

---

## PREFACE

---

**F***riend of Science, Friend of Faith* is a deep revision of an earlier book called *When Faith and Science Collide*. The decision to amend the title was driven, in part, from hearing someone once explaining the premise of the book as being “not really about conflict, but about reconciliation.” The old title inadvertently drew more attention to the apparent clashes between science and Christian faith than on their resolution. The new title better reflects the nature of the work.

Why the need for a revision? For one, a great deal of new material was published in the last ten years that is pertinent to the conversation, from both scientific and religious perspectives. It is an exciting time to live, with new discoveries and insights coming out almost daily. On the scientific side, advances in DNA sequencing, for species ranging from whales to Neanderthals, is opening a whole new world of inquiry into the history of life. New fossils are rewriting popular understandings of how modern organisms are tied to those in the past, and evolutionary hypotheses are even being put to the test in benchtop experiments. On the religious side, significant contributions have been made by theologians and Christian scientists wrestling with how new scientific findings comport or challenge traditional understandings of the Bible. Some are encouraging, and some troubling.

A second reason is a maturation of my own understanding of the issues and conflicting voices at the intersection of science and the Bible. Chapters addressing the intelligent design and young-earth movements have been expanded, with more attention given to foundational assumptions, methods of argument, and the resulting impact on the mission of the church. More attention has also been given to the subject of biblical inerrancy.

Finally, with the benefit of readers and critics of the original book, I have tossed out some material that did not have the desired effect, reorganized the content into five parts to make the logical flow easier to follow, and added more than twenty new figures.



---

PART 1

CONFLICTS NEW AND OLD

---



# 1

---

## SETTING THE STAGE—CRISIS OF FAITH

---

Riley sat alone in her dorm room feeling as though her world was getting turned upside down. She had come to college two years earlier, full of dreams and aspirations of a career in the sciences. With a love for the outdoors and uncertain which field of science to pursue, she had tested the waters with introductory classes in both biology and geology. She had known her faith would be tested. Her parents and youth minister had forewarned her about the humanistic worldview pervasive in American universities. Full of the energy and confidence of a young bird launching from the nest, she was ready for the challenge. She believed what the Bible taught and had answers to challenge the flimsy presuppositions employed in support of evolution and millions of years.

But she did not encounter what she expected. She had anticipated arguments based largely on wishful humanistic thinking, with theories built on untestable assumptions that could not even reasonably be called science. As she plunged into her studies, she was increasingly confronted by both the breadth and depth of evidence for views she had previously dismissed. To make matters worse, the evidence was not just being preached by proselytizing atheists. Yes, there had been a few professors and fellow students who mocked all forms of religious belief, especially Christian belief, but the larger number seemed to be normal people honestly striving to understand how nature worked.

At a small group Bible study, she sat in silent upheaval as a fellow student spoke derisively of the supposed absence of transitional fossils to support evolution. Riley kept her mouth shut about the wealth of transitional fossils now known, ranging from feathered dinosaurs to whales with legs. Afterward, she caught up with Doug, a campus-ministry intern who was leading

the study. She asked him if being a Christian required belief in a literal six-day creation in the recent past. For Doug, there was a simple answer to this simple question. If God truly inspired the writing of the Scriptures, a literal, or “plain sense” reading of the Genesis account must be true. Any other reading would challenge its veracity and authority.

The next day, Doug called Riley from the lobby of the dorm to tell her he had brought her a book. She was genuinely appreciative of the effort, though less certain about the gift itself. The book was written by a prominent young-earth creationist. Back in her room, Riley opened the book at random to the second chapter, one of several devoted to debunking old-earth science and biological evolution. The chapter was filled with examples of “incontrovertible facts” documenting the impossibility of scientific claims. She read one, squinting and reading again, sure she had misunderstood. She read another and was equally confounded. She read the entire chapter, dumbfounded at the number of misconceptions and false assertions about fossils, scientific laws, and even the definition of terms.

She shook her head at the audacity of one in particular, that uniformitarian geologists assume that the rates of natural processes observed today were always the same in the past. She marveled that the writer could say such a thing, knowing that her “uniformitarian” professors taught that competing views for the demise of the dinosaurs included a giant meteorite impact and massive volcanic eruptions. No professor had *ever* taught her that rates in the past were constant, nor that they were all slow.

If the veracity of the Bible was linked with the purported truthfulness of the book she had been given, she could not fathom how the Bible could be considered the legitimate Word of God, at least not a God who valued logic, reason, and truth. Her disquiet began to turn to resentment as she contemplated the possibility that her family and church had unwittingly indoctrinated her with fairy tales. Though it would be months before she could bring herself to tell her parents, her Bible found itself that evening sitting in her waste bin, waiting for its new home in the county landfill.

---

There is a growing population of young adults, raised up in Christian churches, who could read this opening story and reasonably believe I was telling *their* story. In its general description, it is neither unique to one person’s experience nor infrequent in occurrence. Many tentative seekers could also

readily identify with Riley's experience, differing only in detail. For a time, they considered the possible truth of Christianity, until encountering the stumbling block of a recent creation and finding it insurmountable.

The underlying cause of these spiritual shipwrecks is hotly contested in the church today. For some Christians, it is the inevitable result of clashes between biblical and humanistic worldviews. Their primary sympathies lie with Doug, grateful for his faithful effort to reach out with a defense for the gospel and saddened by hearts hardened against truth. An implicit assumption is made that the stumbling block to faith is not really scientific evidence, but a basic unwillingness to take God at his word. If people would simply *believe* the Bible, they would *see* that science actually supports a young earth.

Other Christians argue, with equal conviction, that the battle lines have been drawn not just in the wrong spot, but entirely on the wrong field. Our imperfect interpretation of the Bible has been conflated with the Bible itself, a flawed theological foundation leading to the construction of an equally flawed scientific house of cards. It is the young-earth position that does not take God truly at his word, imposing human ideas on the biblical text. Doug, in this view, has erected a needless barrier in the path to faith—a well-intentioned builder of stumbling blocks!

Which view is correct? There is no shortage of websites, books, articles, blogs, and videos that claim to answer this question. Some are quite good, though very few back up to ask the more basic question of *how* to approach Scripture and science when they seem to conflict. History should teach us that this is not just a matter of “believing the Bible.” Seventeenth-century believers taking this simplistic approach unjustly condemned Copernicus and Galileo for undermining the “plain meaning” of Scripture that the sun orbits the earth. The Bible was not wrong, but many were too quick to assume that the traditional understanding of what the Bible taught was what the writers intended.

With history in mind, the objectives of this book are twofold. The first is to develop a general approach for addressing apparent conflicts whenever they may arise, in a way that honors Scripture and honestly engages science. It will not start with an assumption that science is right. Science, as the study of God's natural creation, will simply be allowed to raise questions that will drive us back to Scripture, with the humility to recognize that human understanding of God's perfect Word is not as equally perfect. While new questions may lead occasionally to new scriptural insights, none will challenge the truth of

the Bible nor any core Christian doctrine.<sup>1</sup> Rather, where multiple interpretations *could* be true for a particular passage, new insights may simply serve to dust away never-intended meanings that cloud our view, allowing the true message, one that was there all along, to shine more brightly.

The second objective of the book is to apply the approach to the current discord on origins to see what may be learned. In the pages that follow, we'll first look to see how believers in the past wrestled with apparent conflicts between science and biblical understanding to help us develop our approach for looking forward. As we apply this method to the subject of origins, science will be permitted to prompt a return to Scripture, looking with fresh eyes for what Scripture can tell us about itself on each question raised. Part of this exercise will require, and benefit from, an assessment of how our own culture influences the way we define terms like *truth* and *inerrancy*. Only after a thorough reckoning of the written Word (three chapters worth) will we dive into the strength of evidence offered up by those who study the material world.

My conviction is not only that modern science fails to contradict an accurate understanding of the Bible, but that the simplicity and elegance with which God's natural revelation illustrates his special revelation is breathtaking. My hope is that this book will not end with the last word of the final chapter, but that Doug will finish the opening story with a more edifying visit to Riley.

