterate the ancient faith of his Jewish people. Rather, he brought out of his treasury of wisdom “things both old and new” (Mt. 13:51-52). The “things old” were indeed familiar to his Jewish audience, affording them much comfort. But the “things new” were not. In fact, they were so new and so radical that they produced a spiritual crisis in just about everyone who heard. Moreover, in the case of some, the new teaching produced a veritable revolution in the way they looked at the universe, life, and man. And again, history shows us that this revolution not only spread to the whole inhabited world, but turned it upside down (Acts 17:6). Clearly, no seeker of cosmological truth can afford to neglect what Jesus of Nazareth brings to the table.

Let us begin, then, at the beginning, with Jesus’ understanding of “things old.”

### THINGS OLD

Though Jesus did not teach extensively about the beginning, there can be little doubt as to his views on the subject. Along with his Jewish contemporaries, he believed and endorsed all that Moses had written in Genesis 1-11. This is particularly evident from one of his dialogues with the Pharisees concerning marriage and divorce.

And Jesus answered and said to them, “Because of the hardness of your heart he (Moses) wrote you this precept (i.e., a law permitting divorce). But from the beginning of the creation, ‘God made them male and female. For this reason a man shall leave his father and mother and be joined to his wife, and the two shall become one flesh.’ So then, they are no longer two, but one flesh. Therefore what God has joined together, let no man separate.”

—Mark 10:5-9

Here we see that Jesus not only accepted the Genesis cosmogony, but also drew important ethical conclusions from it. In the beginning God laid down more than the physical universe. He also laid down certain norms for all men and women, from which they ought not to depart. With the natural order, he created a moral order as well. More on this in a moment.

This is only one of several texts in which we find Jesus referring to the early chapters of Genesis. In speaking of the end of the world, he mentions its beginning (Mt. 24:21). In speaking of the Sabbath, he mentions its origin in the creation week (Mk. 2:27). In describing Satan’s character, he alludes to its first display in the Garden of Eden (John 8:4). In warning of coming persecutions, he mentions their prototype in Cain’s murdering Abel (Mt. 23:35). And in characterizing the vicissitudes of the end of the age, he recollects Noah and the Flood (Mt. 24:37-9; Luke 17:26-27). Such allusions to the beginning are hardly incidental. They give us insight not only into Jesus’ view of origins, but of cosmic history as well. They show us he believed that Moses had written truly about the beginning, that the ways of God and man were manifested in the beginning, and that what happened in

the beginning is therefore profoundly relevant to all who live in the middle or near the end.

But what, precisely, is the biblical view of the beginning—the view that both Jesus and his disciples presupposed and referred to in so much of their teaching?<sup>1</sup>.

This question has two possible answers, for the book of Genesis gives us both a narrow and a broad view of the origin of the world. It very much behooves us to distinguish carefully between the two.

The narrow view is found in Genesis 1-2, where we learn of the creation. These chapters follow God through his six days of creative activity, bringing the reader to *the world as it was when God took his rest*.

The broad view is found in Genesis 1-11. Here we learn not only of the *creation*, but also of the *curse* that fell upon the creation as a result of Adam's sin; of a global *catastrophe* (the Flood) that completely restructured the original earth; and of a global *confusion* (at the Tower of Babel) that gave rise to the diverse nations of the human family. These chapters follow God (and man) through the first 1,800 or so years of cosmic history, bringing the reader to *the world as we now know it*.

If we hope fully to understand biblical cosmogony, it is vital to keep this important distinction in mind. In the beginning *week* of cosmic history God created and rested: a good beginning. In the beginning *years* of cosmic history, God first created, then cursed, catastrophically judged, confused, and dispersed. Thereafter, the divine judgments ceased and the cosmos was largely fixed in its present form: all told, a bad beginning. And so, in his dealings with Abraham, God set in motion his redemptive plan. The time had come at last for a new beginning to begin (Gen. 12:1f).

If, then, we were to ask Jesus and his contemporaries to describe “the beginning,” they would likely respond, “Do you mean the good beginning or the bad, the narrow or the broad?” Again, we must understand and ever keep in mind the distinction between the two. If we don't, we cannot hope to see the cosmos as Jesus saw it. If we do, we will understand not only his view of the world, but also what he hoped to accomplish by coming into it:

to remove the bad, to revert to the good, and to realize all that God originally intended in the good beginning.

## **The Good Beginning**

We turn, then, to Jesus' understanding of the good beginning. To a very large extent this was shaped by Old Testament revelation, especially as that is found in Genesis 1 and 2. We may summarize this aspect of OT cosmogony as follows: *In the (good) beginning, God created the heavens, the Earth, the seas and all that is in them; he did so in a definite sequence, with a definite structure, and for a definite purpose; he did so in six literal days, after which he saw that all he had made was very good, rested from his creative work, and sanctified the seventh day.*

Since there is a wealth of cosmological meaning buried in this short definition, let us pause to mine each phrase just a little.

### ***In the beginning:***

This important phrase, which first appears in Genesis 1:1 (and which is echoed in John 1:1), teaches us that the universe had a definite or “absolute” beginning. Unlike God, who exists “from everlasting to everlasting,” it is not eternal. Or rather, it is not eternal in the same way that God is eternal, since God is without beginning or end, whereas the universe, in one form or another, is without an end but with a definite beginning. The kind of beginning it had is explained in the remainder of the creation story.<sup>2</sup>

### ***God:***

Here is the agent of creation, the infinite, personal God of the OT. In Genesis 1, he is God (Heb., *Elohim*), the powerful and majestic creator and sustainer of the universe. In Genesis 2:4ff, he is “the LORD God” (Heb., *Yahweh Elohim*), the One who, having created the world, now enters into a personal relationship and solemn agreement (covenant) with the man who is to rule it (along with his wife as helper).<sup>3</sup> And, as we shall see in a

moment, he is also the triune God, fully revealed only by Jesus and his apostles, but hinted at even here in Genesis 1, where the agent of creation is three-fold: God, the Word of God, and the Spirit of God (see John 1:1-5).

### ***Created:***

This word (Heb., *bara*) describes the character of God's action during the six-day beginning. From Genesis we learn that it is essentially two-fold. On the one hand, God creates by *drawing his creatures into existence* by word and deed. Here we think especially of the divine fiat, as, for example, when God said, "Let there be light," and there was light, (Gen. 1:3, 4). Such creation is not, in strictness, *ex nihilo*, since *ex nihilo nihil fit*, "out of nothing, nothing comes." If, then, creation may be said to come forth out of anything, it is out of the purpose, plan, and infinite power of Almighty God.

On the other hand, God also creates by *forming*, or *fashioning* (Heb., *asah*) that which he has previously brought into being. Of special interest here is the creation of the man and the woman: The man was formed out of the dust of the ground (Gen. 2:7) and the woman was formed out of a rib extracted from the man, (Gen. 2:22).<sup>4</sup> As the case of the woman reveals, it is not always easy to distinguish God's bringing into being from his fashioning. But this much is sure: The biblical cosmogony is altogether unique in world religion and philosophy. As opposed to pantheistic views, it teaches that the physical universe is objectively real, external to God's being, and chronologically prior to any sentient creature's consciousness of it; it is a true creation, not an emanation or a mere phenomenon appearing in someone's mind. As opposed to the naturalistic, it teaches that the universe had a true or absolute beginning: First, the universe was not; then—as the psalmist sang—"The LORD spoke, and it came to be; He commanded, and it stood firm" (Psalm 33:9).

***The heavens, the Earth, the seas, and all that is in them, (Exodus 20:11):***

Here are the objects of God’s six-day creation, woven like the threads of a tapestry into the cosmos as a whole. Broadly, Genesis teaches that God first created three environments—the heavens, the seas, and the Earth—and then bountifully filled them with light and life.

The heavens, as the “dual” Hebrew noun (Heb., *shamayim*) indicates, are two-fold. They include a near heaven (i.e., the atmospheric heaven, the air, Eph. 2:9, 6:12), and a far heaven (i.e., the expanse, “outer space”). However, it was during the creation week, and quite early in it, that God also created an invisible spiritual heaven, either invisibly embedded somewhere in the expanse of space, or situated above its outer edge, or existing as another dimension that enfolds or runs parallel to it (see below). The near heaven contains the birds of the air (Mt. 6:26), while the far contains the luminaries: the sun, moon, and stars (Gen. 1:14-19). Both contain light separated from darkness (Gen. 1:4, 14, 18). The spiritual heaven is the proper abode of the angels, who continually behold the glory of God (Isaiah 6:1f).<sup>5</sup> The seas are home to teeming fish and giant sea creatures (Gen. 1:20-23). The Earth abounds with vegetation, creeping things, cattle, beasts of the Earth, and man (Gen. 1:9-31). Israel’s singers marveled at all this richness: “O LORD, how manifold are thy works! In wisdom thou hast made them all: The Earth is full of thy riches (Psalm 104:24, KJV). The fullness of the universe is testimony to the fullness of God’s wisdom, power, and goodness to all.

In passing, we do well to observe that the Bible refers to our universe as “*the creation*” (Mt.10:6, Rom. 8:19-21), “*the creation of God*” (Rev. 3:14), and “*the whole creation*” (Rom. 8:22). Such phrases strongly imply that God limited his creative activity to one universe: ours. This in turn rules out the existence of multiple or serial universes, two favorite themes of modern speculative cosmology. Moreover, it very highly exalts the Earth—which the Bible places at the center of the one cosmos—as the privileged object of God’s eternal interest and concern.

***In a definite sequence:***

The good beginning is an orderly, three-staged event, suffused with purpose and rationality.

First, we have *the primordial creation*, in which God brings into being the rudiments of the universe. This occurs on day one of the six-day beginning. The relevant text here, Gen. 1:1-5, is mysterious and difficult to interpret. If, as some argue, verse 1 describes the first act of the primordial creation, then the primordial creation involves three basic elements. First, God creates the heavens (i.e., vacant space, and possibly the angelic realm as well). Then, in the midst of those heavens, he creates “the Earth in the deep” (i.e., the unformed Earth, covered by, or soluble in, the deep primeval waters, Job 26:7). Then he creates a bank of light, apparently revolving in space around the Earth in the deep, thereby dividing light from darkness and instituting astronomical time by means of the first day and the first night.

If, however, as others contend, verse 1 is a title and summary statement for the entire creation narrative (see Gen. 2:4), then verse 2 may be read as presenting us with something considerably more dramatic: the primordial universe *as a whole*, to be understood as an inconceivably “deep” (i.e., enormous) watery sphere, within which the heavens shall appear at the creation of the expanse on the second day (Gen. 1:9)! On this view, “the face of the deep” (v. 2) is, in effect, the outer edge of the primordial universe, beyond which there is nothing at all—unless, perhaps, it be the spiritual heaven centered around the throne of God (Isaiah 66:1, Rev. 4-5).<sup>5.1</sup>

Whichever interpretation is best, this much is clear: In the primordial creation God brought into being a universe that was as yet “formless and empty”—and therefore waiting to be formed and filled. The Spirit of God—brooding over the waters like a mother eagle above her nest—is poised to do these very things (Gen. 1:1; Deut. 32:11, Isaiah 31:5).

This brings us to stage two, *the forming of the universe*. It occurs during the second and third days of God’s creative work, when he prepares four separate environments for their respective inhabitants (Gen. 1:6-12).

On day two God creates an expanse between the waters that are situated above and below it (Gen. 1:6-8). He calls this expanse “heaven” (cf. Gen. 1:1). Significantly, there are a large number of OT texts that speak of God as “stretching out” the heavens (Job 37:18, Psalm 104:2, Isaiah 40:22, 42:5, 44:24, 48:13, 51:13, Jer. 10:12). Is it, then, that God, on day two, pushes back the great bulk of the primeval waters to a vast distance (i.e., possibly light years away), thereby opening up an immense womb of space within the Deep; thereby creating, not only the heavens, but also an outer boundary of ice for the resulting heavenly sphere? Or, more modestly, is it simply that he elevates a portion of the primeval waters to a position a few miles above the surface of the earth, thereby creating the clouds—or possibly a canopy of water vapor—beneath which lies the newly created bank of air (Psalms 108:4, 148:4, Proverbs 8:27-28)?<sup>6</sup> By my lights, the first view, startling as it may be to modern sensibilities, stands truest to the biblical text. But whatever the final solution, it is clear enough that God’s action on the second day puts the finishing touches on a two-fold environment that will soon house the heavenly bodies, the birds of the air, and all other things that draw the breath of life (Gen. 2:7).

In passing, it is worth noting yet again that biblical teaching about the expanse (i.e., space) stands in direct contradiction to the assertions of General Relativity. Why? Because unlike GR, the Bible represents space as ontologically distinct (i.e., different in nature) from time and matter. Here, space is a structurally static (though not necessarily void) receptacle that God created in time and prior to the bulk of (visible) matter in the universe (i.e., the luminaries). Time, on the other hand, is essentially subjective, and therefore best understood as an attribute of God: unlike space and matter, it is eternal, without beginning or end (as opposed to astronomical time, which, according to the Bible, began on the first day, and will end on the last, at Christ’s return). As for visible celestial matter, it too is independent of space since, as we just saw, it was created two days *after* the expanse. So again, biblical cosmology sees the three great components of our visible, consciously experienced cosmos (i.e., time, space, and matter) as closely



related, yet ontologically unique. General Relativity, however, denies all this, asserting (incomprehensibly enough) that the cosmos is a monistic “field,” a single substance (or continuum) that *looks* like three related things, but that is in fact one (continually changing) thing.

Here we should note also that the Bible situates the creation of the holy angels very close to the beginning, presumably either on the first or second day, depending upon the whereabouts of the spiritual heaven. That they were rapt witnesses to much of the creation is clear from God’s own question to Job concerning the origin of the Earth: “On what were its footings set, or who laid its cornerstone, while the morning stars sang together and the sons of God (i.e., the angels) shouted for joy” (Job 38:6-7)? Interestingly, from other passages, we learn that the angels have never stopped praising him for his creative acts (Psalm 148:1f, Rev. 4:11)!

On day three, two more environments attain their final form: The dry land emerges from the remaining waters, and the seas pour into their newly carved basins. Now the seas are ready for fish, and the dry land—laden with edible vegetation—is ready for creeping things, animals, and man (Gen. 1:9-13; 2 Peter 3:5, Psalm 104:7-9). The habitats now being formed, the inhabitants are free to appear.

Finally, we have the third stage of the good beginning, *the filling of the universe*. This takes place during the last three days of creation (Gen. 1:14-28). On the fourth day, God fills the expanse with the luminaries: the sun, moon, and stars, all of which will serve man by giving him light, enabling him to reckon time, and—in their capacity as signs—speaking to him of the glory of God and the mysteries of redemption (Gen. 1:14-19; Psalm 19:1, Isaiah 37:7-8, Dan. 12:1-3, Mt. 2:2, Luke 21:25). On the fifth day, God begins to fill the seas with fish and giant sea creatures. So too does he begin to fill the air with birds that will wing their way across the face of the expanse (Gen. 1:20-23). On the sixth day, he begins to fill the dry land with creeping things, land animals, and—as lord over all—the crown of his creation, man (Gen. 1:31). At God’s command, all these living creatures are

to be fruitful and multiply, thereby filling up his creation and fulfilling his manifold purposes for the world (Gen. 1:22, 28).<sup>7</sup>

Note carefully that the sequence of creation evinces something important about the purpose of the universe: It is designed to be a home for living things, and especially for man. The prophet Isaiah set it down this way:

*For thus says the LORD,  
Who created the heavens,  
Who is God,  
Who formed the earth and made it,  
Who did not create it to be empty,  
Who formed it to be inhabited:  
“I am the LORD, and there is no other.”*

—Isaiah 45:18

<b>THE SIX DAYS OF CREATION</b>	
<b>Days of Forming (Habitats)</b>	<b>Days of Filling (Inhabitants)</b>
<b>Day 1</b> The Earth in the Deep Light & Darkness Day & Night	<b>Day 4</b> The Lights of Heaven: Sun, Moon, Stars
<b>Day 2</b> The Expanse of Heaven: Sky, Air	<b>Day 5</b> Fish Birds
<b>Day 3</b> Earth Seas Vegetation	<b>Day 6</b> Insects Land Animals Man

***With a definite structure:***

The biblical universe, fresh from the creator’s hand, was highly structured, both physically and spiritually. Acting in accordance with a pre-existing plan, God impressed specific forms, functions, motions, and relationships upon all things. In six days he brought into being “a fixed order”—the cosmos—after which he began to preserve, animate, and direct that order to its appointed ends (Jer. 31:35-36, Psalm 148:1-6).

The creation story, as illumined by other scriptures, abounds with examples of God-given structure:

***The universe itself is (geocentrically) structured.*** Though interpretations differ, many glean from the Bible that the universe is a finite, rotating, geocentric sphere, possibly bounded by unseen waters above. The radical geocentricity of the cosmos is especially clear from Genesis 1, where, according to either reading of the primordial creation, we see the formless Earth resting at the absolute center of God's interest and creative activity (Gen. 1:1-5). Geocentricity is further underscored by the work of the fourth day, in which God fills the heavens with "lights" that, to all appearances at least, revolve around a stationary Earth, and that exist for the sole purpose of serving those who dwell upon it (Gen. 1:14-19). Since the idea of a geocentric universe has been sharply challenged by modern science, we must revisit this important theme again further on.

***The Earth is structured.*** The Earth is comprised of two main environments, the seas and the dry land (Gen. 1:9-13). These are separated by fixed boundaries (Job 38:8-11), and each is occupied by inhabitants specifically prepared for it (Gen. 1:20-31).

***All physical things are structured.*** Sun, moon, and stars; seas and dry land; trees and vegetation; fish, birds, insects, animals, and men—each has its own unchanging structure direct from the creator's hand. The universe is a "fixed order," in part because all things in it have fixed forms and functions (Jer. 31:15, Isaiah 45:7). That this is the biblical view is seen especially from the case of living beings: In several broad categories (i.e., trees, vegetation, water-dwellers, creeping things, beasts of the field, etc.) God created "each according to their kind" (Gen. 1:11, 21, 24). In other words, all living beings, by creation, received from God definite physical and behavioral structures, structures that cannot fundamentally change, since he has also ordained that these living beings *reproduce* "each according to its kind" (Gen. 1:11-12, 1 Cor. 15:39-41). The dire implications of all this for evolutionary theory are clear.

***Living things are structured, and that in a hierarchy of value.*** At the bottom of the hierarchy is vegetable life: grass, plants, and trees, largely serving to provide food and other necessities of life for animals and man. Next come the “living creatures” (Heb., *nephesh chayim*), distinct from vegetable life in that they have invisible souls or spirits (Heb., *nephesh, ruach*).<sup>8</sup> These include fish, birds, insects, and animals. And finally, ruling over all, is man. He too is a “living creature,” but a supremely privileged one whose soul is uniquely cast in the image and likeness of God (Gen. 1:27-28, Col. 3:10).

Observe from all this that the Bible sees biological life *in conjunction* with matter but never as *the product* of matter. In other words, biological life always involves the *natural* (i.e., the material) animated by the *supernatural* (i.e., the spiritual). In the case of men and animals, matter is indwelt by supernatural entities: spirits. And in all cases, it is created and sustained by the Spirit of the living God (Psalm 104:30, Job 12:10). With him is the fountain of life (Psalm 36:9). It is God alone who gives life, breath, and all things to those who live (Acts 17:25).<sup>9</sup>

***Man is (very intricately) structured.*** As the creation account reveals, man is an intricately structured physical being in whom God has placed an animating spirit (Gen. 2:7, James 2:26). Moreover, man’s spirit is also intricately structured, being created in God’s own image and likeness and therefore endowed with self-consciousness, intellect, memory, emotion, will, conscience, gender, rulership, and (before the Fall) perfect freedom and moral rectitude (Gen. 1:26-27). Marveling at this imprint of the divine upon a mere creature, the Psalmist exclaims that man is only “a little lower than God” (or the angels) and “fearfully and wonderfully made” (Psalm 8:5, 139:14).

***Man’s relationships are structured.*** In Genesis we see that God created Adam and Eve in and for different kinds of relationships. He related them to himself, each other, their offspring, the animals, and the rest of the world of nature. He also revealed the privileges and responsibilities peculiar to those relationships. Here is the basis of much biblical morality. What is good is

what is *normal*: it conforms to God’s norm, or design, for the relationship. Jesus’ words concerning marriage illustrate this important principle. Divorce, he said, is forbidden because God created the man to cleave to his wife and to become one flesh with her. Other biblical exhortations to marital love and faithfulness, as well as prohibitions against all forms of sexual deviance, have the same creational basis. Right and wrong, in the biblical universe, depend upon the structure of things, a structure laid down by God in the beginning.<sup>10</sup>

Summing up, we have seen that at its creation the entire cosmos, both as a whole and in each of its separate parts and relations, received a fundamentally unchanging structure from the hand of God. This, by the way, was the faith of most of the founders of modern western science. Steeped as they were in the biblical worldview, these men believed that God had created the universe according to a rational plan. That plan made their work possible and guaranteed its success. In uncovering the structures (or “laws”) of nature, they were learning, as Kepler declared, “to think God’s thoughts after him.”<sup>11</sup> Naturalistic evolutionists, on the other hand, have no such basis for their scientific labors, believing that the cosmos has neither a rational creator nor any permanent structures. Here, as elsewhere, the two worldviews are starkly opposed.

### ***For a definite purpose:***

The stages and structure of creation reveal a God with a goal. Though Genesis does not exhaust the biblical revelation of God’s purposes in creation, it tells us much. Broadly, we see that God created the universe—and especially the Earth—for man. The biblical universe is profoundly geocentric because it is profoundly anthropocentric.

More particularly, we see first that God intended the world to be man’s *home*. It is his “proper abode,” a lovingly prepared and lavishly endowed dwelling place created specially for him (Psalm 115:16, Jude 6).

This world is also given to man as his *domain*, for God has specially appointed him to rule as his vice-regent over the fish, the birds, the creeping things, the animals, and all the Earth. As the psalmist prayerfully phrased it, “Thou hast put all things under his feet” (Gen. 1:26, Psalm 8).

Similarly, God purposed that the world should become a kind of *workshop* in which his human children, co-laboring with their heavenly Father, through his Son, would fulfill a divine calling to “subdue” the earth (Gen. 1:28, Col. 1:15-18). Sometimes referred to as “the dominion mandate,” this calling meant that mankind was summoned and equipped to discover, harness, and bring forth all the hidden potentials of the natural world. How would the dominion mandate have unfolded if Adam had not sinned and the curse had not fallen upon nature? Doubtless in a manner *quite* different from what we have beheld in the actual course of human history! Nevertheless, there is nothing in the Bible to suggest that God rescinded the dominion mandate after the fall; to the contrary, the progress of science and technology, especially since the Reformation, enables us to see it being worked out before our very eyes, even if fitfully and imperfectly.

The dominion mandate also involved the enlargement of the human family through reproduction so that mankind might exercise a princely rule and a loving stewardship over *all* the earth (Gen. 1:26-28, 2:8, 15, Acts 17:26-28). In this connection, observe that even after the fall the biblical authors did not view a growing population as a burden on the Earth, but rather as an important key to its proper and complete development (Psalm 127:3-5, 128:1-6, Prov. 14:28).

Finally, it appears that the cosmos was also designed as a kind of *theatre*, and this in a two-fold sense. On the one hand, it was to be a theatre in which men (and angels) could *behold* the glory of God. This means that in nature, in the marvels of his own being, and in his direct contacts with God, man would be able to grow in the knowledge of the many-faceted character of his creator. The apostle Paul affirms this purpose by declaring that in their experience of the natural world all people behold something of God’s glory

—his eternity, power, goodness, and other “invisible attributes” of the divine nature (Acts 14:17, 17:25, Rom. 1:20-21). In short, God created the cosmos in order to bestow upon his creatures the gift of the knowledge of himself. Interestingly, it appears that the angels also grow in their knowledge of God’s glory, especially by scrutinizing all that transpires on the Earth below (Eph. 3:8-13, 1 Peter 1:12).

On the other hand, the cosmos was also intended as a theatre in which men would *enhance* the glory of God. This does not mean, of course, that man could add anything to the perfections of the divine nature. But it does mean that he could bring honor—or dishonor—to his creator in the sight of others; that he could reflect well or ill upon his maker, depending upon the way in which he responded to him. Not surprisingly, the Bible repeatedly exhorts us to take the high road of honoring God with our lives. Jesus, for example, commanded his followers to “Let your light so shine before men that they may see your good works and glorify your Father in heaven” (Mt. 5:16). Similarly, the apostle Paul tersely exhorted the Corinthians, saying, “Glorify God in your bodies,” (1 Cor. 6:20). Thus, one of God’s high purposes in creation was to secure honor and pleasure for himself as his extended human (and angelic) family delighted in the knowledge of his glory and showed their gratitude through freely chosen acts of obedience and praise.<sup>12</sup>

We find then that God had many reasons for creating the cosmos. But before any of these purposes could be fulfilled, the original pair must pass a test.

### ***In six literal days:***

The Bible is quite emphatic that God created the universe in six literal (i.e., 24 hour, solar) days. This foundational fact is first revealed in Genesis, a book that patently falls into the category of historical narrative. Read in its entirety, with close attention to its content and literary structure, we see immediately that it is intended as a history of beginnings, whether of the

universe, life, man, sin, suffering, death, global defacement, diverse languages, separate nations, or God's plan of redemption. It is certainly not intended as myth or poetry.

The biblical evidence for recent creation abounds. In Genesis 1, a creation day is carefully defined in terms of "evening and morning," the writer apparently wishing to leave no doubt as to its duration (Gen. 1:5, 8, 13, etc.). The literal view is further supported by the fact that whenever the OT uses the word "day" with a number (410 times), it is always a literal day (Gen. 1:5, 8, 13, etc.). Similarly, whenever it uses the word "day" with the word "evening" or "morning" (61 times) it is again a literal day. At Sinai God confirmed the literal view when he unveiled to Israel the rationale for their Sabbath observances: "For in six days the LORD made the heavens and the Earth, the sea and all that is in them, and rested on the seventh day; therefore the LORD blessed the Sabbath (Heb., *shabbat*, seventh) day and made it holy" (Exodus 20:11). The creation week was intended as the prototype of his people's workweek, and is therefore of equal duration.

As we have seen, Jesus himself espoused recent creation, declaring that male and female were present "from the beginning of the creation" (Mark 10:6). Similarly, the apostle Paul asserted that God has been revealing himself to mankind through nature "since the creation of the world" (Rom. 1:20). The apostle Peter, in his discourse on the end of the age, manifestly embraces the young Earth cosmology of Genesis 1-11 (see 2 Peter 3:1-13, where the true import of the controversial verse 8 is that God's *consciousness* of time, and not his manner of reckoning it, is different from ours). Importantly, a large majority of early Christian leaders (the so-called Church Fathers) explicitly identified the six days of creation as 24 hour periods. Only three (Clement of Alexandria, Origen, and Augustine) regarded them as figurative, yet these too still concluded that the world was only a few thousand years old. Down through the centuries the vast majority of Christians have concurred. In modern times, some interpreters, pressured by alleged scientific evidence for an old Earth and universe, have tried to explain the days of creation figuratively. But even these are honest



enough to admit that extra-biblical considerations alone compel them to depart from the *prima facie* sense of the text. In short, all agree, friend and foe alike, that the Bible itself unequivocally teaches a recent creation.<sup>13</sup>

Seekers should understand that the doctrine of a recent six-day creation is not a theological “fine point,” but integral to the entire biblical cosmology and worldview. In other words, as compared with modern, non-literal interpretations of Genesis 1—interpretations expressly designed to accommodate billions of years—the traditional, common-sense view stands *alone* in upholding the glory of God and the internal coherence of his total revelation. Here are a few important reasons why.

First, it alone adequately magnifies God’s power, since it concentrates his creative work in six short days rather than spreading it out over billions of years. It is precisely such concentrated power that the psalmist had in mind when he sang:

*By the word of the LORD were the heavens made,  
Their starry host by the breath of His mouth.  
He gathers the waters of the sea into jars;  
He puts the deep in storehouses.  
Let all the earth fear the LORD;  
Let all the inhabitants of the world stand in awe of Him.  
For He spoke, and it came to be;  
He commanded and it stood firm.*

—Psalm 33:6-9, NIV

Secondly, it alone is consistent with his manifest purpose in creation—to provide a home, a domain and a workshop for man (Isaiah 45:18). Why would God build a house, and then wait billions of years to create the people who were meant to occupy it?

Thirdly, it alone supports the destiny and dignity of man. For if God’s original workweek is the prototype of man’s, then man’s implicit destiny is to work like God and rest like God, living and serving in nature as a co-creator with him. By denying the symmetry of the two workweeks, other views clearly belittle the glory of man.

Fourthly, it alone preserves the original goodness of the universe, as well as the goodness of the One who made it. For if God's creative activity included all that theories of an ancient universe seek to accommodate—millions of years of biological trial and error, violence, bloodshed, death, and extinction—how could he, or his creation, be good? Is it not the case, then, that theistic evolution and progressive creation, by ascribing natural evil directly to the creator, challenge both the truthfulness and the goodness of the God of the Bible?

Finally, and very importantly, recent creation alone supports the cardinal biblical teaching about how evil, suffering, and death really did enter the world: through the sin of the first Adam. And this in turn supports the cardinal biblical teaching about how they will ultimately be expelled from it: through the righteousness of Christ, the last Adam (Rom. 5:12ff). Here we meet *the very infrastructure of biblical redemption*: What the first Adam lost, the last Adam regains; and what the first Adam admitted, the last Adam expels. But if this is so, then it is clear that old-Earth theologies, which accept the presence of natural evil in the cosmos prior to Adam, strike a mortal blow at the biblical doctrine of redemption. For if the universe is old and natural evil was present long before the coming of the first Adam, what guarantee do we have that God will not include natural evil in the universe that he promises to create at the coming again of the last Adam (2 Peter 3:13, Rev. 21:1)? Yet the Bible repeatedly assures us that such things will never be (1 Cor. 15:20-28, Rev. 21:4).

In view of all this, it is hardly surprising that many theological conservatives vigorously defend the doctrine of recent creation, often at great personal cost. They believe, correctly, that the entire biblical worldview—with its unified story of cosmic creation, fall, and redemption—rises or falls with the integrity of Genesis 1-2.<sup>[14](#), [15](#)</sup>

***After which He saw that all He had made was very good:***

Throughout the six days of creation God saw that his work was good; on the seventh day he saw that everything he had made was *very* good (Gen. 1:31). This recurring judgment, so manifestly exuding satisfaction, impresses upon the recipients of biblical revelation a vital cosmological truth: The world in which man now lives is not the world as it was in the beginning. Originally it was “good”; now it still is good, but also strangely mixed with evil. Originally it knew nothing of the moral evil, guilt, sickness, death, toil, pain, and other disruptions of nature that came in with man’s fall; now it does (Gen. 2-3). Accordingly, the total biblical beginning fully supports a complex set of human intuitions: that the world is good, that it should be better, that something has gone wrong, and that somehow it may well be better again. Similarly, this cosmogony supports our intuition that the creator is good, explicitly protecting him from charges that moral and natural evil sprang intentionally from his creative hand.

Again, the doctrine of the original goodness of the creation pits biblical cosmology against all forms of cosmic evolution. Cosmic evolution teaches that natural evil, in one form or another has been present in the universe from the very beginning. Moreover, in the case of theistic evolution or progressive creation, it teaches that God is the one who put it there. The Bible, on the other hand, teaches that all natural and moral evil in the universe is traceable, not to God’s creation, but to man’s sin (Gen. 3, Rom. 5:12f, 8:18f). On this point, as on so many others, the two cosmologies are implacably opposed. It is hardly surprising, then, that every effort to reconcile biblical creation with cosmic evolution inevitably—even if unintentionally—shatters the biblical worldview.

### ***Rested from His creative work:***

The divine rest does not mean that on the seventh day God stopped working in the universe (as Deism taught), only that he stopped creating (Gen. 2:1-3). In other words, he is no longer bringing new things into being or fashioning new things out of preexisting material. The universe is now

filled. The forms, functions, natures, and motions of things are essentially fixed. Henceforth, God no longer creates, but is at work to sustain, animate, and direct all things to their appointed ends (Psalm 36:5f, 104).<sup>16</sup> Interestingly, the biblical teaching on this point accords perfectly with the First Law of Thermodynamics.

The declaration of God's creation-rest yet again puts biblical cosmology in direct opposition to all forms of evolution. The Bible states that creation was a brief once-for-all event that is now completed; evolution states that it is an ongoing process. Happily, we can easily test both views simply by looking at the world around us.

### ***And blessed and sanctified the seventh day:***

Though God created no physical objects on the seventh day, he did perform a final creative act: He blessed and sanctified the seventh day. This seems to mean that he impressed upon the inmost nature of his human children an inclination to set apart one day in seven to emulate him (Exodus 20:11). Accordingly, on that day they were to rest (i.e., cease) from their work and reflect with satisfaction upon all that God had enabled them to accomplish during the previous six days. Here too was a special opportunity for them to think about their creator, thank him for his many good gifts, ponder his plans for the future, and wonder about what awaited them at the end of their own historical labor of love, when, like God himself, they would enter into *their* rest. In sum, by sanctifying the seventh day, God instituted in man's very being a weekly rhythm of work, rest, and blessed worship (Hebrews 4:1f). As one thoughtful commentator put it, he "... oriented the whole created order toward the worship of God."<sup>17</sup>

Much later, after the fall of man, God would explicitly command his OT people Israel to observe the Sabbath (Exodus 20:8-11). Prior to the fall, however, no such command was necessary. Come the seventh day, it would only have seemed natural for Adam, Eve, and their growing family to join

with all creation in gladly worshipping the LORD, the maker of heaven and Earth (Psalm 146:1-7).

## **Heaven**

Though Genesis 1-2 does not speak of it explicitly, other Bible passages indicate that in the beginning God brought into being a distinctly spiritual world. As a rule, it is simply called *heaven* (Gen. 28:12, 2 Chron. 28:11-19, Mt. 5:12, 45, 48). Ezekiel, however, refers to it as Eden (not to be confused with the earthly Eden), the Garden of God, and the Holy Mount (Ezek. 28:11-19). Jesus, apparently following Ezekiel, also calls it Paradise, a word of Persian origin meaning “a garden with a wall” (Luke 23:43, 2 Cor. 12:4, Rev. 2:7). The apostle Paul, contrasting heaven with the air and “outer space,” calls it “the third heaven” (2 Cor. 12:2). As we are about to see, heaven is a mysterious place. Indeed, for humbling the human intellect, there is nothing quite like trying to determine the precise nature and whereabouts of the spiritual heaven. Feeling this difficulty keenly, I will nevertheless venture four biblically based observations about heaven that may help us close in just a little on the ineffable truth.

### ***A Creation***

First, heaven is a *creation of God*. This is especially clear from the words of the writer to the Hebrews, who picturesquely describes heaven as “...a sanctuary and a tabernacle that the Lord pitched...not made with (physical) hands, that is, not of this creation” (Heb. 8:2, 9:11). Here we learn that the Lord “pitched” and “made” heaven. This implies that we cannot simply identify heaven with the omnipresent Spirit of God, or with spiritual visions going on in someone’s mind. No, heaven is a true place, a place that was “made,” a place that *came into being* at God’s creative hand.

### ***An Abode***

Secondly, heaven is an *abode*, or a home. In particular, it was intended as a home for the *holy angels*, a vast host of incorporeal personal spirits, created early in the hexaemeron, probably on the first or second day (Psalm 148:1-5, Job 38:1-11). There were different *kinds* of angels (e.g., *seraphim* and *cherubim*), and also different ranks (e.g., angels and archangels). Awakening to consciousness, they beheld a certain kind of environment. Importantly, the “furniture of heaven,”—including a throne, a city, a garden, trees, and a river—was apparently patterned after the “furniture” of the world below, upon which indeed they beheld God bestowing his creative touch (Isaiah 6, Ezek. 28, Rev. 4-5, Job 38:1-11). Endowed with a mature and profound intelligence, they understood immediately that God had graciously created them to behold, contemplate, and enthusiastically worship him in all his glory (Is. 6:1f, Rev. 4, 5). Also, they understood that they had been created to serve God *as messengers to humanity in the world below* (Dan. 10:20, Luke 1:19, 26, Heb. 1:14). Thus, both heaven and heaven’s hosts were much like the sun, moon, and stars: They were *geocentric*, being spiritually centered upon the world of men!

All too soon, however, the spiritual heaven underwent a dramatic change. When Lucifer and his angelic followers rebelled against God (Isaiah 14, Ezek. 28); when God cast them down to the Earth beneath (Isaiah 14:19, Rev. 12:1f); when Satan entered the Garden of Eden and tempted Eve and Adam (Gen. 3, John 8); when sin entered the world (Gen. 3, Rom. 5:12f); and when God began to trump sin by administering the redemption that is in Christ (Gen. 3:14-15, 20-21)—then God opened up heaven to the spirits of the departed saints, as well. Seeking to encourage persecuted Jewish Christians with this very hope, the writer to the Hebrews gives us a glimpse not only of heaven’s (enlarged) population, but also of its unspeakable joys:

But you have come to Mount Zion, to the heavenly Jerusalem, to the city of the living God. You have come to thousands upon thousands of angels in joyful assembly, to the Church of the firstborn, whose names are written in Heaven. You have come to God, the Judge of all men, to

the spirits of righteous men made perfect, to Jesus, the Mediator of the new covenant, and to the sprinkled blood that speaks a better word than the blood of Abel.

—Heb.12:22-24, NIV

Here we have the very essence of the biblical picture of heaven *as it exists today*. Today, heaven is the abode of both the holy angels and the perfected saints, who together joyfully worship God and Christ in the city that lies mysteriously “above.”

### ***A True Place***

This brings us to our third observation, namely that heaven is *a true place*. More particularly, it is a place *above the earth*. As the psalmist wrote, “He looked *down* from the height of His sanctuary; from heaven the LORD viewed the earth” (Psalm 102:19; 11:4). Angels, as we saw, are sent *down* from heaven to Earth (Dan. 10:11f, Luke 1:19, 26). Meanwhile, from Earth the prophets look *up* into heaven (1 Kings 22:19f). Indeed, one of them, Elijah, ascended into heaven bodily (2 Kings 2:1)! As was his custom, Jesus lifted *up* his eyes in prayer to God (John 11:41, 17:1). The first martyr Stephen, just before his death, gazed *up* into heaven and saw Christ standing at the right hand of God (Acts 7:54-60). Thus, the Bible repeatedly depicts heaven as a true place above, even as it likewise represents *Hades* as a true place beneath (Prov. 15:24, Ezek. 13:15f, John 8:23, 2 Peter 2:4).

The great question, however, is: *In what sense* is heaven a true place above? Or, to put the matter slightly differently, *where exactly is heaven*? Responding to this challenging problem, biblical interpreters have offered three main views.

