

*The Henry Morris*  
SIGNATURE COLLECTION

THE BIBLICAL  
**BASIS**  
FOR MODERN SCIENCE



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## Foreword

In his treatise on “Physics and Reality” in 1936, Albert Einstein remarked that it “is a miracle” that “the world of our sense experiences is comprehensible.”<sup>1</sup> He said, “The setting up of a real external world would be senseless without this comprehensibility.”<sup>1</sup> Thus, the physicist who helped to precipitate the destruction of Hiroshima and Nagasaki with the abstract formula that  $E = mc^2$  also realized that the existence of the physical world is by no means the greatest mystery faced by science. Even the existence of living things pales in comparison to the fact that the world is comprehensible, that it can be represented truly. Surprisingly, in Darwin’s materialistic attempt to explain the existence of living organisms, he failed even to ask the deeper question: How is it possible for any of our representations of the world to be true?

C.S. Peirce<sup>2</sup> agreed with Galileo before him and with the world’s most quoted living intellectual, Noam A. Chomsky, all of whom supposed that the human mind is designed to comprehend just the sort of world that presents itself. Einstein said, “The very fact that the totality of our sense experiences . . . can be put in order . . . is one which leaves us in awe.”<sup>3</sup> This awesome reality is grounded in the fact that some of our representations are true. Thus, truth itself is revealed not only in some propositions of the sciences, but also in many of the representations of ordinary experience. While we must guard against errors, illusions, hallucinations, and outright lies, it is nonetheless true that many of the representations in our experience are true. It was for this reason

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1. Albert Einstein, “Physics and Reality,” in *Out of My Later Years* (Secaucus, NJ: Citadel Press, 1956), p. 61.
  2. C.S. Peirce, “A Neglected Argument for the Reality of God,” *Hibbert Journal* (1908): 90–112. Also in C. Hartshorne and P. Weiss, eds., *Collected Papers of C.S. Peirce*, Vol. VI (Cambridge, MA: Harvard University Press, 1935), p. 311–339.
  3. Einstein, “Physics and Reality,” p. 61.

that Einstein (1936) said, “The whole of science is nothing more than a refinement of everyday thinking.”<sup>4</sup>

The essential question of science, therefore, is: “What is truth?” This was the question, according to the Gospel of John, that Pilate asked of Jesus Christ. In fact, if the Gospels are true reports, the answer was standing before Pilate in a visible human body. Jesus had said, “I am the way, the truth, and the life” (John 14:6). Evidently Pilate neither needed nor received any answer other than the one standing before him. The next thing we see Pilate doing is reporting to the Jewish leaders, “I find in him no fault at all” (John 18:38).

Science repeats Pilate’s question: “What is truth?” It is an abstract question. In mathematics, it is supposed that wherever truth may be found, it will at least be self-consistent. That is, the truth cannot contradict itself. All mathematical proofs rely ultimately on this foundational premise, and yet, a perfectly complete mathematical system has not yet been found in mathematics or anywhere in the sciences. Neither can perfect consistency be found in experimental or empirical measurements. In fact, perfect consistency has never been found in the material world or in the sciences, excepting the life of Jesus Christ. The only source for the concept of absolute consistency (truth), as far as I know, is the one pointed to by Dr. Morris in this book: namely, the God who is the same yesterday, today, and forever (Heb. 13:8); the God whom no one can cause to lie (Num. 23:19); and who has determined the course of events leading to redemption before the world ever was (Matt. 13:35; 25:34; Luke 11:50; John 17:5, 24; 1 Cor. 2:7; Eph. 1:4; 2 Tim. 1:9; Titus 1:2; Heb. 4:3; 9:26; 1 Pet. 1:20; Rev. 13:8; 17:8).

Nevertheless a good definition of truth can be found in the sciences. The best and most complete definition of truth does not come from pure mathematics, but rather from that esoteric branch of mathematical logic known as theoretical semiotics — the grand science that seeks to discover the basis for all possible meaning. The answer is of the logico-mathematical kind developed in strict

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4. Ibid., p. 59.



proofs.<sup>5</sup> It comes out that truth is exclusively a formal property of representations. It consists of the agreement between words (or abstract concepts), acts of observation, and facts (physical things and events as related in space-time).

The purest form of truth is also the simplest sort. It is the kind found in true reports of known facts. For instance, if it is true that Jesus Christ appeared before Pilate as reported in all four of the Gospels, the Book of Acts, and Paul's first letter to Timothy, then, these reports not only qualify as true but each contains three critical and necessary elements that must be found in any true report. First, there are the material facts of history that are reported. Second, there are faithful and competent observations that link the material facts in question with certain representations (e.g., the words of some language). Third, there are the words (i.e., the actual representations themselves) used to report the events. A simple triadic structure emerges consisting of (1) facts, (2) linking acts, and (3) representations. If these three are in agreement relative to each other, we say that the narrative is true of the facts reported. To be true in this way, it is only necessary that the facts deliver all that the narrative claims, and that the narrative claims nothing not delivered by or contained in the material facts. It turns out upon logical examination of the formal structure of any true narrative representation that the three elements in question stand in more than a mere triadic relation: they form what logically may be called a trinity of the biblical kind. That is, each element contains and is contained by the others such that if one of the three elements is fully known, the other two are also known.

Thus, it comes out that the simplest and purest form of truth is the sort found in any true narrative. Interestingly, the Bible is a

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5. C.S. Peirce, "The Logic of Relatives," *The Monist*, 7 (1897): 161–217; A. Tarski, "The Concept of Truth in Formalized Languages," in J.J. Woodger, ed. and trans., *Logic, Semantics, and Metamathematics* (Oxford: Oxford University, 1936, translated in 1956), p. 152–278; A. Tarski, "The Semantic Conception of Truth," (1944), in H. Feigl and W. Sellars, eds., *Readings in Philosophical Analysis* (New York, NY: Appleton: 1949), p. 341–374; J.W. Oller Jr., (1996). "Semiotic Theory Applied to Free Will, Relativity, and Determinacy: Or Why the Unified Field Theory Sought by Einstein Could Not be Found" *Semiotica*, 108, no. 3/4 (1996): 199–244.

narrative and represents itself to be true. If the Gospels are true, and if Jesus Christ is the Creator God as He claimed to be in saying, "Before Abraham was, I am" (John 8:58), it follows that the biblical narrative must be the most complete account ever rendered about the material world. If true, it reaches from the beginning of the universe until the end of what we know as time. If Jesus is "Alpha and Omega, the beginning and the end" (Rev. 1:8, 11; 21:6; 22:13), then the book which He came to fulfill must be the best account there has ever been, is now, or ever will be. What if there is a day of judgment and the principal question on that day should be: "What is truth?" We know now that the simplest and most solid kind of truth involves a trinitarian relation between (1) actual material facts, (2) competent observations by one or many reliable witnesses, and (3) representations faithfully mapped into those facts.