---

1. For example, the doctrines expressed in the Nicene and Apostles' Creeds.



# 2

---

## HISTORICAL CONTEXT—HELIOCENTRISM VS. SCRIPTURE

---

*“The sun rises and the sun sets...”* (Eccl. 1:5)

The year was 1633. Galileo Galilei stood before the ecclesiastical court for the final time under the demand that he recant his heresy that the earth was not the center of the universe. It was a confrontation more than 100 years in the making. Heliocentrism, the theory that the sun, rather than the earth, resides at the center of our solar system, was suggested as far back as the early Greeks and Romans, but was not taken seriously again until similar arguments were made by Copernicus in a handwritten book called the *Little Commentary* in 1514.<sup>1</sup> A century later, Galileo had amassed a sizable body of scientific evidence demonstrating that the sun—not the earth—was indeed the center of our local system. The Vatican, and many professing Christians at the time, vigorously opposed the idea on the grounds that it challenged the authority of the Bible. God inspired the words recorded in Ecclesiastes 1:5 and Psalm 19:6 saying that “the sun rises and the sun sets,” and that the sun’s “rising is from one end of the heavens, and its circuit to the other end.” Two additional Psalms proclaim that the earth is “firmly established” and “will not be moved”

---

1. Copernicus published a more expansive work in 1543 called *De Revolutionibus Orbium Coelestium* (*On the Revolutions of the Celestial Orbs*); Broderick, *Galileo: The Man, His Work, His Misfortunes*, 18.

(Pss. 93:1; 104:5), and the history of Israel's battles includes an account of a miraculous event when the sun stood still in the sky (Josh. 10:13). Because of these verses, it was strongly believed that Galileo's measurements and conclusions were not only erroneous, but heretical.

Modern Protestant believers are tempted to dismiss this science-church conflict as a Catholic mistake, but such an assertion is unwarranted. The Catholic Church is the focus of the historical account only because of the legal injunctions eventually levied against Galileo by the Vatican and its political authority to act on its indictments. The possibility that heliocentrism might be inherently in conflict with Scripture was a Christian concern, not just a Catholic one. Following the publication of the *Little Commentary*, Martin Luther, the father of the Protestant movement, spoke of the foolishness of heliocentric notions and cited Joshua 10:13 as effectively settling the matter.<sup>2</sup> John Calvin was another prominent Protestant who took issue with heliocentrism. A little more than a decade after the publication of *Revolutions*, Calvin wrote,

We will see some who are so deranged, not only in religion but who in all things reveal their monstrous nature, that they will say that the sun does not move, and that it is the earth which shifts and turns. When we see such minds we must indeed confess that the devil possesses them.<sup>3</sup>

Though it is not possible to know the condition of Galileo's heart four centuries removed, his writings suggest that he never felt that he was challenging Scripture or the Christian faith. Galileo did not suggest that the Bible was flawed. Rather he argued that the traditional interpretation of these verses was flawed:

The holy scriptures cannot err and the decrees therein contained are absolutely true and inviolable. But...its expounders and interpreters are liable to err in many ways; and one error in particular would be most grave and frequent, if we always stopped short at the literal signification of the words.<sup>4</sup>

---

2. *Luther's Works, Table Talk*, 358–59. *Table Talk* was published twenty years after Luther's death. If it does not accurately reflect Luther's views, as some claim, it nonetheless represents the thinking of the Protestant Christian recalling the conversation.

3. White, "Calvin and Copernicus: The problem reconsidered," 236. Calvin was not anti-science, nor did he support an overly literalistic view of Scripture, but he did write against heliocentrism.

4. Broderick, *Galileo*, 76.

Galileo argued that the interpretation of God's special revelation (Scripture) should be consistent with and illuminated by God's natural revelation (science). When faced with excommunication by the church and possible corporal punishment, Galileo signed a written abjuration confessing his sin and promising to cease his heretical teachings. For Galileo, however, the evidence for a sun-centered celestial system was so convincing that a true denial was a denial of reason itself. These sentiments were best recorded in an earlier, now frequently quoted statement,

I do not think it necessary to believe that the same God who gave us our senses, our speech, our intellect, would have put aside the use of these.<sup>5</sup>

The infallibility and authority of Scripture remain central tenets of Christianity, yet few Christians today hold that the earth is the center of the universe. Somewhere during the last four centuries, the church at large transitioned from a strictly literal interpretation of the verses in Ecclesiastes, Psalms, and Joshua, to an interpretation deemed more accurate even though less literal. It is still believed from Scripture that a miraculous event took place during Joshua's battle and that it is God who establishes the order of the universe, but Christians no longer argue that the intent of these Scriptures was to describe the physical movement of the sun and planets.

To avoid confusion over terminology, we need to be clear about what is meant here by the word *literal*. Some conservative Bible scholars define the word *literal* as the intended meaning taken within the context.<sup>6</sup> In this sense, *literal* is essentially synonymous with *literary*, where forms of literature, figures of speech, context, and the author's intent are all taken into consideration to arrive at the appropriate interpretation. While I concur with this approach to understanding Scripture, I find the definition of the term unfortunate, serving to confuse more than clarify. By this definition biblical poetry and allegory are correctly interpreted in a *literal* fashion, which means to interpret them *figuratively*. Meanwhile, among folks sitting in the pews, *literal* means nearly the opposite. A literal understanding is one that accepts the words to mean exactly what they say. A passage of Scripture is *either* literal *or* it is figurative.

Confusion on this subject has led some to speak instead of the "straight-forward reading" or the "plain sense" meaning of the text. This turns out to

---

5. Broderick, *Galileo*, 78.

6. *Chicago Statement on Biblical Hermeneutics*, Article XV.

be of questionable help, for there are many places in Scripture where one could argue that the “plain sense” reading is a figurative reading (think of the dragon of Revelation 12). With common folks in mind, I have chosen to use the more vernacular definition of *literal*, where a literal interpretation is one that accepts the words in question to mean just what the words say.

Returning to our historical account, fast-forward three centuries from the time of Galileo to Darwin, Hutton, and other scientists who presented scientific theories that again appeared to be in conflict with Scripture. Initially, one must ask if these modern conflicts are of the same essence as the conflict championed by Galileo, or if they are wholly different. Many Christian writers today argue with considerable conviction that they are indeed wholly different. The conflict arising from Galileo’s assertions altered our interpretation of expressions in the “Wisdom Literature” of Ecclesiastes and the poetry of Psalms, and simply brought to our attention that in Joshua descriptions are often made from the perspective of the viewer rather than from some fixed point in space. As an example, today we still insist that we can accurately predict the time of a “sunrise” even though we know the sun is not rising in a literal sense. In contrast, evolution and billions of years of earth history are said to challenge the very foundation of Scripture. If the opening words of Scripture cannot be taken literally, what can be? If a nonliteral interpretation of the creation story is accepted, are we not stepping out onto the proverbial slippery slope where ultimately nothing in Scripture can be taken at face value?

Though it is argued that the challenges to Scripture presented by Galileo and Darwin are quite different, it is not likely that church leaders (Protestant or Catholic) of the seventeenth century would have agreed.<sup>7</sup> Placing ourselves in their shoes, if it was conceded that the sun does not revolve around the earth, then a portion of Scripture that was interpreted literally for thousands of years must now be interpreted nonliterally. If the sun did not actually stop its revolution around the earth during Joshua’s battle, did a miraculous event really take place at all? Could we even believe with confidence that there was a God-ordained conquest of Canaan, a Davidic kingdom, or real prophets? Is the entire Bible mere allegory? Either science is right, or Scripture is right. Scientific theories are continually in flux and not all stand the test of time. Scripture, on the other hand, is God-breathed and immutable. Therefore, when science and Scripture clash, science must yield to Scripture!

---

7. Davis and Chmielewski, “Galileo and the Garden of Eden: Historical reflections on creationist hermeneutics,” 449–76.

The idea that science might be used to help interpret Scripture was also problematic. To allow the use of telescopes and mathematical calculations to arrive at an altered understanding of a biblical passage suggests that the Scriptures are not really accessible to the common person. And why would God allow his people to believe something false for millennia only to reveal the truth through secular scientists? Are scientists to be our new high priests and Nature our new revealed Word?