Some suggest that heaven is, or is in some portion of, space itself; that it is invisible to us simply because God has made its inhabitants invisible to us; that it could actually be quite near to us, with God’s throne, for example, being situated directly above the earthly Jerusalem, and with heaven’s other citizens spread out in a sheath around the whole Earth, or possibly even

filling the depths of space. Proponents of this view base their case on the fact that both Old and New Testaments use the same word (Heb., *shamayim*; Greek, *ouranoi*) to describe the spiritual and the physical heavens. They also remind us that if the angels seem to travel *through* our space, then surely it is reasonable to suppose that they also live *in* it (Dan. 6:22, Luke 1:19, Acts 12:11). Additionally, they point out that Christ (like Enoch and Elijah) now has a (glorified) physical body and must therefore still live in some kind of space. And since he was born into our kind of space, why should we think of him abandoning it for another? However, as we have seen, the Bible represents heaven as a true creation, and also as a creation that is “not of this creation.” This seems to mean that heaven is not part of the (finite) physical cosmos that God created in the beginning. But if it is not, how can it be basically identical with the expanse of space?

Another view—and one with a long and venerable history—declares that heaven lies *above* the firmament; that it is a kind of “hyper-space” situated just beyond the outer edge of our own (finite) physical universe. Scriptural support for this idea is considerable. God has set his glory *above* (or upon) the heavens (i.e., the expanse) (Psalm 8:1, 113:4). He is high above all nations, and his glory is *above* the heavens (Psalm 113:4). He has set his seat on high, and humbles Himself to regard the heavens (Psalm 113:5). In the Day of Judgment he will call to the heavens from *above* (Psalm 50:4). Because of his lofty transcendence, all creatures should praise the LORD: the angels who dwell “in the heights,” the sun, the moon, the stars, and “the heavens of the heavens” (Psalm 148:1-4). Very suggestively, Ezekiel, in a majestic vision of spiritual things, beholds four glorious cherubs. Above them he saw “...the likeness of *an expanse*, like awesome crystal (or ice) to look upon.” And *above* that he saw the throne of God, and Him who was seated upon it (Ezek. 1:22ff). Does this vision picture for us something of the structure of the universe and the whereabouts of heaven? It certainly appears to. And yet, intriguing as this view is, there seems to be a problem: It makes heaven quite remote from the Earth (unless—as could well be the



case—the universe is much smaller than we presently think). However, many Bible passages seem to represent it as being quite close (see below).

A third group of interpreters agrees that heaven is indeed a place above, but that we ought to interpret such language figuratively; that we should not think of heaven in *physical* terms, but in *metaphysical* terms; that heaven is best conceived as *another dimension that is different from, yet closely related to, our own*. John Byl succinctly expresses this notion by saying: “The biblical description suggests that the spiritual heaven is a universe parallel to the physical universe.”<sup>18</sup>

In defense of this rather mystical view, these interpreters appeal to the writings of Paul, who said of Christ that he “...ascended far above all the heavens, that He (by His Spirit) might fill all things” (Eph. 4:10, 1:9-23, Phil. 2:6-11).<sup>19</sup> Similarly, they point to the words of the writer to the Hebrews (likely Paul), who described Christ as a High Priest whom God had “exalted above the heavens” (7:26). Such language, while amenable to the “hyper-space” view, can also be read to imply that at his ascension Christ actually transcended the physical heavens themselves; that he left the present physical creation and entered another (spiritual) dimension altogether.

Embracing this line of thought, John Calvin comments on Ephesians 4:10 as follows:

(The apostle means that Christ ascended) beyond this created world. When Christ is said to be in Heaven, we must not view him as dwelling among the spheres and numbering the stars. Heaven denotes a place higher than all the spheres, which was assigned to the Son of God after his resurrection. Not that it is literally a place beyond the world (i.e., beyond the edge of the firmament), but we cannot speak of the kingdom of God without using our ordinary language.<sup>20</sup>

Here Calvin asserts that Christ’s ascension took him beyond “the entire frame of the visible world,” and therefore beyond our present ability to understand where he went. Calvin can say where heaven is not, but not where it is. Ordinary language—even God’s language—only points to a

transcendent, other-dimensional heaven; it cannot actually describe its place.

Defenders of this position feel it best explains the biblical data as a whole. When, for example, angels suddenly appear to shepherds, or when the risen Christ suddenly appears to his disciples, is it really that they have traveled vast distances through the sky? Or is it rather that they have simply slipped into Earth's space from heaven's space—a space that, metaphysically speaking, is actually quite near to our own (Luke 2:13f, 24:31, 36, John 20:19-20, Acts 1:9-11)? Also, does not this approach help us understand why heaven seems so close to those privileged saints of old, before whose wondering eyes it was, on very special occasions, mysteriously “opened up” (Gen. 28:18, 1 Kings 16:4, Mt. 3:16, John 1:32, Acts 7:55-6)? The mystical view seems, then, to have much to commend it. Yet one wonders if it is not a bit too facile, seeing that we human speculators can make “other dimensions” do just about anything we want them to do!

Which of these views is best? It is difficult to say. Speaking for myself, I lean towards the second. Yet each one has its strengths and weaknesses. Perhaps, then, the real conclusion of the matter is that God has left the exact whereabouts of his heaven a mystery beyond our present ability to comprehend. If so, it means that for a complete understanding of that mystery seekers will have to wait until they enter heaven themselves—and make every effort on Earth to be sure they do!

### ***A Visionary World***

Finally, it appears that heaven is *a visionary world*. Negatively stated, this means that “the furniture of heaven”—most (but not all) of the things that the saints and angels perceive up there—are not physical, but rather spiritual in nature. That is, heaven's “things” are not like our earthly things, only made of a finer, more ethereal kind of matter. Instead, they are purely spiritual phenomena, ongoing visions by which the infinite God continually

manifests himself and his truth to his finite rational creatures, whether saints or holy angels.

To understand this idea better, let us consider the prophet Isaiah's majestic vision of the great God of heaven:

In the year that King Uzziah died, I saw the Lord sitting on a throne, high and lifted up, and the train of His robe filled the temple. Above it stood seraphim. Each one had six wings: with two he covered his face, with two he covered his feet, and with two he flew. And one cried to another and said, "Holy, holy, holy, is the LORD of hosts; the whole earth is full of His glory!"

—Isaiah 6:1-3

This vision is quite similar to others received by various biblical prophets (2 Chron. 18:18f, Ezek. 1-2, Dan. 7:9-14, Rev. 4 and 5). Though each differs in interesting and important ways, all include a revelation of God in more or less human form, a throne, a temple, and angels. But does God really exist in a human form? To this fundamental question, the Bible emphatically answers in the negative, since he is essentially an infinite personal Spirit (Ex. 20:4, Deut. 4:9f, John 4:24). Does he sit upon a physical throne? How could he, if he fills the whole universe (1 Kings 8:27)? Does he really live in a heavenly temple of some kind? To Isaiah himself God said, "Heaven (i.e., the sky, space) is My throne, and Earth is My footstool. Where is the house you could build for Me?" (Is. 66:1). Does he wear a robe—this One who wraps himself in light as with a garment, and stretches out the heavens like a tent (Psalm 104:2)? And what of the seraphs in heaven: Do they have six wings (Is. 6:2), or four (Ezek. 1:60)? One face (Is. 6:2) or four, (Ezek. 10:21)? Hands (Ezek. 10:21) or no hands, (Is. 6:2)?

Now unless the Bible is at odds with itself, there appears to be only one solution to these seeming contradictions. Heaven is not, as we sometimes imagine it: a rarefied physical world floating around like an island somewhere above the Earth. Instead, it appears to be a *visionary* world; a world in which the presence, glory, and truth of God are revealed to angelic and human spirits under earthly imagery by means of sustained spiritual visions.<sup>21</sup>

If so, important conclusions follow. It means that God does not really have a human form, but is seen that way in heaven in order to reveal his metaphysical kinship with man. It means that he does not really sit on a throne, but is seen that way in heaven in order to reveal his sovereignty over all creation. It means that he does not really live in a temple, but is seen in one to reveal his desire for the worship of his creatures in the preferred place of his dwelling (i.e., Christ and his people, John 2:19, Eph. 2:22). To express all this in the words of the apostle Paul, we may say that in heaven, as upon the Earth, "...the invisible things of Him are clearly seen, being understood by (visions of) the things that are made" (Rom. 1:20). So again, even heaven above bears the stamp of Earth below!

By way of conclusion, let us note an important implication of this view. If heaven is essentially a visionary world, then it follows that *heaven's place must always be with heaven's population*. But this in turn implies that heaven, by its very nature, is *a movable reality* within the universe; that heaven goes where heaven's population goes. The Bible agrees with this conclusion. As we have seen, in the beginning heaven was situated somewhere above the earth, for that is where the angels dwelt, beholding visions of God, his truth, and his world below. Today, according to the NT, heaven is *still* situated above the earth, for that is where the (holy) angels and the spirits of the departed saints presently dwell, beholding visions of God, Christ, and *more* divine truth (Heb.12:22f). Some day soon, however, heaven will actually *descend to the Earth*, for that is where the (resurrected) saints and the holy angels, according to promise, will continue to enjoy the beatific vision together, only this time under new heavens and in a new Earth where righteousness dwells (2 Peter 3:13, Rev. 21:1-3). For believers in Jesus, it is a day devoutly to be hoped for; a day when heaven and Earth shall become one—and remain one—forever.

## THE BAD BEGINNING

Earlier I stressed that biblical cosmogony involves a complex of four divine acts, spread out over a period of about 1750 years, and giving us the world as we now know it. They are: Creation in six days (ca. 4000 BC), the Cursing of man and nature because of Adam's Fall (ca. 4000 BC), the global Flood in the dark days of Noah (ca. 2400 BC), and the Confusion of Language at Babel (ca. 2250 BC). The first constitutes what I have called "the good beginning," the final three—all judgments of God upon man's sin—"the bad beginning." Our focus in this section is the bad beginning. It is vital that we take a closer look at each of its three elements, since they are of such tremendous cosmological significance.

## **1. The Cursing of Man and Nature Because of Adam's Fall**

Like all orthodox Jews, Jesus and his apostles followed the Hebrew Scriptures in tracing the presence of evil, suffering, and death in the world to the failed probation of Adam, the earthly father of the human race (John 8:44, Romans 5:12, 8:20, 1 Tim. 2:12-14, 1 John 3:18). Genesis 2 and 3, supplemented by further light from the New Testament, recount the whole terrible tale. Foundational as it is to the biblical worldview, we must examine it now with some care.

### ***The State of Adam in the Garden of Eden***

In order to appreciate the biblical cosmogony of evil, it is crucial to understand four important facts about the state of Adam immediately after his creation and prior to his fall.

First, he was *innocent*. That is, he had no knowledge of good and evil. This does not mean that he was *experientially* ignorant of goodness, since everything he experienced in his short existence before the fall was good: God, the world, and himself (Gen. 1:31). It does mean, however, that he was *conceptually* ignorant of goodness: He had no *idea* of goodness, because he had no idea—or experience—of its opposite, evil. In evil, he

was a babe (1 Cor. 14:20, Isaiah 7:15-16). And in this case, ignorance truly was bliss.

Secondly, he was *on probation*. That is, God was pleased briefly to test Adam's love for him by requiring obedience to a simple command: "Of every tree of the Garden you may freely eat; but of the Tree of the Knowledge of Good and Evil you shall not eat, for in the day that you eat of it you shall surely die" (Gen. 2:16-17). Though Adam, in his innocence, knew nothing of death, he knew God as his creator, knew him as his rightful ruler, and knew the difference between "may" and "may not." Accordingly, he also knew that for as long as the forbidden fruit remained before him, he must take God at his word—and stay away.

Thirdly, Adam was *mutable*. This means that if he ate from either of the two trees, he would immediately change, whether for the better or the worse. If he ate of the Tree of Life, he would live forever in intimate spiritual union with the triune God (Gen. 3:22, John 17:3, 23). If he ate of the Tree of the Knowledge of Good and Evil, he would die—and that, as time would prove, in more ways than one.

Finally—and perhaps most importantly—throughout his probation Adam stood before God as the *head, or representative*, of both of man and nature. In other words, his decision with respect to the two trees would affect not only himself, but also the whole family of man and the entire physical creation that God had made to be their home. If he passed the test, he would lift up all things—the very universe itself—into eternal life. If he failed it, he would drag them down together into death and destruction. Thus, in his innocence Adam was like a door through which great good—or great evil—would soon enter the universe, life, and man (Romans 5:12f, 8:18-25).

## ***The Fall***

The biblical story of the Fall really begins in heaven, where, presumably on the first or second day, God created the angels. Among them was a cherub of extraordinary wisdom, beauty, and rank—Lucifer, or "Day Star."

Like Adam, Lucifer and the other angels were on probation. The Bible says nothing about the nature of their test, only that Lucifer was the first to fail it, since shortly after his creation there came a dreadful moment when “unrighteousness was found in him” (Ezek. 28:15). This cryptic phrase marks the entrance of evil into God’s good creation. Henceforth, the entire course of Lucifer’s existence would be determined by a sinful two-fold animus: pride and hatred. In his pride, he would seek to supplant God by usurping both his worship and his sovereignty (Isaiah 14:12-15, Mt. 4:8-11). In his hatred, he would seek to wound God, primarily by using his formidable spiritual resources to injure his (God’s) beloved creations (John 10:10). Thus did Lucifer become Satan (Heb., *adversary*): the adversary of God, and the adversary of all God loves, especially the race of men.

Moved by this new nature, Satan immediately undertook to build a counterfeit kingdom of his own. His first prey were the other angels, a large minority of which quickly succumbed to his temptations (Rev. 12:4). Through their sin, they too corrupted their original nature, transforming themselves into demons (Mark 5:1f). Some of them were cast into *Hades*, a place of darkness and torment that God immediately created for the punishment of his angelic foes (Luke 8:31, 2 Peter 2:4, Jude 6). Others, however, for wise reasons, were permitted to remain “in the heavenly places” where Satan, their overlord, arranged them into a hierarchy of evil rulers (Eph. 2:2, 6:10-12). Thus was born the kingdom of Satan, an alien “domain of darkness” in the previously perfect Kingdom of God (Mt. 12:25, Col. 1:13).

Satan’s next target was Adam, whom he would tempt through his wife, whom he would tempt through a serpent (Gen. 3:1f). Unfortunately, we cannot linger here to explore the nuanced record of Adam’s temptation and fall. Suffice it to say that in that hour Satan did what came most naturally to him: he lied. Or more precisely, he spoke numerous half-truths with an intent to deceive (John 8:44, 2 Cor. 11:14, Rev. 20:3, 8). In Eve’s case, the deception worked: Filled with doubts about God’s goodness—and enflamed with illicit desires to free herself from his rule, become his equal, and make

her way forward in life independently of him—she ate. However, Adam was not deceived (2 Cor. 11:3, 1 Tim. 2:14). Why, then, did he eat? The Bible does not say. Yet this much is sure: Because he was not deceived, he had nothing like Eve’s excuse for his disobedience, and was therefore guilty of the purer rebellion against his benevolent creator and king. All too well, then, do the words of the apostle seem to apply to the guilty pair, even as they explain to modern skeptics the seriousness (and deadly consequences) of one man eating a piece of forbidden fruit:

Although they knew God, they did not honor him as God, nor were they thankful, but became futile in their thoughts, and their foolish hearts were darkened...(They) exchanged the truth of God for a lie, and worshiped and served the creature rather than the Creator, who is blessed forever. Amen.

—Rom. 1:21, 25

### ***Consequences of the Fall: Friends That Went Out***

Genesis 3:7-24 recounts some of the consequences of Adam’s fall. When supplemented with NT teaching, we realize that they were cosmic in scale, extending up into heaven, out across the whole face of nature, down through the generations, and deep into the recesses of the human heart. To form a complete picture of them, let us remember once again that the Bible likens Adam to a door (Rom 5:12). When he sinned, many dear friends went out the door, even as many deadly enemies entered in.

As for departed friends, the dearest was no doubt Adam’s *easy relationship with God*. If this was not yet full spiritual sonship, it was certainly friendship. When Adam sinned, that friendship was broken, God withdrew his soul-sustaining presence, and—in immediate fulfillment of God’s earlier warning—Adam died, spiritually speaking (Gen. 2:17).

With this there necessarily followed a loss of his *original integrity*, both spiritual and physical. Henceforth, Adam’s faculties, his body, and his manifold relationships were weakened, twisted, broken, and polluted beyond human repair (Gen. 3:7-8, 14-19). Death, like sin, was at work in his members (Rom. 7:5, 23).



With these two losses there also came a third: the loss of his *original freedom*. In biblical perspective, freedom is never autonomy (a metaphysical impossibility for any creature of the all-sustaining and absolutely sovereign God), but rather the simple ability to be what one was created to be. When Adam sinned—and when sin wrought its devastating change in his nature—he lost that ability. Henceforth, he was no longer free to be his normal godly self. Indeed, he was no longer even *inclined* to be his normal godly self (Rom. 3:9-18, 8:7). Instead of being a slave to God and righteousness, he had now become a slave to sin and Satan (John 5:42, Rom. 6).

Finally, and very importantly, Adam lost *access to the Tree of Life* (Gen. 3:22-24). Again, this tree represented eternal life in union with the triune God. In his innocence, Adam might so have “worked” as to receive that life: He had only to eat, and thereby live forever. However, having disobeyed, he became guilty and polluted with sin, so that God could no longer grant him access to the Tree of Life. To do so would have been for God to break his word (i.e., the threat of death), compromise his justice, and stain his honor by joining himself to a rebel. No, some provision must first be made for Adam’s sin, both to forgive it and to eradicate its manifold consequences. Only then could Adam eat from the Tree of Life. Only then could he regain all he had lost.

So then, when Adam transgressed, he forfeited his easy relationship with God, his integrity, his freedom, and his access to the Tree of Life. And—because he had acted as Head over all—what he lost for himself he also lost for his wife, his children, and his beautiful God-given home.

### ***Consequences of the Fall: Enemies That Came In***

While many precious friends were going out the door, many deadly enemies were coming in. Moreover, they did not enter simply to harass the sons of Adam, but rather to take them captive and, if possible, drag them

down to eternal destruction. Under four broad categories, I will touch on some of the most important.

### *Interior Spiritual Enemies*

First, there were *interior spiritual enemies*, enemies that took hold of the spirit (or soul) of man. Chief among them were *sin* and *guilt*. As for sin, the Bible depicts it as an indwelling force; a complex of dark, powerful, and unnatural passions (or lusts) that effectively bend every human faculty towards self: self-satisfaction, self-exaltation, and self-rule over and against the rule of God. The NT finds all men in this state, and traces that state to Adam, who “sold” his posterity “under” sin, so that henceforth all would be born in sin’s chains (Mark 7:21-22, John 2:25, Rom. 7:14; Psalm 51:5). As for (true) guilt, it is a subjective awareness of an objective fact: the fact that one has fallen short of God’s glory (i.e., his moral perfection) both in who he is and what he has done (Rom. 3:23). Typically, this shortfall involves fear (of divine punishment) and shame (Gen. 3:7-8, 1 Tim. 4:2, Eph. 4:19, 1 John 4:18). With great compassion the Bible pictures sin and guilt as formidable enemies indeed, well able to darken the entire sky of a man’s existence, crush his spirit, and even sicken his flesh (Psalm 5, Mark 2:1-12, Luke 7:36-50).

### *Physical Enemies*

Secondly, there were *physical enemies*. These entered when God cursed the whole realm of nature. In a measure, Genesis itself tells us how this happened. God cursed the ground (along with the entire plant kingdom) so that henceforth it would yield its treasures reluctantly, barring the way with thorns and thistles (Gen. 3:17). He cursed the serpent, the cattle, and the beasts of the field (i.e., the entire animal kingdom), thereby introducing a dreadful new economy of violence and predation (Gen. 3:14-15, Lev. 26:22, Isaiah 11:6-9). He cursed Eve’s body, so that she and her daughters would give birth in pain (Gen. 3:16). He cursed man’s body, so that it would return

to the dust from which it had come (3:19). In other words, God subjected *the entire physical creation* to a principle of *decay, futility, and suffering*; to a principle that manifests itself in the whole dark spectrum of *natural evils*: drought, famine, plague, pestilence, earthquake, storm, flood, mutation, extinction, accident, injury, sickness, pain, fatigue, old age, and physical death, (Romans 8:18-25). The Bible well understands that hurting people often reckon these judgments as a sign of God's indifference, cruelty, or non-existence (Prov. 19:3). It responds, however, by framing them instead as severe mercies, wisely designed to show fallen man the ugliness of his sin, warn him of its dangers, and (along with the far more numerous tokens of God's goodness) lead him to repentance, faith, and salvation from a far worse judgment waiting for sinners up ahead (Deut. 28, Luke 13:1-5, Acts 14:17, Rom. 2:4).

### *Satanic Enemies*

Next, there were *Satanic enemies*. These entered when Adam repudiated the rule of God and obeyed the devil instead. In other words, through his sin Adam effectively incorporated himself and his family into Satan's growing kingdom of darkness (Luke 4:5-7, John 8:44). Here then was the beginning of what the Bible calls "the world," or "the world-system." It may be defined as human society insofar as it is alienated from God, and organized, energized, and directed by its unseen "prince" or "ruler"—the devil and his demonic hosts (John 12:31, 14:30, 16:11, Eph. 6:10f). Happily, Satan's rule is not absolute, since, from the very beginning, God is ever taking a chosen people *out of* the world (Gen. 3:15, 21, John 15:19, 17:6, 15) and bringing them back *to* himself. Nevertheless, the devil remains a dangerous enemy to all, saint and sinner alike, ceaselessly prowling about like a ravenous lion, seeking whom he may devour (1 Peter 5:8).

Though the modern mind often scoffs at the idea of invisible spiritual enemies, the NT writers regard them with utmost seriousness. At any given moment the majority of mankind are their (unwitting) slaves (Rev. 12:9).

The ungodly are ensnared by the devil, having been taken captive by him to do his will (2 Tim. 2:24-26). The fallen world is Satan's "domain," a prison-house of spiritual darkness (Mt. 12:22-30, Col. 1:13). It lies in the power of the evil one, so much so that he can summon entire empires onto the stage of history (1 John 5:19, Rev. 13:1). Though Satan is the prince of this world, he hates its citizens, for he hates the God who created and loves them. Therefore, whether by deception, temptation, oppression, or persecution, his great goal is first to feed his own pride by usurping the (unconscious) obedience of God's human creatures (Mt. 4:8-9), and then to wound God by destroying as many of those creatures as he can (John 10:10, 1 Peter 5:8). Soberingly, Jesus reckons mankind's Satanic enemy as a "strong man" from whom none can deliver themselves. Their only hope is that "a stronger than he" should appear on the scene, invade his dark prison house, spoil his goods, and take those goods to himself (Mt. 12:22-30).

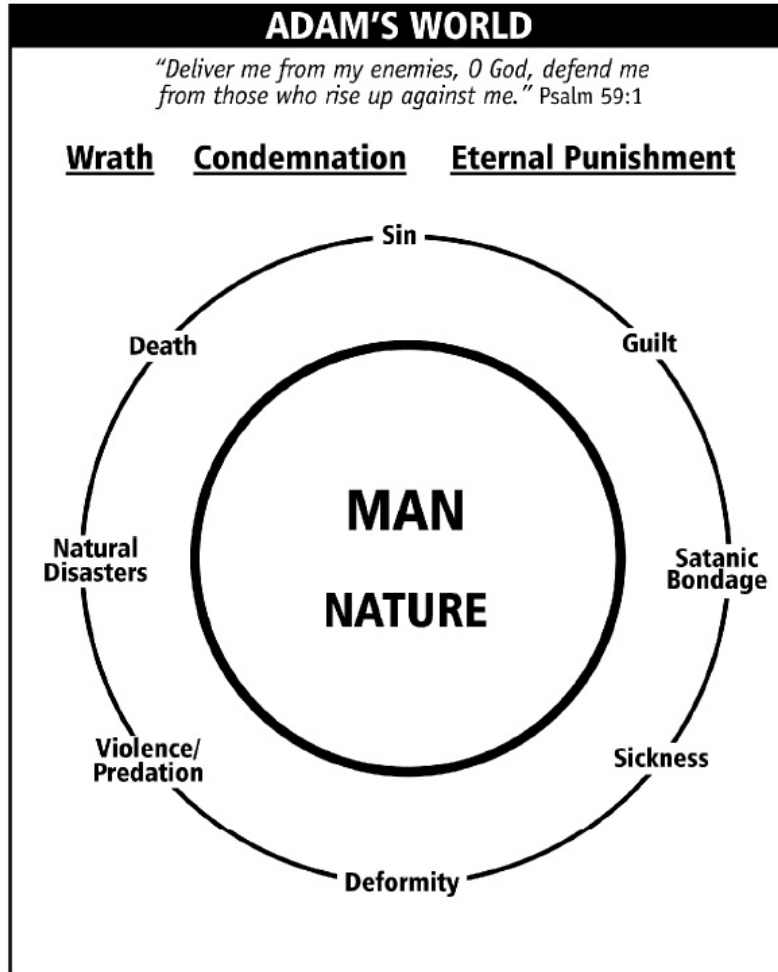
### *Divine Enemies*

Finally, Adam's sin brought upon the world a dark trinity of *divine enemies: condemnation, wrath, and the peril of eternal punishment*. There are none more dangerous. Because Adam represented all, his sin *condemned* all. All are reckoned transgressors of God's law and worthy of death in every form: spiritual, physical, and eternal (Rom. 5:12, 16, 18). Similarly, Adam's disobedience exposed his sinful children to God's *wrath*. This is not to be understood as an impersonal spiritual principle, like the *karma* of the Hindus and Buddhists. Rather, it is a true passion in a true person. Sinners awaken God's wrath each and every time they "suppress the truth in unrighteousness" (Ex. 32:11, Deut. 29:28, 31:17, Psalm 5:5-6, 7:11-13, Romans 1:18f). And this brings us to the most fearsome enemy of all: *the peril of eternal punishment*. It is two-fold, involving eternal separation from every life-giving blessing of God, and also eternal subjection to his wrath under painful retributions throughout the age to come (Mt. 25:46, 2 Thess. 1:9, Rev. 14:11). No biblical figure speaks of this

enemy more often or more forcefully than Jesus of Nazareth: “Do not fear those who kill the body but cannot kill the soul. But rather fear Him who is able to destroy both soul and body in hell” (Mt. 10:28). Just as condemnation and wrath loom from above, so too the peril of hell lurks from beneath. For the moment—amongst the living, at least—these enemies stand strangely at bay. Yet they will not do so forever. If, then, God has made a way of escape, men must now do all they can to find it. They must seek the God-appointed door through which they may safely “flee the wrath to come” (Mt. 3:7, 7:13, 1 Thess. 1:10).

### ***Adam’s World***

Our survey has shown that the cosmological effects of the fall were stupendous. In summing them up, we may say that Adam’s sin gave us “Adam’s world.” Adam’s world is all-inclusive, taking in “the heavens and the earth”—the universe, life, and man. Though God created it “very good,” the transgression of its Head and Representative profoundly marred it. Adam alienated his world from the fullness of the life-giving power and presence of God, even as he subjected it to the tyranny of a deadly host of interior spiritual enemies, physical enemies, Satanic enemies, and divine enemies. Moreover, because of their fallen state, neither Adam nor his offspring could do anything at all to restore themselves to the perfect health and joy of life in union with God. In and of themselves, they were henceforth without strength (Rom. 5:6), without hope (1 Thess. 4:13), and without God in the world (Eph. 2:12).



That did not mean, however, that they were *altogether* without hope. For what if God, in mercy and grace, were somehow to help them? In particular, what if he were to raise up another Adam; a Last Adam not descended exclusively from the First, and so unstained by sin; a holy and triumphant Adam who, on behalf of a chosen family of sinful men and women, passed his own test successfully, doing for them what they had failed to do, and undoing for them what they had done? In short, what if God were to send a Last Adam to create a whole *new* world—a world overflowing with eternal life; and what if, having created such a world, He then began to transfer a chosen people out of the old and into the new?

More on this in a moment!

## 2. The Flood

In closely associating it with his own second coming at the end of the age, Jesus of Nazareth clearly demonstrated that he regarded the Flood as a true historical event, a solemn divine judgment, and a global catastrophe. Accordingly, it was for him an event of immense spiritual, prophetic, and cosmological significance (Mt. 24:34f, Luke 17:26f).

One needs only to read the Genesis narrative itself to see why. There we learn that God, having run out of patience with man's utter depravity and lawlessness, determined to destroy all flesh—everything that drew the breath of life—from the face of the Earth (Genesis 6). As his instrument of judgment, he chose a global Flood, to be effected by two closely related events: the opening of the windows of heaven, and the breaking up of the fountains of the great deep (Gen. 7:11). That the ensuing deluge was global in scale is clear from the fact that it did indeed destroy all flesh (the inhabitants of the Ark excepted): men, birds, cattle, beasts, and every creeping thing (Gen. 7:21-22; 2 Peter 3:5-6). It is also clear from the fact that the flood waters "...prevailed exceedingly on the earth; and all the high hills under the whole of heaven were covered" (Gen. 7:19).

Such a catastrophe would, of course, leave an enormous geological imprint upon the world. This is especially true if, as some speculate, the "opening of the windows of heaven" involved the collapse of a water vapor canopy that had hitherto produced a global greenhouse effect, thereby securing a temperate climate in all times and places. It is all the more true if, as others speculate, the "breaking up of the fountains of the great deep" involved a subterranean ocean bursting with unimaginable force through the crust of the Earth. Obviously, such happenings must impact—and profoundly disfigure—the face of the entire globe.

Later we will look at some of the scientific evidence favorable to the historicity of a recent global Flood. Here, however, I would close by stressing that for the NT authors the Flood narrative was designed to do something far more than explain the present face of the Earth to God's people. Rather, it was designed to enable God's people to *interpret* the face of the Earth to their neighbors; to proclaim to them—much like Noah

himself, and Jesus after him—the *spiritual meaning* of salinized oceans, infertile deserts, uninhabitable mountain ranges, frozen tundra, whole continents of arctic ice, a geological column full of animal remains, and (perhaps) the four seasons themselves, with their unwelcome and often deadly extremes of heat and cold. For what are all these things, if not (after the curse) *further* divine judgments upon man’s sin, *further* warnings against such sin, and a solemn foreshadowing of a *further*—and far worse—judgment still to come (2 Peter 3)? In short, the NT authors clearly intend that the Flood narrative—and Flood geology—be enlisted in the cause of the gospel. God’s people are to speak of these things to all nations, with a view to warning people everywhere of the coming Day of Judgment, and in hopes that they will swiftly get on board God’s true Ark: the Lord Jesus Christ.

### **3. The Confusion of Language at Babel**

Looking upon the face of the world as we now know it, thoughtful seekers, alive to the existence of an unknown god, might well ask: If there really is one god, and if he really did create one human race, why do the peoples of the Earth not live together as one family? Why do they speak different languages, live in different lands, and develop different cultures? Why must there be so much linguistic and ethnic division, when seemingly humanity could accomplish so much more without these barriers to unity?

The Bible fully answers these thoughtful questions in its narrative of the confusion of language at Babel. Importantly, still another judgment is involved: Linguistic and ethnic division was *not* God’s original purpose for the family of man, but is yet another result of man’s sin.

The story here is quickly told. Shortly after exiting the Ark, God commanded Noah and his sons to be fruitful, multiply, and fill the earth (Gen. 9:1). He intended that Shem, Ham, Japheth, and their respective families should separate and spread abroad throughout the Earth. It is even possible that God, through Eber’s son, Peleg, gave them specific



instructions as to where each family should go (Gen. 10:25). In any case, the growing, sojourning seed of Noah—now led by their powerful hero, Nimrod—were not inclined to obey. Indeed, in words savoring of open rebellion, they said, “Come, let us build for ourselves a city, and a tower whose top will reach into heaven, and let us make for ourselves a name, *lest we be scattered abroad over the face of the whole earth*” (Gen 11:4). The great city was to become a rallying point, a center of gravity to hold them all together. So too was the tower, visible even from the outermost boundaries of the growing metropolis. Furthermore, in naming the city, they would, in effect, be *re-naming* themselves—and thus, in time, forgetting not only their own family names, but the name of the LORD as well.

So God stepped in. Surveying the situation, seeing their unity, *and seeing its potential for still greater evil and rebellion*, the triune LORD “went down” and confused their language, dividing their one tongue into many, according to their respective families (Gen. 10:20, 31). The result was that the people immediately stopped building, memorialized the bewildering event by naming the city Babel (Heb, *balal, confuse*), and then—no doubt reluctantly—began to spread abroad. By confusing their language, God had not only confounded their purpose, but successfully established his own (Deut. 32:8, Prov. 19:21, Acts 17:26).

Here then is the Bible’s account of the origin of linguistic and ethnic divisions in the family of man. However, as in the case of the Flood narrative, so here: It is meant not only to explain, but also to instruct and warn. Thus, even to the end of the age, it warns *all* the sons of Noah against rebellion. It warns them against pride. It warns them against charismatic leaders, and the perils of mass psychology. In particular, it warns them against man’s perennial quest for global unity (e.g., political, religious, economic, etc.)— or rather, against his perennial quest for global unity outside the sphere of Christ, in whom alone, according to the NT, such unity is lawful and safe; in whom alone pride and the lust for power are restrained by the Spirit of God; in whom alone love, humility, and a desire to serve

become the basis for an enduring oneness that is grounded in, and pleasing to, the one true God (John 17, Eph. 4).

Therefore, as illumined by NT revelation, the account of the confusion of language at Babel actually contains a message of hope. Why? Because this third and final element of the bad beginning instructs sinful, divided, and warring humanity to look ahead to a new beginning and a better day; a day when the indwelling Spirit of Christ will perfectly join a redeemed human family together in one mind, one judgment, one tongue, one nation, and—at long last—one world (Acts 2:1-5, 1 Cor. 1:10, 1 Peter 2:9-10, Rev. 11:15).

## THINGS NEW

Our discussion so far has focused on the OT picture of the good beginning, a picture fully embraced by Jesus and his disciples. But a thorough investigation of biblical cosmogony would be incomplete if it neglected the “things new” that Jesus added to this picture. And what he added was something as mind-boggling as it was fundamental: He added that he himself was the creator of the cosmos, and its spiritual center as well!

### *Christ the Creator*

Let us consider first Christ’s claim to being the creator. His teaching on this crucial point is both direct and indirect, by word and by deed.

Concerning the deeds, it appears that in many of his miracles Jesus sought intentionally to reveal himself to Israel as the creator.<sup>22</sup> In some miracles he seems actually to have created something out of nothing. We think, for example, of how he multiplied loaves and fish to feed thousands (Mt. 14:13-21, 15:32-39, John 6:1-14). Meanwhile, in others he reminds us of the One who created by forming something out of what he had previously brought into being. The most familiar illustration of this is Jesus’ first sign, performed at a wedding in Cana, when he turned water into wine,

thereby manifesting his glory (i.e., his divine nature) to his disciples (John 2:1-12). Similarly, Jesus laid his transforming touch upon a withered hand (Mt. 12:9-14), paralyzed legs (Mark 2:1-12), leprous skin (Mark 1:40-41), blind eyes (Mt. 9:27-31), and—most dramatically—dead bodies (Mark 5:35-43, cf. John 11). Of special interest is a miracle wrought upon a certain Jerusalem beggar, blind from birth (John 9:1-10). Jesus healed him by mixing spit with earth, thereafter applying the clay to the man's eyes. Reflecting upon this, his disciples may well have recalled how God formed the first man out of the dust of the ground (Gen. 2:7). In all of these miracles of healing, Jesus shows himself as creator by acting as *re*-creator. He restores human bodies to something of the original wholeness that God bestowed upon Adam and Eve in the beginning.

In this vein, it is also worth considering the miracles in which Jesus demonstrated his power over nature. Perhaps the most dramatic of these occurred during a fierce storm on the Sea of Galilee, when he so rebuked the wind and waves that they immediately became quiet once again (Mt. 8:23-7, Psalm 107:23-32). This display of power was not unlike that seen in the beginning, when the Spirit of God, hovering over the primeval waters, created and shaped the elements themselves. Small wonder, then, that upon seeing this miracle the disciples inquired among themselves, “Who can this be, that even the winds and sea obey Him?” The terrifying answer—that he was the creator himself—seems to have hovered, ghostlike, at the edge of their shaken minds.

Turning next to Jesus' teachings, we find not a little to suggest that he did indeed understand himself to be the creator. In his final prayer for the disciples, he referred to himself as one who existed with the Father “before the foundation of the world” (John 17:24). To the Jewish mind, such an utterance could hardly help but raise suspicions that he was putting himself on a par with the creator. In an earlier clash with the Pharisees, Jesus was even more explicit, declaring, “Before Abraham was, I AM” (John 8:58). Here, he forthrightly takes to himself the preeminent divine Name, also

suggesting that he himself was not only Abraham's seed, but his divine maker as well!

Finally, and most directly, we have Jesus' words and deeds following his resurrection. One instance, recorded by the apostle John, is especially intriguing. Shortly after his resurrection, Jesus mysteriously appeared to his disciples in a certain house in Jerusalem. He greeted them with these words: "Peace be with you! As the Father has sent me, I also send you." Importantly, John then relates that after so speaking, Jesus *breathed* on them, saying, "Receive the Holy Spirit." No Jew could fail to catch the symbolism here. Just as God, in the beginning, had breathed life into Adam's clay form, so now, in another kind of beginning soon to occur, Jesus will breathe new spiritual life into his followers. Thus, in a richly symbolic act, Jesus seeks to identify himself as both the creator and re-creator of the people of God (Gen. 2:7, John 20:19-23, Acts 1:8, 2:1-4, 33).

Here we should also remember Jesus' words to John on the island of Patmos, where he appeared in a vision to the persecuted apostle. In his very first utterance, the glorified Christ identifies himself, saying, "I am the Alpha and the Omega...who is and who was and who is to come, the Almighty" (Rev. 1:8). Later, he calls himself "The Beginning and the End" and "The First and the Last" (Rev. 1:17, 2:8, 22:13). Christ's use of these exalted titles is obviously designed to comfort the harried apostle. He is reminding John that he himself is the omnipotent creator of the universe, and therefore its omnipotent consummator as well. John is to understand that he who created in the beginning may be trusted to care for his suffering people all throughout the middle, and then to return, resurrect and re-create in the end (Rev. 21:5).<sup>23</sup>

If, however, we limit ourselves to his pre-resurrection teaching, it does appear that Jesus made no explicit claim to being the creator. What might have been his reasons for this? Biblical conservatives reply by arguing that Jesus sought, like all previous and subsequent biblical teachers, to ascribe creation preeminently to God the Father (Mt. 5:43-48, 11:25, 19:6). More importantly, they suggest that he refrained because he knew that his

disciples had not yet fully understood the great trinitarian mystery, nor could they until the coming of the Holy Spirit (John 16:13). Only in fully seeing their Teacher as God (the Son) could they ever see him as their creator.