During Darwin's heyday, in the 19<sup>th</sup> century, it became popular to suppose that the material things and living beings in the real world could come about by pure chance and without any assistance whatever from God. In the 20<sup>th</sup> century, the rage was to question human knowledge of the existence of an external world. In effect, Bertrand Russell, for instance, tried to raise doubt as to whether we can know for sure that there is a real world. Now, in the 21<sup>st</sup> century, intellectuals have become so mature and advanced that they no longer put the issue in the form of a question. They look so far beyond modern times that they call themselves "postmodern." They deny not only the existence of God, miracles, and knowledge of an external world, but are now (supposedly) certain that no one has the power to know anything for certain, excepting of course that it is certain that nothing can be known for certain. Alistair Pennycook wrote, "We cannot know ourselves or the world around us in any objective fashion."<sup>6</sup> So, according to the postmodernist perspective, we must abandon hope of knowing anything. We are reminded of the inscription that William Blake placed over the gates of hell in his drawing to illustrate Dante's *Inferno*: "Abandon all hope, ye who enter here."

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6. A. Pennycook, "Incommensurable Discourses?" *Applied Linguistics*, 15, no. 2 (1994): 134.

I believe that the day will come when men will look back on this period and be astonished that so many weeds could have grown up in the same fields where good wheat was also thriving. Let it be noted, however, that the existence of fictions, errors, and lies alongside true representations are themselves evidence of the existence of truth. If truth did not exist, no fantasy, mythology, illusion, hallucination, or error of any kind, not even a deliberate lie, could ever be discovered. Science, contrary to a lot of nonsense, thrives on the biblical principle of non-contradiction. Science seeks truth in every aspect and part of the universe. It aims to test hypotheses to see which ones can stand up under scrutiny. It requires publication of results so that they may be examined critically, not by literary types who boast of their own inconsistencies, but by persons of integrity seeking to know which representations (which hypotheses and theories) are consistent with observable facts and which are not.

The U.S. federal government has recently issued a policy statement banning falsification, fabrication, and plagiarism in sponsored scientific work. The policy says, “Fabrication is making up data or results and recording or reporting them. Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. Plagiarism is the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit.”<sup>7</sup> Why was such a policy issued? Because truthful reporting is essential to the very existence of scientific inquiry.

The third edition of *The Biblical Basis of Modern Science* shows that science has no other basis than the principle of non-contradiction which is manifested historically only in one God: that is the God of Abraham, Isaac, and Jacob — the one who chooses not to lie and whose power is sufficient to overcome those who would prefer to have Him be other than as He is. The Apostle Paul put it well when he said, “Let God be true, but every man

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7. Federal Policy on Research Misconduct, (December 6, 2000), *Federal Register*, 65, no. 235 (Dec. 6, 2000): 3.

a liar” (Rom. 3:4). He went on to paraphrase the Hebrew Psalmist: “That thou mightest be justified in thy sayings, and mightest overcome when thou art judged” (Ps. 51:4).

*The Biblical Basis for Modern Science* leaves no room for the myth that science is grounded in material philosophy. Materialistic philosophy has no grounding other than fiction, and science, as practiced by persons of integrity has only one basis, and that basis can only be found in the Judeo-Christian God who is never inconsistent with himself. Here is an updated version of the book I recommended to readers almost 20 years ago and am glad to recommend again in its revised and updated edition. It shows better than any other that I know of why science can only prosper in contexts pervaded by the Judeo-Christian outlook of the God who cannot lie. It is my pleasure and honor to commend it to readers again.

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## Introduction

If I have told you earthly things, and ye believe not,  
how shall ye believe, if I tell you of heavenly things?  
(John 3:12).

**T**he Christian witness frequently is confronted with the problem of the alleged scientific mistakes of the Bible, especially in its first 11 chapters. Many Christians have been so intimidated by the supposed weight of modern opinion that they respond merely by a faint-hearted protest that “the Bible is, after all, not a textbook of science but of religion; it merely tells us the fact of divine creation, not the method or the chronology; the Bible is infallible in matters of religion and morals, but we should not expect it to speak precisely on irrelevant data of science and history.”

It is obvious, of course, that the Bible is not a scientific textbook in the sense of giving detailed technical descriptions and mathematical formulations of natural phenomena. If it were merely that kind of a textbook, it would quickly become outdated, like other science textbooks. Nevertheless, it does deal extensively with a broad variety of natural phenomena, as well as with numerous and varied events in history. It especially deals with the basic principles of science and the key events in history, and many of its revelations in spiritual and moral matters are keyed to its revelations on scientific and historical matters.

It is logically unsatisfactory and evangelistically unfruitful to try to retain the one without the other. How could an inquirer be led to saving faith in the divine Word if the context in which that Word is found is filled with error? How could he trust the Bible to speak truly when it tells of salvation and heaven and eternity — doctrines which he is completely unable to verify empirically — when he is taught that biblical data that are subject to test are

fallacious? Surely if God is really omnipotent and omniscient, and the Bible is really His revelation (and all true Christians at least profess to believe these basic Christian doctrines), then He is able to speak through His Scriptures as clearly and truthfully with respect to earthly things as He does when He speaks of heavenly things.

Men have too rapidly jumped to the conclusion that the Bible is unscientific (or “prescientific,” as some would say). The biblical cosmology has never been disproved; it has simply made men uncomfortable and been rejected. Nevertheless the actual facts of observation and experience can be shown to correlate with the biblical view of the world and history in a highly satisfying way.

The Bible authors claim to have written the very Word of God, and it has been accepted as such by multitudes of intelligent people down through the centuries. This is more true today than ever in the past, and there are thousands of qualified scientists around the world who quite definitely believe in the full verbal inerrancy of the Holy Scriptures. It is thus absurd for anyone to say that “science” has disproved the Bible.

Whenever a biblical passage deals either with a broad scientific principle or with some particular item of scientific data, it will inevitably be found on careful study to be fully accurate in its scientific insights. Often it will be found even to have anticipated scientific discoveries. The Bible is indeed a book of science, as well as a book of history, literature, psychology, economics, law, education, and every other field. It does not use the technical jargon of particular disciplines, of course, but speaks in the universal language of human experience. As the Word of God, it is altogether “profitable . . . that the man of God may be perfect” (2 Tim. 3:16–17), meeting every need, either by direct instruction on specific subjects or by broad guidance in research and decision-making.

The great field of natural science is particularly significant. We are living in a “scientific age,” and the proliferation of scientific knowledge and the resulting technologies seem almost boundless. Scientific discoveries and developments, however, can be a danger as well as a blessing to mankind. Not only has the arrogance of

the so-called scientific mind tended to subvert religious faith and confidence in the Scriptures, but is also threatening civilization with its nuclear armaments, environmental pollutants, biochemical weaponry, genetic manipulations, and other products of scientific research.

The modern world is desperately in need of God's own wisdom with respect to the purpose and meaning of true science. The Bible will be found not only to reveal a thoroughly modern perspective on the real facts and principles of science but also to provide wisdom and guidance concerning its proper role in human life and in the eternal counsels of God.