The *perceived* challenge was no different in the time of Galileo than it is today. Those who opposed heliocentrism on biblical grounds did so as passionately as people today oppose evolution and deep time.<sup>8</sup> So what is to be done? No one consciously wishes to repeat the mistakes of the past, but neither do we desire to make new mistakes in an effort to avoid old ones. How do we know when we should hold fast to a traditional interpretation of Scripture in the face of all opposition, and when we should welcome new discoveries to aid our understanding? Must traditional interpretations of Scripture make way for science every time a new theory comes along? Surely not, but how do we make these assessments?

Reliance on God's Spirit to provide illumination is a necessity. Having said this, we must acknowledge the human propensity for "relying" on the Spirit to reach conclusions determined before ever really seeking truth. The vast number of Christian denominations in existence is a testament to how often people reach different conclusions while all claiming reliance on the Spirit. God's Spirit does not lie or mislead, but our sensitivity to his working is imperfect. This book was written on the conviction that God, who created both the universe and the Bible, has given us both his Spirit and the ability to reason through a series of logical questions to address this issue.

## ASSESSING APPARENT SCIENCE-BIBLE TENSIONS

Here are three questions that can be asked when a scientific theory appears to conflict with Scripture:

1. Does the infallibility of Scripture rest on a literal interpretation of the verses in question?
2. Does the science conflict with the intended message of Scripture?
3. Is the science credible?

---

8. *Deep time* is a term used to refer to natural history going back millions or billions of years.

The questions do not start with science. Question 1 is not some form of, “Well, how strong is the physical evidence?” The questions address the scientific evidence only after the scriptural questions have been answered. Science initially serves only as the impetus for driving us back to the Bible for another look.

### ***Seventeenth Century Revisited***

Consider heliocentrism in this context. Prior to Copernicus, there was no reason to doubt the traditional interpretations of Ecclesiastes or related verses regarding the cosmos, for there was no evidence to call them into question. Christians and atheists alike held the words of Scripture to be true when describing the rising and setting of the sun, for this seemed to be self-evident. A reevaluation of these Scriptures was not necessary until Copernicus, and later Galileo, provided reasons to begin asking the questions above. Though the church was initially slow to ask these questions, they were all eventually addressed (though perhaps not consciously in the order suggested).

#### *Question 1: Does the infallibility of Scripture rest on a literal interpretation of the verses in question?*

We can approach the relevant verses today in much the same fashion as they would have been approached in the days of Galileo. Passages such as Solomon’s description of the sun rising and setting<sup>9</sup> and Joshua’s reference to the sun standing have two possible interpretations that would not call into question the infallibility of Scripture. The phenomena described could have happened exactly as recorded (sun orbits earth), or the phenomena could have happened as witnessed from the reference point of the human observer. In other words, the passages accurately describe what Solomon and Joshua *saw*, just as we may accurately describe the beauty of a “sunset” rather than an “earthroll.”

References to the immovability of the earth in the Psalms could likewise be interpreted in two ways. The literal, “plain sense” reading is that the earth is stationary. But by allowing Galileo’s work to prompt us to take a deeper look, we may discover that the expression “will not be moved” does not always mean “assigned to a fixed point in space.” Using Scripture to interpret Scripture, we find the same phrase (same Hebrew words) in Psalm 16:8 where David says, “I have set the LORD always before me: because he is at my right hand, I shall not be moved” (KJV).<sup>10</sup> David obviously was not referring to his

9. Though generally attributed to Solomon, the author of Ecclesiastes is not known with certainty.  
10. Hebrew: אֵמוֹתַי בַּל (‘emowt-bal), “be moved, not”; NASB translates as “not be shaken.”

geographical location, suggesting he was now fixed in one position, no longer able to step forward or back, left or right. He was speaking of the firm establishment of his own welfare in the providence of God. The same may be said for the earth. The planet is firmly in the providential care of the Creator, and it will not be removed before its time.

These observations illustrate that Bible-honoring, nonliteral interpretations are *possible* for these passages without assessing which is more accurate. This brings us to the next question.

*Question 2: Does the science conflict with the intended message of Scripture?*

It is clear to us today that the central message of these texts was never celestial mechanics. Solomon's message was not instruction on solar migration, but about the futility of human efforts. Joshua's message was intended to relate to future generations that God is master of his creation, intervening in a marvelous and incredible way on behalf of his people. A lesson in orbital dynamics would have only confused ancient readers and distracted from the power of the intended message.

When considering the Psalms, even independently of the scientific evidence, what message is of greater significance: the motion of the planet, or the fact that it was made, set into place, and protected by the Lord God? Of course, Scripture does not have to be limited to a single meaning. The Psalms could speak of *both* the immobility of the earth and God's provision for it, but nothing is ultimately lost from Scripture if it becomes evident that the Bible was not written with instruction on the orbit of planets in mind. In fact, brushing away the unintended understanding serves to allow the true message to fully capture our easily distracted attention.

These observations bring us to the recognition that Galileo's science presents no threat to Scripture. The only remaining question, then, addresses the *quality* of the science.

*Question 3: Is the science credible?*

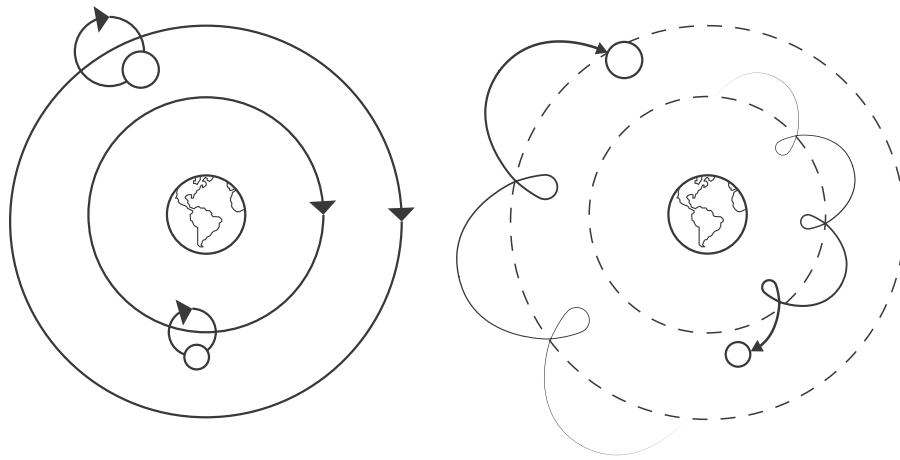
We take the credibility of Galileo's observations much for granted today. Of course the earth revolves around the sun. But consider the seventeenth-century farmer or store clerk pondering the unbelievable assertion that the sun stands still while the earth hurtles through space at breathtaking speed. Could Galileo bring his observations into the laboratory and test them? Could he contrive a way in which he could physically see the earth's motion? If the earth continually

spins toward the east at 1,000 miles per hour, surely the wind would always blow to the west as an unrelenting super-hurricane. Nothing could remain standing!

Galileo could not physically see the earth in motion, nor were his hypotheses fully testable in the laboratory. Most of his conclusions derived from calculations based on observations of the time and position of planets millions of miles away. There was already a scientifically based explanation for the position of planets that left the earth at the center. Ptolemy had a system of equations that allowed the path of each planet to be predicted as it traveled around the earth. So why trade in Ptolemy's universe for Galileo's?

The trouble with the Ptolemaic system was at least twofold. First, from a human perspective, the planets periodically appear to reverse direction for a time, requiring each to travel along a mini-orbit, called an *epicycle*, as it traversed its much larger orbit around the earth (Fig. 1). A heliocentric model accounted for planetary motion with simple orbits, without the need of epicycles. Second, the planets continually drifted from the predicted Ptolemaic path, requiring periodic corrections. The heliocentric model required fewer adjustments over time (especially with Kepler's discovery that the orbits were elliptical rather than circular).

A third problem, unknown to Galileo and his contemporaries, would not be understood until Isaac Newton's formulation of gravity a half century later.