This view seems amply vindicated by the events of NT history. When at last Christ sent the Spirit on the day of Pentecost, the apostles soon began to declare not only Christ's deity, but also his central role in the creation. Indeed, as time went on—and as the Spirit of wisdom and revelation continued to perform his work—the apostles began to declare Christ's central role *in all things*. This declaration flowed from their growing realization that God, in and through them, *was now bestowing on all mankind the fullness of his cosmological truth*. Moreover, when they themselves pondered that truth, they found to their amazement and joy that its absolute center—its living, pulsing heart—was none other than their beloved Master himself, the Lord Jesus Christ.

### ***The Christ-centered Cosmology of the NT***

In order to understand this full-blown apostolic cosmology—which caps and completes biblical cosmology as a whole—we must begin at the beginning: the glory of God.

As we saw earlier, one of God's great purposes in creation was that the universe should be *a theatre for the display and enhancement of his glory*. From their writings we know that the apostles fully understood, embraced, and proclaimed this sublime truth. Thus, in a doxology that appears in his letter to the Roman Christians, Paul writes, "For from Him and through Him and to Him are *all things*. To Him be the glory forever. Amen" (Rom. 11:36)! Clearly, the expression "all things" is comprehensive, taking in the universe as a whole, and viewed from every conceivable angle: its framework, furniture, inhabitants, and entire history. By divine decree, all are meant to redound to the glory of God (Eph. 3:21, Phil. 4:20, 1 Peter 4:11, 2 Peter 3:18, Jude 25, Rev. 5:13, 7:12).

While this theme does indeed pervade the Old Testament (see Ex. 14:4, Num. 14:21, Psalms 19:1f, 86:9, Isaiah 24:15-16, 66:18f), the New Testament takes it to an entirely new level, opening it up like a flower in full bloom. With Jesus leading the way, his apostles henceforth spoke of the glory of God in terms of the tri-unity of God.<sup>24</sup> In particular, they revealed that it belongs *essentially* to the very nature and activity of the triune God *that each of the three Persons should seek the glory and honor of the other.*

Scriptural evidence for this amazing tendency abounds. Jesus said that the Father loves the Son, and has bestowed upon him any number of divine prerogatives "...so that all should honor the Son, just as they honor the Father" (John 5:23). Similarly, concerning his own life and ministry, he said, "He who speaks from himself seeks his own glory; but he who seeks the glory of the One who sent him is true, and no unrighteousness is in him" (John 7:18, 17:1). As for the work of the Holy Spirit, Jesus taught that, "He will glorify Me, for He will take of what is Mine and declare it to you" (John 16:14; Mt. 12:32). These few citations supply but a tiny glimpse into a pervasive NT motif: In all their work before men and angels in the great theatre of the cosmos, each Person of the Holy Trinity seeks the pleasure, glory, and honor of the others (Mt. 12:32, John 5:19-23, 8:29, 14:31, 16:13-15, Phil. 2:1-11). Through the active, mutual, other-oriented love of each member of "the Holy Family," God is ever seeking the glory of God!

### ***Christ, the Firstborn Over All***

Keeping these ideas in mind, let us turn now to the theme at hand: the Christ-centered cosmology of the NT. We will begin by looking at two passages of great cosmological importance.

The first is found in Paul's letter to the Colossians. Seeking to clarify for them the nature and work of Christ, he writes:

He is the image of the invisible God, the first-born over all creation. For by Him all things were created, both in the heavens and on earth, visible and invisible, whether thrones or

dominions or rulers or authorities—all things have been created through Him *and for Him*. And He is before all things, and in Him all things hold together.

—Col. 1:15-17

Clearly, the primary thrust of this rich text is to exalt the deity of Christ, which Paul accomplishes simply by enumerating some of his divine prerogatives. To this end he identifies Christ as “the image of the invisible God,” the one in whom we finite humans can best behold the glorious face of the infinite and invisible Father (John 14:9, 2 Cor. 4:6). Similarly, he identifies Christ, along with the Father, as the eternal Creator, through whom not only the heavens and the Earth, but also the angelic hosts, were made (John 1:1-3, 1 Cor. 8:6). Finally, he identifies Christ as the cosmic Sustainer; the one who holds all things together in their appointed form and structure, and the one who also guides them to their appointed ends (Heb. 1:1f, Rev. 6:1f).

We must, however, take special note of a subtle yet central aspect of Paul’s teaching here. Almost as if in passing, he states that God not only created the universe *through* Christ, but also *for* Christ. What might this cryptic remark mean?

In part, Paul has already supplied the answer, having identified God’s Son as “the first-born over (literally, “of”) all creation.” As commentators have often pointed out, this expression cannot mean that the pre-incarnate Son was the Father’s first creation, for the context itself (along with many other NT passages) declares that the Son existed before *all* things, and that *all* things were created through him. Such things would include, of course, the angels, with whom some of the Colossians were apparently confusing Christ. So then, Paul is saying something else entirely, and something quite unexpected: *He is saying that from all eternity it has been the Father’s pleasure, purpose, and plan to put his Son in authority and control over the entire universe.* In other words, just as earthly fathers in biblical times delighted to set their first-born sons over (much of) their estates, so God has ever planned to see his one and only Son ruling over the

cosmos! Why? Because he knows it will redound to his (Christ's) glory. For as we just saw, the Father loves the Son, and desires all to honor the (sovereign) Son, even as they honor the (sovereign) Father (John 5:20f).

### ***Christ, the Head Over All***

This brings us to our second text, which again comes from the pen of Paul. Writing to the Ephesian Christians about God's eternal purpose in Christ, he says:

In him (Christ) we have received redemption through his blood, the forgiveness of sins, according to the riches of God's grace that he made to abound toward us in all wisdom and understanding, having made known to us the mystery of his will, according to his good pleasure which he purposed in Christ, that in an administration of the fullness of the times he might *bring all things in heaven and on earth together under one head, even Christ.*

—Eph. 1:7-10

Once again Paul's theme is God's eternal pleasure, purpose, and plan for the universe. The "us" of whom he writes is Christ's holy apostles and prophets, to whom God has been pleased to reveal these things, so that they in turn may reveal them to the world. And what exactly is God's plan? What exactly is the Father's over-arching purpose, or goal, in his Son's redemptive work? In a word, it is *the heading up* of all things in Christ. Or, to use the language of the Colossian letter, it is God making his Son to be the "first-born over all creation," giving him supreme authority and power over a whole *new* universe, with the assured result that manifold and precious blessings will fall upon all of the redeemed who have come to live beneath his (the Son's) benevolent reign. Even now, says Paul, the long-awaited plan is being implemented. Having guided cosmic history to "the fullness of time" (i.e., the time when his Messianic promises are being fulfilled), God is actively placing a chosen people under Christ's headship, and will continue to do so until he (Christ) comes again to consummate his great redemptive work—to perfect his new universe—at the end of the age (Gal. 4:4-7).



## ***Christ, the Heart of All***

These two texts enable us now to survey—in the broadest possible terms—the Christ-centered cosmology of the NT and of the Bible as a whole.

Think back for a moment to the good beginning. Beneath the NT light we have just received we now can see that when God created the universe, life, and man, he had one supreme purpose in mind: to bless and honor his Son. How did he intend to accomplish this purpose? By making him *head* over all things; by placing all things directly under his authority and power; by making him personally responsible for the unfolding of his (the Father's) plan for cosmic history. All that was necessary for the great project to begin was that Adam should pass the test set before him in the Garden of Eden; that he should eat, not of the Tree of the Knowledge of Good and Evil, but of the Tree of Life. For (as the NT finally reveals) the fruit of that tree represented none other than the Son of God himself, so that when Adam ate of it he would have understood the trinitarian mystery, received the Son as his rightful Head and Lord, and thereby received for himself (and all his posterity) the same spiritual life that Christ offers to all people today: *eternal life*—the life ever lived and enjoyed by the triune God, and that life lived forever (John 1:12, 3:16, 6:54, 17:1-2, Rev. 2:7, 22:2, 14).

To judge from NT teaching, such obedience on Adam's part would have meant fabulous blessings for the universe, life, and man. With all creativity, fruitfulness, and joy, the Sovereign Son, pursuant to his Father's will, would have shepherded both man and nature down the long corridor of universal history (John 10:1-30), brought them to their appointed ends, lifted them up into a state of eternal glory (Rom. 8:18-25, 1 Cor. 15:50-58), and then—in a cosmic grand finale—handed them all back over to the Father, so that God might be all in all (1 Cor. 15:20-28).

We know, however, that this particular journey was not to be. Adam did not pass his test, but instead sinned, polluted his entire being, fell under condemnation, and forfeited his access to the Tree of Life (Gen. 3:24). As a result, he, his family, and his beautiful abode were subjected to a terrible

curse, with all the pain, struggle, and futility that this entailed. Worst of all, it now appeared that Satan and the rebellious Adam had thwarted God's eternal purpose and plan for the glory of his Son and the good of his world.

But where sin abounded, grace abounded much more (Rom. 5:20). Yes, God might justly have destroyed the entire universe because of Adam's sin. But he did not. To the contrary, in love, mercy, and grace he launched his plan of redemption; a plan that was itself settled upon even "before the foundation of the world" (Mt. 25:34, Eph. 1:4, 1 Peter 1:20); a plan according to which his Son might *still* become "the first-born over all creation;" a plan by which the glorious attributes of God and Christ might be *more* fully displayed; and therefore a plan by which they both might be *more* fervently worshiped and glorified (Eph. 1:6, 12. Rev. 5, 7).

As we saw earlier, the rest of the Bible—from Genesis 3 to Revelation 22—is simply a history of the progressive administration of this great plan. The divine-human Redeemer—Jesus Christ—stands at its very heart. In OT times, God prefigures, predicts, and prepares for his coming, prophetically casting him in the roles of a Messianic (i.e., Spirit-anointed) Prophet, Priest, and King. In NT times he appears at last. Born of a virgin (and therefore without the stain of sin), he is true God and true man, the Last Adam and a better Adam. Through his righteous life, atoning death, and victorious resurrection on the third day, he accomplishes the redemption of his Father's chosen people. Having done so at such great cost, the Father rewards him by highly exalting him, lifting him up into heaven, seating him at his own right hand, and bestowing upon him all authority in heaven and earth (Mt. 11:27, 28:18ff, Acts 5:31, Eph. 1:15ff, Phil. 2:1-11, Col. 3:1-4, Heb. 1:3, Rev. 5). Thus, through an ineffable transfer of divine authority and power, *God the Father makes Christ the King of the cosmos*, placing the very reins of providence in his hands so that he (Christ) may administer and complete the redemption that he accomplished on Earth. In all of this the Father has therefore laid the foundation and set the stage for the fulfillment of his purpose: the heading up of all (redeemed) things in his

beloved Son; the creation of a whole new humanity and a whole new cosmos in Christ Jesus the Lord.

### ***The Two Phases of Christ's Cosmic Rule***

The NT teaches that the “heading up” of all things in Christ—the creation of a new world in Christ—occurs in two distinct phases.

The first begins when Christ pours out the Holy Spirit upon his nascent Church on the Day of Pentecost, and ends when he returns to the Earth in power and glory at the end of the age to consummate his redemptive mission. During this period (now some 2000 years long), the heavenly King sends his Church to all nations to preach the gospel, the good news of God's gracious gift of salvation (Mt. 28:18f, Luke 24:49, John 20:19-23, Acts 1:8, 2:1). In so doing, he puts all who hear to the test: Will they love the truth about God, the universe, life, and man enough to consider the gospel, and to obey it if they find it is true? In this process, Christ grants repentance, faith, and the gift of the indwelling Holy Spirit to God's chosen people (Luke 24:45, John 10:16, 14:16-18). Thus does Christ enter Satan's house, bind the strong man, plunder his goods, and make them his own (Mt. 12:29, John 12:30-32, Titus 2:14). Thus does he rescue God's people from the domain of darkness, and transfer them into his own kingdom of light and love (Acts 26:18, Col. 1:13, 1 Peter 2:9-10). Thus does he extend his distinctly *spiritual* reign over all the Earth. Thus does he create a new, invisible world in Christ (Mt. 13, Mark 4:1-34).

The second phase of the cosmic “heading up” occurs at the close of “this present evil age,” when Christ descends from heaven bodily, visibly, and in great power and glory (Mt. 24, Acts 1, 1 Thess. 4, 2 Thess. 1). His purpose in that day is to consummate God's redemptive plan *by extending his spiritual reign to the physical side of creation, to all of nature* (Mt. 13:36-43, Gal. 1:4, Rom. 8:18-25). To this end he will raise the dead (John 5, 11, 1 Cor. 15), judge the world in righteousness (Mt. 25, Acts 17:31, Rom. 2:1f, Rev. 20:11f), destroy the present universe by fire (Mt. 24:35, 2 Pet. 3), and

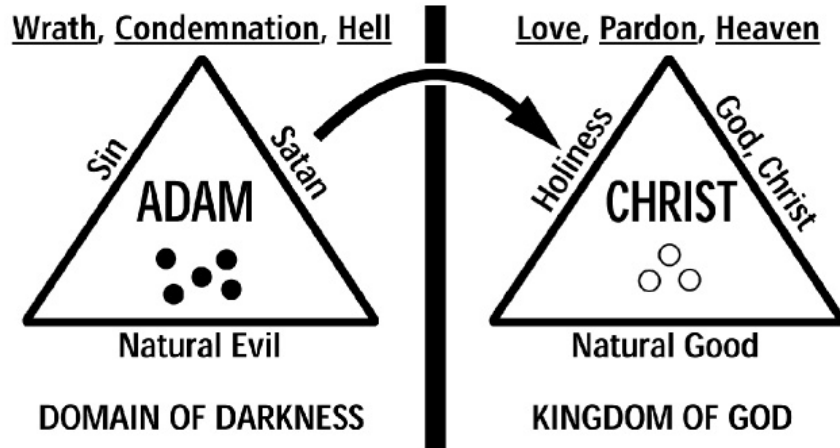
create new heavens and a new Earth, the everlasting home of the redeemed (2 Pet. 3:13, Rev. 21:1). Having done so—having perfectly headed up all spiritual and physical things in himself—the omnipotent Son will then triumphantly hand over to the Father all that the Father so lovingly handed over to him. The grand finale has indeed come to pass, and God is all in all (Mt. 11:27, John 6:37, 17:6, 1 Cor. 15:20-28).<sup>25</sup>

Here then is something of the rich, Christ-centered cosmology of the Bible. And why Christ-centered? Because the Father has the Son in his heart, *and because he has therefore chosen to place the Son at the heart of his plan for the entire universe*. In other words, biblical cosmology is really a love story, a story of God diligently seeking to exalt his dear Son by making him the glorious and beloved creator, sustainer, redeemer, ruler, judge, and re-creator of all things. Moreover, it is a love story that he now invites all to behold, and in which he desires all to participate. If, then, the Bible is true, the poet was right when he said, “All the world’s a stage.” But if all the world’s a stage, then surely it is the solemn joy, privilege, and responsibility of every seeker to discern the meaning of the great drama now unfolding upon it, and to decide what part he or she would like to play.

## NOTES

## SALVATION IS OUT OF THIS WORLD

*"He has rescued us from the domain of darkness and transferred us to the Kingdom of His beloved Son."* Col. 1:13



The New Testament represents salvation as a change of spiritual residence. Basically, it assumes that all people are born in Adam, and therefore in bondage to the whole spectrum of spiritual, physical, and divine enemies introduced by his fall. However, in conjunction with the preaching of the gospel, the exalted Christ sends forth the Holy Spirit to deliver a believing people out of Adam's fallen world and into his own, where they henceforth rest secure. During the present stage of the Era of Fulfillment, their blessings are largely spiritual. After the parousia they will be physical as well as spiritual. In other words, when Christ returns to make all things new, the redemption of the world that is in "in Christ" will be eternally complete.

1. For a table indicating the extent to which Jesus and his apostles referred to the beginning, see Appendix 3.

2. Some interpreters find a "cosmological trinity" in Gen. 1:1, arguing that in the beginning God created *time* (at the beginning), *space* (the heavens) and *energy/matter* (the Earth in the deep). However, we must guard against following relativity theory in tying time too closely to the created order. True, *astronomical* or *cosmological* time had a beginning: the first day (Gen. 1:5). Accordingly, we may indeed think of astronomical time as being God's creation (and may therefore speak of "absolute time," since

cosmic history has an absolute beginning, the first day, against which we can henceforth measure all other times). But if, as I suggested earlier, time is *essentially* a subjective and supernatural reality—and perhaps even an attribute of God himself—it cannot *in any fundamental sense* be part of his creation. It seems best, then, to avoid speaking of time as a created reality, and therefore to take Genesis 1 at face value: In the (six-day) beginning of the universe, God created space and all that he meant to fill it.

In passing, we do well to note here that the weight of biblical evidence favors the idea that the universe is finite. Everything else that God created was finite: Why should space be the exception? In creation, God set fixed boundaries for the seas; why would he not set them for the heavens as well (Psalm 104:7-9, Jer. 5:22)? If the heavens revolve daily around the Earth, must they not be finite (see Chapter 6 for more on this)? If he measured the heavens with a span, must they not be finite (Isaiah 40:12)? If God knows the number (and the names) of the stars, that number is finite (Psalm 147:4, Isaiah 40:26). But if the number of the stars is finite, ought not their abode to be finite as well? Most importantly, God seems jealously to reserve the attribute of infinity to himself, explicitly declaring that he has no equal and that there is none like him (Isaiah 40:25, 46:5). If, then, God alone is infinite, how can the universe (by being infinitely extended) be his equal?

3. Some have argued that chapters 1 and 2 of Genesis represent separate and contradictory Hebrew creation stories, brought together at a late date by the unknown author/editor of Genesis. There is, however, no historical evidence for this view, while the entire weight of Jewish tradition, as well as the testimony of Jesus and his apostles, contradicts it by affirming the Mosaic authorship of Genesis (see Mt. 19:3-6, Mark 12:26, Luke 24:44, Acts 28:23).

A careful reading of these chapters will reveal that the accounts are not contradictory but complementary. Genesis 1 is an overview of creation as a whole, celebrating the wisdom, power, and goodness of the mighty *Elohim*. Genesis 2 and 3 elaborates, focusing now on the creation of man and

woman, the institution of marriage, the probation and fall of man in the Garden of Eden, and the first tokens of the redemptive love, mercy, and grace of the covenant-keeping *Yahweh*.

Two problems commonly cited should be mentioned here.

First, some argue that Gen. 2:19 has God creating land animals and birds on the sixth day, right between the creation of Adam and Eve; whereas Gen. 1:23-25 places their creation before Adam. However, this problem immediately disappears if we follow Jewish scholars in translating Gen. 2:19 as follows: “Now the Lord God *had* formed out of the ground all the beasts of the field and all the birds of the air” (NIV).

Secondly, it is sometimes argued that Gen. 2:2-7 places the creation of vegetation *after* the creation of man, and not before, as in Gen. 1:11-12. However, a careful reading of these texts reveals a distinction between the vegetation of 1:11-12 and 2:5. The former are not “of the field,” the latter are. The former are apparently watered by a mist or stream; the latter by rains (which had not yet fallen). The former grow of themselves; the latter, at least in part, as a result of human cultivation. Also, the latter passage has in view two particular kinds of vegetation only, namely, cultivated crops of grain (such as wheat or barley), and, according to some interpreters, the “thorns and thistles” that will infest them after the Fall (3:18). So again, the separate accounts do not contradict, but complement one another.

For more on this subject, see Douglas Kelly, *Creation and Change*, Mentor Books, 1997, pp. 52-54, 121-125; and *The New Answers Book*, pp. 105-106.

4. God’s procedure in the creation of man and woman is of great theological significance. Genesis tells us that God formed the man from the dust of the ground. Seeing that it was not good for the man to be alone, he cast him into a deep sleep, extracted a rib from his side, fashioned it into a woman, and—in the first marriage ceremony—brought the woman to the man. She was to be his companion, helper, lover, mother of the living, and “bone of his bones, and flesh of his flesh” (Gen. 2:23).

According to the apostle Paul, these things contain a great mystery. The first Adam represents the last Adam—Jesus Christ (1 Cor. 15:45). The woman represents the Church, Christ’s Bride (Eph. 5, Rev. 12:1f). Figuratively speaking, she comes from Christ’s very body, which God cast into the sleep of death at Calvary for the redemption of a sinful but beloved people (John 19:34). Now that Christ is awake from the dead, God is bringing this people to his Son to be his eternal companion, helper, lover, and the (spiritual) mother of his children (John 6:44, 65). As the Body of Christ, she is indeed “bone of his bones, and flesh of his flesh.”

Observe also that this mystery explains why God is opposed to, and threatens to judge, any sexual behavior that departs from the marriage norm—whether pre-marital sex, adultery, divorce, or homosexual relations (Rom. 1:18ff, 1 Cor. 6:9, Gal. 5:19, 21, Heb. 13:4). Such things grievously mar a sacred institution that was meant to picture the joy of God’s heart: the eternal union of Christ and his Bride.

5. In his second letter to the Corinthians, Paul writes, “I know a man in Christ who fourteen years ago—whether in the body I do not know, or out of the body I do not know, God knows—such a man was caught up to the third heaven...caught up into Paradise, and heard inexpressible words which it is not lawful for a man to utter” (2 Cor. 12:2-4). Here, Paul alludes to three heavens. Again, the first appears to be the atmospheric heaven, the second the stellar heaven, and the third the spiritual heaven, the place of God’s continuous self-revelation to the angels. As Paul’s experience suggests, the exact nature and whereabouts of the third heaven (or Paradise) is not so easy to determine. We shall consider some possible answers further on.

5.1. In the following quote, Hebrew scholar Dr. Thomas Strouse advances a number of reasons for believing that Gen. 1:1 is a title or heading for the *inclusio*: that is, for the entire narrative of God’s six day creation (Gen. 1:2-2:3):



Insurmountable arguments for interpreting Genesis 1 as the title for this *inclusio* are the following: 1) the expression “the heavens and the earth” consistently refers to the completed creation of God (cf. Gen. 14:9, Psalm 121:2, Mt. 24:35, etc.); 2) the “completed” cosmos of v.1 cannot exist contemporaneously with the incomplete cosmos of vv. 2-19; 3) the verb *bara’* refers to a finished creation; and 4) the *waw* of v.2 (i.e., the “and” introducing the verse) is disjunctive, thus not giving consecutive action, since it is attached to a non-verb (“and the earth”).

And once again, the heading of the complementary creation account of Genesis 2, found at Gen. 2:5, suggests that the analogous verse in the Genesis 1 account (i.e., Gen. 1.1) serves the same function.

Dr. Thomas Strouse, *He Maketh His Sun to Rise: A Look at Biblical Geocentricity* (Emmanuel Baptist Publications, 2007), p. 18.

6. There is much difference of opinion about the nature and location of the “waters that were above the expanse” (Genesis 1:6-9). Ancient interpreters viewed them as spiritual, the “sea of glass” located in heaven just beyond the sphere of the fixed stars (Rev. 15:2). Others argue that they are physical, serving as the outer boundary of a finite cosmos that may, in fact, be much smaller than we imagine. Some in this camp even wonder if the 2.7° K CMB emanates from these astronomically distant waters, now turned to ice. Others, however, say the waters were simply the first clouds. A popular modern view is that they were something historically unique: a canopy of water vapor that surrounded the Earth from its creation up to the time of the Flood. Henry Morris points out that this hypothesis goes far toward explaining a number of important biblical and natural phenomena. These include the (apparent) lack of rain before the Flood (Gen. 2:5, 7:4); the diurnal mist (or springs) that watered the antediluvian lands (Gen. 2:6); the waters that fell for forty days and nights when, at the time of the Flood, “the windows of heaven were opened” (Genesis 7:11, 8:2); the late appearance of the first rainbow (Gen. 9:13f); the tropical climate of the

ancient Earth (including the Arctic and Antarctic regions), presumed to be the result of a greenhouse effect induced by the vapor canopy; the great longevity of antediluvian man (Gen. 5); and the greater size of many animals prior to the Flood. (See Morris, “Let the Word of God Be True,” *Acts and Facts*, January, 2003.)

It should be noted, however, that capable creationist critics have found this view both scientifically and biblically wanting. One of them, Dr. Walt Brown, has carefully examined five major scientific problems associated with the canopy theory. Concluding that it is scientifically untenable, he proposes that “the firmament” was actually a “plate”—a thick crustal sheath of earth. The waters beneath the plate (and upon which it floated in the beginning) were “the fountains of the great deep” (Gen. 7:11). The waters above it were the primordial seas, out of which, in places, the crust arose to form dry land. While Brown capably defends this position, it seems to falter upon Gen. 1:8a, where it is written, “And God called the expanse ‘heaven’ (or sky).” (An alternative translation, “God also called heaven the expanse,” is grammatically forced.) Note also that this view shatters the apparent structure of Genesis 1, according to which the environment formed on day two should be filled with creatures made on day five. It will hardly do, however, to have birds flying “above the earth across the face of the plate” (Gen. 1:20, NKJV)! (See *ITB*, pp. 260-268; *Creation and Change*, pp. 182-185).

7. As has often been pointed out, the sequence of biblical creation differs sharply from that proposed by evolutionists. For example, the Bible has God creating the Earth before the heavenly bodies; evolution states the opposite. The Bible has the oceans first, and the dry land emerging from them afterwards; evolution has the land first, and the oceans coming much later, after the molten Earth has cooled. The Bible says that life started on the land; evolution says it started in the seas. The Bible says plants were created before the sun; evolution says they came billions of years later. The Bible says land animals were created after birds, and whales before land

animals; evolution states the opposite. Such conflicts are numerous, presenting still another barrier to the harmonization of the biblical and evolutionary schemes, and therefore inclining convinced evolutionists to relegate the biblical account to the status of a myth, or a theological “framework” meant to counter surrounding pagan cosmologies. For more, see *The New Answers Book*, pp. 108-110.

8. In Ecclesiastes 3:2 (NIV) we find Solomon asking, “Who knows if the spirit of a man rises upwards and if the spirit of the animal goes down into the earth?” Though he cannot tell where it goes, Solomon definitely knows the animal has a spirit.

9. Though God is the giver and sustainer of life, the Bible does not teach *panentheism*, the idea that he alone is the indwelling principle animating all living matter. Rather, in the case of men and animals, it is the soul that animates matter, and—in a manner unexplained by the Bible—God who animates the soul, while remaining metaphysically separate from any evil in it (Gen. 2:7, James 2:26).

10. It is noteworthy that the apostle Paul often appealed to the beginning when he supplied Christians with ethical guidelines for relations between the sexes (1 Cor. 11:1f, Eph. 5:22f, 1 Tim. 2:8f).

11. Bible-believing scientists of the past include such notables as Isaac Newton (physics), Johann Kepler (astronomy), Robert Boyle (chemistry), Lord Kelvin (thermodynamics), Louis Pasteur (bacteriology), Matthew Maury (oceanography), Michael Faraday (electromagnetics), Clerk Maxwell (electrodynamics), John Ray (biology), and Carlous Linnaeus (taxonomy). See Morris, *The Biblical Basis for Modern Science*, p. 30; see also pp. 463-5, where he lists more than 60 outstanding creationist scientists.

12. Numerous biblical passages depict the world as a theatre in which man is tested and observed by powers beyond his ken. See 2 Chron. 6:9, Job 1-2, Psalm 14:2, Mt. 18:10, 1 Cor. 4:9.

13. Dr James Barr, a professor of history at Oxford University, comments on the plain sense of Genesis 1:

So far as I know, there is no professor of Hebrew or Old Testament at any world-class university who does not believe that the writer(s) of Gen. 1-11 intended to convey to their readers the ideas that a) creation took place in a series of six days which were the same as the days of 24 hours we now experience, b) the figures contained in the Genesis genealogies provided by simple addition a chronology from the beginning of the world up to later stages in the biblical story, c) Noah's Flood was understood to be worldwide and to extinguish all human and animal life except those in the ark.

—Cited in *The New Answers Book*, p. 94

Similarly, Dr. Pattle Pun, a progressive creationist Christian, speaks for many when he writes:

It is apparent that the most straightforward understanding of the Genesis record, without regard to hermeneutical considerations suggested by science, is that God created heaven and earth in six solar days, that man was created in the sixth day, and that death and chaos entered the world after the Fall of Adam and Eve.

Nevertheless, says Pun, the scientific evidence amassed to support the theory of natural selection and the antiquity of the Earth is so impressive as to trump the straightforward biblical teaching. (P. Pun, "A Theory of Progressive Creationism, *Journal of the American Scientific Affiliation*, March, 1987:14.)

14. For a discussion of interpretations of Gen. 1-11 that seek to preserve a high view of the Bible while accommodating modern scientific opinion about the antiquity of the universe, life and man, see Henry and John Morris, *The Modern Creation Trilogy: Scripture and Creation* (vol. 1), (Master Books, 1997), pp. 35-64. Hereafter cited as MCT.

[15](#). Conservative interpreters understand that as a matter of historical fact, if not logical necessity, the doctrine of an ancient universe goes along with cosmic evolution; that evolution goes along with the denial of the first man, Adam; that the denial of Adam goes along with the denial of an original sin (i.e., the sin which ushered evil, suffering, and death into the cosmos); and that the denial of an original sin goes along with the denial of a need for a Savior—a last Adam who will undo all that the first Adam did. In other words, conservatives believe that in the battle for the beginning, the Gospel itself is at stake.

It is interesting to note that the opponents of Christianity sometimes understand this better than its friends. Secular humanist Richard Bozarth is a case in point. He writes:

Christianity is—must be!—totally committed to the special creation as described in Genesis, and Christianity must fight with its full might, fair or foul, against the theory of evolution...It becomes clear now that the whole justification of Jesus' life and death is predicated on the existence of Adam and the forbidden fruit he and Eve ate. Without the original sin, who needs to be redeemed? Without Adam's fall into a life of constant sin terminated by death, what purpose is there to Christianity? None! What all this means is that Christianity cannot lose the Genesis account of creation like it could lose the doctrine of geocentrism, and get along. The battle must be waged, for Christianity is fighting for its very life.

—G. R. Bozarth, *The American Atheist*, Sept. 1978, pp. 19, 30

[16](#). A possible exception to this general rule is the ongoing creation of the spirits of living beings at the time of their conception (see Psalms 104:27-30, 139:13-16).

[17](#). For a rich meditation on the meaning of the Sabbath day, see *Creation and Change*, pp. 237-252.

[18](#). *God and Cosmos*, p. 169.

19. Lutheran interpreters teach that Christ did not ascend to a true place, whether in or beyond the cosmos, but that his body miraculously became ubiquitous (Eph. 1:20f, 4:10). Now it is true that the NT affirms the omnipresence of the glorified Christ. However, this is not ascribed to the ubiquity of his physical body (which is in heaven), but to his vital union with the omnipresent Holy Spirit (John 14:16-18, Acts 1:1-5, 2:1f, 1 Cor. 12:12-13, Eph. 2:19-22). Also, the NT insists that Christ's true humanity is essential to his ongoing ministry in heaven as the priestly representative of his people (1 Tim. 2:5, Heb. 2:14-18, 10:1-10). But how can he be truly human—and how can he truly represent them—if he no longer has a body like theirs? Finally, the doctrine of Christ's physical ubiquity threatens a plunge into pantheism, since it seems to identify the omnipresent Spirit with the physical body of Christ (see Luke 24:39). For further discussion of different views of heaven, see *God and Cosmos*, pp. 161, 169-170, 206-209.

20. John Calvin, *Calvin's Commentaries* (Baker, 1984), Vol. 21, pp. 275-276.

21. As we saw in note 5, the apostle Paul—whether in the body or out of the body, he could not tell—was caught up into the third heaven, into Paradise, where he experienced visions of God (2 Cor. 12:1-6). Now it seems safe to say that as a matter of fact Paul was in his body, since James tells us that the body without the spirit is dead, and Paul certainly did not die (James 2:26). But even if Paul did leave his body, his words imply that a person *could be in his body* and also in the third heaven at the same time! This does not mean, however, that the third heaven was merely a visionary experience in Paul's head. Rather, it means that the Holy Spirit, by means of visions, enabled him actually to experience something of what goes on in the third heaven, wherever that heaven may be. The passage implies, then, that shared visionary experience belongs essentially to the nature of heaven.

22. Jesus' teaching here would, of course, be one of the revelations that the Father desired him to bring into the world, (John 7:16).

23. In the Revelation, Christ also refers to himself as “the Beginning of the creation of God” (Rev. 3:14). Some have interpreted this to mean that he is identifying himself as the first (angelic) creature that God made. But because so many other passages clearly designate Christ as the creator of all things (including the angels), this view is impossible. The word here translated as “Beginning” (Greek, *arche*) can also mean origin or source. Translating it thus, the passage has the glorified Christ identifying himself as the creator of the universe.

24. For a selection of trinitarian biblical texts, see note 4 in the Introduction to this book. Also see Chapter 9 in Dean Davis, *The Test: A Seeker’s Journey to the Meaning of Life* (Redemption Press, 2013).

25. For a more detailed discussion of the Christ-centered course of universal history, and for more on the consummation at Christ's second coming, see *The Test*, chapters 12 and 16.



## Chapter 6

# A CRITIQUE OF THE BIBLICAL BEGINNING

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**I**t is time now to evaluate the Teacher's cosmogony. This is one of the most important and fascinating stages in our journey to the origin of the universe, life, and man. Already we have seen that the biblical beginning is worthy of a serious and respectful hearing, since the truthfulness of this self-proclaimed revelation is attested by a large, varied, and impressive body of supernatural signs. Yet we have also seen that a trustworthy divine revelation must commend itself to seekers by being intuitive, reasonable, "right" (i.e., ethically sound), and hopeful. Does the Teacher's cosmogony meet these important criteria? Many today say it does not, primarily because modern scientific opinion contradicts it at several crucial points. However, others say that it does indeed meet them, arguing that modern scientific opinion has shown itself to be biased and unreliable precisely at these flashpoints of controversy. Here, then, we must take a careful further look at the main bones of contention in the Great Debate about origins. When all the evidence is in, seekers will be able to judge wisely and confidently for themselves.

### **Is Biblical Cosmology (BC) Intuitive?**

As we begin our evaluation, let us note immediately that biblical cosmology, philosophically speaking, is far more intuitive than that of naturalism or pantheism. The reason is clear: This cosmology posits



a *personal creator god*, exactly the kind of god we see reflected in manifold ways throughout the natural, moral, and probationary orders. Naturalism and pantheism give us no such god. They fail to satisfy because they do not build upon the only possible foundation for a sound cosmology: a wise, holy, powerful, personal supreme being, just the kind of supreme being the Bible proclaims.

But let us be more specific, touching here on the intuitiveness of certain key elements in the biblical creation account.

First, the biblical assertion that the universe is not eternal (in the same way that God is eternal), but that it had a definite beginning, is highly intuitive. This is because our metaphysical common sense balks at the idea of an uncreated cosmos. We feel, viscerally, that the (existence of the) realm of nature must have a cause, and that nature herself cannot be that cause. In other words, our minds run instinctively to the view that the world sprang into existence at the hand of an infinitely powerful and intelligent spiritual being; a being who *drew it* into existence *ex nihilo*, “out of nothing.” Certainly we feel this way about ourselves, being inescapably aware of the fact that we are not eternal, but have *come into being*, and did so at the hand of a being greater than ourselves. Is it not reasonable, then, to conclude that the cosmos as a whole came into being, just as we did?

Secondly, it is easy to believe that a *personal* god created the universe. Indeed, we find it almost impossible to think otherwise, since, wherever we turn, whether within or without, we observe order, design, purpose, beauty, and benevolence—all earmarks of a decidedly personal creator and sustainer.

That this creator should be revealed to us as a tri-personal god is indeed unexpected, but hardly counterintuitive. Furthermore, under the light of his special revelation, certain peculiarities of the natural world suddenly begin to make sense. Why, for example, should the one phenomenon of space be comprised of three dimensions—length, width, and depth? Why should time be triune, involving past, present, and future? Why does matter in the cosmos exist simultaneously in three basic forms—solid, liquid, and gas?

And why is the cosmos itself—or rather our experience of it—profoundly triune, consisting of time, space, and matter, mysteriously cohering in the unified field of our own consciousness? Under the light of biblical revelation, such “little trinities” seem to speak loudly, bearing united witness to a triune creator who has left the imprint of his own nature upon the world.

Thirdly, we have the “metaphysical dualism” of the biblical cosmos. This expression refers to the fact that the biblical cosmos contains *both physical and spiritual creations*; creations that are often related, but never reducible one to the other. Unlike the “monistic” cosmos of the naturalist and the pantheist, in which all things arise from a single substance, a dualistic cosmos makes sense to us. Intuitively, we know that *god* is different from matter, though related to it. Intuitively, we also know that *we* are different from matter—and from god as well—though intimately related to them both. Also, while some of us may not like to think about them, we have no great difficulty accepting the idea of angels, demons, souls (whether of men or animals), and spiritual realms (i.e., heaven or hell). Admittedly, in the very nature of the case, the existence of such entities cannot be confirmed scientifically. Nevertheless, anecdotal evidence, along with universal religious tradition, affirms them abundantly and is not without significance. In weighing such evidence, wise seekers will be duly cautious but not closed-minded. They will remember that where there is much smoke there is likely to be real fire.

For those steeped in modern evolutionary cosmogonies, the biblical story of a brief, six-staged creation, in which four environments are formed and filled, does indeed strike one as strange. The story itself, however, contains nothing counterintuitive. Indeed, on the assumption that God created the universe for living things—and especially for man—such a procedure is not only reasonable, but to be expected. Why would God use age-long evolutionary processes to create a home for occupants who were not to appear on the scene for billions of years? The very idea of it grates upon us.

Logically, an anthropocentric universe cries out for a brief, anthropocentric creation.

What's more, the idea of a radically anthropocentric creation is itself highly intuitive. It is only common sense to conclude from a universe so manifestly suited to men and animals, that it was actually created with them in mind. This, interestingly enough, is precisely the testimony of many modern scientists. Observing a wide range of astronomical, physical, chemical, and biological phenomena that seem clearly designed to support the life, well-being, and pleasure of mankind, they now affirm that an *anthropic principle* pervades the entire cosmos. "The universe seems to be tailor-made for man."<sup>1</sup>

And then there is the Bible's insistence on a universe that is structurally static. This doctrine is also intuitive because it harmonizes so completely with our everyday experience of the heavens, the Earth, inanimate objects, living beings, man, and man's relationships. Looking upon all these, we see immediately that none of them changes in any fundamental way. Once for all they have received their structure, a structure that is manifestly based upon a specific purpose and design. Thus, the fullness of heaven and earth bears united witness to the kind of rational and immutable God whom we meet in the Bible.