It is the purpose of this book to bring together in systematic, useful, and meaningful fashion these key biblical insights and instructions related to all the natural sciences. It should serve effectively as a textbook in courses on science and the Bible, whether formal classroom courses or informal study groups in home and church. It can also be used for reference purposes and is organized and indexed with such use in mind. Most of all, however, it is intended for individual — even inspirational and devotional — reading by men and women and young people in all walks of life. It is the writer's desire to help implant in the heart and mind of every reader a greater appreciation for God's inspired Word than ever known before, along with a greater confidence in the absolute truthfulness of every verse of Scripture, leading to implicit trust in its promises and obedience to its instructions in all things.

This concept of the Bible became the conviction of the writer back in the days of World War II, after an intensive study of both the Scriptures and the writings of evolutionists and other Bible critics. I had trusted Christ as my Savior as a very young boy, but had later become a theistic evolutionist during my undergraduate years studying engineering at Rice Institute (now Rice University). After graduation, as a young engineer working with the International Boundary and Water Commission in Texas, I became active in a strong Bible-believing church and also joined the Gideons International, a lay organization seeking to spread the Scriptures widely and to win people to saving faith in Christ.

This experience solidified my conviction that the Bible was truly effective in changing lives and meeting human needs. When I returned to Rice three years later to teach engineering to the students then being trained as prospective naval officers for the war effort, it also became my burden to influence them for Christ and eternity as well. Therefore, I began an intensive study of Christian evidences and doctrines, as well as anti-Christian literature, in order to do this more effectively.

This study has continued every year since, from youth to maturity to the status of senior citizen, and my conviction that the Bible is God's inerrant Word has become stronger and more confident every year. I taught engineering for almost 30 years, at five different secular universities, trying to maintain an active Christian witness among the students and faculty at each school, and so had many challenges and tests of faith, as well as many wonderful confirmations of the power of the Word. Since getting into Christian education in 1970 (at Christian Heritage College and then the Institute for Creation Research), there have been many fulfillments of God's ancient promise in, "Call unto me, and I will answer thee, and shew thee great and mighty things, which thou knowest not" (Jer. 33:3). Although there is still need for research on certain unresolved problems, the positive evidence for the scientific and historical accuracy of the Bible, as well as its validity in human experience, is so abundant and overwhelming as to justify an unshakable faith in its truth.

In this present book, I have continued to use the standard King James text, unless otherwise noted, whenever referring to specific Bible passages. This was, indeed, the standard English version for most Christians for over four hundred years until the sudden explosive proliferation of new translations beginning in the 1950's. I am aware of these new versions, of course, and have over 40 of them at hand in my own library, using them for study purposes and citing them when helpful. Nevertheless, I still prefer the old standard King James, as the most beautifully written, spiritually powerful, and generally most reliable of all of them, and therefore continue to use it in my own writing and speaking. The



evidences and arguments for the scientific accuracy of the Bible apply, of course, regardless of the particular version preferred by the individual reader.

Regardless of the problem, and regardless of the version preferred, one can always find in the Bible a true and satisfying answer to every need. Its statements are true and its promises sure. “Thy testimonies have I taken as an heritage for ever: for they are the rejoicing of my heart” (Ps. 119:111).

**Part One**

**Science and True Christianity**

## Chapter 1

# Queen of the Sciences

## Biblical Theology

### The Importance of Theology

**M**ost scientific disciplines have been given English names compounded from two Greek roots, one meaning “organized study,” the other referring to the object of study. Biology is the study of life, geology is the study of the earth, hydrology is the study of water, and so on. The ending of each of these words is from the Greek *logos*, meaning “word,” also translated “answer,” “saying,” etc. As a proper name, it is identified in Scripture with the Lord Jesus Christ, as the living Word of God, the Creator of all things (John 1:1–3).

Whether or not men intended it that way, it is at least providential that Jesus Christ should be thus indirectly identified with the study of His creation. Biology is the science of life, and Christ himself is “life” (John 14:6). Geology is the science of the earth, and He is the Creator of the ends of the earth (Isa. 40:28). Hydrology is the science of water, and from Him flows the “water of life” (Rev. 22:1). We also could speak of the sciences of meteorology, zoology, psychology, sociology, climatology, physiology, and many others, but all must ultimately be ascribed to Christ, for in Him “are hid all the treasures of wisdom and knowledge” (Col. 2:3). “By him were all things created” (Col. 1:16), and He “uphold[s] all things by the word of his power” (Heb. 1:3), so it follows inescapably that true knowledge of any component of His creation must depend ultimately on the knowledge of Christ and His Word.

Therefore, the most important of all sciences, or objects of study, is theology, the study of God. In a special sense, this disci-

pline becomes also Christology, since God was in Christ, and since the Lord Jesus Christ is the Word made flesh (John 1:14). Theology, in fact, once was honored as “the queen of sciences,” though it has lost this position of public esteem in our modern scientific age. To many it has since become merely a branch of philosophy, known as “philosophical theology,” or “the philosophy of religion.” Scholars speak of different forms of theology — natural theology, rational theology, dogmatic theology, empirical theology, and so on. Latter-day radical theologians are even promoting such concepts as what they call “liberation theology,” equating Christian action with Marxism and revolution.

Since this is not a treatise on theology, however, no attempt will be made to discuss and critique these various theologies. Our interest here is solely in biblical theology, especially the relation of biblical theology to the natural sciences. Biblical theology, of course, is the systematic codification of what the biblical authors, inspired by the Holy Spirit, teach about God — His person, His attributes, His revelation, His works, and His purposes. Other sources of information about God — in nature and in religious experience, for example — can supplement and illumine the biblical data, but only the latter are normative for Christian doctrine. In particular, it is important in the context of this chapter to establish what the Bible teaches about the existence of God and His purposes for man and the universe — created, sustained, and redeemed by Him — in relation to the other sciences as understood today.

### **Science and the Existence of God**

Although it is not possible to develop a completely rigorous proof for the existence of God (after all, Heb. 11:6 says that “without faith, it is impossible to please him”!), the Scriptures do indicate that it is utter foolishness not to believe (Ps. 14:1; Rom. 1:22; et al.). Although there may exist certain philosophical arguments by which one can avoid acknowledging God’s existence, the great solid weight of scientific and statistical evidence, when rationally evaluated, clearly balances the scales heavily in favor of God. One rejects God only because that is the choice of his will, not because of the evidence.

It is superficial to say (as many have said) that since science is based on observation and since God cannot be “observed” with the physical senses, therefore God’s existence is an unscientific belief. There are many scientific entities that cannot be seen with human eyes but whose existence is not doubted in the least by scientists (e.g., electrons). The famous assertion by the first Russian astronauts that they had proved God did not exist since they could not find Him in space was a prime example of the irrational rationalizing by which unbelievers justify their unbelief. Scripture itself says, “No man hath seen God at any time” (John 1:18). “God is Spirit, and they that worship him must worship him in spirit and truth” (John 4:24). The very essence of God’s revelation of himself precludes evaluation by the experimental procedures of the scientific method. Nevertheless, the most basic principles of science (which are themselves assumed in the application of the scientific method) point directly to the exceedingly high probability that God is the true cause of all causes.