**Figure 1**—Geocentric model showing orbits and epicycles of two planets traveling around the earth. The looping arrows on the right show the expected pathway combining the orbits and epicycles on the left.



Gravity provided a logical mechanism for the orbits of the planets around the much more massive sun. No physical mechanism could account for the orbits or epicycles of the geocentric system.

It was further appreciated that not all legitimate science is done in a laboratory. Hypotheses may be drawn and tested using both historical and distant observations of natural phenomena. We will dive more deeply into this subject in Chapter 8.

## WHY DIDN'T THEY SEE IT?

The scriptural conclusions drawn above seem obvious to many Christians today, so it is worth considering why they were not viewed as obvious in the days of Copernicus and Galileo. We benefit today from a long history of acceptance of the current interpretations of Ecclesiastes 1:5; Joshua 10:13; and Psalms 19:6; 93:1; and 104:5 by theologians and preachers we trust. At the time when theologians were first grappling with heliocentrism and its scriptural implications, there was no history of acceptance. Every believer who decided that the Bible was not teaching about planetary movement did so without the explicit support of the current and ancient church body. It is far easier for us to believe as we do today with more than three centuries of belief by Christians who paved the way before us.

The idea of reevaluating long-standing scriptural interpretation because of scientific evidence was unsettling to seventeenth-century Christians, and it continues to be unsettling today, often because of a sense that any reevaluation driven by science is “giving up ground.” There are at least two underlying reasons for this feeling.

### ***Problem 1: Failure to Recognize That Nature Reflects Its Author***

We tend to think of the Bible as being a self-contained document requiring no other source than God's illumination for understanding. At one level, this is true. The central message intended for all times and all believers must be understandable apart from scientific observations only available after the Renaissance or the nuclear age. But what of unintended meanings that we may have unconsciously added to Scripture? Seventeenth-century Christians believed that the intention of Ecclesiastes 1:5 was to teach both on the condition of humanity *and* on the movement of planets. The twenty-first-century Christian believes the intent was only instruction on the condition of humanity. The central message remains unchanged and independent of knowledge

of modern scientific discovery. Knowledge of science served only to cast off an unintended, secondary message.

Even this makes us uneasy, though, because of a sense that science should not play *any* role in understanding Scripture. We forget that God repeatedly uses his natural creation, even within the pages of Scripture, to illuminate his message. Indeed, Romans 1:20 tells us, “For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made....” Scripture repeatedly draws analogies from the natural world to convey spiritual realities.<sup>11</sup> If nature reflects its Author, we should expect then that a thorough study of nature will occasionally give us previously unrecognized insights into the Scriptures themselves.

Far from giving up ground, these new insights can be thought of as freshly plowed soil that unearths problematic rocks to discard. The rich theological soil was there all the time, but our understanding is improved by removal of a few infertile interpretational rocks. In this sense, it is *gained* ground.

### ***Problem 2: Failure to Differentiate Scripture and the Interpretation of Scripture***

The second and perhaps more important reason reevaluation of Scripture is unsettling comes back to our tendency to conflate God’s Word with our interpretation of his Word. God’s Word is immutable and true; our interpretation is not always so. Failure to recognize this has the potential to cause tremendous personal upheaval. If the weight of evidence begins to accumulate that my interpretation is in error, but I am unable to differentiate my interpretation from Scripture itself, I will begin to retreat into a world of contradictions where some truths must be ignored in order to cling to others.

This can be illustrated using a variation of the familiar parable of houses built on rock and those built on sand. In this reformulated parable, Scripture is the foundation and our interpretation is the house built upon it. Two builders both recognize the inferiority of sand and build their houses on rock. When small storms pass, both houses are damaged, but still stand. One builder recognizes defects, not in the foundation, but in the design of the house built upon it. He modifies the construction to anchor it more effectively on the undamaged foundation and weathers the next storm with few ill effects.

---

11. Examples of nature used to illustrate theological principles: industry of ants (Prov. 6:6), responsiveness of sheep (John 10:3), security of rock deer (2 Sam. 22:34), sinners compared to weeds/tares (Matt. 13:24–43), kingdom of God compared to seeds and leaven (Matt. 13:3–23, 33–35).

The second builder, unable to see the difference between structure and foundation, refuses to see damage as weakness and builds a second story with the same faulty construction. Living on the newly built second floor, the builder remains confident because the foundation is sure. Unrepaired and weakened by the weight of additional floors, the house eventually falls. Conditioned by years of belief in his own work, the builder's last thought is that the *foundation* has failed him.

In this light, consider the plight of a group of eighteenth-century Christians still convinced that the now widely accepted theory of heliocentrism directly contradicts Scripture. Unable to distinguish between their understanding of Scripture and Scripture itself, they hold fast to belief in an earth-centered universe. As the evidence continues to build for heliocentrism, the group finds various ways of coping with the assault on their faith.

- Some come to believe that scientists throughout the Western world have conspired to maintain the longest-running hoax in human history.
- Others, unable to conceive of a conspiracy of such immense proportions, believe that scientists are accurately reporting what they see, but that God's natural creation does not reflect the way it was actually made. The universe was created with the *appearance* of heliocentrism, perhaps to test believers, or to mislead the godless who are unwilling to have faith in God's eyewitness account.
- A third subset argues that nature accurately demonstrates geocentrism if one has a biblical worldview. Ministries are established pointing out the ever-changing nature of science versus the immutable Word of God, piling up "evidence" against the biblically compromising position of heliocentrism, and linking the degradation of societal morals to the disregard of God's clear teaching.<sup>12</sup>
- A final portion responds by simply insulating themselves from the discussion and believing what they wish without having to wrestle with difficult evidence.

---

12. These are not just hypothetical. Some geocentric ministries still exist today, e.g., *Christian Flat Earth Ministry*, <https://christianflatearthministry.org>.

With the clarity of hindsight, all four of these methods of dealing with the challenge of heliocentrism can be seen as poorly designed constructions built upon a foundation that is intrinsically solid, but of little benefit to the builders. So where does this leave us when considering more contemporary issues like the age of the earth or evolution? Are those standing against the prevailing scientific wisdom fighting the good fight, or are they building the same faulty construction as our unfortunate eighteenth-century holdouts described above? This should not just be a matter of personal opinion. We should be able to discern the truth through a study of Scripture, and the Spirit's illumination.

The next three chapters will work toward an answer to a variant of Question 1: Does the infallibility of the Bible rest on a literal interpretation of the creation story? We'll start broadly in Chapter 3, considering how references to nature are employed throughout the Bible and how they relate to our understanding of inerrancy. Chapter 4 will draw attention to what can be learned from a comparison between the opening chapters of the New and Old Testaments before focusing full attention on the Genesis text in Chapter 5.

---

PART 2

THE MEANING OF SCRIPTURE

---



# 3

---

## NATURE AND BIBLICAL INERRANCY

---

The doctrine of inerrancy is a belief that the Bible, by virtue of being inspired by the Holy Spirit, is free from error in all it intends to teach.<sup>1</sup> Nothing false is affirmed or defended. In short, it is *true*. This is a central doctrine of the Christian faith that is widely affirmed by believers. There is less unity, however, on what exactly this means. One common understanding says that if the Bible is truly inspired by God and without error, then it must be true for every subject upon which it touches. This view, which I will call *comprehensive inerrancy*, is characterized well by a quote from John McArthur,

Scripture *always* speaks with absolute authority. It is as authoritative when it instructs us as it is when it commands us. It is as true when it tells the future as it is when it records the past. Although it is not a textbook on science, wherever it intersects with scientific data, it speaks with the same authority as when giving moral precepts.<sup>2</sup>

This understanding does not discount the use of figurative language in Scripture. But when observations of nature are made that are not clearly metaphorical, phenomenological, or common figures of speech, there is an expectation that the Author of Creation has inspired truthful and accurate descriptions of the physical realm.