The Bible's emphasis upon the purposefulness of creation is especially intuitive. On the one hand it encourages us, affirming what we all know and feel: Mankind does indeed have a purpose, and an exalted one at that. "Would it not be strange," asked Sir John Templeton, "if a universe without purpose accidentally created humans who are so obsessed with purpose?" On the other hand, the biblical teaching is practical and illuminating, telling us much about what our purpose is: to know God, to co-labor with him, to raise a family, to serve as caretakers of his creation, to take dominion over the vast potentialities of the Earth, and much more. On this crucial point the biblical cosmogony is far more intuitive and far more reasonable than either naturalism or pantheism.

The idea that God rested after his brief creation week certainly accords with intuition, so long as we remember that he is now represented as working in other ways, actively sustaining, animating, and guiding his every creature to their appointed ends. Again, this is precisely what the First Law of Thermodynamics affirms, declaring as it does that no new energy or matter are coming into being, whether in the distant reaches of outer space or in the secret corners of the quantum realm. The substance and basic shape of things is, just as the Bible declares, fixed, albeit subject to a mysterious principle of decay—the Second Law of Thermodynamics—that threatens, in time, to destroy the integrity of all. All of this accords perfectly with the biblical model of creation and fall, which, unlike cosmic evolution, predicts exactly what we see in the world around us. For this reason, the biblical view is both intuitive and easy to believe.

As for biblical teaching on the bad beginning, seekers open to a theistic worldview will find nothing here to offend intuition. To the contrary, the biblical cosmogony of evil, suffering, death, global defacement, and an ethnically divided humanity is actually quite satisfying, since it traces the origin of these phenomena to the sin of man and to the judgments of a holy God, thereby vindicating a benevolent Creator from having made them in the first place. In short, the biblical cosmogony of moral and natural evil, while indeed raising weighty theological questions (see Chapter 11 of *The Test*), is far more ethically intuitive than that of naturalism or pantheism.

## **Is BC Reasonable?**

As we have seen throughout our journey, the rational case for biblical cosmology is based upon a panoply of evidences drawn from several different quarters. It begins by spotlighting a wide variety of phenomena found in the natural, moral, and probationary orders; phenomena that strongly favor a specifically theistic cosmology. It then turns to the diverse body of supernatural and providential signs found in and around “the Book of books,” the revelatory order that we call the Bible. Next, it cites a vast

array of scientific evidences that are at once unfavorable to the hypothesis of cosmic evolution and highly favorable to the creationist cosmogony of biblical revelation. Finally, it points to a variety of archeological, historical, and anthropological evidences that tend to confirm the various elements of the biblical beginning. For example, cultural anthropologists have supplied us with numerous legends that mirror, to a greater or lesser degree, the biblical narratives of the creation, fall, flood, and dispersion. Such legends are most reasonably seen as corrupted versions of the Genesis accounts, whose truthfulness is corroborated by the manifold evidences for the divine inspiration of the Bible.[11](#).

We must, however, linger awhile over two basic features of the biblical cosmogony that do indeed strike many people as unreasonable: the Bible's apparent assertion that the universe is radically geocentric, and its related assertion that God created the universe in six literal days, so that it is now only some 6,000 years old. For modern seekers these are indeed "hard sayings" (John 6:60). Could it be, however, that upon closer examination they are not really so hard to accept as the world would like us to think? Let us now look carefully at these two fascinating questions and find out.

## THE GEOCENTRIC STRUCTURE OF THE COSMOS

As we have seen throughout our journey, modern man is lost in the cosmos. He is told that space is curved and expanding; that the universe is perfectly homogeneous and isotropic, having no center, no edges, no place special or more important than any other. Believing all this, he therefore has no definite sense for the structure of the universe, or of his place in it. Quite literally, he no longer knows where in the world he is. And if he no longer knows *where* he is, how can he possibly feel *at home* where he is? Giving picturesque expression to this modern mood of cosmic displacement, H. L. Mencken complained, "The cosmos is a gigantic fly-wheel making 10,000 revolutions per minute. Man is a sick fly taking a dizzy ride on it." Carl

Sagan agreed, declaring that man's inheritance from modern science is the humiliating realization that "...we live on an insignificant planet of a humdrum star lost in a galaxy tucked away in some forgotten corner of a universe in which there are far more galaxies than people."<sup>2</sup>

But again, it has not always been so. Medieval man, as we saw earlier, was actually quite at home in the cosmos, dwelling securely beneath God's heaven and envisioning himself at the center of a finite, spherical universe, lovingly set in motion around the Earth by the Father of lights (James 1:17). But then came Copernicus, and after him Kepler, Galileo, and Newton. With these, the dominoes began to fall: first the Earth-centered universe, then the finite universe, then the sun-centered universe, then the created universe, and finally the creator of the universe himself. Said the poet Goethe after much of the damage had been wrought:

Among all the (scientific) discoveries and (new) convictions, not a single one has resulted in deeper influence on the human spirit than the doctrine of Copernicus...Humanity has perhaps never been asked to do more. For consider all that went up in smoke as a result of this change becoming consciously realized: a second paradise (i.e., a coming Kingdom of God), a world of innocence (i.e., Eden), poetry and piety, the witness of the senses, and the conviction of a poetic and religious faith."<sup>3</sup>

Goethe was not alone in this gloomy assessment. Contemplating the collapse of the ancient biblical worldview and all the spiritual wreckage it would surely bring in its train, Anglican priest and poet John Donne lamented, "Tis all in pieces, all coherence gone!" Subsequent history bears out the testimony of these seers. The Copernican revolution did indeed eventually bequeath to modernity an essentially beginningless, structureless, purposeless, and godless cosmos, in which the Earth and man henceforth appear as cosmic specks, meaningless accidents wandering aimlessly about in the void. All coherence—and all comfort—was indeed gone.<sup>4</sup>

Now given this dismal outcome, alert seekers, tender to the place of optimism and hopefulness in a viable worldview, may well find themselves

asking: Could it be that we have taken a wrong turn somewhere along the way? Might we even have erred at the Copernican crossroads? Could it be that in abandoning cosmic geocentricity we have lost something precious that the unknown god actually intended his dear human children to enjoy: a sense of place, a sense of importance, a sense of being at home in the midst of his creation?

The test perspective boldly answers all these questions in the affirmative. For if, as I have suggested, our spiritual hunger to behold the beginning of the universe comes from the unknown god, then surely our corresponding hunger to know something about its structure—and to situate ourselves comfortably in its midst—must come from him as well. And if (as the labors of the scientists abundantly attest) we are by nature eager to look upon and contemplate both of these things, is it not reasonable to expect that a revelation from the unknown god will enable us to do so, at least in some small measure? Here then we find yet another occasion for suspecting that the unknown god may well be speaking to us in the Bible. For as we have already seen, the Bible does indeed give us a clear revelation, not only of the beginning of the universe, but of its basic structure as well.

### ***The Bible and Cosmic Structure***

Concerning this matter, three preliminary points must be made.

First, experience proves that it is difficult, if not impossible, to glean from the Bible a *detailed* picture of the universe. Partly, this is because the data is limited; partly it is because that same data is amenable to different interpretations. As a result, many questions still remain open. For example, do the waters above the expanse serve as the outer boundary of the atmosphere, or as the outer boundary of the universe itself? Does the third heaven—the abode of God’s continuing self-revelation to the angels—exist somewhere within the expanse of space, or in a “hyperspace” situated just beyond our own, or as another dimension altogether (though mysteriously related to our own)? Is the expanse of space empty (i.e., a true vacuum) or

is it full (i.e., is it a plenum, filled with an invisible substance such as the light-bearing ether of 19<sup>th</sup> century physics)? Is space “curved” or “flat,” static or expanding? Is the universe bigger than we have yet to imagine, or smaller than we have been led to believe? To these and other fascinating questions the Bible may well give some definite answers. But again, experience proves that those answers are elusive, and that consensus is difficult to achieve. Thus, it seems fair to conclude that the Bible does not readily yield a detailed picture of the structure of the universe.

But secondly, despite all this, it is indeed possible to glean from the Bible a reasonably clear picture of the *basic* structure of the cosmos. Believing this to be so, I would not agree with biblical creationist Gerald Aardsma when he states, “The Bible provides no explicit teaching on any questions relating to the form of the universe.”<sup>5</sup> To the contrary, it seems to me that the Bible provides quite a number of concrete and spiritually comforting facts about cosmic structure. Admittedly, some of these must be inferred from the text. Yet down through the years—and especially prior to the Copernican revolution—multitudes of interpreters have made these very inferences and therefore reached a significant degree of consensus.

Chief among such basic facts is what I will henceforth call the *radical geocentricity* of the cosmos, the focus of our attention in this section. It is crucial to define this idea carefully. As I see it, the biblical revelation of radical geocentricity involves at least the following five elements: 1) our habitable Earth lies at (or very near) the physical center of a spherically symmetrical universe, a view technically referred to as *geocentrism*; 2) the Earth sits motionless, or at absolute rest, at the center of this universe, a view technically referred to as *geostationism*. These two ideas imply, of course, that the Earth neither rotates on its axis beneath the “fixed stars,” nor revolves in an orbit around the sun, nor revolves around the center of the Milky Way, nor moves through space with the Milky Way, etc.; 3) the heavenly bodies (i.e., sun, moon, stars, galaxies, etc.), though not necessarily without limited motions peculiar to themselves, nevertheless all orbit the Earth once daily from east to west. The idea here is that the



universe itself revolves around the Earth, somehow carrying all the heavenly bodies (and their peculiar motions) along with it; 4) this revolving universe is finite, since, quite apart from the direct biblical testimony to this effect, it is self-evident that an infinite universe cannot revolve daily around the Earth, and 5) the radical geocentricity of the physical creation is laden with spiritual meaning, being designed to reflect the existence, wisdom, and power of the creator, as well as the centrality of the Earth's inhabitants in his affections and purposes. Now if all this may be justly deduced from the Bible, one would certainly have to concede that we have indeed been given a clear picture of the basic structure of the universe. Moreover, it is a picture clear enough to make even a little child feel at home in the cosmos—and very important to the divine head of the household!

This brings us to our third point—and to a fact that will come as a surprise to no one—namely, that a radically geocentric understanding of the physical universe is highly controversial, more even than the alleged 6000 year age of the creation. Just to contemplate such a universe is completely to go against the grain of some 300 years of scientific “common sense.” Indeed, it is to invite charges of abject scientific ignorance and/or religious fanaticism, as though one held that the Earth is flat or perched on the back of a cosmic turtle. Most assuredly, no son of modernity can fail to be scandalized by the geocentric thesis. And yet, if that son is a true seeker—and a seeker who truly hungers to find his place in the universe—he will be unable to dismiss it out of hand. Why? Because the biblical signs have instilled in him a sense of the trustworthiness of the Bible. Accordingly, his proper course of action in this matter will soon become clear. First, he must determine if the Bible really does teach radical geocentricity (for some who love the Book say that it does not). And second, if he finds that it does, he must determine whether this teaching has any scientific credibility at all. That is, he must see if the unknown god has graced the idea of radical geocentricity with enough theoretical and observational support to make it scientifically reasonable to believe.

Needless to say, this will be another daunting—yet fascinating—journey. In an effort to point the way, let me offer a few brief remarks on both of these important questions.

## **The Testimony of the Bible**

Does the Bible really teach radical geocentricity? Or is it the case, as Dr. Aardsma claims, that it is impossible to find therein any definitive teaching on the physical form of the universe? A careful consideration of several different (classes of) passages will enable the seeker to make his own informed judgment on this important question.

### **1. The Genesis Cosmogony**

First and foremost, we have the Genesis cosmogony, especially the material found in Genesis 1:1-19. As we have seen, this passage is explicitly cosmological, as opposed, say, to the more poetic statements of the Psalms and the Prophets. Moreover, because of its placement at the very head of biblical revelation, it is clearly of first importance in determining the biblical testimony about the structure of the universe. With the question of geocentricity in mind, let us survey this foundational passage once again.

In verse 2 we meet the object of God's primordial creation, what we earlier referred to as "the Earth in the deep." Immediately we sense that this mysterious entity stands silent and motionless, either suspended in the midst of empty space (see Job 26:7), or (what seems more likely) as the material body within which the womb of the expanse will be created on the second day. The Spirit of God alone is moving—moving upon the face of the deep waters.

In verses 3-5 we have the creation of a bank of primordial light. Like the Spirit of God (who is its ultimate source), this light also seems to be moving. Indeed, how else can we picture it except as revolving around the still motionless face of the deep, thereby introducing the first day and the first night and thus instituting the fundamental unit of Earth time?

In verses 6-8 we have the creation of the expanse (or firmament). Here we are led to envision God separating the waters in such a way as to create spherically concentric envelopes of 1) air, 2) clouds (or water vapor), 3) space, and (perhaps) 4) water or ice serving as the outermost edge of the universe. In other words, the passage gives us a strong impression of *the Earth-centered sphericity of the universe*. Importantly, this impression is confirmed by a number of other biblical texts that refer to the sky as a vault or dome (Job 22:14, NIV; Amos 9:6, RSV), and also as a canopy (Job 36:29, NKJ; Isaiah 40:22, NIV). Note also that the sphericity of the sun, moon, stars, and planets—clearly visible to the naked eye—only adds to our common-sense impression that space itself is spherical, and that Gen. 1:6-8 presupposes this very thing.

Finally, we have in verses 14-19 the creation of the luminaries on the fourth day: the sun, moon, and stars. Here the text invites us to see God not only as setting the luminaries in the expanse (v. 17), but also as setting them in orbit around the *still* motionless Earth that they will henceforth serve. This conclusion flows logically from several important biblical considerations.

First, it is evident that the luminaries are designed to supplant the revolving bank of light that marked out the Earth's first three days. This leads naturally to the conclusion that they too revolve around the Earth.

Secondly, in describing their function, the text treats the different luminaries as a unit: all give light upon the earth, all are for telling time, all serve as signs, etc. Presumably, then, all share the same basic motion as well: All revolve around the Earth.

Thirdly, it is highly counterintuitive to imagine God on the fourth day suddenly setting a stationary Earth in motion around the sun. Intuitively, we feel instead that the member of the Earth-sun system that was created first should remain the stationary member—i.e., that it should serve as the center—while the other member should become an orbiting “planet,” (from the Greek word for *wanderer*). Along these lines, note again that the luminaries are expressly designed to serve the Earth. How, then, shall the Earth

subserviently revolve around any of the heavenly lights, including the “greater light” that we call the sun?

In this connection, observe also that the Genesis cosmogony puts life and man *only* upon the Earth. The uniqueness of the Earth in this regard inclines the reader to view it as central: central in God’s affection, purpose, and plan—and therefore central in his cosmos.

In sum, we find that the Bible’s premier, foundational, and most explicitly cosmological text, Genesis 1:1-19, positively drips with radical geocentricity. Admittedly, it is not explicitly stated, but it is everywhere implied. Moreover, as we are about to see, subsequent biblical texts go on to make explicit what remained implicit in the cosmogony of Genesis 1-2.

## **2. An Earth at Rest**

We come now to a class of passages that affirms radical geocentricity by depicting the Earth as being at rest and immovable in the cosmos. Importantly, these texts presuppose and reflect the cosmology of Genesis 1. In particular, they are designed to glorify God as the divine sustainer of the world. The One who in the beginning set the world “in its place” (Job 9:6) is here seen as the One who keeps it there, safe and sound, day by day, until all is accomplished and the end (i.e., ultimate goal) has come.

Such passages are numerous. The Psalmist declared of God, “You laid the foundations of the Earth, so that it should not be moved forever” (Psalm 104:5). Similarly, David said, “Tremble before Him, all the Earth. The world also is firmly established: It shall not be moved” (1 Chron. 16:30). And again, David proclaims, “The LORD reigns, He is clothed with majesty. The LORD is clothed, He has girded Himself with strength. The world is firmly established: It cannot be moved” (Psalm 93:1, 119:90). The message here is uniform and clear: The mighty creator God has anchored the Earth securely in its proper place beneath the sun, moon, and stars, all of which go about in their courses above (Judges 5:20, Psalm 19:5-6, Eccl.

1:6). Though hell itself should come against it, he will hold it to its place and to his purposes. His obedient and trusting people may rest assured.

Now it is true that a number of texts envision the Earth as moving (Psalm 99:1), shaking (Isaiah 2:19-21, 13:13, Haggai 2:6), tottering (Isaiah 24:20), reeling to and fro (Isaiah 24:19-20), and even fleeing the face of God (Rev. 20:11). While the language here is to some extent figurative and hyperbolic, it is clear that these texts do indeed speak of the Earth moving. However, in each case the thought is of the Earth being *temporarily* moved out of its *normal resting place* by the end-time judgment(s) of God. Isaiah gives us an excellent illustration of this point:

*I will punish the world for its evil,  
And the wicked for their iniquity;  
I will halt the arrogance of the proud,  
And will lay low the haughtiness of the terrible.  
I will make man scarcer than fine gold,  
More rare than the golden wedge of Ophir.  
Therefore I will shake the heavens,  
And the Earth will move out of her place  
At the wrath of the LORD of hosts,  
And in the day of His fierce anger.*

—Isaiah 13:11-13

Again, this text and the others like it clearly support the idea of radical geocentricity, seeing that they presuppose a static, immobile Earth as the divine norm. From where will the LORD move the Earth? From her appointed *place*, which is a place of rest. Such texts reveal the assumption of *all* the biblical writers, namely, that the Earth is *not* like the heavenly bodies, for it alone lies at rest in the midst of the cosmos; it alone, in one form or another, will ever remain; it alone is the privileged, stationary footstool for the feet of him who sits unmoved upon heaven's throne (Isaiah 66:1, Mt. 5:34-35; cf. Gen. 28:12).

### **3. A Sun In Motion**

This class of passages, strictly interpreted, proves challenging indeed for all who have imbibed modern heliocentrism. I refer to a largish number of texts stating or strongly implying that within the Earth-sun system it is the sun that moves. Moreover, the assumption here, as we just saw, is that the sun is in motion relative to an Earth at absolute rest. This was the tenor of Genesis 1:2-19, the basis of Hebrew cosmology. In the passages we are about to consider, that tenor is specified and confirmed in remarkable detail.

Let us begin by noting the obvious: In common with our own habits of day-to-day speech, many Bible passages speak of the motions of the sun (Gen. 15:12, 17, 19:23, 32:31, etc.). One thinks of the words of the Psalmist, who declared, “From the rising of the sun to the going down of the same, the LORD’S name is to be praised” (Psalm 113:3)! Importantly, in some texts we hear the voice of God himself using these very terms. For example, in the Mosaic Law we find God saying, “If you ever take your neighbor’s garment as a pledge, you shall return it to him before the sun goes down” (Exodus 22:3, 26; Lev. 22:7). Similarly, through the prophet Malachi God says, “From the rising of the sun, even to its going down, My name shall be great among the Gentiles” (Mal. 1:11, Isaiah 45:6). Along these lines, one thinks also of the words of Jesus, who, in urging his disciples to show impartial love to all people, directed their attention to the work of his Father, who “...causes his sun to rise on the evil and the good, and sends rain on the righteous and the unrighteous” (Mt. 5:45). Just as surely as God sends down a (moving) rain to the parched earth, so surely does he raise up a (moving) sun over the darkened earth. Thus, the Bible gives us many passages about the sun that not only reflect our common sense experience, but actually shape and confirm it.

Of special importance is Psalm 19, in which David vividly describes the motion and ministry of the sun:

The heavens declare the glory of God, and the firmament shows His handiwork...In them He has set a tabernacle for the sun, which is like a bridegroom coming out of his chamber, re-

joicing like a strong man to run his course. Its rising is from one end of the heaven, and its circuit to the other end, and there is nothing hidden from its heat.

—Psalm 19:1, 4-6

David's words here are very like those of his son Solomon, who wrote, "The sun also rises, and the sun goes down, and hastens to the place where it arose" (Eccl. 1:5). Observe that both of these texts have the sun in motion, both have it running a course, and both have it making a circuit around the Earth. Elsewhere, we learn that the stars too go "in their courses" (Judges 5:20). Nowhere, however, do we read of the Earth having a course, or of its making a circuit around the sun. Like all the biblical writers, David and Solomon assume that the sun—and beyond it, the heavens themselves—revolves around an Earth that remains stationary in the midst of all.

This persuasion is explicitly affirmed in James' epistle to his persecuted Christian brethren. Seeking to reassure them of God's immutable love and goodness in all his dealings with his children, James writes, "Every good gift and every perfect gift is from above, and comes down from the Father of lights, with whom there is no variation or shadow of turning" (James 1:17). The idea here is that every gift of God—including the persecutions and temptations he wisely permits—is good; that the goodness of the gifts reflects the goodness of God himself; and that God is *always* good, since he is immutably, or unchangeably, good. Importantly, the saints may catch a glimpse of their Father's unchanging goodness in his gift of the heavenly lights—the sun, moon, planets, and stars—whose faithful "turnings" in the sky above reliably give us light, warmth, shade, and the ability to reckon time. On the other hand, those same lights stand in stark contrast to God, since their position is always changing—along with the shadows that are cast by their "turning"—whereas God changes not (Mal. 3:6). We see then that James—who may well have been aware of ancient (Greek) heliocentric cosmologies—nevertheless fully embraced the faith of his fathers,

presupposing as he did a stationary Earth above which *all* the heavenly lights are steadfastly “turning” (revolving) in their appointed courses.

#### 4. “Phenomenological” Language?

When modern readers come upon the passages we have just cited, they typically react in one of two ways. If, on the one hand, they are of a skeptical turn of mind, they will simply dismiss such texts as yet another “proof” that the Bible is a mythological artifact of pre-scientific man in his spiritual and cultural infancy. If, on the other hand, they are respectful of the evidence pointing to the Bible’s divine inspiration, they will try to interpret such texts “phenomenologically.” That is, they will say, “The (inspired) writers were simply using the language of appearance. Today we know that the sun does not really rise or go down. Rather, the Earth, rotating on its axis before the sun (and moon), makes it appear as if this is the case. Thus, the Bible is simply speaking from ‘the Earth’s reference frame.’ It gives us the language of common sense experience, while science gives us the language of truth and reality.”

Though the latter approach is popular even among strict biblical creationists, there are a number of good reasons why seekers should think twice before embracing it.

First, the contention that the Bible uses phenomenological language does *not* arise from the Bible itself. As we have just seen, the Bible seems *consistently* to presuppose that the Earth is stationary and that all the luminaries are in motion. If we had, for example, even one or two passages in which it was recorded that the Earth turns or moves or goes about in a circuit, then we would have to wonder which of the two classes of passages was telling us the truth and which was speaking phenomenologically. However, we do not have to wonder, for all speak geocentrically. And if the Bible is inspired by God, that is a fact to be taken seriously.

Secondly, the assertion that all these texts are speaking phenomenologically clearly *does* arise from one’s assuming the truth of



heliocentrism. Why would this discussion even come up unless a modern reader was interpreting the text through the grid of the prevailing heliocentric model? One proof of this important point is the simple historical fact that prior to Copernicus *no trusted biblical interpreter ever taught that the Bible speaks phenomenologically about the Earth-sun system*. Rather, all students of Scripture simply received these texts at face value, and therefore consistently gleaned from them a radically geocentric cosmos. It is, then, our modern indoctrination into heliocentrism that moves even the biblical loyalist to impose a new (and alien) interpretive framework upon the text. That is, “knowing” that heliocentrism is true, he presumes to vindicate the Bible from an apparent error by saying that in these texts it is only speaking phenomenologically—and therefore truly enough, relative to common sense experience. But one wonders: In thus subordinating his interpretation to prevailing scientific opinion, is he missing the true cosmological teaching of the very Book he so ardently seeks to understand and defend?

This brings us to our third point, namely, that seekers of cosmological truth *cannot* take the phenomenological approach. The reason is clear. As seekers, they have interacted with the evidence indicating that the Bible is a trustworthy revelation from God. Therefore, in their quest for truth about the structure of the cosmos, they will want to come to this book with a fresh, unprejudiced mind. In particular, they will want to see what it *really* says about the structure of the universe. Moreover, if they are well established in the test perspective, they will examine the data with a keen awareness that finite man, apart from divine revelation, can never be sure about the structure of the universe; that sinful man—whose faculties (according to the Bible) are fallen—is always biased and subject to error; and that as a result of all this, scientific man’s theories about the nature of universe are always in flux. In short, prudent seekers will be wary of imposing popular scientific models on the biblical data, no matter how deeply entrenched in the culture they may be. Instead, they will try to let the

Bible speak in its own terms. And when they do, they will find that it speaks geocentrically from Genesis to Revelation.

Fourthly, the fact that the Bible uses common sense language to describe the motions of the heavenly bodies is best seen as an argument *against* phenomenological interpretation. For all agree that the scriptures do indeed reflect our common-sense impression of an Earth at rest beneath a revolving heaven full of lights. But once again, this argues against geocentricity only if we assume that heliocentrism is true, and that God, in the Bible, is “accommodating” himself to our scientific weakness by using the language of everyday experience. But surely it is at least as reasonable to assume that God chose the language of common sense *in order to confirm the testimony of common sense*. Indeed, of the two options this is certainly the better, since God himself is the author of common sense. Why, then, would he deceive us twice: first by inclining us to feel that the Earth is at rest in the center of the universe (as indeed most ancient pagan cosmologists taught), and then again by couching his revelation in language that would only serve to confirm this (false) impression? When Goethe said that Copernicanism overthrows “the witness of the senses,” he put his finger upon a telltale heart. The senses do indeed bear witness to geocentricity, and have not ceased to do so all these 500 years since Copernicus stepped forward to contradict them. Why is this so?

Fifthly, the fact that occasional Bible passages use figurative language to describe the shape of the Earth does not entail that the geocentric passages are figurative as well. Yes, the scriptures sometimes refer to “the ends of the Earth” (Psalm 72:8, Isaiah 40:28, Mt. 12:42), or to “the four corners of the Earth” (Isaiah 11:12, Rev. 7:1), or to “the pillars of the Earth” (1 Samuel 2:8, Job 9:6, Psalm 75:3). We can be sure, however, that all such expressions really are intended figuratively. This is evident from the contexts in which they appear, and also from the fact that still other passages speak of the sphericity of the Earth, thus directly contradicting them (Job 26:7, Prov. 8:27, Isaiah 40:22, Luke 17:34-36). Even more importantly, the foundational cosmological text of the Bible (Genesis 1:1-19)

gives no hint of a flat, four-cornered Earth set upon its pillars. When, however, we read it in conjunction with other biblical passages—and bring to our reading both common sense experience and a wealth of scientific observation—we see immediately that the biblical cosmology everywhere presupposes not only the sphericity of the Earth, but the sphericity of the heavens as well. In sum, the geocentric passages—unlike those describing the shape of the Earth—are abundant, consistent, and undergirded by explicitly cosmological texts. This is why history provides us with no biblical theologians who believed in a flat Earth, but with many who believed that the sun, moon, and stars go around a spherical Earth situated at rest in the midst of all.

This brings us to our sixth and final point: If geocentricity is not true, then the truthfulness of God is impugned. The argument here is straightforward. According to the Bible, God is the author of common sense, a common sense that inclines us to view the universe geocentrically (Psalms 94:8-11, Prov. 20:12). He himself has directly spoken of a sun that rises and sets (Ex. 22:3, 26, Lev. 22:7, Isaiah 45:6, Mal. 1:11). And he himself was inspiring all the biblical authors when they wrote, believingly, of an Earth at rest “in its place” and of a sun revolving in its circuit around the Earth (Job 9:6, Psalm 19:6, Prov. 30:5, 2 Tim, 3:16-17, 2 Peter 1:19-21). Thus, in manifold ways the God of the Bible gives us a definite and powerful impression of a geocentric cosmos. Moreover, until Copernicus, this was precisely the impression that God’s people took from his Book. To say, then, that geocentricity is untrue is to say that God has given us a false impression. But this is to impugn the truthfulness of the God of truth, the God who cannot lie, the God who would not have his people ignorant, and the God in whom there is no darkness at all (Num. 23:19, Isaiah 65:16, John 8:40, 1 John 1:5).

## **5. Joshua’s Long Day**

These considerations bring us to a brief discussion of Joshua's Long Day. This well-known Bible story, which served as a potent theological weapon against the early Copernicans, is among the most impressive bastions of geocentricity to be found in the scriptures. As we are about to see, it not only powerfully resists "phenomenological" interpretations, but also contributes decisively to their demise. Let us turn to it now.

In Joshua 9-10 we read of Joshua and the Israelites going to war against a great confederation of Canaanite kings. When the battle was finally joined, God worked mightily in behalf of his people, strengthening them for victory in direct combat and further assisting them by casting down hailstones upon their foes. Joshua, however, found that he needed still more time to complete the rout. So he petitioned God, thereby securing a final intervention that stood out far above all the rest:

Then Joshua spoke to the LORD in the day the LORD delivered up the Amorites before the children of Israel, and he said in the sight of Israel, "O Sun, stand still over Gibeon; and O Moon, in the Valley of Aijalon." So the sun stood still, and the moon stopped, till the people avenged themselves of their enemies.

Is this not written in the book of Jasher? So the sun stood still in the midst of heaven, and did not hasten to go down for about a whole day. And there has been no day like that before it or after it, when the LORD heeded the voice of a man, for the LORD fought for Israel.

—Joshua 10:12-14, cf. Habakkuk 3:11

Observe first that "Joshua spoke to the LORD." Presumably, this means that he asked for further help in completing the defeat of the Amorites, whereupon God, in reply, authorized him to issue his forthcoming command in the sight of all Israel (John 5:19, 1 Cor. 4:7). Now if this is so, it implies that Joshua's very words to the sun and moon were, like the miracle itself, God's idea. But if this is so, it implies that God himself presupposed the sun to be moving, or else he would never have spoken to Joshua as he did. For if heliocentrism were true, then God, in the interest of speaking and teaching truth to his people, would surely have told Joshua to

say, “Earth, stand still beneath the sun!” But he did not, presumably because heliocentrism is not true (Num. 20:8).

Notice next that our passage tells us twice that the sun did indeed stop. This double affirmation may well reflect God’s ancient mandate that in the giving of public testimony every matter must be established by two or more witnesses (Deut. 17:6, 19:15, 2 Cor. 3:1). If so, it means that we are meant to give special consideration to the magnitude, uniqueness, and importance of the miracle here affirmed. In other words, the double affirmation signals that we are to take this testimony seriously, as all who consent to the divine inspiration of the Bible must.

Finally, we must not overlook the significance of the moon’s having stood still as well. For what is the simplest, most natural implication of this notable fact, if not that the sun, *just like the moon*, normally makes a daily circuit above the Earth? The text says that sun and moon both stopped. Therefore, sun and moon both were moving, and moving with the same kind of (orbital) motion. Moreover, we may be sure that the “real” miracle was not, as some heliocentrists have suggested, that the Earth stopped rotating on its axis beneath the sun. For if that had been the case, then it is indeed true that the motion of the moon would not have been apparent to the Israelite’s naked eye. Nevertheless, since the heliocentric model also posits a monthly journey of the moon around the Earth, *the moon would still have been in motion*. Yet the Bible says that it stood still.

For all these reasons, pre-Copernican interpreters gladly received this text at face value: They confessed that the sun and moon really did pause in their regular motions above a stationary Earth. However, modern interpreters, constrained by their allegiance to the Copernican theory, have been forced to depart from simplicity and seek out exotic non-geocentric explanations. Indeed, they have proven endlessly inventive in doing so. Some, of course, simply reject the story out of hand, calling it a mere legend. Others, trying to reconcile their Copernicanism with an inspired Bible, argue that God specially refracted the light of the sun and moon; that he temporarily changed the inclination of the axis of the Earth so that

Gibeon became the North Pole for one day; that he slowed the rotation of the Earth, or placed clouds over the sun, or caused his people (fortuitously) to hallucinate a longer day. The list goes embarrassingly on.<sup>6</sup>

All of these strained interpretations have one common and painfully obvious flaw: They are motivated by a desire to avoid the plain sense of the text. The text says that the sun and moon stood still. Logically, this entails that they were first in motion, then stopped, and then—after about a day, when victory was complete—began to move again. Admittedly, none of this logically requires that the Earth itself remained at rest beneath the sun and moon. Most would agree, however, that this is *by far* the most natural conclusion. Moreover, when our text is read in light of the Bible's pervasive geostationism, that conclusion becomes positively compelling.

Seekers of cosmological truth should understand that the story of Joshua's Long Day (along with one or two others like it) is an especially important piece of biblical testimony since, among other things, it so powerfully anchors down the geocentric interpretation of the rest of the Earth-sun passages in the Bible.<sup>7</sup> To say the same thing negatively, it decisively refutes the phenomenological interpretation of those passages. *Indeed, some would say it was providentially designed to do this very thing.* Yes, in speaking of the rising and the setting of the sun the biblical authors speak of how things appear. But the story of Joshua's Long Day—confirmed as it is by widespread extra-biblical evidence—assures us that how things appear is how they really are.<sup>8</sup> So does the cosmology of Genesis 1. So does the fact that the God of the Bible always tells the truth. So does the fact that he could easily have told us something else if something else were the truth. So does the fact that he hasn't.

In sum, the biblical narrative of Joshua's Long Day wonderfully focuses our attention on the central issue in our quest for cosmological reality: Whom shall we trust to tell us how things really are? Modern science says that the Earth really revolves around the sun, and that the Bible is therefore in error, or that it must be interpreted phenomenologically. The God of the Bible says that the sun—along with the heavens themselves—revolves

around the Earth, and that modern science, insofar as it contradicts his word, must be in error. Honesty compels us to admit that the two views and the two antagonists cannot be reconciled. It appears, then, that seekers will have to find out which one is really telling us the truth.

## **6. The Argument from Typology**

We come now to a further class of passages often held to support radical geocentricity, passages in which the sun “typifies” the Messiah, the divine Son who “goes down” from heaven to the Earth below to secure his people’s redemption, and who then “rises” from its depths to carry the light of salvation from east to west, that is, to the whole world.

By way of introduction, let us note that the biblical writers consistently treat nature as “God’s other book,” as another appointed vehicle of his self-revelation to the world. In “general revelation” God uses the book of nature to reveal certain general truths about himself to the generality of mankind; these truths include his existence, eternity, power, intelligence, goodness, etc. In “special revelation” God uses the words of scripture to reveal certain special truths that man cannot read in nature; these include the answers to the questions of life, and especially the answer to our questions about “salvation” from evil, suffering, and death. If, however, man cannot discover these special truths simply by studying nature, it does not necessarily follow that nature is silent about them. And as a matter of fact, Jesus and his apostles did not view nature as being silent about them. To the contrary, they taught that under the light of God’s special revelation, believers can henceforth see and understand nature in a whole new way. In particular, they (the believers) can see that God has fashioned all things—including nature itself—*with a view to glorifying his Son and supplying tangible vehicles for communicating the truths of redemption*. In other words, they can now read “God’s other book” as heralding, celebrating, and confirming the things of Christ. Here, then, is the reason why we find Jesus and the apostles declaring that rocks (Rom. 9:33, 1 Cor. 10:4), trees (Rom.

11:24, 1 Peter 2:24, Rev. 2:7), water (John 7:37), bread (John 6: 35, 48), vines (John 15:1f) and more all speak mystically of (the things of) Christ. But if this is so, it should hardly surprise us to find that the Bible, in many places, symbolizes or “typifies” Christ and the things of redemption by referring to the sun and its motions (Psalm 89:36, Mt. 17:2, Acts 26:13, Rev. 1:16). Moreover, when we examine these passages closely, we realize they speak, not only of the things of Christ, but (in favor) of a radically geocentric cosmos as well.

Perhaps the most impressive of these passages is Malachi 4:1-2, where we find God speaking through the prophet as follows:

“For behold, the day is coming, burning like an oven, and all the proud, yes all who do wickedly, will be as stubble. And the day which is coming will burn them up,” says the LORD of hosts. “That will leave them neither root nor branch. But to you who fear My name, the Sun of Righteousness shall arise with healing in His wings. And you shall go out and grow fat like stall-fed calves.”

Most interpreters regard this as a Messianic prophecy. In context, the rising of the Sun of Righteousness refers to the coming again of Christ at the end of the age, when he will judge the world in righteousness and consummately “heal” his people by raising them bodily to eternal life in God’s kingdom (Mt. 13:36-43, John 5:24-29). Nevertheless, the NT also assures us that the Sun of Righteousness has *already* risen, though not yet consummately. Christ *now* shines as the light of the world (John 1:5, 8:12, 9:5). His light *now* heals the (spiritually) sick of the world, (Acts 3:11, 8:7, Heb. 12:13, 1 Peter 2:24). Thus, our text also refers to present blessings, presently enjoyed by all who believe in the Messiah.

How has all of this come to pass? Essentially, it is through the two-fold work of the divine Sun of Righteousness. First, this Sun “went down.” That is, the divine Son humbled himself unto incarnation as a man, then to death on a cross, and finally to burial in a borrowed tomb. As Jesus himself said, “I have come down from Heaven, not to do My own will, but the will of Him who sent Me” (John 6:38, 41, 51, 58; Eph. 4:7-10, Phil. 2:5-8). Thus,



the setting of the astronomical sun pictures Christ's *humiliation*. But secondly, this Sun also "rose." That is, the divine Son was exalted by God unto a resurrection from the dead, an ascension into heaven, and a seat at God's own right hand, whence, by means of his Spirit working through his obedient people, he henceforth encircles the Earth, sun-like, bringing to the nations the light and warmth of the gospel (Psalm 50:1, 113:3, Isaiah 45:6, Rom. 10:18). Thus, the rising of the astronomical sun, as well as its circuit, pictures the full scope of Christ's *exaltation*. Notably, it is all but impossible to read Malachi without thinking in particular of Jesus' resurrection, which occurred at dawn on the first day of the week (Mt. 28:1), just as the sun was rising (Mark 16:2). The NT is clear that for all who "see" this risen Son and believe on him, a new Day—a day of everlasting rejoicing—has begun (Mt. 29:9, Luke 1:78, John 6:40, 8:56).

The geocentric implications of this constellation of texts are evident. According to the Bible, God himself has established a definite correlation, both in nature and in scripture, between the work of the sun and the work of his Son. This correlation strongly supports radical geocentricity, the idea that the sun (and the stars) moves around an Earth at rest. For it is clear that in the work of redemption, it is the Son who does all the moving. As we just saw, he is the one who came down out of heaven, and he is the one who came (in) to the world (John 16:28). Moreover, such divine initiative was absolutely necessary, since man, being absolutely dead in trespasses and sins, *could not make a single move towards the Son* (John 6:44, 65, Rom. 3:11, Eph. 2:5). Now if God desired to embed these profound truths in his other book (i.e., the book of Nature), how better or more impressively than by having the astronomical sun—in humble, life-giving subservience—go down and rise upon an Earth that sits absolutely still with the stillness of the grave (Mark 10:45, John 11:1f, Phil. 2:5f)? We conclude, then, that "sun" passages like Malachi 4:1-2—and the great truths of redemption that they typify—do indeed support radical geocentricity.