Even though it is not possible to prove God’s existence by rigorous scientific demonstration, it is even more impossible (if there were such a category) to prove His nonexistence! One cannot prove a “universal negative.” To prove that there is no God anywhere in the universe or at any time in the universe, would require omniscience and probably omnipresence as well, which are themselves attributes of deity. That is, one would have to be God, in order to prove there is no God! Dogmatic atheism, therefore, is self-contradictory foolishness.

One may lodge certain moral arguments against God if he wishes. For instance, he may ask why a holy God condones evil in the world if He is able to prevent it. Some would say that God must be either unrighteous or impotent, or both, and thus not really God. But such arguments assume that man has the right and the ability to judge God, and thus that man himself is really God. They ignore the possibility that God may have a good reason, consistent with His holiness, to allow evil to exist for a brief time and that He will eventually destroy it forever. According to Scripture, God will eventually judge and purge all evil from His creation (2 Pet. 3:10–13), but in the meantime He is calling men to repentance

(2 Pet. 3:9), having created them not as unthinking machines but as volitional beings in His divine image, responsible for their own moral and spiritual choices, and having also himself paid the full price for their redemption (1 Pet. 1:18–20).

At the very best, such anti-theistic arguments are specious and self-serving, arrogating to the creature the right to judge the motives and actions of his Creator. “Shall the thing formed say to him that formed it, Why hast thou made me thus?” (Rom. 9:20).

All but the most presumptuous, therefore, must acknowledge at least the possibility that God exists and that we are His creatures. We can, furthermore, examine that possibility in terms of its probability. If we do happen to be His creatures, then our minds and reasoning capabilities are likewise created by Him, and we can use these very entities and experiences as instruments with which to evaluate this probability. If these were not created by Him and if, indeed, there is no God, then it is quite absurd to believe that we can trust our minds and reasoning faculties at all. They are then merely the products of chance and randomness. Victor Weisskopf, while president of the American Academy of Arts and Sciences, reminded his fellow scientists of the amazing “fact” that non-thinking “Nature” has, as they believe, generated intelligent beings and intelligible systems. “Einstein considered this development to be the great miracle of science; in his words, ‘the most incomprehensible fact of nature is the fact that nature is comprehensible.’”<sup>1</sup> Weisskopf perhaps used the term “miracle” inadvertently, but such a development — the evolution of intelligence and intelligibility by random processes from unthinking atoms — would indeed require a mighty miracle.

Dr. Lewis Thomas, former chancellor of the Sloan Kettering Cancer Center in Manhattan, has commented, “We know a lot about the structure and function of the cells and fibers of the human brain, but we haven’t the ghost of an idea about how this extraordinary organ works to produce awareness.”<sup>2</sup> In another article this distinguished scientist has noted that “we do not

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1. Victor F. Weisskopf, “The Frontiers and Limits of Science,” *American Scientist*, 65 (July–Aug. 1977): 405.

2. Lewis Thomas, “On Science and Uncertainty,” *Discover*, 1 (Oct. 1980): 59.

understand a flea, much less the making of a thought.”<sup>3</sup> With respect to the idea that complex and comprehensible systems could ever evolve from random process by chance, Thomas rather wistfully laments: “Biology needs a better word than *error* for the driving force in evolution. . . . I cannot make my peace with the randomness doctrine; I cannot abide the notion of purposelessness and blind chance in nature. And yet, I do not know what to put in its place for the quieting of my mind.”<sup>4</sup>

With all due respect, Christian theism provides a clear answer to such a query. An omnipotent, omniscient, personal Creator God provides perfect peace of mind and soul to all who come to Him in faith. Theism does not oppose true science. All the great laws and principles of science lead directly to God as their only adequate source and explanation.

In a modern treatment of this fascinating subject, two authorities have pointed out the almost infinite complexity of the human brain.

The human brain is the most astonishing and mysterious of all known complex systems. Inside this mass of billions of neurons, information flows in ways that we are only starting to understand. The memories of a summer day on the beach when we were kids; imagination; our dreams of impossible worlds. Consciousness. Our surprising capacity for mathematical generalization and understanding of deep, sometimes counterintuitive questions about the universe. Our brains are capable of this and much more. How? We don't know: the mind is a daunting problem for science.<sup>5</sup>

The amazing phenomenon of consciousness is perhaps the most mysterious of all the mysteries of the human brain. Anthropologist Matt Cartmill, in a Phi Beta Kappa message, has noted this.

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3. Lewis Thomas, “On the Uncertainty of Science,” *Key Reporter*, 46 (Autumn 1980): 2.

4. *Ibid.*

5. Richard Sole and Brian Godwin, *Signs of Life* (New York, NY: Basic Books, 2000), p. 119.

The phenomenon of consciousness is the source of all value in our lives. As such, it should be at the top of the scientific agenda. Yet despite its fundamental importance, consciousness is a subject that most scientists are reluctant to deal with. We know practically nothing about either its mechanisms or its evolution. . . .

If consciousness is not algorithmic, then how is it produced? We don't know. The machineries of consciousness are an almost perfect mystery.<sup>6</sup>

The answer — indeed the only possible answer that makes sense — is that we were *created* in the image of God!

### **Biblical Backgrounds of Science**

The basic compatibility of science with Christian theism is even more obvious when it is realized that modern science actually grew in large measure out of the seeds of Christian theism. It is absurd to claim, as modern evolutionists often do, that one cannot be a true scientist if he believes in creation. As outlined in figure 1, most of the great founders of science believed in creation and, indeed, in all the great doctrines of biblical Christianity.

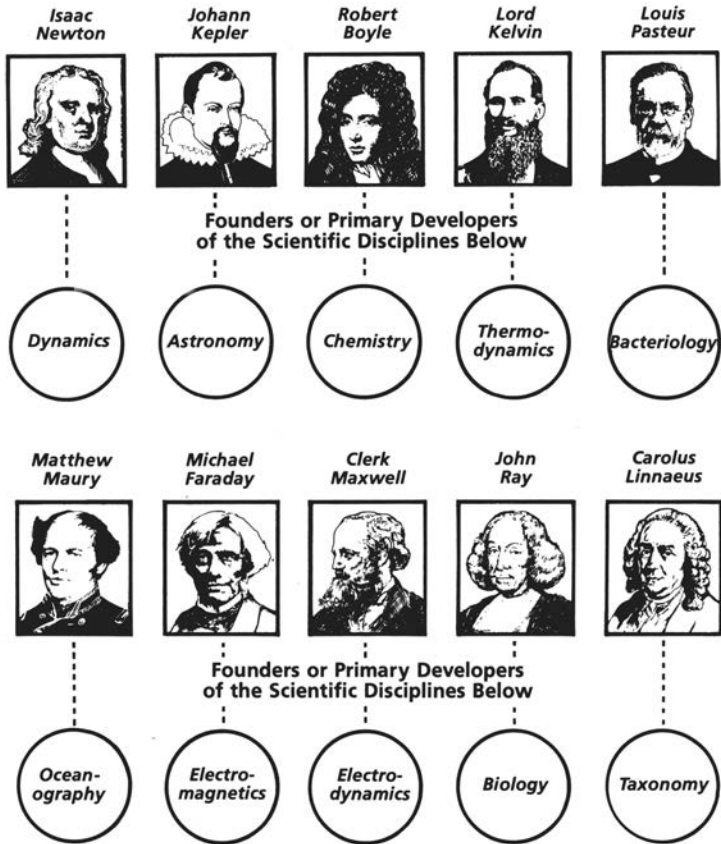
Men such as Johann Kepler, Isaac Newton, Robert Boyle, David Brewster, John Dalton, Michael Faraday, Blaise Pascal, Clerk Maxwell, Louis Pasteur, William Thompson (Lord Kelvin), and a host of others of comparable stature<sup>7</sup> were men who firmly believed in special creation and the personal omnipotent God of creation, as well as believing in the Bible as the inspired Word of God and in Jesus Christ as Lord and Savior. Their great contributions in science were made in implicit confidence that they were merely “thinking God’s thoughts after Him,” and that they were doing His will and glorifying His name in so doing. They certainly entertained no thoughts of conflict between science and the Bible. A tabulation of the names and contributions