Others have argued that this view goes beyond Scripture's own claim for itself, and imposes a modern Western definition of inerrancy that the orig-

- 
1. *Chicago Statement of Biblical Inerrancy*, Article XI, reads, "We affirm that Scripture, having been given by divine inspiration, is infallible, so that, far from misleading us, it is true and reliable in all the matters it addresses."
  2. McArthur, "Creation: Believe it or not," 14–15.

inal writers would not have recognized.<sup>3</sup> According to 2 Timothy 3:16–17, “All Scripture is inspired by God and profitable for teaching, for reproof, for correction, for training in righteousness; so that the man of God may be adequate, equipped for every good work.” This verse makes no claim of instruction on subjects such as medicine, technology, or nature. If the intention of Scripture is to communicate truths about the kingdom of God, is God not free to use illustrations from nature that were common to the perspective of readers at the time, without charge of error? Descriptions of nature that anticipated modern scientific discoveries would have served only to confuse the original audience and distract from the intended message.

The theological term for the second view is *divine accommodation* (or just *accommodation*). It is not a new idea dreamed up to allow room for the science of the industrial and nuclear ages, but is found in the writings of respected church fathers as far back as Origen (third century) and Augustine (fifth century).<sup>4</sup> John Calvin, though critical of heliocentrism, nonetheless argued that our “slight capacity” for understanding *necessitates* that God condescend to our abilities and comprehension, comparing it to a mother speaking in “baby talk” to her infant child.<sup>5</sup>

Either view (comprehensive inerrancy or divine accommodation) *could* be true regarding the Bible’s “intersection with science.” So how do we know which is *actually* true? For an isolated passage in Scripture, the answer can be difficult to ascertain. As an example, consider the inspired prayer of Samuel’s mother, Hannah, in 1 Samuel 2:8, which includes the statement, “For the pillars of the earth are the LORD’s, and He set the world on them.” Few reading this today believe the earth rests on physical pillars. Among those who hold to biblical inerrancy, agreement is virtually universal that this passage is *not* providing instruction on the physical structure of the earth. But the rationale for that conclusion differs dramatically for the two views.

For the comprehensive-inerrancy view, reference to pillars of the earth must represent a figure of speech or metaphor for stability that was

---

3. Walton and Sandy, *The Lost World of Scripture: Ancient Literary Culture and Biblical Authority*; Greenwood, *Scripture and Cosmology: Reading the Bible Between the Ancient World and Modern Science*; Miller and Soden, *In the Beginning...We Misunderstood: Interpreting Genesis 1 in its Original Context*; Hill, *A Worldview Approach to Science and Scripture: Making Genesis Real*.

4. Origen, *Homilies on Jeremiah and 1 Kings* 28, 198–99; van Bavel, “The Creator and the integrity of the Creation.”

5. Calvin, *Institutes of the Christian Religion*, 1.13.1. Calvin’s quote is quite similar to the words of Origen more than a thousand years earlier (cited above).



well known *at the time of writing*.<sup>6</sup> If, on the other hand, the Israelites of Hannah's day actually thought that the earth rested on some sort of solid foundation, then this passage represents an example of divine accommodation; God condescended to the limited and imperfect human understanding of nature to communicate the truth of his authorship and sustaining power over his creation.

The only way to ascertain which view is correct, short of a direct revelation from God, is to survey the entire Bible for references to nature and compare the descriptions with archaeological discoveries of what people understood at the time of writing. If biblical descriptions of nature are found to deviate from the normative thinking of the day, but begin to align better with discoveries of nature through time and scientific discovery, then it would appear that instruction on nature was indeed intended. If, on the other hand, descriptions consistently fit the common, imperfect understanding of the original audience, then one must conclude that accommodation was at work.

This task is less daunting than it might seem. If the idea of divine accommodation is correct, it should take only one definitive example to demonstrate its merit: a concept of nature that is repeated throughout Scripture that is not mechanically scientifically correct based on modern knowledge, but fits well with ancient understanding. We'll consider three subjects where God's Word "intersects with science," topics that span the spectrum of scale in nature from tiny seeds to the vastness of the cosmos.

## SEEDS

Truly, truly, I say to you, unless a grain of wheat falls into the earth and dies, it remains alone; but if it dies, it bears much fruit. (John 12:24)

And [Jesus] said, "How shall we picture the kingdom of God, or by what parable shall we present it? It is like a mustard seed, which, when sown upon the soil, though it is smaller than all the seeds that are upon the soil, yet when it is sown, it grows up and becomes larger than all the garden plants and forms large branches; so that the birds of the air can nest under its shade." (Mark 4:30–32)

---

6. Short, "Phenomenological language and semantic naïveté"; Barrick, "Old Testament evidence for a literal, historical Adam and Eve."

It is well known today that seeds do not actually die when planted, and that mustard seeds are not the smallest of all seeds (Fig. 2). Of course, the literary style of the verses above is parable, so we expect that fictional names or events may be used to illustrate the point. But Jesus based these parables on things that were real and familiar to his audience, things we would not expect to be fictionalized. God knows the nature of germination and the size of all seeds, so it is entirely reasonable to assume Jesus spoke with “absolute authority” on the nature of seeds as well as on the nature of the kingdom of God. If God says the mustard seed is the smallest of all seeds, even if within a parable, how could it not be so?

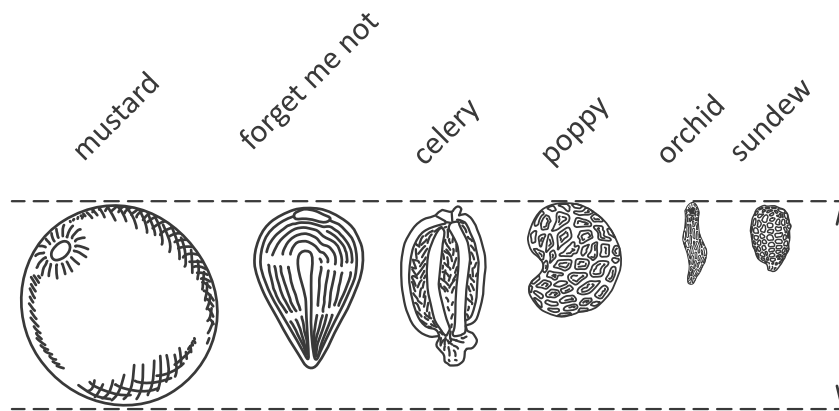


Figure 2—Examples of garden and flower seeds that are smaller than a mustard seed.<sup>7</sup>

And yet God was content to use the knowledge of the people at the time to convey his message without concern over how strictly accurate the description would be to those with greater scientific knowledge at a time far in the future. Could Jesus have told these parables using more technically accurate terminology and descriptions? Certainly. He could have provided a few caveats, saying, “The mustard seed is smaller than all the seeds *that you know of* . . .” and “Though seeds don’t *actually* die . . .” But with what result? The attention of his agriculturally savvy listeners would have undoubtedly focused on questions about seeds rather than the kingdom of God. The power of the message would have been diluted.<sup>8</sup>

7. Orchid and sundew seeds are the European “common spotted orchid” and the South African “citrus-flowered sundew,” respectively. The other seeds are common garden varieties.

8. Miller and Soden, *In the Beginning... We Misunderstood*, 151.

It is additionally important to note that our understanding of these verses today is undiminished by greater knowledge of seed variety and physiology. We still recognize the message of something great arising from the smallest of beginnings, and the need to die to self to bear spiritual fruit. Instruction on nature was never the point.