Let us complete this section by looking again at Psalm 19:4-6, already cited above. Just like the passage in Malachi, this text also seems to have

the sun typifying Christ at his second coming. For just like the sun, Christ, in that day, will be as a bridegroom coming out of his heavenly chamber, (Mt. 25:1f, Mark 2:19, John 14:1-3). Eager to fetch his beloved Bride, he will be as a strong man, rejoicing to run his race. Importantly, his circuit will be from one end of heaven to other, (v. 6). This correlates well with Jesus' own description of his return, in which he said, "For as the lightning comes from the east and flashes to west, so also shall the coming of the Son of Man be" (Mt. 24:27). Observe also from our text that no one will be hidden from the heat of this sun when it finally appears. John the Revelator says much the same thing, crying, "Behold, he is coming with clouds, and every eye will see him, even those who pierced him (Mt. 26:64, Rev. 1:7). But how can this be unless Christ, like the sun, makes at least one circuit around the globe, safely gathering his Bride to his side, even as he consigns his enemies to the fires of the last judgment (v. 6, cf. Mt. 13:42, 50, Luke 17:34-36)? We see, then, that the typology of Psalm 19:4-6 richly supports the idea of geocentricity. For just as Christ one day will "rise" and circle the Earth at his coming again, so even now the sun rises and circles the Earth, promising and warning all nations that the great Day of the Lord—the Day of Christ—is soon to come (Psalm 50:1f, Phil. 1:10, 2:16, 2 Thess. 2:2, 2 Pet. 3:10).

## **7. The Argument from Eschatology**

We close this section with a final argument from biblical eschatology—the Bible's teaching concerning the wrap up of world history and the future state of the universe.

According to the biblical writers, history is moving inexorably towards an awesome consummation of God's redemptive work in the universe, a consummation that will occur when Christ comes again at the end of the age. In that day, he himself will create "new heavens and a new earth," (Isaiah 65:17, 66:22, 2 Peter 3:13, Rev. 22:21). Importantly, this creation is actually a re-creation. That is, the old cosmos—and especially the Earth—is

not to be annihilated, but rather transformed into a (radically) new cosmos (Rom. 8:18f, 1 Cor. 7:31, 15:35-49, Phil. 3:21).<sup>9</sup> In the Revelation, the apostle John gives us some tantalizing glimpses of the new and eternal world to come. Having just described the resurrected and glorified people of God under the imagery of a city that descends onto the Earth as a Bride adorned for her husband, John says of her, the New Jerusalem:

But I saw no temple in it, for the Lord God Almighty and the Lamb are its temple. And the city had no need of the sun or of the moon to shine on it, for the glory of God illuminated it and the Lamb was its light...They shall see His face and His name shall be on their forehead. And there shall be no night there: They need no lamp nor light of the sun, for the Lord God gives them light. And they shall reign forever and ever.

—Rev. 21:23, 22:4-5

This text harmonizes with many others found throughout the Bible, indicating that the sun, moon, and stars shall all be dissolved in the end-time conflagration, and also that they—along with darkness itself—shall never be created again (Isaiah 13:10, 24:23, 34:4, Joel 2:10, 31, Zeph. 1:15, Mt. 24:29, 2 Peter 3:10). As John said, God and Christ alone will be the light of the world in the world to come (Isaiah 60:19-20, Zech. 14:6-7, Mt. 17:1f). The question therefore arises: What part of the old universe *does* manage to pass through the end-time cataclysm so as to enjoy continuing existence in the eternal Kingdom? The biblical answer is clear: only a fully transformed Earth, so firmly established in its place that it “cannot be moved forever” (Psalm 93:1, 104:5, Ecclesiastes 1:40).

Here, then, is yet another line of evidence favorable to radical geocentricity. For it is evident from Scripture that the world to come is, in several important respects, exactly like the world as it was before the fourth day of the good beginning: suspended once for all—majestic, unmoving, and immovable—in the midst of space and in the midst of God’s loving presence and watch care. The only real difference is that in the future world night has given way to perpetual day, and periodic illumination to the perpetual light of the glory of God. With the luminaries gone, and astro-

nomical time abolished, the consummated Kingdom breathes an atmosphere of eternity, though time itself endures forever. Thus, in biblical perspective, the “day” of the luminaries is surprisingly short and quite temporary: For just a few thousand years out of a whole eternity they shine, move, and at the last move on. But the Earth does not move on. Like God himself, it abides unmoved and immovable, forever.

## **Summary**

In our survey of the biblical teaching on the structure of the universe we have encountered an impressive body of evidence favorable to the idea of radical cosmic geocentricity. This includes the Bible’s foundational cosmological passage (Gen. 1:2-19); passages that depict the Earth as being at rest and immovable in the midst of all; passages that depict the sun (and the stars) as revolving around the Earth; Joshua’s Long Day, and extra-biblical evidences for it; Messianic types indicating that the sun daily encircles the globe; and passages depicting the Earth as the only “world” in the world to come. Moreover, we have seen that in many ways the Bible positively discourages a “phenomenological” interpretation of the relevant texts.

Here, then, is why Christians understood their Bible geocentrically for over 1000 years: For all the reasons just cited, it seemed like the sensible thing to do. Here also is why Christian leaders, both Catholic and Protestant, strenuously resisted Copernicanism for some 200 years, leaders such as Martin Luther (1483-1546), Philipp Melanchthon (1497-1560), John Calvin (1509-1604), Robert Bellarmine (1542-1621), Gilbert Voet (1588-1676), Abraham Calovius (1612-1686), John Owen (1616-1683), and Francis Turretin (1623-1687). These men ran deep. Well able to understand the science of their day, and well acquainted with it, they nevertheless remained convinced that the Bible spoke more clearly and more authoritatively about the structure of the cosmos than did the scientists. Said Martin Luther in the midst of the tumult: “Even in these things which are

thrown into disorder, I believe the Holy Scriptures.” John Calvin concurred, reaffirming on the basis of God’s inerrant word that, “The heavens revolve daily, immense as is their fabric and inconceivable the rapidity of their revolutions.”

But the center did not hold. Kepler’s laws of planetary motion, incorporated by Newton into a powerful new system of celestial mechanics, seemed too compelling. Since Newton’s system described and predicted the motions of the heavenly bodies so well (though not perfectly), most concluded that its underlying heliocentrism must be true. And with few exceptions most continued to reckon it as true for the next 200 years. Little did they imagine, however, that fresh theoretical insights and new astronomical observations would soon enable even the staunchest opponents of biblical revelation to contemplate a geocentric universe once again.

## **The Testimony of Science**

This brings us to a second witness in the great debate about cosmic structure, natural science. The question here is: Does science speak up even a little in favor of radical geocentricity? Now if the test perspective is true, it certainly should. After all, how could the God who created the universe, reason, and human ability in natural science give us a revelation that runs contrary to the universe, reason, and the trustworthy fruits of natural science? If, then, the Bible really is his word to mankind, its cosmological statements should be scientifically reasonable, including those about radical geocentricity.

Note carefully, however, that the question here is not: Does science *prove* geocentricity? Science cannot prove any model of the universe, since scientists cannot observe the universe in all places and at all times. So, then, the real question is: Are geocentric models of the cosmos scientifically *plausible*? Is there good theoretical and observational evidence to back them up? Are they at least as reasonable—or possibly

even more reasonable—than the prevailing acentric model? Surprisingly, to all these questions a growing number of modern physicists and astronomers are now returning an enthusiastic answer of yes!

In what follows I will touch briefly on the main lines of scientific argumentation favorable to radical geocentricity, beginning with theoretical considerations and progressing towards specific experiments and observations. Since I have neither the space nor the expertise to develop these ideas at length, scientifically inclined readers are encouraged to consult the endnotes for helpful books, articles, videos, and websites dealing with this fascinating subject.<sup>10</sup>

## *Arguments from Theory*

### **1. The Trend Towards Relativity**

The first line of argumentation is the modern trend towards relativity—a trend that, paradoxically enough, actually restores radical geocentricity as a viable cosmological option.

As we saw earlier, medieval cosmology was grounded in a metaphysical assumption: absolute cosmic geocentricity. With Galileo, Kepler, and Newton, that assumption changed: Now the sun stood at the center of a finite material universe, while the Earth rotated on its axis and revolved around the sun beneath “the fixed stars.” Later, Kant retained a cosmic center, but denied pride of place to our solar system. After that, theoretical cosmology more or less abandoned the idea, realizing that it was indeed an assumption, and that the methods of natural science could not, in any case, discover or demonstrate a center, since, according to the Galilean/Newtonian principle of relativity, we cannot determine absolute motion or rest by direct observation. Finally, Einstein made his great *faux pas*, daringly introducing a *new* metaphysical assumption: *absolute relativity*. According to this assumption, there is absolutely no such thing as absolute motion or rest, with the result that a cosmic center *cannot* exist.

In our day, this relativistic skepticism—and not textbook heliocentrism—is the view that prevails in the scientific world. Said Dr. Arnold Sikkema:

No physicist I know says that the Earth in any absolute sense travels around the sun... Science today does not claim that there is an absolute reference frame in which the Earth is moving. Newton thought that, but after Einstein, no informed scientist still makes that claim.<sup>11</sup>

Similarly, Bertrand Russell wrote:

Whether the Earth rotates once a day from west to east, as Copernicus taught, or the heavens revolve once a day from east to west, as his predecessors believed, the observed phenomena will be exactly the same. This shows a defect in the Newtonian dynamics, *since an empirical science ought not to contain a metaphysical assumption*, which can never be proved or disproved by observation.<sup>12</sup>

This is a very revealing statement. Because of the modern trend towards relativity, Mr. Russell faults Newton's cosmology as unscientific. He asserts that an empirical science (e.g., cosmology) ought not to contain a metaphysical assumption (i.e., Newton's assumption of absolute heliocentricity). However, if this is so, *then surely cosmology ought not to assume absolute relativity*. True, we cannot observe absolute rest or motion. Nor can we observe the center of the universe (if indeed there is one). But do these observational limitations really justify our saying that absolute rest, absolute motion, and an absolute cosmic center *absolutely do not exist*? Surely not, for again, that would be to introduce exactly what what Mr. Russell condemns: *a metaphysical assumption*, this time of *absolute relativity*. This is, of course, what Einstein did in his Theory of Relativity. But, says Russell, he was quite unscientific in doing it. For in the end, the post-Copernican trend towards relativity does *not* rule out the possibility of absolute motion, absolute rest, or an absolute center; it only confronts us with our inability to observe or ascertain them scientifically. Accordingly, the modern trend towards relativity does *not* rule out a geocentric universe.

Happily, some modern cosmologists are wise and honest enough to admit it. They include men like S. Hawking and G. Ellis, who, as we saw earlier, confessed that they cannot do cosmology without metaphysical assumptions; that their preferred acentric universe contains an “admixture of ideology;” that they have arbitrarily embraced a “democratic” view of the cosmos, rather than grant the Earth or mankind any special place therein.

Similarly, we have the words of Sir Fred Hoyle, who declared, albeit rather reluctantly, “The Earth-centered hypothesis is as good as anybody else’s, but no better.”<sup>13</sup> Here, Hoyle speaks for all clear-thinking relativists, openly admitting that the modern trend towards relativity has not ruled out cosmic geocentricity, but has in fact made it a viable cosmological option once again.

However, in one respect Hoyle is surely mistaken. For what if an ever-growing mass of direct observational evidence actually favors the geocentric view? Furthermore, what if the unknown god has given us a well-attested revelation that positively teaches this view? Under such circumstances would not the geocentric model become, far and away, the better hypothesis—and therefore the most reasonable to believe?

## **2. The Proliferation of Geocentric Modeling**

Since the idea of relativity leads inexorably to a fresh consideration of radical geocentricity (and therefore quite possibly to its own destruction), it should hardly surprise us that 20th century physics is characterized by a noteworthy proliferation of geocentric models. We will briefly discuss them here.

In order to be viable, any model of the cosmos must satisfy two basic criteria. First, it must “save the appearances.” That is, it must enable us to understand and even predict the observed motions and appearances of the heavenly bodies (e.g., the path and phases of the moon, the path of the sun, the Earth’s four seasons, the path of the planets, the retrograde motion of



the planets, various “perturbations” of the planets, the path of the stars, etc). As we have seen, Ptolemy gave us one such system of celestial kinematics, Copernicus another, Tycho Brahe yet another, and Kepler and Newton another still, until at last the modern turn to relativity seemed to eliminate any hope of arriving at a definitive picture of the actual motions of the heavenly bodies. Might a confident return to the geocentric cosmology of the Bible supply us with such a picture? Perhaps. But for it to do so, it must—like any good model—“save the appearances.”

Secondly, a viable cosmology will also seek to give us a plausible system of celestial mechanics and dynamics. That is, it will follow in Kepler’s footsteps, trying to explain the physical reasons for the diverse motions of the heavenly bodies. Are these bodies attached to revolving crystal spheres that are propelled by angels? Are they moved by invisible gravitational, centrifugal, and Coriolis forces acting at a distance? Are they rolling around in pockets of curved space-time (whatever that might mean)? Or are they carried along by a dense but invisible ether, rather like fish in a revolving fishbowl, or like boats in a whirlpool? Only heaven knows for sure. But on Earth, we do know that the model with the greatest explanatory and predictive power normally carries the day—until a better one comes along!

Again, the twentieth century has witnessed a surprising proliferation of basically geocentric models of the cosmos, most of which attempt to address both of the above concerns. Very importantly, the majority of these are “secular,” having been developed by scientists with no explicit interest in, or appeal to, divine revelation. Examples here include the work of P. Gerber, H. Thirring, G. Brown, G. Birkhoff, P. Moon and D. Spencer, J. Nightingale, J. Barbour and B. Bertotti, G. F. Ellis, D. Lynden-Bell, and others. The common component in each of these models is Mach’s Principle, the idea that the universe may be a bounded sphere revolving around the Earth or a point quite near the Earth. After agreeing on this, each embarks in its own direction. Some are based on Einstein’s Theory of General Relativity, others upon classical Newtonian mechanics, others still

upon newer physical models. After discussing a number of these, Christian astronomer G. Bouw concludes:

All of these physicists (and there is not a geocentric Christian in the bunch) conclude that there is no detectable, experimental difference between having the Earth spin diurnally on an axis as well as orbit the sun once a year, or having the universe rotate about the Earth once a day and possessing a wobble centered on the sun which carries the planets and stars about the Earth once a year. In none of these models would the universe fly apart, nor would a stationary satellite fall to the earth. In every one of these models the astronauts on the moon would still see all sides of the Earth in the course of 24 hours, the Foucault pendulum would still swing exactly the same way as we see it in museums, and the Earth's equator would still bulge. In other words, each of these effects is due to either the centrifugal force, Coriolis force, or some combination of the two, and can be totally explained in any geocentric model.<sup>14</sup>

Such considerations are precisely the kind of thing English astronomer G. F. Ellis had in mind when he said, "I can construct you a spherically symmetrical universe with Earth at its centre, and you cannot disprove it based on observations."<sup>15</sup>

Encouraged by these developments, biblically oriented scientists and philosophers have stepped forward as well. Modern biblical geocentrists include the father of the movement, W. van der Kamp (1913-1998); the heir to his mantle, Dr. Gerardus Bouw; and a growing cadre of thoughtful colleagues including Dr. Russell Arndts, Dr. Robert Bennett, R. G. Elmendorf, Dr. J. Hansen, Dr. M. Selbrede, P. Stott, and Dr. Robert Sungenis. Most of these men have daringly devoted a significant portion of their career to rescuing modern physics and cosmology from their thralldom to relativity, hoping to restore them once again to what they see as their true and proper foundation: the geocentric cosmology of the Bible. Their friends call them prophets, their opponents call them "windmill tilters." Each seeker will have to decide for himself which description fits best.

Most biblical geocentrists (though not all) champion a slightly modified version of Tycho Brahe's Earth-centered cosmos, sometimes referred to as the Neo-Tychonic Model (NTM). If we limit ourselves to the kinematic side of the model (i.e., to a description of the motions of the heavenly bodies), it is fairly easy to understand.<sup>16</sup> Here Earth stands motionless at the center of

the universal sphere. The moon, whose orbit wobbles slightly over the course a month, revolves around it daily. As for the planets, they do indeed orbit the sun. But since the sun itself is embedded in the ether, it too, like the moon, revolves daily around Earth. And since the stars, galaxies, and other astronomical bodies are all “centered on the sun” (that is, embedded with the sun in the same ethereal frame) it appears to us as if the sun is carrying the entire universe around Earth. Thus, Earth truly is at the center, since the moon, the sun, the planets, the stars, the galaxies—the universe as a whole—all revolve around Earth once a day!

Kinematically speaking, this model is the exact equivalent of the traditional heliocentric view, and therefore does all that the traditional view does. In particular, it accounts for all the observed motions of the planets (including their retrograde motions), the phases of the planets, the phases of the moon, and stellar parallax, commonly held to be the definitive proof of heliocentrism. But as we are about to see, it does even more, since the NTM is uniquely able to accommodate the many observational evidences favorable to radical geocentricity, and since this model also involves a fresh, holistic understanding of the physics of the universe.

Turning now to the dynamic side of the NTM, we find considerably less agreement and considerably more speculation, some of which is quite challenging for the layman to understand. But on this score we should not point fingers too quickly at the geocentrists, since, as we have already seen, the situation in the larger scientific community is actually worse. Yes, with the help of Newton’s equations any physicist can give us a basic mathematical description of how gravity and inertial forces work (on Earth, at least). But the well-kept secret of modern science is that there is little if any agreement as to *why*, physically speaking, these forces work as they do—and no end to the resulting hypotheses and speculations about them. Here then is where the biblical geocentrists actually have a scientific leg up on their peers: Though they are not yet fully united around a single theory of cosmic dynamics, they are at least pretty much agreed in eschewing the

bizarre world of Relativity in favor of a simple, underlying physical cause for the dynamics of celestial motion.

To get a feel for this cause, let us briefly consider some of Robert Sungenis' thoughts about the structure of the cosmos. According to Sungenis, Earth lies at the center of a spherical rotating universe full of ether particles. He likens this universe to an immense gyroscope whose enormous mass locks Earth in place in the midst of all. But what exactly does he mean by "the universe" and "the mass of the universe?" In the following quote he answers these questions, and in doing so implicitly proposes an (astonishing) explanation for the seasons, as well as for other important astronomical phenomena:

What constitutes the sphere of which the Earth is the immobile center? Do the stars themselves define the universal sphere, or is the universal sphere defined by itself? By force of logic, we are compelled to say that the stars are merely contained within the universal sphere, but are not necessarily the composite body by which the sphere is defined. This is especially true when we understand that besides the stars and other celestial bodies comprising the universe, the universal sphere has its own substance (i.e., the ether), and thus it has a mass and velocity independent of the stars. It is the universe's own mass that is rotating around the immobile Earth, and as it does so it carries the stars with it. As such, there is nothing to prohibit the stars from being slightly shifted to one side of the universal sphere, and thus to have their center on the sun, whereas the universal sphere itself is centered on the Earth. In fact, if that were the case, we would obtain the characteristic precession or "wobble" that we see in so many sectors of the cosmos. All this can be accomplished by keeping the Earth as the immobile center of the universe.<sup>17</sup>

Here we find Sungenis introducing what, for many biblical geocentrists, is the primary physical cause of cosmic dynamics: an all-pervading physical ether that somehow lies behind, or is involved with, all gravitational and inertial forces. First, he places Earth at the center of a rotating spherically symmetrical universe. Second, he fills this universe with ether. Third, he embeds the stars and galaxies in the ether, thus making the universe a gigantic ethereal fishbowl. Fourth, he posits that the stars and galaxies are (intentionally) distributed in such a way as to be "centered" on the sun, rather than the earth. (Does this mean that the stars and galaxies are largely

arranged in concentric shells radiating outward from the sun, as astronomical observations now affirm?) Fifth, he suggests that because of this arrangement the universe “precesses” or wobbles slightly. This causes the sun, which is itself carried along by the rotating universe, to describe an annual helical motion up and down the Earth’s y-axis. Here then, according to the Sungenis, is the reason for the seasons, and for other astronomical phenomena such as stellar parallax.<sup>18</sup>

Again, the dynamic side of biblical geocentrism (and of some secular systems as well) is essentially based on the ether, a concept that controlled much of the physics prior to Einstein, and to which post-Einstein scientists are now gradually returning under the influence of new discoveries in quantum mechanics. Dr. Robert Bennett, Sungenis’ colleague, defines the new geocentric ether as a hugely massive “fluid of quanta” (i.e., tiny particles, the smallest in all creation) that is more rigid than steel, more flexible than any known substance, and that fills (or constitutes) all of space. It is this ether, he argues, that the Bible has in view when it speaks of “the firmament.”<sup>19</sup>

The importance of the ether for geocentric cosmology is revealed by its many functions. As we have seen, macroscopically it serves to carry the stars and galaxies in their daily orbit around the Earth; in other words, it is the primary physical cause of cosmic momentum. Its enormous mass, or its mass in motion, somehow locks the Earth at the center of the universal sphere. According to some, vortices or whirlpools of ether account for local rotational motion, say of a spiral galaxy. According to others, streams of ether flowing towards us from outer space create a downward ethereal pressure that we on Earth experience as gravity. According to still others, gravity is caused by the continuous rapid vibration of ether particles, a vibration that will always push two material objects together since there is less “ether pressure” in the space between them than there is elsewhere around them.<sup>20</sup> Furthermore, it is generally agreed that rotating ether and/or interactions with it produce the so-called “inertial forces,” (i.e., inertia, centrifugal force, the Coriolis force, and the Euler force).<sup>21</sup> Finally, as in

days of old, the ether is also seen as the appointed medium for the propagation of electromagnetic waves.

Geocentrists freely admit that their new ether science is still in its infancy, and that there will inevitably be theoretical false starts and dead ends before things come into focus. They are, however, much encouraged. As we saw earlier, experimental evidence for the existence of a cosmic ether, which began to appear in the 1960's, is now abundant.<sup>22</sup> Secular researchers are increasingly open to the idea that the "vacuum" of space may in fact be a *plenum* of tiny ethereal particles. As a result, the prospect of a new and truly physical physics suddenly looms on the horizon. For biblical geocentrists this is all to the good, since it raises hopes for a latter day exodus from the maze of RT, a fresh look at cosmic geocentricity, and above all a return to the God and cosmology of the Bible. In hopes of winning a new generation of seekers to that warm and wonderful world, the geocentrists labor on.<sup>23</sup>

### **3. Geocentric Answers to Heliocentric Arguments and Objections**

While geocentrists certainly do not claim to have all the answers, they contend that their model has at least as much explanatory and predictive power as the heliocentric. Neither space nor competence permit me to explore this fascinating debate in detail, but we can at least briefly survey the main fields of battle.

In arguing for Earth's rotation on its axis heliocentrists typically cite: a) Earth's equatorial bulge, b) the veering flight of projectiles fired towards the north or south pole from the equator, c) the diagonal, west-to-east pattern of Earth's generally north-south winds, d) the "precession" (i.e., arcing motion, rotation) of the plane of gyroscopes or a Foucault Pendulum, and e) the amazing behavior of geostationary satellites (i.e., satellites that are seen to hover over a single point on Earth's equator).

Now beneath the light of Newtonian mechanics, all of these phenomena can indeed be held to demonstrate a rotating Earth. For example, one can argue that the centrifugal force generated by the Earth's spin produces its bulge; that geostationary satellites, orbiting Earth at an altitude of 22,000 miles, are moving synchronously with a point on Earth's equator below, and are being held aloft by a balance of centrifugal and gravitational forces; that winds, projectiles, gyroscopes, or pendulums—all actually moving in approximately straight lines—seem to be arcing because the Earth is moving beneath them, thus producing a so-called Coriolis effect.

In response to this line of reasoning, geocentrists typically point out that the same phenomena can be explained at least as well within a geocentric framework. All that is necessary, they say, is to begin with the presupposition that our Earth lies at rest with respect to a universe that revolves around it once a day. It is the second part of this presupposition that proves decisive. For, as we saw above, nearly all geocentrists, whether secular or biblical, follow Mach in affirming that a revolving cosmos will somehow generate real centrifugal and Coriolis forces capable of producing the various effects under discussion. Moreover, biblical geocentrists throw a revolving ether into the mix, thereby enhancing their model by positing a genuinely physical cause for such motions. Thus, the flight of projectiles, the diagonal pattern of winds, and the arcing motion of the Foucault pendulum or the gyroscope would be traceable, at least in part, to a revolving sea of ether that carries their objects along.<sup>24</sup>

Concerning the challenging problem of geostationary satellites, most geocentrists argue that cosmic forces of one kind or another balance out gravity and hold them aloft. Sungenis illustrates this approach by inviting us to imagine a roulette wheel. There are two ways to put centrifugal force on the marble situated on the inside rim. We can move the marble very fast on a stationary rim, and the marble will cling to the rim due to centrifugal force; or we can rotate the roulette wheel very fast and the marble will again cling to the inside the rim, again by centrifugal force. The latter option is meant to picture the geocentrist solution: A geostationary satellite

remains in place at 22,000 miles above the earth because at that point the satellite “experiences” a centrifugal force generated by a revolving universe that exactly matches the centripetal force generated by Earth’s gravity.

There are other options, as well. Robert Bennett, for example, points to peculiarities in the flow of ether near the Earth, arguing that, “Ether motion around the Earth can be deduced from satellite motion, since ethereal rotational motion around an object sustains orbital motion.” Thus, a geostationary satellite would remain in place because at an altitude of 22,000 miles the ether, for some reason, is either flowing negligibly or not at all.<sup>25</sup> Still another approach would simply be to say that at 22,000 miles above the Earth the gravitational force generated by precisely situated stars and galaxies cancels out the gravitational force generated by the earth, thus allowing any object in that special zone to remain aloft.

In seeking to prove the Earth’s revolution around the sun, heliocentrists typically cite the four seasons, stellar parallax, and its kissing cousin, stellar aberration. They also note that everywhere we look in the solar system, the smaller body (e.g., Jupiter’s moons) revolves around the larger, as indeed Newtonian mechanics would seem to require.

Concerning the first of these, we have already seen that geocentrists respond by positing a slight “wobble” in the rotating universe at large. Yes, to modern minds saturated in heliocentrism this solution will indeed sound far-fetched. It must be remembered, however, that biblical geocentrism is radically theistic; that it is centered upon the God of the Bible, who rhetorically asks all mankind, “Is anything too hard for the LORD?” (Gen. 18:14, Mt. 19:26). Moreover, the idea of a cosmic wobble—perhaps best understood as a slight destabilization of the original motion of the universe—seems to fit well with the Genesis cosmology. This wobble could, for example, be traceable to the fall of Adam, which, according to the apostle, sent shock waves throughout the entire cosmos (Rom. 8:18-21). On the other hand, it may have begun in the days of the Flood, after which, for the first time, the Bible mentions the four seasons as we now know them (Gen. 8:22). In either case, the seasons—and their cosmic cause(s)—would



ultimately be traceable to the sin of man and the hand of God, an idea often embraced by Christian poets and philosophers who came to see in the annual cycle a mystical and redemptive significance centered on Christ.<sup>26</sup> Thus, the thesis of a cosmic or solar wobble may not be nearly as preposterous as it first seems.

As we saw earlier, geocentrists typically explain stellar parallax by noting that the Copernican and Tychoic models both predict this phenomenon, on the condition that we modify the Tychoic model by centering the stars on the sun rather than the Earth. Robert Sungenis has developed some helpful graphics to illustrate this point.<sup>27, 28</sup>

As for stellar aberration, we remember that it is different from stellar parallax, since the elliptical path described by the annual motion of the star as seen in our telescopes does not correspond exactly to the (alleged) elliptical path of the Earth. Bradley, as we saw earlier, therefore postulated that stellar aberration was an optical effect produced by two components: light traveling at a finite speed through the ether, and the annual motion of our Earth. However, Robert Bennett argues that there are other explanations for aberration that do not necessitate ascribing motion to Earth:

Bradley's results make perfect sense in an ether-filled universe. The effect could be caused by the ether flow or density variation between the star source and the Earth. The light speed changes while traversing the ether medium, bending according to the ether's properties and hitting the Earth at an angle, moving the image position of the star so as to form an annual ellipse. For example, stars on the equator have no observed North-South aberration component, so the ether flow in the space projected out from the equator has only an East-West flow. Another valid interpretation is that the ether has no net effect on the starlight, but what is observed is, in fact, reality, the actual intrinsic elliptical motion of the stars. The only reason to discard this alternative is Occam's razor, which makes a subjective human judgment about the (relative) beauty and simplicity (of) two possible conclusions. Occam's razor sees complexity as an obstacle to human understanding, which it is, but excludes revelation as a valid source of knowledge and is ignorant of God's perfect simplicity. Having no parts, God finds nothing complex. To Him all things are simple.<sup>29</sup>

Concerning the problem of the smaller body typically orbiting the larger, two responses are customarily made. First, it is not good logic to say that

the pattern seen in the planets must apply to the Earth as well. Obviously, the Earth may be an exception to the rule. Indeed, if the Earth holds a God-ordained, privileged position in the universe, it is only reasonable to expect that it *should* be an exception, and *the sole exception*. Secondly, it is indeed true that Newtonian mechanics requires the smaller body to orbit the larger—*if we limit our gravitational calculations to these two bodies alone*. But this is precisely what the geocentrists will not permit. Rather, they insist that gravitational and centrifugal forces arising from a rotating universe filled with other massive bodies must be included in the calculations as well (as indeed all good Newtonians would agree is necessary). In other words, they argue that God has so meticulously situated the ether, stars, and galaxies in space that they hold the (presumably) more massive sun in orbit around the (presumably) less massive Earth. R. G. Elmendorf has this very thing in mind when he writes:

In the geocentric model, the function of the Earth is primarily to furnish a small gravitational stabilizing influence to the rest of the universe, not to generate the physical forces of orbital mechanics for everything else.<sup>30</sup>

Now that is some kind of fine tuning—and one that justly explains how the sun can be reckoned a “planet” that actually revolves around the Earth!

Our discussion thus far has addressed the usual objections to radical geocentricity. It remains only to touch on two that are somewhat less common.

First, critics sometimes assert that geocentricity is impossible, since the enormous centrifugal forces generated at the outer edges of the universe would cause it to “fly apart.” One response is to say that such centrifugal force is counterbalanced by an equally enormous gravitational force directed towards the cosmic center (i.e., the Earth). However, the question itself may betray a misunderstanding of the true nature of centrifugal force. If, as some geocentrists assert, centrifugal force is generated by rotational motion against the ether, then it is clear that only objects *within* the (ether-

filled) universe will feel such force, and not the universe itself. In other words, unless our universe were encased within yet another sphere of (revolving) ether, it would feel no centrifugal force working upon it to cause it to stretch or fly apart. And besides all this, where would such a universe fly apart to?

Finally, some object that celestial objects situated beyond the so-called Schwarzschild radius (i.e., about 2.6 billion miles out from us, the radius beyond which objects daily orbiting the Earth would exceed the speed of light) would be moving at superluminal speeds, something that is physically impossible. Here, several responses are in order. First, this objection presupposes the truth of Special Relativity, which (allegedly) posits that the speed of light is a cosmic absolute. As we have seen, however, there is no good reason to believe that Special Relativity is true, and many reasons to believe it is not. More to the point, however, is the fact that even in Relativity  $c$  is constant only *within* a given medium, and in particular the so-called “vacuum of space.” Therefore, even if the relativistic view of  $c$  were true, this would not constitute a problem for geocentrism, since in that model it is the (outer reaches of the) universe itself that travels at superluminal speeds, not the stars moving within it. In other words, relative to the (ether-filled) universe that carries them along in its bosom, celestial objects beyond the Schwarzschild radius do indeed travel faster than the speed of light. But relative to one another, or to the ether through which they (and their light) are moving locally, all or most of them are traveling at speeds considerably slower than 186,000 mps. On the other hand, it may be that some are indeed traveling through the ether at speeds faster than  $c$ , as a number of recent observations seem to suggest, much to the dismay of strict relativists.<sup>31</sup>

I want to close this section on geocentric modeling by stressing once again that science still does not fully understand gravity or inertial forces, only how they work locally (i.e., near the Earth), and even then only approximately.<sup>32</sup> Newton thought it preposterous to hold that gravity was an immaterial force acting upon objects from a distance, and he therefore

contemplated a number of physical theories of gravity. Einstein's notion of gravity as a distortion of space-time is both counterintuitive and largely discredited by the evidence against General Relativity. Quantum Mechanical views, looking to explain gravity in terms of tiny particles of "space-foam," may be getting closer to the mark, since the evidence for a kinetic ether is now plentiful. But again, the bottom line is that no one really understands gravitational and inertial forces from a physical point of view.

Moreover, even if we were able to discover an underlying physical cause for these forces, the new knowledge would only inaugurate a fresh search for further causes behind that one. In the end, then, our journey towards a satisfying theory of celestial mechanics must lead us back to the First Cause of all things. For the biblical geocentrist, that cause is God. However many physical links there may be in the great chain of kinetic causation, he is the spiritual anchor that holds them all down. Ultimately, he is the Prime Mover of all that moves.<sup>33</sup> As the Bible puts it, he is the One who causes the vapors to ascend from the ends of the Earth; who makes lightning for the rain; and who brings the wind out of his treasuries. He is the One in whom all things live and move and have their being (Psalm 135:7, Acts 17:28). Therefore, urging physicists, astronomers, and cosmologists to lift their sights a little higher, he unabashedly asks:

*"Can you bind the cluster of the Pleiades,  
Or loose the belt of Orion?  
Can you bring out the constellations in their season,  
Or guide the Great Bear with her cubs?  
Do you know the ordinances of the heavens?  
Can you set their dominion over the Earth?  
Lift up your eyes on high,  
And see who has created these things,  
The One who brings out their host by number  
And calls them all by name.  
By the greatness of His might  
And the strength of His power*

*Not one of them is missing.  
To whom then will you liken Me,  
Or to whom shall I be equal?”  
Says the Holy One.*

—Job 38:32, Isaiah 40:26, 25

## ***Arguments from Observation***

### **4. No Conclusive Evidence for Earthly Motion**

Turning now to observational evidences for radical geocentricity, let us begin by affirming with Einstein’s disciple, Lincoln Barrett, that, “We cannot feel our motion through space, nor has any physical experiment ever proved that the Earth is actually in motion.” Similarly, Henri Poincare wrote, “We do not have, and cannot have, any means of discovering whether or not we are carried along in a uniform motion of translation.”<sup>34</sup>. Though these statements will come as a shock to many, we have already seen why most scientists, in private at least, will admit to their truth. The reason, in a nutshell, is relativity. As Einstein, Hoyle, Hawking and the rest have publicly confessed, relativity makes it impossible to deduce the Earth’s motion from any physical experiment. For example, we have repeatedly seen that the NTM is at least as fruitful as the heliocentric; that it saves all the appearances and gives acceptable explanations for all the so-called proofs for the Earth’s rotational and translational motion. So who can say what is really moving, the Earth or the sun? Now it is true that relativity is a two-edged sword: Just as it precludes observationally demonstrating that the Earth is in motion, so too it precludes observationally demonstrating that the Earth is at rest. This does not mean, however, that the evidence does not favor one model over the other. Indeed, a growing number of scientists, many quite reluctantly, are now prepared to admit that there is indeed a large and compelling body of observational evidence favorable both to the geocentric and geostationist views. In the space that remains, let us survey that evidence briefly.

## 5. Observational Evidence for Geocentrism

Observational evidence for geocentrism is so varied and so abundant that it now threatens to overthrow the Copernican (or Cosmological) Principle, forcing a paradigm-shift on modern cosmology. Capturing the drama of this recent development, Sungenis writes:

After Hubble, all kinds of interesting objects and forces were found in man's telescopes, e.g., quasars, gamma-ray and X-ray bursters, CMB radiation, and a wide assortment of galaxies and star clusters. To the utter consternation of the world's scientists, each of the newfound discoveries kept revealing the same startling information—that the Earth was right smack in the center of it all!<sup>35</sup>.

In their magnum opus, *Galileo Was Wrong*, Sungenis and Bennett collate and carefully document all of the new evidence. Some of their discussion is technical and therefore challenging for the scientific layman. Nevertheless, the salient points are clear enough. Citing frequently from their work, I will touch on a few of the most important here.

**CMB:** First, we have the Cosmic Microwave Background radiation, (CMB). Though views differ as to its cause, all agree that this so-called black body radiation arrives at the Earth at essentially the same temperature (2.7° K) from all directions in space. In other words, the CMB radiation is almost perfectly isotropic. This means, however, that the Earth must be at or very near the center of the CMB. Joseph Silk expresses the situation this way:

Studies of the CMB have confirmed the isotropy of the radiation, or its complete uniformity in all directions. If the universe possesses a center, we must be very close to it...otherwise excessive observable anisotropy (i.e., non-uniform appearance) in the radiation intensity would be produced, and we would detect more radiation from one direction than from the opposite direction.<sup>36</sup>.

As we saw earlier, Big Bang theorists reject Silk's common sense geocentric conclusion by assuming the inconceivable, namely, that the

universe is homogeneous and isotropic; that it has neither edges nor center, and that matter is so evenly distributed throughout it that the heavens (and the CMB) look basically the same from every vantage point. Since, however, this assumption is highly counterintuitive, and since other evidence points even more decisively to geocentricity, the geocentric interpretation of the CMB seems the more reasonable.

In passing, we should note also that painstaking studies into slight irregularities in the CMB (i.e., so-called anisotropies) have given further credence to geocentricity. In particular, Dr. Max Tegmark's analysis of data from the Wilkinson Microwave Anisotropy Probe (WMAP) led him to conclude that 1) the CMB is not perfectly isotropic, 2) the anisotropies show it to be symmetrically structured, 3) the universe seems to have an axis upon which it rotates (and therefore an equator as well), and 4) that axis passes through the Earth or a point very near to it! In short, the WMAP evidence points to a rotating cosmos with the Earth at its center! So dangerously anti-Copernican were these results, that one author wrote an essay about them entitled, "Axis of Evil Warps Cosmic Background."<sup>37</sup>

***Galactic Red Shifts:*** Over the last 25 years, beginning with the work of William Tifft, astronomers have carefully measured the red shifts of hundreds of galaxies. Also, they have analyzed the red shifts of several different kinds of galaxies (e.g. individual spiral galaxies, binary clusters, dwarf irregulars, rapidly rotating regulars, etc.). To the astonishment of everyone, the results showed that their red shifts are all "quantized." That is, the red shifts are not smoothly distributed along a spectrum of numerical values, but bundled in one or another fraction of the most common value, 72 km/sec. Thus, red shift measurements commonly fall at 12, 24, 36, 72, 144, or 216 km/sec. As Robert Bennett observed, "The probability of this occurring by chance is incalculable."