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6. Matt Cartmill, “Do Horses Gallop in their Sleep?” *Key Reporter* (Autumn 2000): 6, 8.

7. See Henry M. Morris, *Men of Science — Men of God* (Green Forest, AR: Master Books, 1988), for brief biographies and testimonies of over 107 of these great Bible-believing scientists of the past.





**FIGURE 1 — Christian Founders of Key Scientific Disciplines**

*The humanistic claim that scientists cannot believe the Bible is refuted by the fact that many of the greatest scientists of the past were Bible-believing creationist Christians. See appendix 1 for an extensive listing of these men.*

of many of these great Bible-believing scientists of the past is incorporated in appendix 1.

Some skeptics might say that such men were merely products of their times — that everyone believed in God and the Bible at the time.

But that's exactly the point! It was no coincidence that it was in the milieu of the Reformation and the Great Awakening that modern science first grew and began to thrive. Fruitful scientific research almost demands a biblical worldview, either consciously or subconsciously, a worldview in which like causes produce like effects, where natural phenomena follow fixed and intelligible natural laws, and where we can have confidence that we can think rationally and meaningfully. Such a world presupposes no random, chaotic origin but an origin under the control of a great mind and will, an intelligent and volitional First Cause, a great lawgiver who can enact, implement, and enforce His created laws.

Many recent scientists, even though they themselves are not creationists, are still willing to recognize the Christian, creationist origin of modern science. Entomologist Stanley Beck, an articulate anti-creationist, has acknowledged this fact: "The first of the unprovable premises on which science has been based is the belief that the world is real and the human mind is capable of knowing its real nature. . . . The second and best known postulate underlying the structure of scientific knowledge is that of cause and effect. . . . The third basic scientific premise is that nature is unified."<sup>8</sup>

Christian creationists certainly would agree with all these premises, although such concepts were largely either unformulated, ignored, or rejected by the pagan philosophers of antiquity. Beck acknowledges that they are essentially Christian in origin and nature. "These scientific premises define and limit the scientific mode of thought. It should be pointed out, however, that each of these postulates had its origin in, or was consistent with, Christian theology."<sup>9</sup>

Why, then, should there be a conflict between Christian theology and true science? The fact is that there is no conflict, but the

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8. Stanley D. Beck, "Natural Science and Creationist Theology," *Bioscience*, 32 (Oct. 1982): 739.

9. Ibid. See also E. M. Klaaren, *Religious Origins of Modern Science* (Grand Rapids, MI: Eerdmans, 1977); Stanley L. Jaki, *The Origin of Science and the Science of Its Origin* (South Bend, IN: Regnery/Gateway, 1978); R. Hooykaas, *Religion and the Rise of Modern Science* (Grand Rapids, MI: Eerdmans, 1972); Alfred North Whitehead, *Science and the Modern World* (New York, NY: Macmillan, 1926).

problem lies with modern evolutionary scientists, who have arbitrarily superimposed an additional, extraneous postulate in their current definition of science. Here is how Beck puts it: "Scientific thought soon parted from theology, because no assumption is made concerning any force outside or beyond natural measurable forces."<sup>10</sup> That is, science is assumed to be, not only rational and causal and unified, but also naturalistic, banning by definition even the possibility of a supernatural First Cause of the rationality, causality, and unity of the universe with which science deals. But such an assumption is purely arbitrary (even emotional, as Isaac Asimov had admitted)<sup>11</sup> and was certainly not held by the great scientists of the past, nor is it indicated by any actual scientific data.

On such a basis, the possibility of true creation is excluded, not because of facts, but because of anti-creationist prejudice. Natural causes are invoked not only to explain the operation of present processes and systems but also the origin of all such processes and systems!

Such a definition of science was not held by the original founders of science or by anyone else until recently. The once-revered definition of "science" was as follows: "'Science,' n. (Fr. from L. *scientia*, from *scio*, to know) 1. In a *general sense*, knowledge, or certain knowledge; the comprehension or understanding of truth or facts by the mind. The *science* of God must be perfect."<sup>12</sup> Thus *science*, as originally defined and intended, meant "truth" or "facts" or "knowledge." The essence of the time-hallowed scientific method has heretofore been claimed to be observation, experimentation, falsifiability, repeatability. But modern evolutionists have prostituted it to mean "naturalism" or "materialism" or even, in effect, "atheism." Such a definition, of course, is a convenient dodge to get away from having to consider creationism.

Is scientific creationism scientific? Obviously, it is not. Creationism involves acceptance of a premise that

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10. Beck, "Natural Science," p. 739.

11. See chapter 4.

12. *An American Dictionary of the English Language*, 1st ed., s.v. "science." This first edition of Webster's famous dictionary was published in 1828.

lies outside of science. . . . If separated from its origin in a religious tradition, might not the creationist view of life on earth be offered as a scientific theory? . . . The answer is an unequivocal “no,” because the creationist theory requires the belief that some force, some factor has created and, in so doing, has bypassed the natural forces and mechanisms by which the physical universe operates.<sup>13</sup>

Such an evaluation ignores the fact that, insofar as any real proofs or unequivocal evidences go, evolution also bypasses any observed natural forces or mechanisms. However, it is considered “scientific” purely because it is “naturalistic.”