## FUNCTION OF THE HEART

If you confess with your mouth Jesus as Lord, and believe in your heart that God raised Him from the dead, you will be saved. (Rom. 10:9)

We consider it nearly self-evident today that all thoughts, emotions, and reasoning have their origin in the brain. We nonetheless routinely use phrases that associate feelings and emotion with our hearts. We follow our hearts, have longings in our hearts, pour our hearts into our passions, and even draw cartoon hearts as expressions of romantic love. We know that reference to the heart in each of these expressions is symbolic of functions that are really going on in our brains, so we naturally assume that the writers of Scripture had the same literary forms in mind; these expressions were all figures of speech.<sup>9</sup>

If a biblical expression was *intended* as a figure of speech, it means that native speakers *at the time of writing* knew the words were not literally true. But we forget that for most of human history, the function of the various bodily organs was not well understood, and the heart was commonly thought to have real powers of reasoning and emotion. During embalming, the ancient Egyptians (among whom the Hebrews lived) took great care to remove and preserve organs for the afterlife, returning the heart to the body, yet discarding the brain.<sup>10</sup>

Much later, with the rise of natural philosophy in Greek culture, there were active debates over which organs were primarily responsible for emotion, reasoning, and temperament. Aristotelian and Stoic philosophers believed human intellect derived from the heart. Followers of Plato and Hippocrates believed it resided in the brain.<sup>11</sup> Even Galen of Pergamum, who put some of these debates to rest with his meticulous medical examinations late in the *second century*, still placed the seat of the spiritual soul in the heart.<sup>12</sup>

---

9. Short, "Phenomenological language and semantic naïveté."

10. Wade and Nelson, "Evisceration and excerebration in the Egyptian mummification tradition."

11. Gross, "Aristotle on the brain."

12. Gill, "Galen and the Stoics: Mortal enemies or blood brothers?"

Given that God knows the inner workings of his creation, we might expect that he would inspire the writers of Scripture to set the record straight, assigning the will, intellect, and emotions to the brain. So what do we find? Throughout the Old Testament, functions of the brain are consistently attributed to the heart (*leb*<sup>13</sup>).<sup>14</sup> It is the heart that experiences joy and grief (Prov. 15:13), fear and courage (Ps. 27:14), arrogance, despondency, and lust (1 Sam. 17:32; Prov. 6:25; Hos. 13:6). The heart is the seat of intellectual reasoning (1 Sam. 25:37), and where trust and belief reside (Neh. 9:8; Prov. 3:5).

The New Testament, written in Greek at a time when debates were active over the functions of bodily organs, makes the same use of the heart as we find in the Old Testament.<sup>15</sup> The heart (*kardia*)<sup>16</sup> is repeatedly referred to as the source of motives (1 Cor. 4:5), understanding (Acts 28:27), belief (Rom. 10:9), and the center of our spiritual being (Eph. 3:17). If there was any doubt, Jesus himself weighed in, teaching that the mouth speaks what comes from the heart (Matt. 15:18–19), that men reason with their hearts (Luke 5:22), and calling upon listeners not to doubt in their hearts (Mark 11:23). The Greeks had a word for the brain (*enkephale*), but the New Testament writers did not make use of it.

If we were Christians of the first century wrestling with what to believe about the biological function of bodily organs, we might have reasonably assumed that God settled the matter in his infallible Word. The seat of human reason is in the heart. The words of Jesus confirm it. Still more, we may have felt frustration with Christian brothers and sisters who sided with the pagan philosophers, who attributed thought and emotion to the brain. Why did they allow science to trump the clear teaching of Scripture? Why trust unbelieving philosophers over the unchanging Word of God?

Yet it appears evident that God was content to use the common understanding of nature at the time of writing to communicate truth about the kingdom of God. And again, our understanding today is unharmed by the accommodation. Whether we think “believing with the heart” is a physical or symbolic reality, the intended message is the same. Belief is something to be contemplated, internalized, and owned at the center of our being.

13. Hebrew: לֵב (*leb*), “heart.”

14. Branson, “Science, the Bible, and human anatomy”; Wolff, *Anthropology of the Old Testament*, 40–51.

15. Branson, “Science, the Bible, and human anatomy”; Baumgartel and Behm, “καρδια, καρδιογνωτς, σκληροκαπδια,” 605–14.

16. Greek: καρδία (*kardia*), “heart.”

## STRUCTURE OF THE COSMOS

Can you, with Him, spread out the skies, strong as a molten mirror? (Job 37:18)

Imagine for a moment that you are transported back to the first century, erasing all modern knowledge of the physical construction of the earth and the heavens. All you have are your senses and your Bible. Wishing to grow in understanding, you scour the Scriptures for references to the cosmos. You collect them and organize them by the specific subjects they address. Table 1 is a representative subset (limited to two pages) of what that listing might look like.<sup>17</sup> If you then start to read, adhering to the “plain sense” meaning of the verses, what understanding of the cosmos would result?

TABLE 1—REPRESENTATIVE VERSES RELATED TO COSMOLOGY	
<b><i>All the earth visible from a high point</i></b>	<ul style="list-style-type: none"> <li>• The tree grew large and became strong and its height reached to the sky, and it was visible to the end of the whole earth. (Dan. 4:11)</li> <li>• Again, the devil took [Jesus] to a very high mountain and showed Him all the kingdoms of the world and their glory. (Matt. 4:8)</li> </ul>
<b><i>“Circle of the earth”<sup>18</sup></i></b>	<ul style="list-style-type: none"> <li>• When He established the heavens, I was there, when He inscribed a circle on the face of the deep. (Prov. 8:27)</li> <li>• He has inscribed a circle on the surface of the waters at the boundary of light and darkness. (Job 26:10)</li> </ul>
<b><i>“The ends of the earth” or “from sea to sea”</i></b>	<ul style="list-style-type: none"> <li>• O God of our salvation, You who are the trust of all the ends of the earth and of the farthest sea. (Ps. 65:5)</li> <li>• And His dominion will be from sea to sea, and from the River to the ends of the earth. (Zech. 9:10)</li> </ul>
<b><i>Sky as solid surface</i></b>	<ul style="list-style-type: none"> <li>• The One who builds His upper chambers in the heavens and has founded His vaulted dome over the earth. (Amos 9:6)</li> <li>• Can you, with Him, spread out the skies, strong as a molten mirror? (Job 37:18)</li> </ul>

17. For a more complete tabulation, see [www.solidrocklectures.com](http://www.solidrocklectures.com).

18. Note that circles are flat objects (two-dimensional).

<b>TABLE 1—REPRESENTATIVE VERSES RELATED TO COSMOLOGY</b>	
<b><i>Sky like a tent</i></b>	<ul style="list-style-type: none"> <li>• Their line has gone out through all the earth, and their utterances to the end of the world. In them He has placed a tent for the sun. (Ps. 19:4)</li> <li>• It is He who sits above the circle of the earth, and its inhabitants are like grasshoppers, who stretches out the heavens like a curtain and spreads them out like a tent to dwell in. (Isa. 40:22)</li> </ul>
<b><i>Sky rolled up like a scroll</i></b>	<ul style="list-style-type: none"> <li>• And all the host of heaven will wear away, And the sky will be rolled up like a scroll. (Isa. 34:4)</li> <li>• The sky was split apart like a scroll when it is rolled up, and every mountain and island were moved out of their places. (Rev. 6:14)</li> </ul>
<b><i>Sky with openings for rain</i></b>	<ul style="list-style-type: none"> <li>• On the same day all the fountains of the great deep burst open, and the floodgates of the sky were opened. (Gen. 7:11)</li> <li>• For the windows above are opened, and the foundations of the earth shake. (Isa. 24:18)</li> </ul>
<b><i>Heavens supported by pillars</i></b>	<ul style="list-style-type: none"> <li>• The pillars of heaven tremble and are amazed at His rebuke. (Job 26:11)</li> <li>• Then the earth shook and quaked, the foundations of heaven were trembling and were shaken, because He was angry. (2 Sam. 22:8)</li> </ul>
<b><i>Earth on foundations or pillars</i></b>	<ul style="list-style-type: none"> <li>• For the pillars of the earth are the LORD's, and He set the world on them. (1 Sam. 2:8)</li> <li>• He established the earth upon its foundations, so that it will not totter forever and ever. (Ps. 104:5)</li> </ul>
<b><i>Earth immobile</i></b>	<ul style="list-style-type: none"> <li>• Indeed, the world is firmly established, it will not be moved. (Ps. 93:1)</li> <li>• Say among the nations, "The LORD reigns; indeed, the world is firmly established, it will not be moved." (Ps. 96:10)</li> </ul>
<b><i>Sun travels about the earth, hastens back</i></b>	<ul style="list-style-type: none"> <li>• Also, the sun rises and the sun sets; and hastening to its place it rises there again. (Eccl. 1:5)</li> <li>• [The sun's] rising is from one end of the heavens, and its circuit to the other end of them; and there is nothing hidden from its heat. (Ps. 19:6)</li> </ul>