But what does it all mean? Well, for the standard Big Bang model it means big trouble. This is because Big Bang cosmology interprets red shifts as an indicator of galactic recession and spatial expansion. But if this view were correct, the red shifts should be smooth, not quantized. Furthermore,



the new observations lead quite naturally to a most geocentric conclusion: The galaxies are situated around the Earth like the layers of an onion. As Tiftt himself observed with due scientific caution, “A hierarchy of quantized domains is suggested.” Drawing out the implications of this for Big Bang cosmology, the alarmed writer for *Sky and Telescope Magazine* complained, “Quantized red shifts just don’t fit into this (standard Big Bang) view of the cosmos, for they imply concentric shells of galaxies expanding away from a central point, Earth.”<sup>38</sup> Big Bang cosmology wants all galaxies to be receding smoothly one from another, leaving no hint of a cosmic center and thus confirming the cherished Cosmological Principle. However, the actual observations—now confirmed beyond serious dispute—tell a very different story, putting the Earth at the center and leaving no hint of the Cosmological Principle!

It is, of course, possible to interpret galactic red shifts in other ways. For example, rather than seeing them as “cosmological” (i.e., as indicating recessional velocity), one can view them as “intrinsic” (i.e., as arising from some property within the galaxy itself).<sup>39</sup> This approach would, however, be equally disastrous for the Big Bang, since it would mean that the so-called “Hubble relation” between the red shift, recessional velocity, distance, and age of a given galaxy is non-existent. This in turn would mean that the universe is likely quite small and (relative to Big Bang conclusions) quite young, leaving far too little time for cosmic evolution. Moreover, even if (as the best evidence now indicates) red shifts are not due to recession, the geocentric implications would still remain, for no matter what their cause, red shifts would not appear in our telescopes as systematically quantized unless the Earth were central. As Robert Bennett explains:

If Earth were not central, arcs of each shell would be seen with varying red shifts. In geometry, concentric circles can have but one center. All quantum red shifts indicate that the Earth is the center of this incredible phenomenon. Any other location would break the quantum levels, smearing them out, as was expected prior to the discovery by Tiftt.<sup>40</sup>



In closing, let us note also that actual observations do not favor the standard view that galaxies are homogeneously distributed throughout space. To the contrary, galactic distribution—like galactic red shifts—is decidedly geocentric. Physicist Harold Slusher states the case as follows:

If the distribution of galaxies is homogeneous, then doubling the distance should increase the galaxy count eightfold; tripling it should produce a galaxy count 27 times as large. Actual counts of galaxies show a rate substantially less than this. If allowed to stand without correction, this feature of the galaxy count implies a thinning out with distance in all directions, and that we are at the very center of the highest concentration of matter in the universe... This would argue that we are at the center of the universe... When galaxy counts are adjusted for dimming effects, it appears that the number of galaxies per unit volume of space increases with distance. From this we still appear to be at the center of the universe, but now it coincides with the point of least concentration of matter.<sup>41</sup>

Summing up, it appears both from their distribution and the observed red shift of their light that the galaxies are trying to teach us something important: We on Earth are privileged to live in the midst of all—and we didn't get there by accident!

***Other Celestial Bodies:*** Like a symphony performing variations on a theme, the universe over and over again presents us with celestial objects that are distributed geocentrically in space. We have just seen that the CMB and the galaxies both play their part. Let us look here at a few more.

First, we have *gamma ray bursts* (GRB's). Emanating from invisible sources, these enormously powerful bursts of gamma rays "...are equivalent to  $10^{45}$  watts of energy, which is over a million trillion times as powerful as the sun. The bursts occur at the rate of about one per day, but they are fast fading and random, never occurring in the same place twice."<sup>42</sup> From this description, we may justly surmise that GRB's are caused by the explosive death of unknown, star-like objects. Very importantly, careful observation of the location and uniform intensity of the GRB's leads investigators to the unavoidable conclusion that their sources are situated upon a spherical shell whose center is the Earth. As GRB

researcher Jonathan Katz observes below, the data create a very disturbing “dilemma” for the followers of Copernicus:

No longer could astronomers hope that the Copernican dilemma would disappear with improved data. The data were in hand and their implication inescapable: We are the center of a spherically symmetric distribution of gamma ray burst sources, and this distribution has an outer edge. Beyond this edge, the density of the burst sources decreases to insignificance.<sup>43</sup>

Note carefully Katz’ emphasis on an outer edge. This is the source of his Copernican dilemma. For unless the GRB’s are distributed evenly throughout all space, they present decisive observational refutation of the Cosmological Principle, according to which no place in the universe is special or unique. The evidence, however, clearly leads to the conclusion that the shell of GRB sources is unique, and that the Earth at its center is uniquer still!

This brings us to a second kind of geocentrically distributed body, *quasars*. First discovered in the 1960’s, these faintly visible quasi-stellar radio sources display large red shifts, and so (on Big Bang premises) are thought to be very distant and very old. Y. P. Varshni, one of the earliest researchers in the field, studied some 400 quasars and found, to his amazement, that their red shift values effectively bundled them into 57 groups, giving the impression that quasars, much like the galaxies, are situated on concentric spheres, all of which have the Earth at their center. Subsequent observations of some 20,000 quasars have only confirmed Varshni’s findings. His original statement about the significance of this data, though later abandoned under pressure from his colleagues, was impressively direct:

The Earth is indeed the center of the Universe. The arrangement of quasars on certain spherical shells is only with respect to the Earth. These shells would disappear if viewed from another galaxy or quasar. This means that the cosmological principle will have to go. Also, it implies that a coordinate system fixed to the Earth will be a preferred frame of reference in the Universe. Consequently, both the Special and General Theory of Relativity must be abandoned for cosmological purposes.<sup>44</sup>

As we see from Varshni's own words, quasars produce big problems for relativistic Big Bang cosmology. If the Cosmological Principle is true, why are there no quasars near the Earth? Why are they uniquely centered upon the Earth? How can they travel at superluminal speeds (as indeed they must if they are moving as fast as their red shifts suggest)? How can they emit such stupendous energy (as indeed they must if we can still see their light from the "edge" of a universe billions of light years old)? Questions like these yet again cast doubts upon the standard interpretation of red shifts, inviting us to contemplate a small, Earth-centered universe, created by a big, Earth-centered God.

Besides the CMB, galaxies, GRB sources, and quasars, there are quite a number of other celestial objects that play their part in the great geocentric symphony. In surveying them at some length, Sungenis and Bennett discuss such exotic phenomena as BL Lacertae, X-Ray Bursts, Spectroscopic Binaries, Globular Clusters, Quantized Planetary Orbits, and Cosmic Mega-Walls. The breadth and force of the evidence is impressive indeed.

***The Uniqueness of the Earth System:*** Observations to date reveal that the local physical system of which the Earth is a part is cosmically unique. For example, though astronomers think they have found a few stars with a single associated planet, they have certainly found nothing like our own so-called solar system, however we may conceive its actual configuration. Also, they have never discovered a planet that supports life, not to mention a planet inhabited by self-conscious beings such as ourselves. Now the Cosmological Principle predicts that all these phenomena should appear uniformly throughout the universe—hence NASA's deep space probes and the SETI program. But the facts, so far as we know them, show that they do not. The Earth, and the local system of which it is a part, appear to be very special, even unique. If so, it is only reasonable to think of them as central.<sup>45</sup>

***Cosmic Fine Tuning:*** Here we touch upon a very large body of evidence suggesting that our Earth lies at another kind of center—the center of

interest of the One who created it. It includes literally hundreds of phenomena indicating that Earth, the solar system, and the universe itself have all been fine tuned to support life on our planet. Scientists know, for example, that there are a great many physical constants in nature, none of which could vary even slightly without shattering the physical integrity of the universe (e.g., gravitational and electromagnetic constants, the mass of elementary particles, strong and weak nuclear forces, etc.).<sup>46</sup> They know also that life could not exist if the sun were a different color, or a different mass, or closer to Earth, or farther from it. The same is true of the moon: If it were only 50,000 miles closer, ocean tides would engulf nearly all the Earth's land mass twice a day; if slightly further, life in the stagnant seas would die. Or again, if the Earth's gravity, crustal thickness, oxygen/nitrogen ratios, and water vapor and ozone layers were only slightly different, life would perish.<sup>47</sup> Because, on naturalistic premises, this manifold fine tuning is so improbable, many have concluded that there must be a Fine Tuner who has delicately structured all things for the support and enjoyment of earthly life. In short, cosmic fine tuning reveals Earth's inhabitants as the special object of a divine creator's interest and activity. And if they lie at the center of his interest, is it not reasonable to imagine them at the center of his universe as well?

Summing up, in our brief survey of the evidence for geocentrism we have looked at the CMB, galactic red shifts, miscellaneous heavenly bodies, the uniqueness of the Earth system, and cosmic fine-tuning, also sometimes called *the anthropic principle*. Any one of these phenomena should give pause to Copernicans. Taken together, they are compelling. The Bible declares, "Out of the mouth of two or more witnesses, let every matter be established" (Deut. 19:15, Mt. 18:16). To judge from the manifold observational evidence, the matter of cosmic geocentricity appears to be well-established indeed, presumably at the hand of the Bible's evidence-loving and evidence-giving God!

## **6. Observational Evidence for Geostationism**

Just as it is impossible to prove experimentally that the Earth is moving through space, so too it is impossible to prove experimentally that it sits at absolute rest in the center of the universe. Nevertheless, there are several lines of scientific evidence suggesting strongly that this is indeed the case.

First, there are *the results of the numerous interferometer experiments*. As we saw earlier, these all agree in showing that a) there is indeed an ether, b) this ether is either stationary, with the Earth moving through it at a snail's pace, or c) the Earth is stationary, with the contiguous ether (i.e., the ether near the Earth's surface) revolving around it at a snail's pace. While direct observation cannot decide between these two options, several lines of evidence agree in declaring that the geostationary option is best (e.g., Biblical teaching, common sense experience, the observational evidences for cosmic geocentrism, etc.).

Secondly, we have *the pattern of global air currents*. In heliocentric thinking, the observed west-to-east airflow is caused by thermal energy plus the rotation of the Earth on its axis. But in the following quote, Robert Bennett shows how unreasonable this view is, and in so doing gives impressive evidence for a stationary Earth:

We would think that a rotating Earth would drag along the air right at the surface, but the lack of friction and viscosity of air, plus its inertia, would make the air stream behind the ground's motion form as swirls of cream in a coffee cup. At the equator, which spins at 1,054 mph, there would be a rapid change in the wind profile, from zero on the ground to 1,054 mph at high altitudes. Testing our belief with anemometers, we are surprised to learn, however, that the equatorial winds are quite docile, random, and calm, even at heights. Only the sun's heat, as it crosses the sky (literally) provides gentle breezes...Moderns, having made great advances in natural understanding, laugh and say, incredibly, that the whole atmosphere co-rotates with the Earth, as if the air were solid! Theists, with a geocentric mind, say with scriptural simplicity, "Of course there is no wind—the Earth is fixed forever. It was God who told us so."<sup>48</sup>

Finally, we have the *superior usefulness of a fixed-Earth model for astronomical and navigational calculations*. After conceding that the heliocentric paradigm does have occasional practical advantages (e.g., for calculating the relative positions of the planets), geocentrist Philip Stott goes on to observe:

Nevertheless, well over 90% of all astronomical calculations are done assuming the Earth is not rotating and is stationary at the center of the universe. All navigation calculations also assume that the Earth does not move and does not rotate.<sup>49</sup>

Notably, this is precisely the testimony of NASA, the Jet Propulsion Laboratory, and other governmental science agencies, all of which concede that global positioning satellites, geostationary satellites, and deep space probes use what is called the Earth Centered Inertial (ECI) frame of reference in planning and executing their launches.<sup>50</sup> In other words, because it works best to do so, these agencies chart their rocket's courses on the assumption that the Earth is at rest in the midst of the universe. But this invites an important question: Does their assumption work so well because it happens to be the truth?

## **Conclusion**

Though it may well be an emerging trend, radical geocentricity is still a radical idea. It cuts hard against the grain of prevailing scientific opinion and sharply challenges a pervasive ideology of progress that tells us we have become wiser than our ancestors. Yet the test perspective warns us against any and all smugness, even in the matter now before us. So too does the Bible. Together, they declare that the world is a strange place where truth and error ever do battle, where God sorely tests men's love of the truth, and where he chooses "foolish" things in order to confound the wise, (Mt. 11:25f, 1 Cor. 1:27).

In such a world, radical geocentricity may well be true. Moreover, from many quarters we have received good evidence for its truthfulness. It is the testimony of common sense (and therefore the testimony of most ancient cosmologies). It is the testimony of the Bible. It is the testimony of sound theoretical and observational science. It promises emancipation from the confusing labyrinth of Relativity Theory. It holds forth the promise of a new, coherent, and holistic physics, astrophysics, and cosmology. But most

important of all, it points us to a wise and powerful divine creator, one who very much has the Earth on his mind; a God who shows himself to us in his universe, and who calls us back to himself in his Book.

Such considerations will give seekers of cosmological truth pause. Moreover, as they pause—perhaps gazing upward on a clear, moonless night at the mighty vault of heaven—they will better be able to discern the wisdom of the great Swiss mathematician, Leonard Euler (1707-1783), when he said:

In our researches into the phenomena of the visible world we are subject to weaknesses and inconsistencies so humiliating that a (divine) Revelation is absolutely necessary to us. We ought to avail ourselves of it with the most powerful veneration.<sup>51</sup>

## **THE AGE OF THE UNIVERSE, LIFE, AND MAN**

We come now to yet another feature of the biblical cosmogony that many people find unreasonable—the Bible’s assertion that the universe was created in six literal days and that the world is therefore only some 6,000 years old.<sup>52</sup> How can this possibly be when, from many different scientific quarters, we repeatedly hear that the universe is 13-15 billion years old, the solar system 4.5 billion, life 1.5 billion, and *homo sapiens* around 1 million? What about all the geological evidences? What about radiometric dating? What about the billions of light-years required for starlight to reach the Earth from distant galaxies? With so much evidence stacked up against its teaching, surely the Bible must be in error on this fundamental point.

In beginning to wrestle with this important question, the seeker will again want to call to mind several key principles discussed earlier in our journey. Above all, he must remember that in the matter of origins it is never wise to trust the current claims of natural science over the specific declarations of a well-attested divine revelation. Natural science is blind to the beginning: It cannot observe the origin of the cosmos. But the creator is not blind, for he was there. If, then, we find in the world a clear revelation



of the beginning—one that manifestly bears the (supernatural) imprimatur of the creator—it would be foolish and irrational indeed to spurn it in favor of the ever-changing claims of naturalistic cosmogony.<sup>53</sup>

The Bible, as we have seen, meets all these criteria. Its teaching about the beginning, unlike those of pantheistic religions, is crystal clear. Not only so, it is unanimously endorsed by all the biblical authors, including Jesus of Nazareth, the biblical Teacher *par excellence*. Also, it is supported by a vast array of supernatural signs—signs that undergird not only the authority of Jesus, but the authority of the Bible as well. Here, then, is a book with all the earmarks of a trustworthy revelation. And if that book says the universe was created in six literal days some 6,000 years back, it would be foolish not to take that claim seriously.

## **The Case for Recent Creation**

Yet for all this, it is undeniably true that the seeker has a right to expect at least some scientific evidence favorable to a recent creation. How, indeed, could it be otherwise, if the God who *says* he created the world in six days really *did* create it in six days? As in the case of radical geocentricity, there would have to be at least some correspondence between the testimony of his book and the shape of his world. Surely, for the sake of all who must take his test, he would leave at least some evidences in the realm of nature to confirm his revelation of a recent creation.

The contention of biblical creationists is that God has done so, and done so very generously. Indeed, they argue that the preponderance of “cosmic chronometers”—natural phenomena indicating to us the age of the universe, life, and man—supports recent creation. They claim, quite apart from the far more important biblical evidence, that scientific evidences *alone* will incline reasonable people towards a young universe rather than an old. All of this falls shockingly upon the ears of seekers schooled in the modern educational establishment. But as seekers, they must give the creationists their due. They must take a little time to hear their arguments and consider



their evidences. Only then can they decide for themselves which view of the age of the universe is more reasonable. We must, then, briefly survey the creationist case.

A preliminary part of that case is a philosophical reminder. We must always remember, say the creationists, that men of science cannot help but bring certain presuppositions to their study of nature. One of them is the presupposition that present processes have continued in more or less the same way and at the same rate throughout history. Since the days of geologist Charles Lyell, this presupposition has been called *uniformitarianism*. Fundamentally, it is quite reasonable. Every day we observe uniformity in nature, whether in the motions of the heavenly bodies, the action of the tides, the behavior of animals, or the functioning of our own bodies. Without uniformity the world would be chaotic and science impossible. We are right to presuppose a significant degree of uniformity in our study of the past.

Nevertheless, we must be cautious. For even on naturalistic grounds, we cannot assume that nature operates with *absolute* uniformity. Earth-shaking catastrophes may have interrupted the normal course of events in the past, powerfully influencing the present shape of things. As a matter of fact, recent discoveries have increasingly inclined secular geology precisely to such catastrophist views. Furthermore, from the moment we step into the biblical universe we must be even *more* cautious. Yes, uniformity in nature harmonizes well with the biblical revelation of a rational God imposing a rational order on nature. But that same revelation also teaches us that nature has *not* always functioned in accordance with present-day processes. In the beginning, says the Bible, the world was suddenly and supernaturally created. Shortly afterward, it was suddenly and supernaturally cursed. Not long after that, it was suddenly and supernaturally engulfed in water and riven by a massive break-up of the Earth's crust. Finally, there came a sudden and supernatural confusion of human language, resulting in the dispersion of the family of man and the rise of distinct peoples and nations.

Only after all of this did nature finally “settle down” into the more or less uniform set of processes that we observe today.

Now if the Bible speaks truly on these matters, we cannot possibly hope to understand cosmic or human history strictly in terms of present-day natural processes. Rather, we must see it not only through the lens of uniformity, but also through the lens of these four great divine interventions, each of which must have left a deep imprint upon the world as we now know it. When we do, say the creationists, many puzzling natural phenomena suddenly begin to make perfect sense. When we do, nature itself seems to confirm the biblical model of the beginning. And when we do, the world and the universe suddenly start to look very young!

But let us now observe these principles in action. We’ll begin by looking briefly at a dozen of the best scientific evidences that creationists use to argue for a recent creation. Then we’ll conclude by tackling the main evidences evolutionists use to argue for an ancient cosmos that is billions of years old. Interested readers may follow the notes to books and articles that will take them deeper into this fascinating area of study.<sup>54</sup>

### ***The Winding Up Dilemma***

Astronomers have observed that the stars in spiral galaxies rotate around their galactic centers at different speeds, with the stars nearest to the center rotating much faster than those further out. This means there is a built-in tendency for such galaxies “quickly” to disintegrate into an amorphous cloud or disc. We have already seen that what are presumed to be the most distant spiral galaxies should not be there at all, since they are too “young” to have taken shape so soon. Here, however, we have the opposite problem: Spiral galaxies presumed to be quite close to Earth should not be there either, for they are too old to hold their shape this long. Rather, they should long ago have “wound themselves up” into a featureless cluster of stars. How then can Andromeda, thought to be a mere 2.5 million light years away, still retain its beautiful structure? And how is it that we have now

discovered a highly detailed spiral structure in the hub of the Whirlpool Galaxy, thought to be only 23 million light years from Earth (and therefore billions of years old)? Evolutionists refer to this phenomenon as “the winding up dilemma.” It is indeed a dilemma, for the obvious reason that it speaks of a universe vastly younger than the one they proclaim and defend.<sup>55</sup>

### ***Missing Supernova Remnants***

A supernova is an exploding star. Astronomers observe that in galaxies like ours stars explode at a rate of about one every 25 years. Their remains should be visible for around a million years. If, then, as evolutionists argue, our galaxy is 10 byo, we should be able to observe multitudes of supernovae remnants in nearby portions of the Milky Way. In fact, we observe only about 200. This is about 7000 years worth of supernovae, and further evidence that our galaxy is, in fact, quite young.<sup>56</sup>

### ***Our Changing Sun***

Using direct visual measurements, as well as several different indirect techniques, a number of scientists have concluded that the sun is shrinking, possibly by as much as five feet per hour. If so, temperatures on the Earth only a few million years ago would have been so high as to destroy all life as we know it. A shrinking sun means that life could not possibly have begun to evolve 1.5 billion years ago, as evolutionists claim, and that the Earth-sun system must be very young.

Here it is appropriate also to mention “the faint young sun paradox.” Many scientists now believe that the sun is powered by nuclear fusion. On this view, the rapidly moving nuclei of hydrogen atoms fuse to produce atoms of helium plus a release of huge amounts of energy. Because this process increases the density of matter in the sun, it leads to yet more fusion and the release of yet more energy. Here, then, is the paradox: Contrary to expectation, the sun actually burns hotter and brighter as it gets older. But

this implies that the sun at its birth must have burned cooler and fainter than it does today. And this, in turn, casts a long shadow of doubt over the antiquity of the Earth-sun system, since the temperature on Earth a billion years ago would have been far too low to sustain life.

Notably, these observations lead us to opposing conclusions. Is the sun shrinking, so that the Earth was hotter in the past; or is it heating up, so that the Earth was cooler in the past? Of the two, the former seems most likely, since the evidence for a shrinking sun is weighty, whereas many scientists today remain uncertain about whether the sun is really powered by nuclear fusion. Whatever the truth may be, these observations show that the Earth-sun system currently exists in a delicate—and continually changing—balance, a balance that can by no means accommodate 1.5 billion years of organic evolution on the Earth.<sup>57</sup>

### ***Solar Wind and the Poynting Robertson Effect***

Scientists observe a cloud of small dust particles orbiting our sun (and other stars, as well). The smallest of these are being “blown away” by the sun’s radiation. The larger ones, colliding with the same radiation, are first slowed and then “vacuumed” into the sun by its gravitational field. But unless the dust cloud is somehow being replenished (for which there is no evidence at all), a 4.5 byo sun should long ago have blown it away or vacuumed it up. Its continuing presence with us suggests that the solar system is actually quite young.<sup>58</sup>

### ***Missing Meteorites***

Meteorites, some of them quite large, accumulate on the Earth’s surface at a rate of about 60 tons per day, yet there is little or no trace of meteorites in any but the topmost layers of the geological column. Since in the past meteorites probably fell more abundantly rather than less, their absence from the geological column suggests that the column did not form slowly over hundreds of millions of years, but quite suddenly, perhaps as a result of

a global flood. Also, at present rates of accumulation, a 4.5 byo Earth should have very large quantities of nickel-bearing meteoritic dust in its crust. So too should the moon. The fact that they do not suggests that the Earth is young.<sup>59</sup>

In this connection, we should mention also the problem of minimal “crater creep” on the planets. Craters on the moon, Venus, and Mercury have very steep walls. However, if the solar system were billions of years old, they should not, since it is known that the edges of craters tend to “slump” due to the pull of gravity. Thus, the observed lack of crater creep suggests that these planets—and therefore the solar system itself—are really quite young.

### ***Decay of Earth’s Magnetic Field***

Direct measurements over the last 140 years have revealed that the strength of the Earth’s magnetic field is steadily decaying. Many believe this field is produced by an electrical current running through the Earth’s molten core, and that its decay corresponds to the cooling of the core. If so, the Earth could not possibly be older than twenty thousand years, since the heat generated by an older, larger current would certainly have destroyed its (the Earth’s) integrity. Also, evolutionists cannot explain how the Earth (and other planets as well), after 4.5 billion years, has not yet completely cooled but still has a molten core, as well as a magnetic field (presumably) generated by that core. Responding to all this, some evolutionists argue that the decay may only be apparent, an aspect of those periodic oscillations of the field that we know from geology to have occurred in the past. Creationists reply by saying that the evidence for such oscillations indicates they were quite rapid, possibly caused by catastrophic events associated with the Flood. They also point out that oscillations in the magnetic field cannot halt or explain its overall decay.<sup>60</sup>

### ***Recession of the Moon***

The moon is receding from the Earth at a rate of about 1.5 inches per year. Even assuming that its recession began from the surface of the Earth and that the rate has been uniform, the moon could not possibly be more than 1.4 byo, a far cry from the 4.5 billion years assigned to the Earth-moon system by evolutionists. Also, terrestrial life could not have appeared within the standard evolutionary time frame, since massive tidal activity caused by a moon so near the Earth would have made this all but impossible.<sup>61</sup>

### ***Atmospheric Helium***

Most, if not all, of the helium in our atmosphere comes from the decay of radioactive elements in the Earth. If the Earth were 4.5 byo, there should be about 2,000 times more helium in our atmosphere than we actually find. And since we know that very little helium escapes our atmosphere, a reasonable conclusion from the evidence is that the Earth's atmosphere is young. Also, scientists have discovered pockets of helium located in deep, hot rocks that are thought to be about one billion years old. But since the helium is still there, it would certainly appear that it has not had enough time to escape and that the rocks are really only several thousand years old. This finding not only implies a young Earth, but also raises serious questions about the reliability of methods used to determine the age of rocks.<sup>62</sup>

### ***Ocean Deposits***

Each year a great deal more sodium enters the oceans than leaves them. Assuming that the oceans began with no salt in them, the present amount, measured against its present rate of accumulation, indicates a maximum possible age for the oceans of 62 million years. Similar measurements of oceanic copper, gold, lead, mercury, nickel, tin, and uranium give even younger ages. Yet evolutionists contend that the oceans have been around for some 3 billion years.

Much the same is true concerning the deposition of river sediments. These enter the oceans at a rate of more than 27 billion tons per year. Measurements of river sediments now on the ocean floor indicate a maximum possible age for the oceans of 30 million years. (If, however, the Earth recently experienced a global flood, this figure would obviously be much too high.) Similarly, at their present rate of erosion, the continents would be completely leveled within about 25 million years. So again, it appears from both land and sea that the Earth cannot be billions of years old.<sup>63</sup>

### ***Intact Biological Tissue***

Biological material decays very rapidly, and soft material more rapidly than hard (e.g., bone). This is why scientists have been shocked to find intact soft tissues in specimens thought to be millions of years old. The most recent example comes from the Hell Creek Formation in Montana, where evolutionist Mary Schweitzer discovered flexible blood vessels inside the fossilized thighbone of a Tyrannosaurus Rex (assumed to be 68-70 million years old). Not long before that, researchers found partially unfossilized dinosaur bones in the same area. Also, strands of the highly perishable DNA molecule have been recovered from a number of “ancient” specimens (e.g., from wet fossil magnolia leaves dated at 17-20 million years old). Finally, there is the case of Dr. S. Cano, who carefully extracted bacteria spores from the body of a stingless bee preserved in amber. To his amazement, he induced the “25-40 million year old” bacteria to grow! While scientists confess astonishment at such findings, they usually decline to embrace the most reasonable explanation: the intact biological material before their eyes is actually quite young.<sup>64</sup>

### ***World Population Growth***

According to evolutionists, the human race is about 1 million years old. This means that its total population should be vastly larger than it actually

is. The current growth rate for world population is about 1.7% per year, a rate that, for various reasons, is considerably slower than in previous generations. Let us, however, be very generous to the evolutionists and assume an average growth rate of only 0.01% per year. At this pace, world population today should be  $10^{43}$  people! Similarly, if we assume that 100,000 years ago there were only 1 million Stone Age people (some anthropologists argue for 10 million), the Earth should now hold in its bosom the undecayed remains and burial artifacts of some 4 billion of their offspring. Yet archeologists find very few of either. On the other hand, if we assume that about 4,500 years ago Noah's three sons and their wives began to repopulate the Earth at a modest rate of 0.05% per year, a simple calculation essentially gives us today's present world population. Thus, the evidence plainly favors both a young human race and the biblical model of world history.<sup>65</sup>

### ***Human Culture and History***

According to the usual evolutionary scenario, Stone Age men existed as hunters and gatherers for about 100,000 years, during which time they fashioned tools, erected simple dwellings, made stone monuments, painted on cave walls, and even made silk! Yet despite such impressive displays of intelligence, it was not until about 10,000 years ago that they discovered agriculture and soon afterwards began to commit their stories and beliefs to writing. Thus, evolutionists posit a great temporal gulf between the emergence of human culture and human history. Critics argue, however, that such a gulf seems highly improbable and that the more reasonable conclusion is that human culture and history began simultaneously, about 4,500 years ago. This accords well with the biblical picture of early human history, and in particular with its story of a gradual re-emergence of human civilization after the devastating impact of the Flood and the dispersion at Babel.<sup>66</sup>



These are only a few of the many processes cited by creationists as evidence for a young universe and a young Earth.<sup>67</sup> Since all of them involve assumptions about the unobservable past, none can be said to give conclusive proof of recent creation. Nevertheless, it is highly significant that approximately 90% of all cosmic chronometers give ages for the universe, Earth, life, and man that are significantly younger than those proposed by evolutionists. Indeed, the scientific evidence favors a universe so young as to rule out the possibility of cosmic evolution. The only other alternative is divine creation. Therefore, of the two options, divine creation appears to be the more reasonable.

But what of the much-publicized evidences for an ancient Earth and cosmos? What of old Earth geology, radiometric dating, and the problem of starlight and time? Is it really possible that these well-known cosmic chronometers are speaking to us erroneously about the age of things? Yes, say the creationists, it is. To see why, let us briefly examine each one.

## **Old Earth Geology**

For the last 200 years, uniformitarianism has been the guiding principle of secular geology. According to this principle, the present is the key to the past. Just as geological change occurs slowly today, so it must have occurred slowly yesterday. The drift of the continents, the rise of mountains, the carving out of great canyons, the formation of the fossilized geological column—all, we are told, took place gradually over millions and even billions of years. For many, the presumed uniformity of geological processes conclusively demonstrates an ancient Earth.

Today, however, many geologists have begun to acknowledge the inadequacy of the uniformitarian premise. This change is fueled by the dramatic discovery of several categories of new evidence, each of which suggests that the entire surface of the Earth may well have been shaped by a catastrophic geological event, or series of events, that occurred in the recent past.

First, there are numerous evidences for *the rapid deposition of sedimentary rocks*. Chief among them are fossils. Their very existence in the geological column implies rapid deposition, since the original life forms had to have been buried quickly and put under significant pressure in order to escape predation and/or decay. Interestingly, some fossils supply extraordinary snapshots of this very thing. Geologists have found, for example, fossils of highly articulated soft-tissue animals (e.g., jellyfish), an ichthyosaurus in the process of giving birth, one fish eating another fish, and tree-trunks shooting up through several layers of rock or coal (these are called polystrate fossils). Striking evidences like these confirm in the minds of many that the entire fossilized geological column may well have been laid down in a single massive hydraulic catastrophe such as the biblical Flood.

Besides fossils, there are other evidences of rapid deposition. At the Grand Canyon, for example, geologists have discovered delicate imprints (e.g., animal tracks, ripple marks, raindrop marks) on the tops of strata covered by other strata. Apart from rapid deposition, such imprints would surely have been worn or washed away. Again, on the tops of these strata there is usually no sign of embedded life (e.g., worms, roots, clams, etc.). But apart from rapid deposition, such life forms are very much to be expected. Or again, between layers of sedimentary rock geologists usually find no loose soil or signs of chemical erosion. Apart from rapid deposition, they certainly should. Uniformitarians are troubled by these phenomena. Creationists, on the other hand, are pleasantly surprised, seeing in them solid proof for a global flood that suddenly laid down the vast majority of Earth's sedimentary layers.<sup>68</sup>

Secondly, we have evidences pointing to *a massive restructuring of the Earth's crust in the not-too-distant past*. Once again we think of the Grand Canyon, where, at the Tapeats, the horizontal layers of sandstone suddenly bend and rise toward the vertical within the space of 100 feet. Similarly, the entire Grand Canyon sequence of layers (allegedly deposited over the course of 300 million years) is bent at the Kaibab Upwarp. These layers

show no sign of shearing and must therefore have been soft and pliable when, as a result of mighty forces from beneath, they suddenly rose to their present position and finally hardened.

The Sullivan River Mountains in British Columbia tell much the same story. Comprised of thick layers of unbroken sedimentary rock, these mountains look like interconnected hairpins. To view them is to understand immediately that in a relatively short space of time the soft layers of earth not only rose but also were somehow compressed, accordion-like, into the mountain range we see today. Such amazing structures stand as a memorial to a brief but unimaginably powerful geological event.<sup>69</sup>

Biblically oriented geologists, observing phenomena like these, remember that the Flood account speaks not only of the “opening of the windows of heaven” but also of the “breaking up of the fountains of the great deep” (Gen. 7:11). Some among them lay special emphasis upon the latter, theorizing that a sudden rupture in the basement rocks of the Earth led to the explosive release of a vast reservoir of underground water. This globe-encircling rift led to a complete restructuring of the Earth’s surface in only a few short years. Indeed, they argue that this one event supplies the master key to historical geology, through which alone we may accurately understand such diverse phenomena as ocean ridges, trenches and canyons; continental drift, shelves, and slopes; mountain ranges, overthrusts, volcanoes, lava, metamorphic rock; uninhabitable deserts, tundra, and arctic regions; and even comets, asteroids, and meteorites! Needless to say, such thinking occurs far outside the box of orthodox geology. Nevertheless, the growing evidence for a global catastrophe suggests that one day theories like these may well get the hearing they so richly deserve. If they do, the results for uniformitarianism could be catastrophic.<sup>70</sup>

Finally, we have a miscellany of evidences pointing to *a recent global flood*. We now know, for example, that vast animal graveyards have been found all over the world, revealing the sudden burial in mud of all kinds of beasts. Research in the Arctic and Antarctic has shown that both these regions once produced abundant vegetation in subtropical climates—until

something happened. Fossilized marine crustaceans have been found on many of the highest mountains in the world. Entire skeletons of whales have been found in inland regions, even on mountaintops! Pillow lava, which only forms under water, has been discovered on the peaks of Mt. Ararat. The Earth's coal and oil deposits point to a flood, since they could have formed only when large masses of organic material were suddenly submerged, sealed, and compressed in hot mud. The Grand Canyon points to a flood, since only massive amounts of water rushing through soft layers of sediment could possibly have carved out so much material (the humble Colorado simply will not do). More than 230 legends from peoples all around the world point to a flood—legends which usually agree with the biblical record in all essentials: a global cataclysm, the destruction of all mankind, a big boat, and a small family of survivors who went on to replenish the Earth.<sup>71</sup> Finally, a global flood is implied by many sightings, reported over the last 150 years, of a huge, rectangular ship on the top of Mt. Ararat. Today many scoff, a few search, and the rest of us patiently wait to see if someone, somehow, will actually discover Noah's Ark.<sup>72</sup>

Summing up, we have seen that the uniformitarian premise of modern historical geology is not altogether unreasonable, but that hard geological evidence actually favors a catastrophist interpretation of the Earth's present geological structure. This evidence weighs heavily in favor of a recent creation, a young Earth, and a devastating global flood.

## **Radiometric Dating**

In various media, including textbooks, we are often told that radiometric dating has proven a given rock or fossil to be millions or even billions of years old. And yet, as we have already seen, the vast majority of dating methods suggest that the Earth is quite young, possibly only thousands of years old. How can this conflict be explained? Is it possible that radiometric dating is not nearly so accurate as we have been led to believe?

To answer this question, we must understand how radiometric dating works and what assumptions are involved. We know that isotopes of certain elements such as uranium, potassium, and rubidium are unstable. That is, they tend to decay through the loss of atomic particles until they become another more stable element such as lead, argon, or strontium. We also know the (present-day) rates at which one such element decays into another. Many scientists therefore conclude that if we measure the ratio of a parent element to its daughter element in a given (igneous) rock, we can reliably calculate the age of the rock from the time it cooled—that is, from the time it was “created.”

Now it is clear that in using this method scientists are making three crucial assumptions. Each is worthy of a closer look.

First, they must assume that there was no daughter element present at the beginning of the rock’s history. But this is not necessarily the case. In fact, studies of modern lava flow have shown that parent and daughter elements do indeed appear together in “newborn” rocks. Certain knowledge of the original quantities of parent-daughter elements is humanly impossible, yet without it radiometric dating cannot be considered trustworthy.

Second, the scientists assume that the rate of decay has remained constant throughout the rock’s history. But again, this uniformitarian premise is a risky business, especially if the world of nature has more than once been touched supernaturally by the hand of God. Suppose, for example, that rates of decay (along with the speed of light) were quite rapid during the creation week but began to slow when God rested. Or suppose that they were very high at the earliest stages of the Flood and the “breaking up of the fountains of the deep” (when, perhaps, many isotopes were created amidst titanic geochemical transformations), after which they gradually began to slow. In other words, once we begin to interpret Earth’s history through the prism of the biblical paradigm, the uniformitarian assumptions underlying radiometric dating may legitimately be called into question.

Good science invites us to do so, as well. Yes, measurements over the last 100 years indicate that rates of radioactive decay are now constant. However, recent researches have uncovered much evidence suggesting that this has not always been so. For example, geologists have time and again detected Carbon-14 in petrified wood, fossils, coal, etc. Since C-14, with its short half-life, should be undetectable after a maximum of about 60,000 years, one would think that the geologists would date the samples accordingly. But they do not. That is because the samples are found in rocks that other radiometric methods have “proved” to be millions or even hundreds of millions of years old. To retain the preferred older age, the geologists usually argue that the C-14 has somehow seeped into the old rocks. But surely it is at least as reasonable to argue that the “old” rocks may really be quite young because the rates of decay of their radioactive elements were faster in the past.<sup>73</sup>

Again, rock samples taken from the same location—and, therefore, known to originate at the same time—have been assigned vastly different ages by different radiometric methods, (see below). Obviously these ages cannot all be right. Indeed, one reasonable conclusion from such anomalies is that *none* of them is right, since all the radioactive elements in the rocks decayed at an accelerated rate in the not-too-distant past. Why and when the acceleration occurred, the rocks do not say.<sup>74</sup>

Of special relevance here is a recent study of zircons found in deep (Precambrian) granite. Zircons are crystals—in this case crystals containing lead produced from a uranium isotope. By measuring the amount of radiogenic lead in their samples, and by assuming the present rate of decay, researchers determined that these zircons should be about 1.5 billion years old. However, other strands of evidence indicated that this was not possible. One by-product of uranium-lead decay is helium, an element whose light, tiny atoms would quickly work their way up through porous crystal into the atmosphere. In other words, after 1.5 billion years, the radiogenic helium in these zircons should have been long gone. In fact, however, the researchers found it in large quantities. With the help of an independent analyst, they

therefore established the exact rate at which the helium should have diffused from the zircons into the atmosphere. Using this figure, they then determined from the volume of remaining helium the age of the rocks in which it was found: 5,680 (+/- 2,000) years.

These results are amazing. They strongly confirm what creationists have long suspected—that rates of radioactive decay were indeed much accelerated in the not-too-distant past. Moreover, the study of these deep basement rocks suggests that the Earth itself may be only about 6000 years old—just as the Bible teaches.<sup>75</sup>

This brings us to the third and final assumption—that the rocks in which radioactive decay occurs constitute a closed system, immune to outside influences. Common sense tells us that this may be the most problematic assumption of all. All objects interact with their environments. Argon, for example, exists on Earth as a gas that readily diffuses out of rock. Potassium and uranium dissolve in water. Heat, pressure, or chemicals may cause certain elements to “migrate” from one location to another. Such considerations again call to mind the Flood. If a global flood did occur, it is inconceivable that it would not influence the parent-daughter ratios in all rocks.