Scientists like to project an image, for public consumption and admiration, of detached objectivity, or searching for truth. Yet that search for truth seems to stop abruptly whenever it begins to lead in the direction of supernatural creation, and the vaunted objectivity of scientists quickly deteriorates to irate emotionalism whenever evolution is questioned on scientific grounds. If evolutionary scientists are going to continue to insist that science is pure naturalism, then they ought to be honest enough to admit that such a position requires at least as much faith as that of the Bible-believing creationist. A discerning article in the journal of the Society for the Study of Evolution has some very appropriate comments in this vein:

By a metaphysical construct I mean any unproved or unprovable assumption that we all made and tend to take for granted. One example is the doctrine of uniformitarianism that asserts that the laws of nature, such as gravity and thermodynamics, have always been true in the past and will always be true in the future. It is the belief in that doctrine that permits scientists to demand repeatability in experiments. I like the word doctrine in this case because it makes clear that matters of faith are not restricted to creationists and that in the intellectual struggle for citizen enlightenment we need to be very clear just where the fundamental differences between

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13. Beck, “Natural Science,” p. 740.

science and theology lie. It is not, as many scientists would like to believe, in the absence of metaphysical underpinnings of science.<sup>14</sup>

Thus we conclude that true science is fully consistent with Christian theology in general and creationism in particular, certain modern scientists to the contrary notwithstanding. Indeed, modern science had its origin in the creationist worldview of biblical Christianity. Modern scientism, on the other hand, is based on the arbitrary incorporation of eternity-to-eternity naturalism into the establishmentarian definition of science. As we shall see, however, the basic principles of science (such as causality) are fully consistent with theism and a supernatural creation.

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

Probably the most universal and certain of all scientific principles is the principle of causality, the law of cause and effect. This concept has been argued extensively, pro and con, in philosophical treatises, with respect to its possible theological implications, but there is no question of its universal acceptance in the world of experimental science, as well as in ordinary personal experience.

The subtle refinements of philosophical argumentation relative to causality require such a specialized educational background that non-specialists in philosophy (or philosophical theology) find them extremely tedious either to appreciate or evaluate. Such learned disputations are beyond the scope of the practical implications in science and human experience, which we seek to explore here.

Since God does exist, it seems very unlikely that He would make the evidence of His existence so tenuous as to require either expertise in philosophy to discern it or blind credulity to appropriate it. "Be ready always to give an answer [Greek *apologia*, an 'apologetic,' a systematic objective evidential defense of the Christian faith] to every man that asketh you a reason of the hope that is in you" (1 Pet. 3:15), wrote the Apostle Peter as

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14. Walter M. Pitch, "The Challenges to Darwinism since the Last Centennial and the Impact of Molecular Studies," *Evolution*, 36, no. 6 (1982): 1138–1139. See also Henry M. Morris, "The Splendid Faith of the Evolutionist," *Acts and Facts* (Sept. 1982), p. 4.

he was inspired by the Holy Spirit. This is not a suggestion to intellectuals, but a command to all believers! Thus, the evidence must be real and it must be clear, to all who “sanctify the Lord God in their hearts” and who approach such study and witness with meekness and with fear. The Christian should be neither ignorant nor arrogant, though emotional religion by itself tends to the one and intellectual religion to the other. Both heart and mind must somehow be involved together, not in opposition but in fellowship.

It is this need for balance that is met so fully by the principle of cause and effect. Both rigorous science and everyday human experience function within its framework. One speaks to the mind, the other to the heart, but both speak in terms of causality and both lead ultimately to God.

In ordinary daily experiences, one knows intuitively that nothing happens in isolation. Every event can be traced to one or more events which preceded it and which, in fact, cause it. We may raise such causal questions about it as: “*How* did this happen?” “*What* caused this?” “*Where* did this come from?” “*When* did it start?” Or, more incisively, “*Why* did this happen?”

When we try to trace the event to its cause, or causes, we find that we never seem to reach a stopping point. The cause of the event was itself caused by a prior cause, and so on back. Eventually we must face the question of a possible uncaused First Cause.

This situation is equally true in the rigorous system of formal scientific logic. A scientific experiment specifically tries to relate effects to causes, in the form of quantitative equations if possible. That is, for example, if so much of component A is combined with so much of component B, then such an event will result with so much of product C being developed. If one repeats the same experiment with the same factors, then the same results will be reproduced.

Once again, the causal logic can be carried backward in time through a chain of effects and their sequential causes. And again, one must confront the question of either an infinite chain of “second causes,” or else, finally, of a primary cause, the uncaused First Cause.

As to the precise definition of a “cause,” one could hardly improve on the definition formulated by the great 19<sup>th</sup> century apologist, C.A. Row: “A cause is a thing previously existing, which has not only the power to bring into existence something not previously existing, but which has actually produced it.”<sup>15</sup> Everything with which we are acquainted in the physical or moral spheres can be thought of as either an effect or a cause. In turn, each cause is itself an effect of some antecedent cause. “Whatever exists in the effect, exists either actively or in potency, in the cause. Otherwise it must either have produced itself, which is absurd, or some other cause must be invoked to account for the existence of such things in the effect which did not exist either actively or potentially in the cause.”<sup>16</sup>

If someone objects to using a definition formulated by a theologian, consider the discussion by Dr. Abraham Wolf, former professor and head of the Department of the History and Method of Science at the University of London, one of the greatest philosophers of science in modern times: “Except among believers in magic, at the one extreme, and among thorough-going skeptics, at the other extreme, it is usually assumed either explicitly or at least implicitly, that every event has a cause, and that the same kind of cause has the same kind of effect. This assumption is commonly known as the Postulate or Principle of Universal Causation.”<sup>17</sup>

Some intellectuals have eschewed such a definition, regarding it as “anthropomorphic,” maintaining that natural phenomena should be described simply in terms of empirical sequences rather than causes and effects. Wolf, however, pointed out the fallacy in such a formulation:

It would certainly be extravagant to project into the caused sequences of inanimate phenomena anything analogous to the sense of effort or of constraint that is experienced in human activity or passivity respectively. But that is no reason for discarding causality altogether. Carried through consistently, this can only end

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15. C.A. Row, *Christian Theism* (London: Thomas Whittaker, 1880), p. 49.

16. *Ibid.*, p. 50.

17. *Encyclopaedia Britannica*, 1949 ed., s.v. “Causality, or Causation,” by Abraham Wolf.

in the conception of the world as a series of independent miracles — a view even more irrational than the anthropomorphism which it is intended to correct. The principle of conservation of matter and energy would lose all significance without the idea of causal continuity, according to which certain successive events not only *follow*, but *follow from*, one another. In fact, mere laws of sequence are only intelligible in the last resort, when they can be shown to result from direct or indirect causal connections.<sup>18</sup>

The very basis of the highly reputed “scientific method” is just this law of causality — that effects are in and like their causes, and that like causes produce like effects. Even the famous “principle of indeterminacy” involves causality expressed statistically. Science in the modern sense would be altogether impossible if cause and effect should cease.

Oddly enough, however, some modern cosmogonists are indeed trying to deny causality at the quantum level. An astrophysicist at the University of Hawaii has written as follows:

Let me start by saying that many people believe that everything in nature has to have a causal explanation. Although this may be true at the macroscopic level, it is not necessarily the case at the microscopic level, as quantum physics has demonstrated. . . . Similarly, the universe itself does not require a cause.<sup>19</sup>

Quantum physics has *demonstrated* nothing of the sort. The so-called proofs are merely mathematical speculations. This idea is discussed further in chapter 5, but it should be obvious that its main purpose is to account for the universe without God. To do that, it has to be assumed either that the universe suddenly just happened, without a first cause, or else that it has always existed, never beginning at all. For if causality is real, then clear logic implies a first cause, and *that* implies God!