Following the order in Table 1, we find a dream where a tree was elevated to make it visible to all the nations of the earth, and a record of Jesus being taken to a high mountain where he could see all the kingdoms of the world. From these verses, you ascertain that the earth must be flat, or perhaps

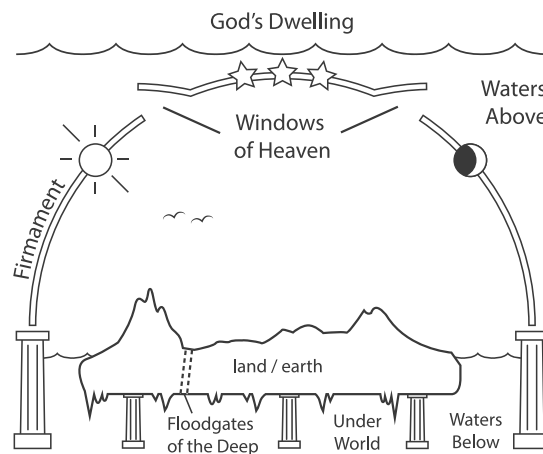
modestly domed, where one just needs to get higher than the tallest mountain to see the entire world. These descriptions would make no sense on a sphere. No elevation is high enough to see a nation on the opposite side of a globe.

The flatness of the earth appears to be reinforced with references to the “circle of the earth,” and multiple passages that speak of “the ends of the earth.” A sphere has no edges, no *ends*. A circle does. At those edges, a sea must surround the land, for you find frequent mention of the breadth of the earth running “from sea to sea.”

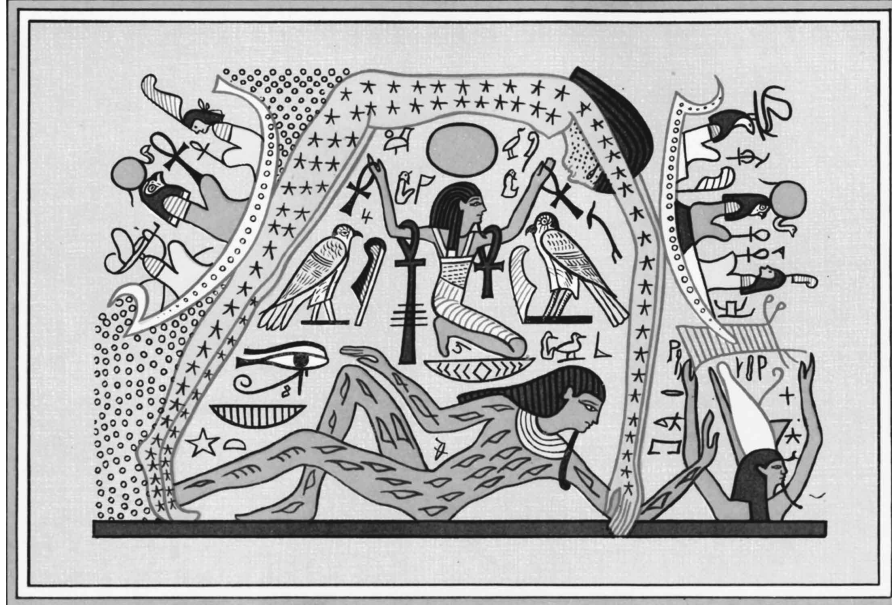
The heavens above are described as a solid surface, even claiming it is as hard as a reflective metal plate (molten mirror). God stretched out this dome like a tent, which one day will be rolled up like a scroll. The sky has gates that allow the waters above to fall as rain. The heavens are supported by pillars that can be shaken at God’s command. Still more verses testify that the earth is also seated firmly on pillars or on a solid foundation. The earth is immobile, fixed upon those pillars. It is the sun and stars that make their circuit across the dome, hastening each day back to their starting places.

If propelled into the twenty-first century, you are startled to discover that your biblical understanding of the earth and heavens looks *nothing* like what is commonly known today. To make matters worse, you find out that the information about the cosmos gleaned from Scripture fits quite well with the common understanding of all the nations surrounding Israel at the time of writing. Though the specific details varied with time and culture, the general understanding of the nations throughout the

Ancient Near East (ANE), from Egypt to Babylon, depicted the cosmos in words and in art as a three-tiered system of solid sky, flat earth surrounded by seas, and a watery underworld supported by pillars. Figure 3 is a generalized depiction of the three-tiered system, with examples of roughly contemporaneous artwork from Egypt and Babylon in Figures 4 and 5.



**Figure 3**—Depiction of the three-tiered universe, divided into the earth, the waters above the earth, and the waters below the earth.



**Figure 4**—The Egyptian god, Ra, travels daily over the arched goddess of the sky, Nut, who is held up and separated from Geb, the god of land, by Shu, the god of air.<sup>19</sup>

What do we make of all this? Those wishing to discount the Bible have focused on the *similarities* between the biblical and ANE cosmologies to claim that the small tribe of Hebrews simply borrowed their mythology from their neighbors, tweaking it to suit their purposes. Those wishing to “discount the discounters” have focused on the *differences* to insist that any similarities are incidental. A third, more likely explanation is that this view was simply the common understanding of people throughout the Ancient Near East.<sup>20</sup> The principal difference between Israel and its neighbors was not what the world *looked* like, but *who* was responsible for it.

It is of significance that we find no effort in all of Scripture to correct the misguided understanding of the physical nature of the cosmos of Israel’s pagan neighbors. Where we see substantive (enormous) correction is in the understanding of the nature and character of the Creator.

19. Budge, *The Gods of the Egyptians*, plate 20.

20. For good descriptions of the various perspectives and more reasoned approaches, see: Greenwood, *Scripture and Cosmology*, chap. 2; Miller and Soden, *In the Beginning... We Misunderstood*, chap. 7.



## OBJECTIONS TO ACCOMMODATION AND RESPONSES

### ***Objection 1: Many of these expressions are simply phenomenological language.***

Those embracing comprehensive inerrancy insist that much of this language is *phenomenological*, meaning descriptions are intended as observations from the perspective of a viewer, as opposed to statements of objective fact. Expressions such as the sun rising and the sun setting are simply descriptions from the perspective of human viewers on the earth's surface.



**Figure 5**—A Babylonian kudurrû (boundary stone; 12th century B.C.), showing layers of the cosmos supported by pillars.<sup>21</sup>

Use of phenomenological language is quite possible, but there are at least two problems if defending comprehensive inerrancy.

*Phenomenological language should be used sparingly.*

If the intention of Scripture was to include instruction on nature, we should not expect routine usage of phenomenological language, at least not without clear disclaimers. God, as the author and master of language, and knowing the discoveries that would one day be made, could have easily inspired writers to say the sun “*appears* to rise and set,” or “*from your perspective*” the sun rises and sets, but he did not. The plain-sense reading of the text adheres to the commonly held belief that the sun orbited a stationary earth.

*Biblical descriptions go beyond the phenomenological.*

Phenomenological designations are superficially plausible for simple statements like the sun rising or setting, but fail to account for more detailed

statements like the sun rising or setting, but fail to account for more detailed

21. Drawn from a kudurrû on display at the Louvre in Paris, Department of Near Eastern Antiquities: Mesopotamia.

descriptions found in places like Ecclesiastes 1:5 that refer to the sun hastening back to its starting point. The writer could not observe what happened to the sun during the night. Furthermore, there were competing views among Israel's neighbors regarding the daily fate of the sun. The Egyptians believed the sun went out or died and was reborn each morning. If intending to instruct on nature, the biblical description of the sun hastening back to its starting point should be considered a corrective statement, declaring that the sun does not die, but completes its orbit under the earth each night.