We find, then, that there are a great many variables in the radiometric dating equation, any one of which could give spurious ages for rocks. Accordingly, it is not surprising that radiometric dating has time and again produced troubling anomalies— anomalies that are all too often glossed over by professionals in their public pronouncements.

Here are a few telling illustrations.

The potassium-argon method dated lava from the Mt. St. Helen's eruption at 350,000 years old. The same method applied to submarine basaltic rocks with a known age of 200 years gave ages ranging from 160 million to 3 billion years.

In one very extensive study, different methods gave vastly different ages for the same Grand Canyon rocks:



- A. potassium/argon—10 thousand to 117 million years
- B. rubidium/strontium—1.27 to 1.39 billion years
- C. lead/lead isochron—2.6 billion years

Rocks formed in two recent eruptions of the Mount Ngauruhoe volcano in New Zealand were assigned radiometric ages ranging from 270,000 to 3.5 million years.

Australian researchers found charred wood in a layer of Tertiary basalt. Carbon-14 dating put the age of the wood at 45,000 years, but potassium/argon dating put the basalt at 45 million.

Carbon-14, which should be undetectable after a maximum of 60,000 years, has been found in wood, coal, and fossil samples embedded throughout the entire geological column—even in rocks and layers thought to be hundreds of millions of years old! Indeed, a study of some 15,000 fossils found all over the world and taken from widely varying depths in the Earth turned up *no samples without measurable C-14*. According to Dr. Robert Whitelaw, the author of the study, standard evolutionary geology predicts that there should have been about 20,000 undatable specimens for every datable specimen. But again, he found none—yet another testimony favorable to Flood Geology.

C-14 has also been detected in diamonds. In one study, scientists discovered it in a South African diamond extracted from deep basement rock assumed to be more than 600 million years old. The diamond's carbon-dated age was put at 58,000 years. Note carefully that the dense lattice structure of this diamond virtually rules out the possibility of C-14 contamination from the outside. This means that the diamond must have formed from organic matter within the last 60,000 years or less. It also means that it must have formed under extraordinary—perhaps even catastrophic—conditions.<sup>76, 77</sup>

Even the generally reliable radiocarbon dating gives anomalies. Douglas Kelly reports that new wood from actively growing trees has been dated at 10,000 years; mortar from the Oxford Castle, built some 800 years ago, was



dated at 7,370 years; and freshly killed seals have been dated at 1,300 years.<sup>78</sup>

While the public is led to believe that radiometric dating is trustworthy, many scientists, aware of anomalies like these, privately admit otherwise. Dr. William Stansfield, a biology professor at California Polytechnic Institute, puts it this way:

It is obvious that radiometric techniques may not be the absolute dating methods that they are claimed to be. Age estimates on a given geological stratum by different radiometric methods are often quite different (some times by hundreds of millions of years). There is no absolutely reliable long-term radiological 'clock.' The uncertainties inherent in radiometric dating are disturbing to geologists and evolutionists.<sup>79</sup>

It appears, then, that of all the cosmic chronometers we have looked at so far, radiometric dating is among the least reliable. It requires knowledge of past conditions that scientists do not have and involves a uniformitarian interpretation of Earth history that, even among secular geologists, is now highly suspect. Those who seek to know the true age of the Earth will not, therefore, be unduly influenced by this method.

## **Starlight and Time**

A third cosmic chronometer suggesting an old universe is the phenomenon of starlight. The argument here is deceptively simple: If, as many astronomers now assume, distant stars and galaxies are indeed billions of light years from Earth, then the universe must be billions of years old. If not, how could the light from those bodies have had sufficient time to reach us?

As I say, this argument is deceptively simple since it involves a number of crucial assumptions, none of which is demonstrably true. For example, the argument assumes that the starlight we are now seeing actually originated in a star or galaxy. It also assumes that the object really is billions of light years away. And it assumes that the light coming from the

object has traveled at the same speed throughout its journey to Earth. However, scientists can be found to challenge all these assumptions. More importantly, the challenges themselves underscore a crucial fact that we have met again and again in our study: The history of the universe (and therefore the truth about these assumptions) *cannot* be known with certainty by the empirical methods of natural science. A divine revelation is required, or we are shut up to ignorance and guesswork about the pre-human past.

But let us look at these assumptions a little more closely.

Consider first the assumption that distant stars and galaxies really are billions of light-years away. This is far from certain. The trigonometric method by which scientists get their most accurate measurement of astronomical distances is useful only to a limit of between two and three hundred light-years from the Earth. Beyond this they are reduced to educated guesses based on the size, intensity, and red shift of the bodies in question. Among these, the last is by far the most important since it is widely held that the red shift of a star or galaxy is directly proportional to its recessional velocity and distance from an observer. We have seen, however, that there is growing scientific uncertainty about the true meaning of red shifts. As a result, there is also uncertainty about the true size and age of the universe. Moreover, we have already encountered some of the solid observational evidence for a young universe (e.g., well-formed distant galaxies, paucity of supernova remnants, etc.). Yes, many astronomers now think that the most distant galaxies are about 11-12 billion light-years away. Others, however, departing from the Big Bang model, propose that they may be as near as 60 light days away! Only one thing is sure: No one knows for sure.<sup>80</sup>

Second, there is the assumption that the speed of light ( $c$ ) has remained constant throughout cosmic history. This too is far from certain. Dr. Walt Brown reports that over the last 300 years some 160 measurements of  $c$  indicate that it is decaying steadily. One Russian cosmologist, V. S. Troitskii, infers from the evidence that at the beginning of the universe  $c$  may have been 10 billion times faster than it is today (quite a blow to

Special Relativity)! Many modern cosmologists are intrigued with the thesis of  $c$ -decay. If verified, they believe it would go far towards explaining such puzzling phenomena as galactic red shifts, the cosmic background radiation, anomalous ages given by radiometric dating, and other cosmological problems associated with the Big Bang.<sup>81</sup>

But even if it turned out that  $c$  is not gradually decaying, other interesting possibilities remain for those open to the biblical testimony. Perhaps, for example,  $c$  was very high throughout the fourth, fifth, and sixth days of the creation week but then slowed to its present (constant) value on the seventh day, when God rested. Or perhaps, as some have suggested,  $c$  was influenced by the curse that fell upon all nature at the time of Adam's sin. On this view,  $c$  would gradually decay and then, at some point in the past, settle down to a norm, rather like the life span of humans over the first 2,000 years of cosmic history (Genesis 11). The Bible does not teach any of these views, but they all are consistent with its cosmogony and draw upon it for inspiration. Naturalists are not likely to consider them. Anyone open to biblical revelation will consider them with care.

Finally, there is the assumption that the light we see actually emanated from the objects we see—objects presumed to be billions of light-years away. Now in the universe of the naturalist, this is a perfectly reasonable assumption. But once we allow the Bible to speak to the issue, another possibility, just as reasonable, presents itself—namely that God, on the fourth day, simply “switched on the stars,” creating not only the heavenly bodies themselves, but streams of light connecting them with the Earth (and one another). In other words, it is possible that he instantaneously created a mature, fully functioning, Earth-related astronomical heaven—a heaven that had, as a necessary by-product, an appearance of old age.

Though the Bible does not explicitly teach this view, it is, in the minds of many creationists, the most biblical of all explanations for the apparent old age of the universe. The argument here is rooted in Genesis 1-2, where we learn that, in essence, all things were created instantaneously, ready to serve the family of man and therefore with an appearance of age. For example,

Adam and Eve, fashioned as adults, were clearly created with an appearance of older age. Would not the same, then, be true for the heavens and their contents? Would they not also have been created “up and running,” linked by light to the Earth, and ready to serve man as luminaries, signs, and markers of time? And would they not (to the eye of a modern scientist, in any case) have given the appearance of *very* old age, when in fact they and their light were altogether new born?

Here, say the creationists, is the great value of having God’s revelation: It supplies a true model, or paradigm, through which we may accurately understand what we see around us, including how and when it came to be. Yes, to a biblical illiterate starlight (and other natural phenomena) might indeed give the universe an appearance of great antiquity. But God has graciously supplied a revelation so as to prevent or correct that (false) impression. Of course, men are free to disregard his revelation in favor of their own (naturalistic) theories. But in that case they have none but themselves to blame when the appearance of things leads them to wrong conclusions about their origin and age—and much else besides. To judge from their difficulties in pinning down the age of the universe, such would appear to be the case among most modern cosmologists.<sup>83</sup>

In closing, it must be stressed yet again that the Bible does not reveal precisely how God created the stars and the light connecting them to the Earth. Perhaps the universe is really very small. Perhaps, in the past, light traveled at enormous speeds. Perhaps space is curved. Perhaps cords of light joined the newborn Earth to the newborn stars. *And perhaps the truth involves two or more of these possibilities.* Such uncertainty may seem disappointing, but we must remember: The value of considering these suggestions does not consist in trying to tease out of nature what God has not been pleased to reveal in Scripture. Rather, the value consists in helping seekers understand that it is actually quite reasonable to believe the biblical account of the beginning—and to feel sure that there is indeed a good explanation for the as-yet unresolved mystery of starlight and time.<sup>84, 85</sup>

In our evaluation so far we have seen that the biblical cosmology is readily understood, highly intuitive, logical, and well-supported by scientific and historical evidences—far more so than its naturalistic or pantheistic counterparts. Perhaps, then, the 45% of Americans who still embrace it are not so unreasonable as their opponents would have us believe. If so, careful seekers must not let the dogmatism, ridicule, or invective of the scientific establishment deter them from the hard work of carefully investigating all sides of the Great Debate.<sup>86, 87</sup>

## **Is BC Right?**

Is the Teacher’s cosmology “right?” That is, does it supply a convincing rationale for our deeply felt convictions about an objective moral order? Most would say that on this point the biblical teaching is especially satisfying.

Above all, biblical cosmology revolves around a personal god—a god who is altogether good and whose original creation was altogether good. Such affirmations deeply resonate with our ethical intuitions, supplying a solid theological rationale for our most fundamental impressions of the universe: that it *is* good, that it *should be* better, and that one day it *may well be* better. Accordingly, for many this revelation becomes the ground of an idealism and optimism that enables them to work hard for a better world even as they wait for God to bring in a perfect one. If Israel had not given mankind such a cosmology, surely our own intuitions about the universe would drive us to invent one very much like it.

We observe also that the biblical cosmogony supplies a clear theological base for many of mankind’s most cherished ethical norms. For example, it grounds our innate conviction about the sanctity of human life, teaching that man really is a being set apart; that he alone, among all God’s creatures, is fashioned in God’s own image and likeness; and that he therefore does indeed enjoy a (God-given) right to life and liberty, the right

use of which is man's only hope for securing the happiness he so avidly pursues.

It confirms our intuition that man is a purposeful being with God-ordained work to do and goals to reach.

It grounds our abiding sense that man, in his God-ordained development of the Earth, must carefully steward nature and lovingly watch over its animal life.

It sharpens our sense for healthy sexual relations, explicitly teaching that it is not good for men and women to live alone; that heterosexual marriage is divinely ordained for companionship, procreation, and teamwork; that in a marriage each partner has distinctive roles and responsibilities; and that husband and wife must be faithful to one another all their days.

In sum, we find over and over again that biblical revelation concerning *how things came to be* has much to teach us about *how they ought to be*. And if the unknown god—who formerly created and now sustains the moral order—were indeed to give us the one true cosmogony, would we not expect it to do this very thing?

## **Is BC Hopeful?**

Is the Teacher's cosmology hopeful? Eminently—chiefly because it posits a good creator whose original purpose was to be a loving Father to his free creatures. He is, quite clearly, a God who joys in the joy of his children. Seeing, then, that he also is an almighty creator, we take hope, knowing that he who purposed our joy in the beginning is doubtless well able to bring it to pass in the end. This is why suffering humanity will always welcome the biblical cosmogony with keenest interest—and why it cannot pass away. For the biblical creation story, unlike all others, is actually a whispered promise of redemption. A creator such as this cannot fail. He will bring his children back; he will meet them in the Garden; he will walk with them again.<sup>88</sup>

## NOTES

1. This quote, by Dr. John Gribbin, is found along with several more in *Darwin's Demise*, p. 127.

1.1. For a close look at ancient European chronologies confirming material found in Genesis 10-11, see Bill Cooper, *After the Flood* (New Wine Press, 1995). Also, for an interesting survey of North and South American legends that closely parallel the biblical stories of creation, fall, flood, and the dispersion at Babel, see Bill Johnson's article, "American Genesis: The Cosmological Beliefs of the Indians," (*Impact*, March, 2004). This article is available at [www.icr.org](http://www.icr.org).

2. Carl Sagan, "A Gift for Vividness," *Time Magazine*, Oct. 20, 1980. Cited in GWW, p. 94.

3. This quote is found in an article by Walter van de Kamp, entitled "Evolution and Cosmology." To read it and other historic papers on geocentricity, visit [www.ldolphin.org/geocentricity/index.html](http://www.ldolphin.org/geocentricity/index.html).

4. As seen in the following quotes, modern naturalists appear to take a perverse pleasure in dethroning man—and God—from their former glory. Observe, however, that in doing so their words take on an atmosphere of gloom and even despair:

The Earth is a very small stage in a vast cosmic arena. Our posturings, our imagined self-importance, the delusion that we have some privileged position in the Universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, I see no hint that help will come from elsewhere to save us from ourselves.

—Carl Sagan, *Pale Blue Dot*, Ballantine, 1977, p. 9.

Cited in GWW p. 93.



Man (with the rise of Copernicanism) begins to appear for the first time in the history of thought as an irrelevant spectator and insignificant effect of the great mathematical system which is the substance of reality.

—E. A. Burtt, *Metaphysical Foundations of Modern Science*, Doubleday, p. 90. Cited in GWW, p. 22.

The story of Christianity tells about a plan of salvation centered upon a particular people and a particular man. As long as someone is thinking in terms of a geocentric universe, the story has a certain plausibility. As soon as astronomy changes theories, however, the whole Christian history loses the only setting within which it would make sense. With the solar system no longer the centre of anything, imagining that what happens here forms the centre of a universal drama becomes silly.

—A. Burgess, “Earth Chauvinism,”  
Cited in *Vital Questions*, p. 133

5. See “Geocentricity and Creation,” by Gerald E. Aardsma, available at [www.icr.org](http://www.icr.org) or [www.refcm.org](http://www.refcm.org).

6. For an extended discussion of non-literal interpretations of Joshua 10, see G. Bouw, *A Geocentricity Primer*, (The Biblical Astronomer, 2004), Chapter 5; and James Hansen, *The Bible and Geocentricity* (The Association for Biblical Astronomy, 2005), pp. 37f. These books may be purchased at [www.geocentricity.com](http://www.geocentricity.com).

7. In addition to the story of Joshua’s Long Day, the Bible, in three separate places, recounts how God gave the ailing king Hezekiah a sign: He caused the shadow on Hezekiah’s sundial (or stairway) to go back ten degrees (or steps), (2 Kings 20:9-11, 2 Chron. 32:24, Isaiah 38:7-8). Isaiah writes, “So the sun returned ten degrees, by which degrees it had gone down,” (KJV). Bouw defends the view that the sun itself, and not just the shadow on the dial (or the stairs), moved backwards. In addition to examin-



ing the texts themselves, he cites numerous legends from around the world in which it is recorded that the sun moved backwards. See *Primer*, pp. 21-30.

8. For an in-depth discussion of Joshua's Long Day, see *Primer*, chapter 5. Here Bouw again cites many stories from around the world, this time referencing either a long day, a long night, or a long sunset. For example, with regard to an unusually long and frightening night, the Mayan Book of Princes states:

They did not sleep, they remained standing, and great was the anxiety of their hearts and their stomachs for the coming of the dawn and the day...“O, if only we could see the rising of the sun! What shall we do now?”...They talked, but they could not calm their hearts, which were anxious for the coming of the dawn.

Concerning the widespread historical evidence for a global long day, Bouw writes:

That some peoples have tales of a long night, while others tell of a long day, while none have both a long day and a long night tale signifies that Joshua's Long Day is not one account, originating in the mid-East, which has migrated all over the world. For if such were the case, then all nations would tell of a long day and none would tell of a long night, let alone a perfectly placed long sunset. So we must conclude that Joshua's Long Day was a real, historical event and not some fiction.

—*Primer*, p. 61

9. There are a number of biblical texts that have given some interpreters the impression that the Earth will be annihilated, (Mt. 24:35, 2 Peter 3:10-13, 1 John 2:17, Rev. 22:5). For example, Jesus said, “Heaven and Earth will pass away, but my words will not pass away” (Mt. 24:35). However, it is clear from other texts that it is only the *form* of this present world (i.e., universe) that will pass away, and not the world itself (1 Cor. 7:13). Thus, at

the consummation Christ will not first annihilate the present universe and then “start from scratch” by creating a new. Rather, it appears that he will re-form and re-fashion the elements of the old universe into a new one (Rom. 8:18-20, Phil. 3:21). That this is the biblical teaching is especially clear from the strong analogy between the glorified resurrection bodies of the saints and the glorified world of nature they shall inherit. Just as the saints former “natural” bodies will be called forth from the graves and glorified, so too will the world that God “re-creates” be glorified at Christ’s return (John 5:25f, Rom. 8:18-25, 1 Cor. 15:35-39). In sum, the Bible foretells that our present Earth will emerge from the fires of the consummation, and then, in a new and glorious form, abide forever in its (original) place.

10. Here are several of the most popular websites defending radical geocentrism: 1) [www.geocentricity.com](http://www.geocentricity.com), 2) [www.reformation.edu \(resources/science/geocentricity\)](http://www.reformation.edu/resources/science/geocentricity), 3) [www.galileowaswrong.com](http://www.galileowaswrong.com), 4) [www.galileowaswrong.blogspot.com](http://www.galileowaswrong.blogspot.com), 5) [www.theprinciplemovie.com/news](http://www.theprinciplemovie.com/news) // As of this writing, certain creationist ministries oppose the new geocentrism, though many of their leading voices are willing to entertain the idea that our Milky Way may well be the center of the universe. To read creationist articles critical of radical geocentrism, visit [www.creation.com](http://www.creation.com) and enter “geocentrism” in the search field.

11. Dr. Sikkema’s quote appears in an article by Philip Stott, entitled, “The Timothy Test, a Continuing Saga.” Available at [www.reformation.edu](http://www.reformation.edu).

12. This quote appears in an article by W. van de Kamp, entitled, “Einstein a Solipsist?” p. 16. Available at [www.ldolphin.org](http://www.ldolphin.org).

13. Fred Hoyle, *Frontiers of Astronomy*, (Harper and Row, 1963), p. 304.

14. *Primer*, p. 115. For geocentric interpretations of stellar parallax and aberration, see the articles on those topics by G. Bouw and J. Hanson, found at [www.geocentricity.com](http://www.geocentricity.com).

15. The Ellis quote is found in an article by W. W. Gibbs, *Scientific American*, 273(4):29, 1995. Cited in GWW, p. 92.

16. In order best to understand the new geocentric model the student needs visual aids. Several are available. Bouw, for example, has produced a video that features a mechanical device designed to illustrate the NTM (i.e., an “orrery”). It is entitled, “Geocentricity: The Biblical Cosmology.” GWW, in the CD Rom version, also contains a number of very helpful animations. Available at [www.geocentricity.com](http://www.geocentricity.com) and [www.geocentrism.com](http://www.geocentrism.com) respectively.

17. GWW, p. 351. To illustrate the idea of the universe as a cosmic gyroscope, Sungenis invites his reader to imagine a hole dug at the center of the Earth and a baseball placed therein. In this place, the baseball would hang suspended in mid-air, weightless and motionless. So it is, Sungenis argues, with the Earth. Like the baseball, it is suspended in mid-universe, “weightless” and motionless. He concludes this line of thought by saying:

Gyroscopic laws show that any force that attempts to move the barycenter will be resisted by the entire system; analogously, the Earth will resist any force against it with the help of the entire universe. Just as a small gyroscope will keep a huge oil tanker afloat across the ocean without swaying, so the universe in rotation does the same with the center of mass, the Earth. Interestingly enough, Anaximander (d. 547 B.C.) held to the same idea: “The Earth...is held up by nothing, but remains stationary, owing to the fact that it is equally distant from all other things.” Perhaps he obtained his view from the Hebrew writers that antedate him by at least a millennium.

—GWW, p. 362

18. It is not clear why a shift in the location of the stars, thereby “centering” them on the sun, would create a wobble in the universe. This might be true of a rotating globe full of honey, with more marbles embedded in one part than another. But in that case, the cause of its wobble

would be gravity acting on the globe from the outside. However, in the case of the universe, we have no idea what, if any, forces(s) might be working on it from the outside so as to make it wobble. Indeed, the most natural assumption is that God himself, for wise reasons, is the One who makes the universe revolve exactly as it does, thereby speaking to us through the four seasons. (See note 26)

[19](#). For Bennett's discussion of geocentric ether physics, see GWW, p. 427f.

[20](#). According to M. Selbrede, most geocentrists think of gravity as an effect of "ether pressure." This view was first articulated by G. L. Le Sage in the late 1770's. Since this idea is important, I here quote Selbrede's discussion at some length:

Le Sage postulated that the universe is filled with countless infinitesimal particles, which he termed "ultramundane corpuscles." These corpuscles are in extremely rapid motion, analogous to molecules in a gas, and are colliding continually with material objects from all directions, so that a net pressure is applied to all objects within this kinetic "ocean" of ultramundane corpuscles. In the case of a spherical mass in the middle of this corpuscular flux, the net force on the mass is zero, since the pressure is applied to it equally from all directions. However, in the case of two spherical objects near each other within this flux, the one sphere will block some of the corpuscles from colliding with the other, and vice versa. The objects shield one another from a portion of this flux, as determined by their mass and separation, such that there are more corpuscles pushing them together along the line joining their centers than there are keeping them apart. The closer they are, the greater the corpuscular pressure becomes. Le Sage calculated the well-known inverse square law from this shielding effect. In this theory, gravity is not a pull, it is an external push. According to this view, a man's weight reflects the difference between how many corpuscles are hitting him from above,

compared to how many are hitting him from below, and is therefore a function of the Earth's mass attenuating the upward-directed flux...It is easy to see why the Le Sagean theory is termed a physical theory of gravitation: its fundamental principle is simple enough for a child to grasp, without any metaphysical mumbo-jumbo (i.e., an appeal to relativistic curving of space, etc.).

Importantly, Selbrede goes on to discuss various evidences favorable to this view of gravity (e.g., that a barbell held horizontally is heavier than one held vertically; the behavior of pendulums before and after an eclipse, or deep within a mine-shaft, etc.). Whereas Newtonian and Einsteinian views of gravity cannot explain such anomalies, Le Sageanism does. (M. Selbrede, "Rebuttal of North and Nieto," available at [www.reformation.edu](http://www.reformation.edu)).

21. Philip Stott writes:

An intriguing point to note about this is that although several "proofs" have been put forward that the earth must rotate on its axis, all appear to be invalid. The Foucault pendulum, the earth's (supposed) equatorial bulge, geo-stationary satellites, and other phenomena have all been put forward by scientists who have not understood what Ernst Mach was talking about when he pointed to the crucial role of the "fixed stars." Einstein, in his fundamental paper on General Relativity, showed that he certainly understood. He noted that if relativity, *even in the form put forward by Newton*, were to hold, then if the earth did not rotate, the universe rotating around it would have to generate a field that would produce exactly equivalent forces. Hans Thirring demonstrated this explicitly by deriving the form of the field generated by the rotation of matter analogous to the rotation of the stars around the earth. He showed that the field due to a rotating shell of material leads to centrifugal force and Coriolis force as real forces, whereas in Newtonian mechanics they are fictitious—the apparent result of accelerations. Astounding as it may seem, there is

no experiment yet devised by science which has established whether the earth actually rotates or not.

—*Vital Questions*, p. 130

22. Evidence for a physical ether is discussed in Chapter 3 of this book, in the critique of Einstein's Relativity Theory.

23. In the previously mentioned article by Selbrede, the author writes as follows about the future of geocentric theorizing:

The case is no different with geocentric science. It too must develop a brand new dynamical theory to support its description of the behavior of the heavens. Unlike the peaceful development of Einstein's theory, the geocentric model's slow codification is being undertaken under tempestuous circumstances, in the face of ridicule, contempt, and self-indulgent scorn, yet propelled forward by laborers operating near their personal limits of physical stamina. Yet the work goes forward and should be allowed the time that was accorded to the preceding revolutions to bear their fruit.

24. For a helpful short survey of the case for geocentrism, including a discussion of the traditional arguments and evidences for heliocentrism, see Philip Stott, *The Earth Our Home*, available at [www.geocentricity.com](http://www.geocentricity.com). Also, see GWW, Chapter 4, entitled, "Answering Common Objections."

25. GWW, p. 430.

26. Since, in man's experience of nature, the four seasons embody a cycle of life and death, Christian interpreters of nature wonder if they mystically point to the truths of redemption. One suggestion is that spring typifies the birth of Christ, who, after millennia of spiritual cold and darkness, brought new life into the world, (John 1:4); summer represents the days of his childhood and youth when, like Israel's crops, he quietly grew in wisdom and stature, (Luke 2:52); fall points to the short three-year season of his earthly ministry, when he began to harvest God's believing children in Israel, (Mt. 9:37, John 4:35); winter recalls the dark days of his

rejection, death, and burial, in which the light and warmth of the world was seemingly extinguished, and when “no one could work,” (John 9:4, 5, 11:9, 12:35). This brings us again to spring, which may also be seen as typifying the day of Christ’s resurrection, when he brought life and light back into the world, once and for all, (John 1:5, Romans 6:4, 2 Timothy 1:10).

According to a similar (and related) paradigm, spring corresponds to the world in its pre-fall purity and vitality; summer to the first four millennia of mankind’s toil, when God was secretly working (especially in Israel) to prepare a global harvest; fall to “the fullness of time,” now some two millennia long, throughout which Christ, by means of the Church, harvests a people from all nations; winter to the end-time tribulation and agony of the true spiritual Church; and spring to the eternal season of light and life, inaugurated by Christ’s coming again, the resurrection of the dead, and the creation of new heavens and a new Earth.

[27](#). A University of Illinois physicist illustrates how a slight change in the Tychonic model of the universe would help to explain stellar parallax:

It is often said that Tycho’s model implies the absence of parallax, and that Copernicus’ (model) requires parallax. However, it would not be a major conceptual change for Tycho to have the stars orbit the sun (like the planets), which would give the same yearly shifts in their apparent positions as parallax gives. Thus, if parallax were observed, a flexible Tychonean could adjust the theory to account for it, without undue complexity. What if parallax were not observed? For Copernicus, one only requires that the stars be far enough away for the parallax to be immeasurable. Therefore, the presence or absence of parallax doesn’t force the choice of one type of model over the other. If different stars were to show different amounts of parallax, that would rule out the possibility of them all being on one sphere, but still not really decide between Tycho and Copernicus.

Cited in GWW, p. 350f.



[28](#). For a helpful animation of stellar parallax according to the geocentric model visit: <https://www.youtube.com/watch?v=stIDO8QBhww>

[29](#). GWW, p. 473f. See also Appendix 1 of GRBB, where Arndts discusses at some length the difficulty of interpreting the true cause of stellar aberration. In the course of the discussion he cites liberally from astronomer James Hogan, who, like Bennett, seems to interpret aberration as an ether effect. Says Hogan:

It's more as if different ethers were involved, one containing the Earth and (a nearby) streetlamp (situated in space), inside which there is no aberration, the other extending out to somewhere less than the Sun's distance, such that its annual motion within the Sun's frame produces the effect on starlight.

—J. Hogan, *Kicking the Sacred Cow: Questioning the Unquestionable and Thinking the Impermissible*, Baen Publishing, Riverside, NY, 2004, pp. 133-135

[30](#). R. G. Elmendorf, "The Labor of the Sun," an article found in *The Biblical Astronomer*, #92, available at [www.geocentricity.com](http://www.geocentricity.com).

[31](#). For further discussion of light traveling at superluminal speeds, see Chapter 3 of this book. Also, see GWW, Appendix 1, p. 559f.

[32](#). Experiments have shown that Newton's famous inverse square law does not work at all times and in all places. For example, scientists found to their amazement that two space probes, Pioneer 10 and 11, actually slowed down the further they got from the sun, exactly the opposite of what was expected. Also, as we saw above, bodies of the same mass and atomic substance, but with different shapes (i.e., surface areas) descend in a vacuum at different rates. And again, in deep mine shafts the inverse square law does not work as it does on the surface of the Earth. Such observations undermine the notion of gravity as a "force" that acts at a distance, or as a curvature in space-time. Rather, they tend to support an ether-based theory of gravity such as that defended by geocentrists.



Notably, God himself asserts that man's knowledge of the physics of space is, and always will be, limited. Thus, we find him asking Job, "Do you know the ordinances of the heavens? Can you set (or establish) their dominion (or rule) on the earth" (Job 38:33)? Similarly, he declares to Jeremiah, "If heaven above can be measured, and the foundations of the earth searched out beneath, then also will I cast off all the seed of Israel for what they have done" (Jer. 31:37). Here God seems clearly to insist that scientific man can neither discover the actual dimensions of the universe, nor fully understand the physical forces holding the Earth in place. Such passages stand as a sharp warning against precisely the kinds of assumptions and speculations that Big Bang cosmologists make about the universe. (For more on this subject, see Strouse, *He Maketh His Sun to Rise*, pp. 37-38)

[33](#). The following hymn well expresses the Hebrew perception of the ambiance of nature. Far from seeing the motions of things as a product of impersonal laws, they behold in all that moves the power, wisdom, goodness, justice, and very presence of God:

## I SING THE MIGHTY POWER OF GOD

*I sing the mighty power of God  
That made the mountains rise,  
That spread the flowing seas abroad  
And built the lofty skies.  
I sing the wisdom that ordained  
The sun to rule the day,  
The moon shines full at His command  
And all the stars obey.*

*I sing the goodness of the Lord  
That filled the Earth with food,*

*He formed the creatures with His word  
And then pronounced them good.  
Lord, how Thy wonders are displayed  
Where'er I turn my eye,  
If I survey the ground I tread,  
Or gaze upon the sky!*

*There's not a plant or flower below  
But makes Thy glories known,  
And clouds arise and tempests blow,  
By order from Thy throne.  
While all that borrows life from Thee  
Is ever in Thy care,  
And everywhere that man can be  
Thou, God, art present there.*

[34](#). These two quotes are cited in GWW, p. 6.

[35](#). GWW, p. 57.

[36](#). J. Silk, *The Big Bang*, (W. H. Freeman and Co., 1980), p. 53. Cited in GWW, p. 97.

[37](#). *Refuting Compromise*, pp. 156-157; GWW, pp. 102-104, 534f, 546f. Said Tegmark, after analyzing the data, “The entire observable universe is inside this sphere, with us at the center of it.”

[38](#). “Quantized Red Shifts: What’s Going on Here?” *Sky and Telescope*, August 1992, p. 128 (84:128). Cited in GWW, p. 112.

[39](#). Some theoreticians hold that red shifts are “intrinsic” to the universe itself. One of them, G. F. R. Ellis, argues, “If the Earth were at the center of the universe, the attraction of the surrounding mass of stars would also produce red shifts wherever we looked,” (Paul Davies, “Cosmic Heresy?” *Nature*, 273:336, 1978; cited in GWW, p. 98). This view of gravitational red shift led Ellis to propose a modified geocentric cosmology.

Similarly, Don DeYoung notes that laboratory experiments have proven that a rotating light source will produce red shifts of a “second order,” (those of the first order presumably being due to recessional velocity). Though himself no geocentrist, DeYoung finds the resulting explanation of red shifts “intriguing,” namely, that the stars may be revolving around the Earth! See article at [www.answersingenesis.org/Docs/399asp](http://www.answersingenesis.org/Docs/399asp)

[40](#). GWW, p. 498. Note that the “smearing” of red shifts is all the more to be expected if the Earth is traveling with the solar system around the center of the Milky Way, and the Milky Way is traveling with its galactic group towards Leo, etc.

[41](#). Harold Slusher, *The Origin of the Universe: An Examination of the Big Bang and Steady State Cosmologies*, (ICR, 1980), pp.12. Cited in GWW, p. 181.

[42](#). GWW, p. 96, footnote 332.

[43](#). J. Katz, *The Biggest Bangs*, (Oxford University Press, 2002), p. 111. Cited in GWW, p. 96.

[44](#). Y. P. Varshni, *Astrophysics and Space Science*, 43:3, (1976), p. 8. Cited in GWW, p. 106.

[45](#). To keep abreast of the latest discoveries in the search for new planets, see [www.planetquest.jpl.nasa.gov](http://www.planetquest.jpl.nasa.gov). Visitors should be warned, however, that in most cases the exuberant descriptions of newly discovered planets are not even based on visual sightings, but rather on “perturbations” of the host star itself, thought to be induced by a nearby planet. The proprietor’s enthusiasm is, however, understandable, since the Jet Propulsion Laboratory will not receive funds for its research unless it continues to give the government (and the taxpayers) something for their money.

[46](#). Duane Gish, “Evolution is not Based on Natural Laws,” (ICR, *Impact* article, July, 2006).

[47](#). See the article, “The Universe is Finely tuned for Life,” [@www.answersingenesis.org](http://www.answersingenesis.org).

[48](#). GWW, p. 468.

[49](#). *The Earth Our Home*, p. 30.

[50](#). For more on Global Positioning Satellites, see GWW, pp. 127 f, and Appendix 7, pp. 600 f. On the usefulness of an Earth-centered frame of reference, Russell Arndts quotes science historian Thomas Kuhn as follows:

Most handbooks of navigation or surveying open with some sentence like this: “For present purposes we shall assume that the earth is a small stationary sphere whose center coincides with that of a much larger rotating stellar sphere.” Evaluating in terms of economy (i.e., simplicity), the two-sphere universe (i.e., the geocentric universe) therefore remains what it has always been: an extremely successful theory.

—T. Kuhn, *The Copernican Revolution*,  
p. 138; cited in GRBB, p. 12

[51](#). The exhortation from Euler appears in an article by Philip Stott, “Towards a Biblical Cosmology,” available at [www.reformation.edu](http://www.reformation.edu). The following quote by Pope Pius X likewise admonishes scientists to see the practical value of conferring with divine revelation in all their theoretical and technological undertakings:

Human science gains greatly from revelation, for the latter opens out new horizons and makes known sooner other truths of the natural order, and because it opens the true road to investigations and keeps it safe from errors of application and of method. Thus does the lighthouse show many things we otherwise would not see, while it points out the rocks on which the vessel would suffer shipwreck.

—Encyclical of March 12, 1904, cited in GWW, p. 7

[52](#). Conservative biblical scholars readily calculate the exact date of the creation by consulting OT genealogies, especially those found in Genesis 1-11. Unlike their gospel counterparts, these genealogies are chronologically precise and unschematized (see Matthew. 1, where the writer uses a scheme of three groups of 14 generations to trace Jesus' family history). This means they contain no gaps, and may therefore be used to determine reliable dates for the key events of OT history. By this method many scholars conclude that the creation took place in 4,178 B.C., the Flood in 2,522 B.C., and the birth of Abraham in 2,170 B.C.. See *Refuting Compromise*, p. 297f.

[53](#). Even evolutionists recognize that “scientific” determinations of the age of the universe, life, and man are continually changing and, therefore, uncertain. A. Engel, an evolutionary geologist, is refreshingly candid on this point: “The fact that the calculated age of the earth has increased by a factor of roughly 100 between the year 1900 and today—as the accepted “age” of the earth has increased from about 50 million years in 1900 to at least 4.6 eons today—certainly suggests that we clothe our current conclusions regarding time and the earth with humility” (See MCT, p. 286.).

[54](#). The evidences cited here were drawn from four publications: 1) Russ Humphreys, “Evidence for a Young World” (an Impact article published by ICR, June, 2005), 2) *Demise*, pp. 51-76, 3) ITB, pp. 5-42, 4) MCT, pp. 285-336. See also the important book, *Thousands, Not Billions*, by Don DeYoung (Master Books, 2005).

[55](#). *Evidence for a Young World*, p. 1. Note that according to geocentric cosmology the Milky Way cannot be a spiral galaxy, unless the Earth lies at its center, as well as at the center of the universe.

[56](#). *Demise*, p. 65; ITB, pp. 27, 72.

[57](#). Though Dr. Walt Brown no longer subscribes to the idea of a shrinking sun, the 7<sup>th</sup> edition of his (ever-growing) book supplies a helpful discussion of, and considerable evidence for, this fascinating thesis. See

ITB, pp. 34 and 82. See also *Refuting Compromise*, pp. 169-171, concerning the faint young sun paradox.

[58](#). ITB, p. 34

[59](#). *Demise*, p. 66.

[60](#). Jonathan Sarfati, “The Earth’s Magnetic Field: Evidence that the Earth is Young,” *Creation Magazine*, March, 1998, pp. 15-17.

[61](#). ITB, p. 33.

[62](#). *Evidence*, p. 1.

[63](#). *Evidence*, p. 1.

[64](#). See Frank Sherwin, “The Devastating Issue of Dinosaur Tissue,” (Acts and Facts, published by ICR, June, 2005.). Also, *Revised Answers Book*, pp. 246-247.

[65](#). Don Batten, “Where are all the People?” This article is available at [www.answersingenesis.org](http://www.answersingenesis.org)

[66](#). *Evidence*, p. 1. See also Bill Cooper, *After the Flood*, (New Wine Press, 1995). Cooper’s meticulous research into ancient European history and genealogy lends remarkable support to the biblical account of mankind after the Flood and the Dispersion from Babel.

[67](#). For lists containing about 80 more cosmic chronometers, see *Demise*, pp. 68-69, and the appendix entitled “Global Processes Indicating Recent Creation” in Henry Morris, *The Biblical Basis of Modern Science* (Baker Books, 1984), p. 477-479. See also *Creation and Change*, pp. 159-180.

[68](#). Material for this section is drawn from John Morris, *The Young Earth*, (Master Books, 1994), pp. 93-118.

[69](#). See ITB, p. 94.

[70](#). Dr. Walt Brown has done much creative work along these lines. His magnum opus, *In the Beginning: Compelling Evidence for Creation and the*

*Flood*, is, among other things, a marvel of geological theorizing based upon the Bible and science. In this layman's opinion, no open-minded geologist can afford to neglect it.