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18. *Ibid.*, p. 62.

19. Richard A. Crowe, “Is Quantum Cosmology Science?” *Skeptical Inquirer* (March/April 1995): 54.



Granted that the law of cause and effect is a universal law, applicable in all science and in all human experience, it still may not be obvious how this points to God's existence. In fact, there have been many attempts to use this very principle to discredit the supernatural of biblical Christianity. The philosophy of scientific determinism has been invoked to disprove biblical miracles, for example. Such arguments miss the point. The occurrence of a miracle does not contravene causality but merely invokes a higher cause, a cause quite adequate to produce the miracle.

Rather than discrediting the possibility of the supernatural, the law of causation offers strong testimony to the existence of a personal, omnipotent God. As noted above, the law leads inevitably to a choice between two alternatives: (1) an infinite chain of nonprimary causes; (2) an uncaused primary Cause of all causes.

Although again it is impossible to prove rigorously that the second alternative is the true one, it surely is more satisfying to all logic and experience. An endless chain of nonprimary causes is all but inconceivable, offering no "mental rest" as a supposed description of reality. Furthermore, this supposed endless chain of finite links can itself be regarded as an effect. Since every component of the chain is a finite effect, the whole series is itself a combined effect, but since the number of links is infinite, its cause must be infinite. Still further, each antecedent link in the chain is "greater" than the one before it, since something is always lost in the transmission from cause to effect.<sup>20</sup> Thus, eventually, in the infinite chain of nonprimary causes, a nonprimary cause must finally be reached that is essentially infinite. And since nothing can be "more infinite" than infinite, this finally must be a primary cause — the infinite First Cause.

There are not really two alternatives after all. If the law of cause and effect applies to the universe as a whole, as it surely applies now to every finite part of the universe, then there must be a great uncaused First Cause of the universe. The First Cause must be adequate to produce and explain every single entity in the universe, as well as the universe itself.

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20. See discussion on the entropy principle in chapter 7.

And the only adequate First Cause is the God of the Bible! That is, the First Cause must be infinite, eternal, and omnipotent (as required by the effects of boundless space, endless time, and the array of various phenomena of energy and matter occurring everywhere through space and always through time). The First Cause must also be living, conscious, volitional, and omniscient, in view of the phenomenal effects of life, consciousness, will, and intelligibility in the universe. Similarly the First Cause of the concept of righteousness — and the universal conviction that righteousness is “better” than unrighteousness — must be a moral Cause. The First Cause of the concepts of beauty, of justice, of spirituality, of love, and other such qualities (all of which, though abstract, are nonetheless real effects in this universe) must, by the principle of causation, be an esthetic, just, spiritual, loving Cause.

Finally, the inexorable conclusion to which we are driven by the scientific law of cause and effect — the foundational principle upon which all true science is built and which all human experience confirms — is that this universe was brought into existence by a great uncaused, self-existing First Cause. As noted in figure 2, that First Cause must be an infinite, eternal, omnipotent, omnipresent, omniscient, living, conscious, volitional, moral, spiritual, esthetic, loving being! Further, since the universe<sup>21</sup> is not a “multi-verse,” the God who created it could only have been one God, not two gods or many gods. Neither dualism, polytheism, nor pantheism will satisfy causality, but only monotheism.

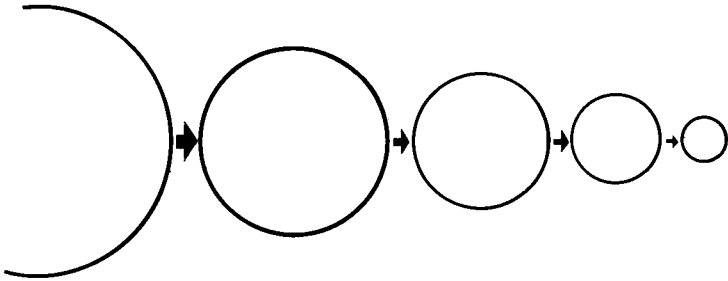
The only assumptions involved in arriving at this conclusion are: (1) that our mental processes are real and meaningful, not illusory dreams; (2) that causal reasoning is valid, not only when dealing with finite systems in the present but also when extrapolated toward infinity; (3) that the basic principles which are known to describe all present phenomena (e.g., law of cause and effect, laws of thermodynamics) have also been in operation throughout the past, since the close of creation.

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21. A recent atheistic suggestion is that there may be an infinite number of universes, and that we just happen to be in the one that seems accidentally to support life. There is no evidence for such a notion, except the desire to eliminate God.

**FIGURE 2 — Principle of Cause and Effect**

*The most basic scientific principle, and the criterion that governs all human experience, is the law of causality. This law states that although one cause can have many effects, no effect can be either quantitatively greater than or qualitatively superior to its cause.*



*An effect can never be greater — and, in fact, will always be less — than its cause. Thus, a chain of effects and their causes must eventually trace back to an essentially infinite First Cause.*

***The First Cause of limitless space must be infinite.***

***The First Cause of endless time must be eternal.***

***The First Cause of boundless energy must be omnipotent.***

***The First Cause of infinite complexity must be omniscient.***

***The First Cause of love must be loving.***

***The First Cause of life must be living.***

***Thus, the First Cause of the universe must be an infinite, eternal, omnipotent, omniscient, omnipresent, personal, volitional, holy, loving, living being!***

While the above assumptions cannot be proved, they are surely the most reasonable assumptions that could be made based on all known observations and experience. No scientist would ever question them in any circumstance, except perhaps on this question of origins. No exception to any of them has ever been noted, except in the case of miracles (which, as noted above, can also be incorporated within them by allowing the activity of a divine Cause when occasion and evidences warrant).

Thus the basic premise of all biblical theology — that “in the beginning God created the heaven and the earth” (Gen. 1:1) — can be considered proved, as well as anything beyond the immediate reach of experimental demonstration can ever be proved. At this point, the method and time and other particular features of His creation are yet to be discussed, but the fact of the God of the Bible, as the one First Cause of all things, can and should be accepted, on the basis of overwhelming evidence throughout His creation.

### **God’s Purpose in Creation**

Apart from the fundamental issue of First Cause, probably the most vital theological question is that of purpose. There is nothing in the essential existence of God that requires Him to create. The universe had a beginning — even time had a beginning — but God is eternal. He existed for endless “ages” (whatever the meaning of such a term before the creation of time) without creating.

Whatever He is, God is not capricious, nor can He be surprised. There must, therefore, be good and sufficient reason why He created the universe and man to live in the universe. Our minds are finite, however, and it is vain and presumptuous for us to attempt to enter into His counsels, except to the extent that He has been pleased to reveal them in His Word. “For who hath known the mind of the Lord? or who hath been his counsellor? . . . For of him, and through him, and to him, are all things” (Rom. 11:34–36).