***Objection 2: Many of these expressions really were figures of speech.***

The argument here is that the ancient Israelites knew how the cosmos was constructed, with the same basic understanding we have today. Expressions such as *the ends of the earth*, *pillars of the earth*, *pillars of heaven*, and *floodgates of the sky*, were all known to people at the time as figures of speech.<sup>22</sup> We use some of these expressions today, after all, without thinking of them as factual statements about nature. There are at least three problems with this reasoning.

*Illogical historical expectations*

For the original audience to have considered these expressions to be figures of speech, it requires a rather odd history.

- God inspired the selection of words that would appear to conform with the pagan nations' literal concept of the cosmos.
- Israelites knew better, thus understanding these expressions correctly as figures of speech.
- Later Israelites and Christians *forgot* the proper understanding of the cosmos, reverting back to their neighbors' understanding and wrongly interpreting these verses literally for *thousands of years*.
- Modern science *rediscovered* the cosmology known previously only to ancient Israel, allowing us to rediscover these expressions to be figures of speech.

22. Short, "Phenomenological language and semantic naïveté"; Edward, "Literary forms and biblical interpretation."

*Circular reasoning*

The only reason we use some of these expressions in our language today is because we took them *from the Bible*. And the only reason we consider them figures of speech is because of our awareness of scientific studies demonstrating they are not realistic descriptions of nature. The original audience had no such knowledge, and the expressions fit quite well with societal beliefs at the time. To borrow an expression from an ancient culture, and then declare that they understood it figuratively because we commonly use such expressions figuratively today is circular logic.

*Defending instruction of nature by claiming no instruction on nature*

If claiming that hundreds of verses that touch upon nature *are not* teaching about nature (they are merely figures of speech or phenomenological), how does this provide a defense for an argument that the Bible *does* teach about nature?

***Objection 3: Some verses actually predict modern discoveries.***

The claim here is that the Bible contains truthful statements about the universe that were not discovered until hundreds or even thousands of years after they were written. Consider the verses below.

He stretches out the north over empty space and hangs the earth on nothing. He wraps up the waters in His clouds, and the cloud does not burst under them. He obscures the face of the full moon and spreads His cloud over it. He has inscribed a circle on the surface of the waters at the boundary of light and darkness. The pillars of heaven tremble and are amazed at His rebuke. (Job 26:7–11)

Covering Yourself with light as with a cloak, stretching out heaven like a tent curtain. He lays the beams of His upper chambers in the waters; He makes the clouds His chariot; He walks upon the wings of the wind. (Ps. 104:2–3)

It is He who sits above the circle of the earth, and its inhabitants are like grasshoppers, who stretches out the heavens like a curtain and spreads them out like a tent to dwell in. (Isa. 40:22)

I, the LORD, am the maker of all things, stretching out the heavens by Myself and spreading out the earth all alone. (Isa. 44:24)

Typical claims derived from these verses include:<sup>23</sup>

- “Stretching out heaven,” is a description of the continuous expansion of the universe.
- “Circle” is better translated as “sphere”—predicting discovery that the earth is a globe (or indicating that the ancient Hebrews already knew the earth was a sphere).
- “Hangs the earth on nothing” refers to planet earth suspended in space.

There are at least two problems with this reasoning.

#### *Haphazard hermeneutic*

By the reasoning above, we are to interpret “stretching out heaven” and “hangs the earth on nothing” literally, yet within the *same verses*, we should not interpret literally the “pillars of heaven” or “beams of His upper chambers in the waters.” From Job 37:18, we should interpret “spread out the skies” literally, but not the sky being “strong as a molten mirror.” And though we are told that stretching of the heavens is to be understood as an expanding universe, “spreading out the earth,” also in the same verse, is not to be understood as a continuously expanding *planet*. All this represents a haphazard hermeneutic.

#### *Missed metaphor*

Isaiah and Job did not just say that God stretched out the heavens, but did so *like a tent*. The Israelites were quite familiar with tents. They were erected and stretched taut with stakes to hold them fast against the desert winds. The tent formed a solid fabric around and above those inside. A tent that did not create a sturdy, *stationary* domicile was worthless. A tent is an apt metaphor for a solid, domed sky, not an ever-expanding cosmos.

#### ***Objection 4: “Accommodation” means that God affirmed falsehood.***

A common objection equates accommodation with the “incidental affirmation of falsehoods.”<sup>24</sup> If the intention of the Bible were to instruct on every-

23. Lisle, *Taking Back Astronomy*, chap. 2.

24. Grudem, *Systematic Theology*, 97–98.

thing with absolute authority, the charge would be reasonable. But the Bible nowhere makes this claim. It is a human expectation imposed on Scripture, not one derived from it. If there is no intention of teaching about nature and the common understanding of nature is tapped only to illustrate the intended message, there is no room for charging that falsehood is being affirmed, incidentally or otherwise.

***Objection 5: “Accommodation” means no one could really understand the Bible until the discovery of Ancient Near Eastern tablets.***

This is an understandable concern, but ultimately without basis. In fact, consider the sequence of discoveries. For most of human history, believers understood references to nature in the Bible to simply reflect common understanding. Whether God was *instructing* on nature or *accommodating* humans’ limited understanding of nature did not matter, because there was no apparent conflict to worry about. Nature looked the way it was described.

Moving into the sixteenth century and forward, scientific studies began painting a picture of the natural world that was increasingly at odds with the descriptions in Scripture. Many, sadly or gleefully, concluded that the Bible is riddled with errors. By the nineteenth century, translations of newly discovered ANE texts began to accumulate, revealing that Israel’s neighbors had very different views on the gods and their dealings with men, but that their understanding of the physical construction of the cosmos was remarkably similar to what is found in the Hebrew Scriptures.

This is significant, for if the ANE texts recorded a description of the cosmos that was distinctly different from what is found in the Bible, one could argue that the biblical writers were trying to correct the pagan nations’ mistaken understanding of nature. It could also then be argued that modern science has demonstrated that this “corrected understanding” missed the mark—a confirmation of flaws in the Bible. But by virtue of our knowledge of the ANE texts, we know that there was no effort to correct the pervasive ANE understanding of the basic structure of the world. The Bible simply accommodated that common understanding to communicate its timeless message about the nature and kingdom of God.

Said another way, when there was no apparent conflict between science and the Bible, there was no need for ANE texts to assist understanding. The ANE tablets only became useful (not *essential*) for biblical understanding after scientific discoveries began to raise questions about how nature was

addressed in Scripture. One might argue that the timing of discovery of the ANE libraries, following in the wake of growing apparent tensions between science and the Bible, was *providential*.

## SUMMARY

The Bible is filled with references to nature that represent the common understanding of the Ancient Near East, whether seeds, or hearts, or the cosmos.<sup>25</sup> To suggest that the original audience knew their neighbors believed these things to be literally true, yet God inspired the words to be understood as figures of speech or merely phenomenological language, stretches credulity. Even the few verses that are pulled out as purported evidence of modern understanding all require departures from a “plain sense” reading to pry them loose from an ANE framework (e.g., tents don’t eternally expand). The original audience would likely have been baffled at the logic applied to impose a twenty-first-century, Western cosmological worldview onto the text.

So is the Bible replete with errors? As the apostle Paul was fond of saying, *may it never be!*<sup>26</sup> If common knowledge of nature was being tapped as a tool of illustration, with no intention to instruct on the nature of nature, there is no error. Those who insist otherwise put God in a small box, where transient cultural norms and human sensibilities define the limits of God’s sovereignty over his message. If accommodation does not live up to a person’s expectation of God’s perfection, it may well be that human expectation is at fault, not God.

So what does this mean for the creation story? Accommodation, found richly employed through the pages of Scripture, does not automatically disqualify Genesis 1 from being a literal account of the steps God employed to bring the world into existence. It should make us cautious, however, about uncritically assuming Genesis 1 is a literal account, based on a culturally biased adherence to *comprehensive* inerrancy. We still have ample hermeneutical work ahead of us to determine the intention and message of the creation story.

25. For additional examples of how nature is addressed in the Bible, see Lamoureux, *Evolution: Scripture and Nature Say Yes!*, chap. 5.

26. Ten times in Romans, three times in Galatians, and once in 1 Corinthians.