71. ITB, pp. 41 and 83.

72. See *Demise*, pp. 53-58; ITB, pp. 37-41.

73. While C-14 dating (of organic specimens) is more reliable than radiometric dating (of igneous rocks), it is definitely subject to error. This is because accurate calculations of the age of a specimen depend upon our knowing, with certainty: 1) the rate of decay of the C-14 found in it, 2) the initial amount of C-14, and 3) the current amount (found in the dead specimen). Assuming for the moment that the rate of decay has been constant, how do scientists calculate the initial amount? They do so by making a *further* assumption, namely that the ratio of C-12 to C-14 in the specimen at the moment of its death was the same as we now find in the atmosphere (from which the specimen imbibed it):  $1:1 \times 10^{12}$ . Only on this assumption can they reliably calculate the initial amount. However, the assumption turns out to be deeply problematic, since we now know that the C-12 to C-14 ratio in the atmosphere is still changing, and probably did so in the past. Moreover, as Walt Brown points out, catastrophic conditions on the Earth in the recent past may have changed the ratio dramatically:

The assumption usually made (but rarely acknowledged) is that the ratio of C-14 to C-12 in the atmosphere has always been about what it is today, about one in a trillion. But that may not have been true in the ancient past. For example, a worldwide flood would uproot and bury pre-flood forests. Afterwards, less carbon would be available to cycle between living things and the atmosphere. With less C-12 to dilute the C-14 that is continually forming in the upper atmosphere, the ratio of C-14 to C-12 in the atmosphere would slowly begin to increase. If the ratio of C-14 to C-12 doubled and we did not know it, radiocarbon ages of things living then would appear to us to be one half-life (or



5730 years) older than their true ages. If that ratio quadruples, organic remains would appear 11,460 (2x5,730) years older, etc. Consequently, a “radiocarbon year” would not correspond to an *actual* year.

—Cited in *Creation and Change*, p. 168

For a helpful short introduction to radiocarbon dating, along with explanations for dates in excess of 6,000 years, see Ken Ham, ed., *The New Answers Book* (Master Books, 2006), Chapter 7, and *Thousands, Not Billions*, Chapter 3.

[74](#). For a proposed explanation of the acceleration of rates of radioisotope decay, see *Refuting Compromise*, pp. 382-383. Also, *Thousands, Not Billions*, Chapter 9, “Theories of Accelerated Nuclear Decay.”

[75](#). See the article by Carl Wieland, “Radiometric Dating Breakthrough,” in *Creation Magazine*, March-May, 2004, pp. 42-44.

[76](#). It is important to remember that 60,000 years is an upper limit for the age of the diamond. If the calculations were based on faulty assumptions, its true age would be less. See note 73.

[77](#). These examples of anomalous radiometric dates, and others like them, are discussed and annotated in *Demise*, pp. 60-63, and *The Revised Answers Book*, pp. 75-94. See also *Thousands, Not Billions*, Chapter 7, “Discordant Radioisotope Dates.”

In passing, we should mention one instance of radiometric dating that testifies quite loudly in favor of recent creation, the phenomenon of *orphan polonium radiohalos*. Radiohalos are discolorations in the crystal of igneous rocks, created by the decay of radioisotopes. As a rule, such halos appear in concentric circles, with each circle representing the decay of each successive daughter element, say in the staged journey from uranium through polonium down to lead. However, scientists have now discovered in the granite basement rocks of the Earth polonium halos *that show no*



*trace of uranium parentage*. This becomes quite significant when we realize that polonium isotopes have very short half-lives, ranging from around 140 days to 3 minutes! Now if, as evolutionists argue, the granite host in which these specks of polonium were embedded formed slowly through the cooling of magma, there should be no halos, since the radioactive emissions scar the crystal, but the crystal can only be formed after thousands of years of cooling. However, if the granite were suddenly created—including the tiny specks of polonium embedded within it—the result would be just what we find. This strange phenomenon so fascinates creationist researcher Robert Gentry that he has spent years defending the thesis that instantaneous creation is, by far, the most reasonable explanation for orphan radiohalos. To date, no one has been able to offer a better one. (See *Creation and Change*, p. 174, and *Refuting Compromise*, pp. 358-364).

[78](#). *Creation and Change*, p. 169

[79](#). *Demise*, p. 60-63.

[80](#). In the following paragraphs, Stott questions the accuracy even of our most “reliable” calculations of (nearby) astronomical bodies:

If we are going around the sun, then we have an orbit with a diameter of about 300 million km. That orbit can be used to deduce the distances to the nearest stars, which, after making some fairly reasonable assumptions, turn out to be about four and a half light years away. Building up from there, using more assumptions, guesses, and untested theories, we come to the conclusion that the universe is at least twenty thousand million light years in diameter.

If (however) the earth stands still, we do not have that base-line of three hundred million kilometers. The same observations could lead to a completely different conclusion. Assumptions made assuming the Copernican principle are no longer reasonable. Making some other fairly reasonable assumptions, one can conclude that the farther objects in the universe may be only about *sixty light days away*.

Different assumptions about how the stars move and how the ether behaves would lead to different distances, giving greater, or perhaps even a smaller, size.

—Philip Stott, *Vital Questions*,  
(Reformation Media Press, 2002, p. 136)

[81](#). For further discussion on this fascinating and important topic, carefully read ITB, pp. 232-237. See also *Creation and Change*, pp. 137-158.

82. (This note has been deleted)

[83](#). *God and Cosmos*, pp. 193-4.

[84](#). For an extended discussion of mature creation, with responses to common criticisms, see *God and Cosmos*, pp. 194-201.

[85](#). In writing this section I have relied heavily upon an excellent short article by Richard Niessen, “Starlight and the Age of the Universe.” It appeared in the periodical, *Impact* (ICR, July, 93). Available at [www.icr.org](http://www.icr.org).

[86](#). Evolutionists cite other natural phenomena in support of millions of years: varves, evaporites, fossil graveyards, fossil forests, bio-deposits, chalk deposits, coral reefs, rates of cooling in granite, rates of erosion, etc. By and large, these phenomena are easily explained with reference to a global flood, for which there is abundant historical and geological evidence. For an extended discussion of each, see *Refuting Compromise*, pp. 367-388.

[87](#). For further reading on biblical creationism, see Henry Morris, *The Biblical Basis For Modern Science* (Baker Books, 1999); Duane Gish, *Evolution: The Fossils Still Say No!* (ICR Books, 1995); Duane Gish, *Creation Scientists Answer Their Critics*, (ICR Books, 1993).

[88](#). The hope glimpsed in the biblical creation story is made explicit in many other passages of Scripture. Fittingly enough, one of the most beautiful and inspiring is found near the end of the book that brings the Bible to a close, the Revelation:

And I (John) saw a new heaven and a new earth, for the first heaven and the first earth had passed away. Also, there was no more sea. Then I saw the holy city, New Jerusalem, coming down out of heaven from God, prepared as a bride adorned for her husband. And I heard a loud voice from heaven saying, “Behold, the tabernacle of God is with men, and He will dwell with them, and they shall be His people, and God Himself will be with them and be their God. And God will wipe away every tear from their eyes; there shall be no more death, nor sorrow, nor crying; and there shall be no more pain, for the former things have passed away.” Then He who sat on the throne said, “Behold, I make all things new.” And He said, “Write, for these words are trustworthy and true.”

—Revelation 21:1-5

## Chapter 7

# THE WAY TO THE BEGINNING

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**I**n our search for the beginning, we have come upon much information—information from the realms of history, philosophy, science, and religion. Such information is necessary. The bridge to the beginning is built out of information—good information, even divine information.

But it is clear that information alone is not enough. If it were, our information-rich age would have produced a consensus about the beginning. Since it has not, the discovery of cosmological truth must depend on something more. Drawing upon some painful personal experience, I want to spend a few moments at the end of our journey discussing what I believe the “something more” to be.

In the early months of 1970, as I continued my search for spiritual reality, I met weekly with Father Gabriel Barry to dialogue about Christianity and Roman Catholicism. His preferred method of catechesis was simply to let me ask questions. I would raise an issue, he would answer as best he could and, if necessary, loan me books that explored in depth the topic at hand. By this method we had soon touched upon all the questions of life. And by it I soon realized that biblical religion was different from eastern religion. Fundamentally different. A crisis was brewing. Though I greatly desired to bring my spiritual quest to a satisfying conclusion, I now began to see that becoming a Roman Catholic Christian would mean abandoning my pantheism and—at the deepest level of our relationship—my pantheist friends. Furthermore, it would also mean embracing certain biblical doctrines that I found incredible, frightening, and even repellent. For the first time my search for spiritual reality was becoming difficult and

costly. Though I did not understand it then, my love of the truth was being put to the test.

During this challenging season, Father Barry and I discussed the question of origins. I wanted to know the official Roman Catholic position on evolution. In response, he gave me some books by Catholic theologians that, in essence, endorsed theistic evolution. Because of my own childhood indoctrination into evolutionism, I found this answer to be reasonable. Who could seriously question the fact of evolution? If God exists, he must have used evolution to “create” the cosmos.

More importantly, in time I also began to see in this answer a convenient solution to the apparent conflict between the Bible and eastern religion. For if the Bible did not speak clearly about the beginning (as Genesis certainly did not if cosmic evolution were true), then perhaps it also did not speak clearly on other matters—e.g., the nature of God, man, sin, Christ, salvation, and the afterlife. Perhaps the teachings of Jesus of Nazareth had a deeper, mystical meaning. Perhaps, as some asserted, he really did travel to India in his youth. Perhaps he really was a Hindu adept, a *bodhisattva*, an enlightened Master—the greatest of all time, no doubt, but one among many, nonetheless. In short, if the Bible spoke metaphorically about creation, perhaps it spoke metaphorically—and pantheistically—about all the rest.

In *The Test* I relate how things finally turned out for me. Here, however, I wish to make a confession that bears heavily on my theme in this book: the love of the truth and the search for the beginning.

I have often asked myself: if Father Barry had responded to my question about evolution differently; if he had defended the plain sense of Genesis; if he had supplied me with thoughtful books written by creationist authors; if, indeed, he had given me the book that I have now given you—would it have made any difference? Would I have turned from my pantheism to one or another form of orthodox (i.e., theistic and trinitarian) Christianity?

Such a question may be impossible to answer, but I will try anyway. With all the benefit of hindsight, and as best I understand my spiritual

condition at that time, I do not think it would have made any difference. Yes, the unknown god was definitely drawing me to an investigation of Christ and the Bible. And I was genuinely interested in discovering spiritual truth. But I was also reluctant. Pantheism was still new and exciting to me. I had invested much time and energy in it. My blossoming spiritual identity was wrapped around it. Its promise of enlightenment gave focus to my existence. It lay at the center of my most significant relationships. How could I summarily abandon it now?

Meanwhile, Christianity, for all its attractions (the chief of which was Jesus himself), increasingly seemed foreign and threatening. It said certain things I did not want to believe. It required certain decisions I did not want to make. And so, because I did not want to believe or submit, I easily found reasons to do neither. Yes, Father Barry's answer to my question about origins was defective. But I do not think more or different information would have made any difference. What I really needed was more honesty. But because, at that time, honesty was in short supply, I eventually abandoned my catechism and re-immersed myself in the world of Zen.

Today, more than thirty years later, writing the last chapter of a book on cosmology, I therefore put myself in Father Barry's shoes. I imagine a seeker sitting before me, someone who has read my book, someone such as myself those many years ago. He has just told me that he enjoyed the book and found it informative. Still, he is not persuaded. He needs more time to be alone and think. He simply cannot believe that the biblical beginning is true—or any of the other teachings of the orthodox Christian faith. He is grateful for our time together, but must temporarily break off the relationship. He will try to get in touch again later, when he has finally gotten things sorted out for himself.

I look at him, my heart sinking, knowing that he has no intention whatsoever of getting in touch later; knowing all too well the painful struggle that awaits him, yet understanding also that he will have to go through that struggle to reach his goal.

What do I say to him? What parting words would best serve to illumine his path and ease his way?

Here they are. Though focused on the question of the beginning, I believe they apply equally well to all the other questions of life.

Dear friend, thank you so much for taking the time to study with me. I know of little that is more rewarding than to think deeply with a seeker about one of the great questions of life. Being a part of your search for truth has been a high privilege and a deep joy. It was a gift to me. Thank you for it.

And now, as you head off on the next leg of your journey, please allow me to leave you with a few final thoughts. You have heard them before, but I believe they are important enough to merit a brief repetition.

Above all else, please continue to consider the proposition that your life is a test—a test of your love of the truth, set before you by a wise and loving unknown god. As I've told you elsewhere, there are many good reasons to believe this is so. And from the moment you do believe it is so, you will find that your life is suddenly framed, focused, and charged with new meaning. If you have been won to the test perspective, listen to it carefully: It will tell you everything you need to do. What's more, it will give you the hope and confidence to do it.

It will tell you, for example, that you must have *faith*. For if the unknown god has deposited within you a hunger to behold the beginning, obviously he means to satisfy it. You must, therefore, believe that somewhere out in the world he has graciously unveiled the truth about the origin of the universe, life, and man. Like wheat amidst chaff, or gold beside pyrite, it is partly hidden. But you must believe that somehow he will enable you—and every sincere seeker—to recognize it when you find it. You can find the truth, and you can be sure that it is the truth. But to do so you must believe that truth and assurance exist, and that they are waiting to be found by the one who sincerely seeks.

The test perspective will also tell you to cultivate *diligence*. A test would not be a test without difficulty; and where there is difficulty, there must be

hard work to overcome it. In the pursuit of truth, this means that you cannot run away from study, controversy, or confusion. Nor can you allow laziness to persuade you to defer to the judgment of experts. The experts may be right. On the other hand, in a world designed to test the lovers of truth, they may well be wrong, as history abundantly demonstrates. Thus the only way you can be certain about the beginning is to work hard to find it for yourself.

The test perspective also teaches you the importance of *self-confidence*. By this I do not mean the kind of confidence that says, “I have no need of anyone, human or divine, to help me. I can do it myself.” To the contrary, I mean the kind of confidence that says, “An unknown god has created me. He has given me spiritual common sense, reason, ethical intuition, and an inclination to hope for the best. He obviously desires me to use these faculties in my search for truth about the beginning. And I am confident that if I do, neither they nor he will let me down—no matter how humble my intellectual gifts.” This is godly self-confidence, healthy self-confidence. Because it is rooted in faith in a good and reasonable god, it means that you can boldly spurn all non-sense, irrationality, mystical double-talk, and moral compromise. Yes, at times you will be appalled by your own confusion and foolish mistakes. But you will still remain confident, knowing that he who made your faculties is well able to compensate for their defects, so long as your intention is pure. You can trust that when truth appears, you will indeed recognize it for what it is.

Finally, the test perspective teaches you the necessity of *courage*. In the face of two great challenges, it will definitely be needed.

First, your pursuit of truth may require you to stand alone—and therefore courageously—before men. Or to state the case more precisely, it may require you to stand virtually alone with a despised minority. In other words, social marginalization may well belong to the essence of the test of life. This makes sense. If a test is to count for something, it must cost us something valuable. And what (we often think) could be more valuable than one’s standing in the world—one’s position and reputation in the great



pecking order of human society? Ought we not, then, to imagine the divine Tester looking down upon a seeker, asking himself, “I wonder if he loves the truth enough to pay for it with the precious currency of his social acceptance?”

History certainly seems to bear this thesis out. With the benefit of hindsight we can see that in every generation the test has been especially rigorous at one or two chosen points. At such points, seekers were required to break with a majority of many on Earth in order to please a minority of One in heaven. In medieval Europe, for example, it was not at all costly to believe that the god of the Bible created the cosmos. It was, however, very costly (and, we now reckon, heroic) to challenge certain Roman Catholic interpretations of the Bible. Today it is not at all costly to believe that the universe evolved from an exploding singularity. It is, however, very costly to challenge that view in public—and costlier still to affirm that the biblical view is true after all. Could it be, then, that in our own time the unknown god has chosen the beginning as a special point of human testing? If so, it will take great courage to pass.

The second challenge, however, is even more daunting than the first. For here the test perspective will again require you to stand alone, but this time before the god of the Bible. And here, in the eyes of many, is the summit of human testing. If they are right, you will need your every ounce of honesty, courage, and love of the truth to reach the top.

Consider again the biblical beginning. You now know it must be reckoned with, since, as we have just seen, numerous trails of good evidence all converge in this single clearing. And yet you are tempted to flee it. Why? Because you know, deep down, that it threatens to precipitate a definite spiritual crisis should you come to believe that it is true.

You know, for example, that you cannot stop at Genesis 1 and 2, but must go on to Genesis 3. You know you cannot rejoice in *Elohim* (the wise, powerful, and loving God of creation), yet deny *Yahweh* (the holy and righteous God who governs, tests, rewards, and judges his people).

And you know you cannot be a child of the holy God without also being a child of the sinful Adam.

Accordingly, you find this cosmology both encouraging and unsettling. It beckons you not only to meet your maker, but also to bow before your ruler and your judge. It offers you hope, but also demands change. It invites you into a new world, but requires you to repudiate and leave behind the old. In short, it speaks to you as to an autonomous human self—a self that does not want to submit to a Self higher than itself—and bids you come and die.

If you doubt all this, please reflect on the following words of evolutionary philosopher Thomas Nagel, as he candidly discusses his own underlying motivations for embracing naturalism:

I am talking about...the fear of religion itself. I speak from experience, being strongly subject to this fear myself: I want atheism to be true and am made uneasy by the fact that some of the most intelligent and well-informed people I know are religious believers. It isn't just that I don't believe in God and, naturally, hope that I'm right in my belief. It's that I hope there is no God! I don't want there to be a God; I don't want the universe to be like that...My guess is that this cosmic authority problem is not a rare condition and that it is responsible for much of the scientism and reductionism of our time. One of the tendencies it supports is the ludicrous overuse of evolutionary biology to explain everything about life, including everything about the human mind.<sup>1</sup>

Listen also to evolutionary biologist Dr. Richard Lewontin, who says much the same thing in these oft-cited words:

We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failure to fulfill many of its extravagant promises of health and life, in spite of the tolerance of the scientific community for unsubstantiated just-so stories, because we have a prior commitment, a commitment to materialism. It is not that the methods and institutions of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our a priori adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counter-intuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is an absolute, for we cannot allow a Divine Foot in the door.<sup>2</sup>

These quotations are as instructive as they are troubling. They teach us that natural science is not the bastion of objectivity that we imagined it to be. They teach us that some people accept cosmic evolution, not because it is reasonable or evidentially sound but because it offers a way of escape from the unknown god and from certain unwelcome changes that he might require them to make. But most importantly, they teach us that there is something in us all (and not just in those materialists out there) that values personal autonomy above truth, self above god; something that does not want us to die, even if such a death were the very gateway to eternal life.

To stand alone before the god of the Bible is, I have found, to meet that something. To get past it and into the truth will take all the courage you have, and more besides. But to do so is to triumph in the test of life.

And that, dear friend, is the way to the beginning, as best I see it. Before you go, let me sum it up, that you may ever keep it in mind.

Embrace the test perspective. Have faith in the goodness of the unknown god. Seek his truth diligently, with all your heart. Trust your god-given faculties, no matter how feeble they may seem. Above all, be very courageous: courageous enough to stand alone before man, and courageous enough to stand alone before the god of the Bible.

If you do these things the unknown god will surely take note. Seeing your love of the truth, he will come to you in the way, introduce you to his Teacher, and take you back, back—all the way back—to the beginning.

When you arrive, be sure to get in touch. Like children, we will rejoice together in all that you have seen.<sup>3</sup>

## NOTES

<sup>1</sup>. Thomas Nagel, *The Last Word*, (Oxford University Press, 1997), pp. 130-131. Cited in John Byl, *The Divine Challenge: On Matter, Mind, Math, and Meaning*, (Banner of Truth, 2005). In this recent work, Byl thoroughly

compares and contrasts the biblical and naturalistic worldviews. Very worthwhile.

2. Richard Lewontin, “Billions and Billions of Demons,” *The New York Review* (January 9, 1997), p. 31.

3. To contact me, please visit [www.clr4u.org](http://www.clr4u.org).

## Appendix 1

# THE UNITY OF THE BIBLE

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**M**any believe that the unity of the Bible is the preeminent proof of its divine inspiration, authority, and trustworthiness. But what exactly is meant by the term “unity,” and how does the Bible display this telling characteristic?

As we saw at the outset of our journey, the phenomenon of unity is inseparable from order. We cannot behold unity unless we see it in an order of some kind. An order may be defined as a collection of component parts that has been integrated (i.e., unified) into a system by means of a definite plan. A strand of DNA, a cell, a flower, an eye, an ear, a brain—all are examples of naturally occurring orders. They are collections of component parts integrated into fantastically complex, beautiful, and functional systems according to a definite plan. Just to look at them is to know these orders could not possibly have arisen by accident. Self-evidently, they require and reveal a divine Orderer. They are one of the great proofs for the existence of a rational, powerful supreme being—a divine creator and preserver—who is at work in the natural world.

The Bible too is an order. Like an object in the fog, its orderliness requires some forward momentum on our part to be seen clearly—some time and study. But if we are willing to exert ourselves, we realize soon enough that the Bible does indeed have many component parts, and that they too are woven into a fantastically complex, beautiful, and functional system by means of a rational plan. Indeed, over time—and by God’s

gracious work of illumination—this unity will not only become evident, but compelling. It will be impossible to view the Bible as a random collection of Jewish myths and musings. No, it must be the purposeful creation of a rational supreme being—a divine revealer of truth—who seeks to work in the minds of men and nations. In short, we will come to see the Bible as a very special gift from the unknown god, a gift in which he discloses to all mankind the much-needed answers to the questions of life.

The outline below, summarizing material found in the Introduction to this book, is designed to display concisely the architecture and implications of the unity of the Bible. May it inspire you to further study of the Bible itself!

## **THE UNITY OF THE BIBLE**

### **I. Multiplicity**

- A. Sixty-six different books
- B. Written in three different languages (Hebrew, Aramaic, Greek)
- C. In eight different literary genres
- D. By about forty different authors
- E. Over the space of about 1600 years (ca. 1500 B.C. to 70 A.D.)
- F. Concerning thousands of persons, places, things, events, and teachings

### **II. Unity**

- A. One story (the creation, fall, and redemption of man and the cosmos)
- B. About one God (the triune Yahweh; Father, Son and Holy Spirit)
- C. Administering one plan of salvation (an eternal covenant between God and man, concealed in the Old Testament, revealed in the New)
- D. Centered around one Person (the redeemer, Jesus Christ: Prophet, Priest, and King)
- E. Who is attested to by one (large and diverse) body of signs:
  - 1. Signs surrounding Jesus' birth

2. Angelic visitations and testimonies
  3. Theophanies
  4. Miracles
  5. The Resurrection
  6. OT Messianic types
  7. OT Messianic prophecies
  8. The Church
- F. And worshiped by one people (believing Jews and Gentiles, past, present, and future)
- G. According to one (clear and comprehensive) worldview (biblical answers to the questions of life)

### **III. Implications: It's Unity Implies that the Bible is (or will be):**

- A. Divinely inspired (given by God through inspired men) (2 Tim. 3:16-17)
- B. Inerrant (true in all it affirms) (John 10:35, 17:17)
- C. Complete (no more scriptural revelations to come) (Eph. 2:19 22, Jude 1:3, Rev. 22:18-19)
- D. Trustworthy (Matthew 7:24-28)
- E. Authoritative (Matthew 7:29)
- F. Preserved (Matthew 24:36)
- G. Recognized (as God's Word) (Luke 24:45, 1 Thessalonians 2:13)
- H. Infallible (it will certainly accomplish what it was sent to do) (Isaiah 55:11, Colossians 1:3-6)

## Appendix 2

# OLD TESTAMENT MESSIANIC TYPES

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**I**n a tense confrontation with the religious leaders of his day, Jesus of Nazareth challenged his opponents, saying, “You search the Scriptures, for in them you think you have eternal life; and these are they that testify of me” (John 5:39). Here Jesus daringly claims that the Jewish Scriptures cannot stand alone; that by their very nature they are forward-looking revelations; that they await the coming of someone who will fulfill them and thereby unveil their hidden meaning; and that he himself is the one who does these very things. Thus, Jesus might well have said here what he had said earlier to his own disciples: “Do not think that I have come to destroy the Law and the Prophets. I have not come to destroy, but to fulfill” (Matthew 5:17).

Truly, these were radical statements. By introducing a new motif of promise and fulfillment, Jesus was actually introducing a new way of interpreting the Jewish Scriptures. Henceforth, he implied, men must see these writings as the record of life under an “old testament”—an old covenant (or agreement) that was secretly preparing the way for a new (Jeremiah 31:31f, Matthew 9:17, Luke 22:20, Hebrews 8:8-12). Moreover, they must now interpret this Old Testament (OT) “Christo-centrally”—that is, as mysteriously pointing ahead to the person and work of the Messiah, Jesus Christ (Luke 24:44-49). In reading its history men must therefore ask themselves “What is the hidden, Messianic significance of



these stories? What do they teach me about the Christ who was yet to come and in whose appearing they are now fulfilled at last?”

Jesus’ apostles definitely got the message. In their writings both to Jew and Gentile, we find them repeatedly citing or referring to the OT scriptures, seeking to display Christ in them all. Indeed, they even developed a special vocabulary to speak about this new method of interpretation, declaring that upon the vast terrain of OT history God has strewn, like so many precious gems, innumerable types (Greek, *tupos*: figure, symbol) of Jesus Christ (Romans 5:14, 1 Corinthians. 10:1-13, Hebrews 8:1-6, 1 Peter 3:21). A Messianic type, they taught, is any OT person, place, thing, institution, or event that prefigures Jesus of Nazareth, the events of his life, and the blessings of the new covenant he came to bring. The OT is loaded with them. They are, as it were, a vast multitude of shadows, all cast by one body: Christ and the things of his covenant (Colossians 2:17). With the help of the Holy Spirit, people can spot these types and see how they have been (or yet will be) fulfilled in Christ (Luke 24:45, 2 Corinthians 3). Thus, to understand the Old Testament at its deepest level, one must interpret it typologically, in terms of Jesus Christ.

Together with OT Messianic prophecies, the Messianic types have traditionally stood among the preeminent proofs of the divine inspiration of the Bible and the spiritual authority of Jesus of Nazareth. Today, however, many who have heard about Messianic prophecy know little or nothing about Messianic types. This is unfortunate, since the types are, if possible, even more impressive than the prophecies. In the prophecies God speaks of the coming Messiah through men (the prophets), showing that he knows the future. In the types, however, he speaks of the Messiah through historical events, showing that he not only knows the future but creates it as well! The types display Israel’s God as the sovereign controller of all history, even down to its minutest details!

The table below is designed to introduce seekers to the amazing but oft-neglected world of Messianic types. I offer it as an inducement for you to study the Bible and to determine for yourself whether or not the OT really

can be interpreted typologically and Christo-centrally. This will take some time and effort. In particular, it will require you to familiarize yourself with OT history (Genesis through Esther), the Gospels, and the Epistles. If you are new to the Bible, I recommend that you read the Gospels first, then the OT historical books, then the Epistles. As you travel back and forth upon the great plain of biblical history, keep your eyes opened wide. You too may see what multitudes of others have seen—astonishing correspondences between OT history and the things of Christ; correspondences so intricate, so beautiful, so numerous, and so improbable as to create a single indelible impression: Jesus of Nazareth must indeed be the Teacher come from God, and the Bible his inspired Word.

## OLD TESTAMENT MESSIANIC TYPES

OT Ref	Type	Fulfillment	NT Ref
Gen. 2	Adam, head and progenitor of an earthly race	Christ, head and progenitor of a heavenly race	Rom. 5ff 1 Cor. 15:20-28
Gen 2-3	<i>The Tree of Life</i>	<i>Christ, in whom is eternal life. The cross, where he died to give life to God's people</i>	<i>Jn. 5:21, 10:10 Rev. 2:7 Gal. 3:13</i>
Gen 6-9	The Flood, Noah and the ark	Christ, the ark of God, safely delivering his people through fires of judgment to a new heaven & a new earth	1 Pet. 3 2 Pet. 3
Gen. 14	<i>Mekchizedek, high priest of Salem</i>	<i>Christ, eternal high priest of his people, "the Jerusalem above"</i>	Heb. 5, 7, 12
Gen. 22, 24	Abraham offers his only son on wood as a sacrifice to God	God the Father offers his only Son on wood as a sacrifice to himself—and receives him back alive from the dead	Heb. 11
Gen. 28	<i>Jacob's Ladder</i>	<i>Christ, the one mediator between Heaven &amp; earth, God &amp; man</i>	<i>Jn. 1:51 1 Tim. 2:5-6</i>
Ex. -Josh.	Moses delivers Israel from Egypt and leads them through the wilderness to Canaan	Christ delivers his people from bondage to evil and leads them through the fallen world-system to a new heaven & a new earth	Gal. 1:3-5 1 Cor. 10 Heb. 4, 11 Rev. 12, 20
Ex. 12	<i>The Passover Lamb</i>	<i>Christ, the lamb of God, slain for his people so that he may pass over them in the day of judgment</i>	<i>Mat. 26 Jn. 1, 19 1 Cor. 5:6-8</i>
Ex. 16	Manna, physical food for Israel in the wilderness	Christ, the bread of heaven, spiritual food for God's pilgrim people in the world	Jn. 6 Rev. 12
Ex. 17	<i>Moses strikes the rock at Horeb, supplying water for Israel</i>	<i>God strikes Christ once for all, to supply the water of life to his people</i>	<i>Jn. 4, 7; Acts 2 1 Cor. 10; Rom. 6 Heb. 7</i>
Ex. 25	The mercy-seat	Christ, the place of meeting between God & man	Rom. 3, 5; Col. 1 Heb. 4:14-16
Lev. 16	<i>The scapegoat</i>	<i>Christ, the bearer and remover of his people's sins</i>	Heb. 10
Jonah 2-3	Jonah, a reluctant prophet swallowed by a sea monster	Christ, a willing prophet, swallowed by death but recalled to life by God to preach good news	Mt. 12:38-40

## Appendix 3

# NEW TESTAMENT REFERENCES TO GENESIS 1-11

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**L**ike all orthodox Jews, Jesus and his apostles assumed that Genesis 1-11 was a divinely inspired account of the good and bad beginning. They regarded it, not as myth or poetry, but as true history. They found instruction, warning, and comfort in the persons, places, things, and events about which Moses wrote. Indeed, a careful study of the passages listed below will show that Genesis 1-11 was foundational to the apostolic worldview. In particular, all of the NT writers presupposed that the creation and fall of Genesis 1-3 set the stage for a divine redemption that was prepared for in OT times and was now being fulfilled in their own.

The importance of Genesis 1-11 is indicated by the frequency with which the NT authors refer to it. Dr. Walt Brown, in an exhaustive survey, finds sixty-eight such citations or references. He also notes that every NT author refers to Genesis 1-11, that Jesus of Nazareth referred to each of the first seven chapters, that the NT authors refer to ten of the eleven chapters, and that sixteen out of twenty-seven NT books refer to Genesis 1-11.

The table below is a much-abbreviated version of Dr. Brown's, spotlighting some of the most important NT references to Genesis 1-11. For a complete listing, see Dr. Brown's excellent book, *In the Beginning*, (CSC Publications, 2001), pp. 283-4.

## NEW TESTAMENT REFERENCES TO GENESIS 1-11

NT Ref	Subject	Genesis Ref
Mt. 23:35	The death of righteous Abel	4:4
<i>Mt. 24:37-9</i>	<i>The dark days of Noah</i>	6:1-8:22
Mk. 10:6-8	Marriage ordained at the beginning of the creation	1:27, 2:24, 5:2
<i>Lk. 3:23-38</i>	<i>Jesus' genealogy traced through Adam to God</i>	5, 10, 11
Jn. 8:44	Satan, father of lies	3:4-5
<i>Rm. 1:20</i>	<i>Man present from the creation of the world</i>	1, 2
Rm. 5:12-21	Adam, earthly head of the human race, through whom sin entered the world	2:15-17, 3:1-19
<i>Rm. 8:20-22</i>	<i>Nature cursed because of Adam's sin</i>	3:17-19
1 Cor. 11:2-16	Man ordained head over woman at creation	1:27, 2:18, 22-23, 3:16
<i>1 Cor. 15:21-2</i>	<i>Death came through Adam</i>	2:16-17, 3:19
1 Cor. 15:45-9	Adam, made of dust, prototype of "natural" men and women	2:27, 3:23
<i>Eph. 5:30-31</i>	<i>Man must cleave to his wife, become one flesh with her</i>	2:24
1 Tim. 2:13-14	Adam created first; Eve deceived	2:18-23, 3:1-6, 13
<i>Heb. 4:1-10</i>	<i>God's Sabbath rest</i>	2:2-3
Heb. 11:1-7	Faith's Hall of Fame: Abel, Enoch, Noah and his household	4:3-5, 5:21-24, 7:1
<i>1 Pet. 3...</i>	<i>Noah, a type of all saved through water (baptism)</i>	6:14-16, 7:13
2 Pet. 3:4-5	Heaven and earth created by the word of God	1:1-2:3
<i>1 Jn. 3:12</i>	<i>Jealous Cain, prototype of worldly persecutors</i>	4:8, 25
Jude 14	Enoch, prophet of judgment	5:18-24
<i>Rev. 2:7, 22:2, 14</i>	<i>The Tree of Life, regained by God's redeemed children</i>	2:9

# SELECT BIBLIOGRAPHY

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## ***Recent Creation***

1. Arndts, Russell T., *Geocentricity, Relativity, and the Big Bang* (Lundquist Books, 2008). Available at [www.geocentricity.com](http://www.geocentricity.com)
2. Brown, Walt, *In the Beginning: Compelling Evidence for Creation and Flood* (CSC Books)
3. Byl, John, *God and Cosmos: A Christian View of Time, Space and the Universe* (Banner of Truth)
4. Ham, Ken (Ed.), *The New Answers Book*, (Master Books, 2006)
5. Kelly, Douglas, *Creation and Change* (Mentor Books)
6. Morris, Henry and John, *The Modern Creation Trilogy* (Master Books)
7. Morris, Henry, *The Biblical Basis of Modern Science* (Baker Books)
8. Sarfati, Jonathan, *Refuting Compromise* (Master Books)
9. ———, *Refuting Evolution* (2 Volumes) (Master Books)
10. Stott, Philip, *Vital Questions* (Reformation Media Press)
11. Sungenis, Robert; Bennet, Robert, *Galileo Was Wrong*, (Available at [www.geocentrism.com](http://www.geocentrism.com))

## ***Intelligent Design***

1. Behe, M., *Darwin's Black Box* (Simon and Schuster)
2. Denton, M., *Evolution: A Theory in Crisis* (Adler and Adler)
3. Dembski, W., *Signs of Intelligence: Understanding Intelligent Design* (Baker)
4. ——— and Colson, C., *The Design Revolution: Answering the Toughest Questions About Intelligent Design* (InterVarsity)
5. ———, *Intelligent Design: The Bridge Between Science and Theology* (InterVarsity)

6. Johnson, P., *Darwin on Trial*, (InterVarsity)
7. ———, *Reason in the Balance: The Case against Naturalism in Science, Law, and Education* (InterVarsity)
8. Strobel, L., *The Case for the Creator* (Zondervan)
9. Wells, Jonathan, *Icons of Evolution: Science or Myth? Why Much of What We Teach About Evolution is Wrong* (Regnery)

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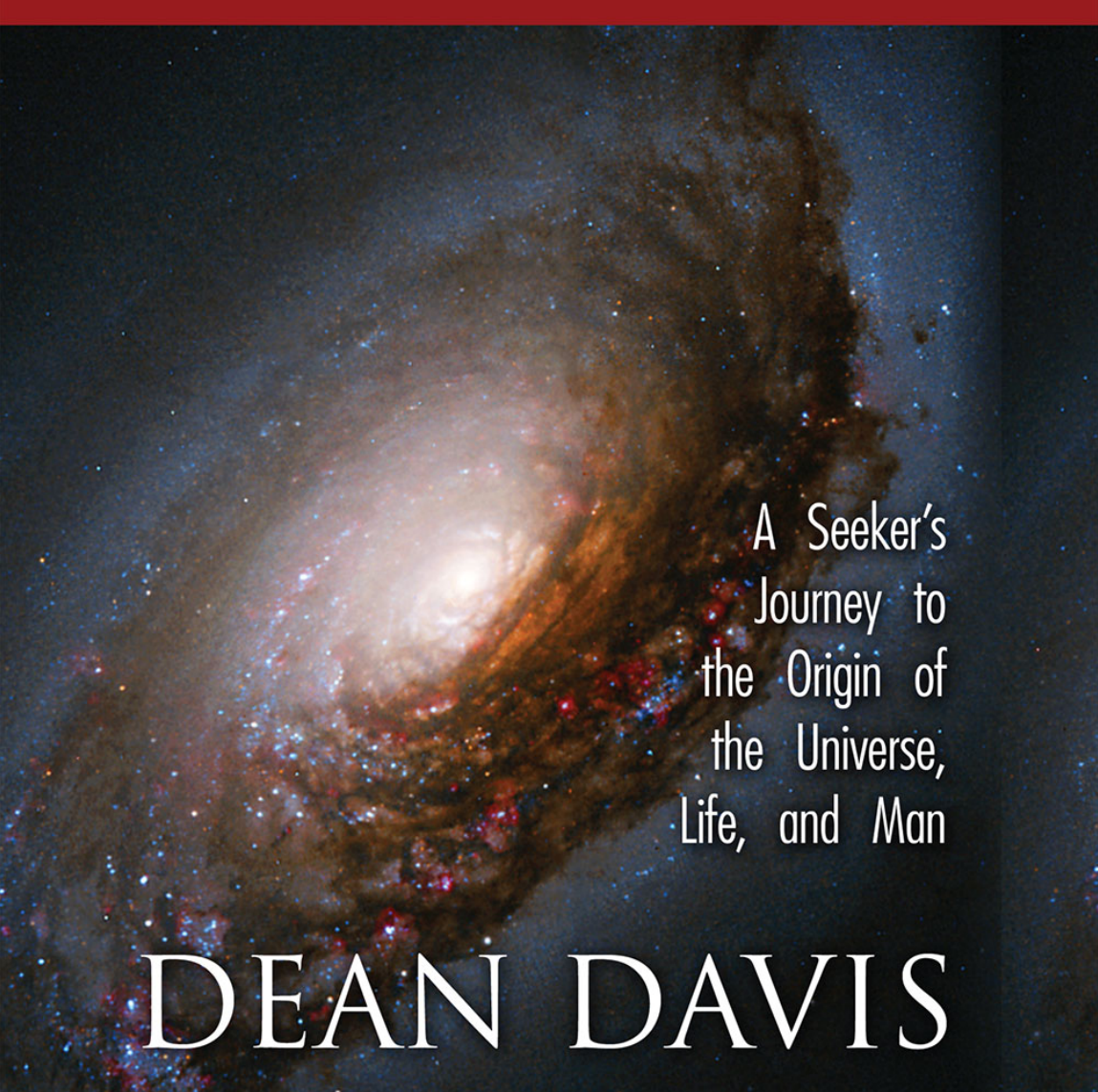
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