The Scriptures do reveal that man is at the center of His purpose. Only man (including woman) was created in God’s image (Gen. 1:26–27), only man was given dominion over all the earth (Gen. 1:26, 28), and only man will dwell with God forever (1 Thess. 4:17; Rev. 21:3). Furthermore, this eternal habitation will not be merely contemplative. “His servants shall serve him” (Rev. 22:3). With all the joys of endless life and peace, and with all the incomprehensible (1 Cor. 2:9) blessings of “the exceeding riches of his grace” that are to be shown to us in “the ages to come” (Eph. 2:7), there will still be much work to accomplish.

But the nature of this future service has been revealed only in the most general way. Details necessarily await His second com-

ing. In fact, the actual individual assignments are somehow given as “rewards,” associated with our service in this present life. Thus, their details cannot yet be revealed, since our present service is not yet complete.

Since God, who created time as well as space, knows the end from the beginning, His ultimate purpose in creation must be centered on these eternal ages to come and on man’s role in these future ages. Since He did not immediately proceed to such a future economy right from the beginning, however, we must conclude that this present economy is tentative and probationary and that this phase also involves good and sufficient reasons on God’s part.

The need for a period of probationary service clearly suggests the need for a time of testing and training. As beings created in God’s image, men and women are not robots, capable of doing only what they are designed and commanded to do. Neither are they infinite in wisdom and ability, for then they would be not in God’s image, but *as* God himself. They were freely responsible for what they might do, though not yet ready for all God had ultimately planned for them to do. Thus the need for a time of preparation and probation.

Furthermore, God chose not to create a whole population of people directly, but indirectly, through the marvelous process of reproduction. Adam was “the first man” (1 Cor. 15:45) and Eve was “the mother of all living” (Gen. 3:20), and it would take thousands of years before an adequate number of people could be produced and prepared for God’s eternal plan.

Not only were human beings created to live forever, but so was the physical universe which God had created. The earth and the sun, the moon and the stars, have been established forever (Ps. 148:1–6, et al.). The universe, in fact, is man’s home. Though his physical body may die, it must ultimately be resurrected and become immortal, no longer subject to death (1 Cor. 15:52–53).

As a part of his probationary training, therefore, man must learn the nature of God’s universe, for he must live in it and serve his Creator in it forever. He must not only learn to understand it, but also to control and utilize its processes. And what he learns,

he must transmit to others, both of his own generation and of subsequent generations, in order that the human race as a whole, as it grows in both knowledge and number through the years, may serve God most effectively.

Initially, of course, even though the entire physical universe was created as man's home, his population would be small and his knowledge and experience very circumscribed. Therefore, God prepared a special part of the universe, a place called earth, that could serve as mankind's home during this growth and learning period. For the time being, the "heavens" were reserved by the Lord for other purposes (Ps. 115:16).

God himself also chose to enter His physical universe and to establish "his chambers" there (Ps. 104:2-3). Having created the universe, He is not, of course, bound by it. He is "transcendent" — outside of space and before time — but He is also "immanent," everywhere "here" in space and always "now" in time.

God has not revealed just where, in relation to earth, His heavenly throne room is located, except that it must be at a tremendously great distance from earth (2 Cor. 12:2-4; Eph. 4:10). It is the place from which Christ came into the world and to which He returned (Ps. 110:1; Hos. 5:15) after His death and resurrection. It is evidently there that He is preparing a place for His disciples (John 14:3) and to which He will receive them when He returns. It is probably also to this "house not made with hands, eternal in the heavens" (2 Cor. 5:1) that the spirit of believers are carried at death, there temporarily to rest and await the resurrection.

Also in the heavens reside "an innumerable company of angels" (Heb. 12:22). These are mighty spirit beings, created not in God's image like man, but created as "ministering spirits" (Heb. 1:14). As "servants," they serve both God (Ps. 103:20-21) and man (Heb. 1:14). They do not share the human capacity of reproduction, having been created initially in adequate numbers for them to accomplish God's purpose for them. They are called "the host of heaven" (2 Chron. 18:18), a term also associated with the stars (Jer. 33:22).

Not very much else has been revealed concerning the matters discussed in this section, and we need to be careful not to draw

unwarranted inferences and conclusions. Nevertheless, what is revealed is fascinating, creating in us a yearning to know more, and is beautifully harmonious with all we know in science about the universe and in our hearts concerning God.

### **The First Great Commission**

When Christ ascended to heaven after His resurrection, He left His disciples what has long been known as the Great Commission, a mandate to all Christian believers to take the gospel to the whole world, commanding them to try to bring all people everywhere to submit to Jesus Christ as Lord and Savior. It is a worldwide, age-long mandate, given to all those who have been saved through His mighty work of redemption. It has never been rescinded, nor will it be, until He sets up His eternal kingdom, composed only of those who have been redeemed.

But long before that another great commission was given to all men, whether saved or unsaved, merely by virtue of being men created by God in His image. It also had worldwide scope, and has never been rescinded. It had to do with implementing God's purpose in His work of creation, just as Christ's commission was for implementing His work of salvation and reconciliation. The first is an obligation for all people, the second an obligation for all Christians.

This primeval commission was transmitted by their Creator to the very first man and woman and, through them, to every man and woman who have descended from them. It has never been withdrawn, and all indications are that it will continue to be applicable forever, since it involves the very purpose of God in creation.

In its primeval form, this mandate (called by some "the cultural mandate," or more appropriately, the "dominion mandate") is found in Genesis: "And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. . . . Be fruitful, and multiply, and replenish the earth, and subdue it; and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth" (Gen. 1:26, 28).

Man's "dominion," of course, is as God's steward, not as one that is given license to "destroy the earth" (Rev. 11:18). "The earth is the LORD's, and the fullness thereof; the world, and they that dwell therein" (Ps. 24:1). Nevertheless, although God retains ownership, man has been placed in charge of the earth and all its systems, living and nonliving. This is a great responsibility.

The command to "subdue the earth," although couched in military terminology, should be understood to mean bringing all earth's systems and processes into a state of optimum productivity and utility, offering the greatest glory to God and benefit to mankind. Thus, the primeval commission authorizes — in fact, commands — those human enterprises that we now denote as science and technology, or research and development. First we are to learn to understand the full nature of earth's processes, and then we are to organize them in useful and beautiful systems and products. Note figure 3.

The creative acts by which God brought His universe and its inhabitants into existence are reflected now in the major divisions of science, as man continues year after year seeking to subdue the earth. There are only three specific acts of *ex nihilo* (out of nothing) creation recorded in Genesis, indicating three fundamentally different entities in God's universe. These acts are indicated by the use of the verb "create" (Hebrew *bara*):

1. "In the beginning God *created* the heaven and the earth" (Gen. 1:1).
2. "God *created* . . . every living creature that moveth" (Gen. 1:21).
3. "God *created* man in his own image" (Gen. 1:27).

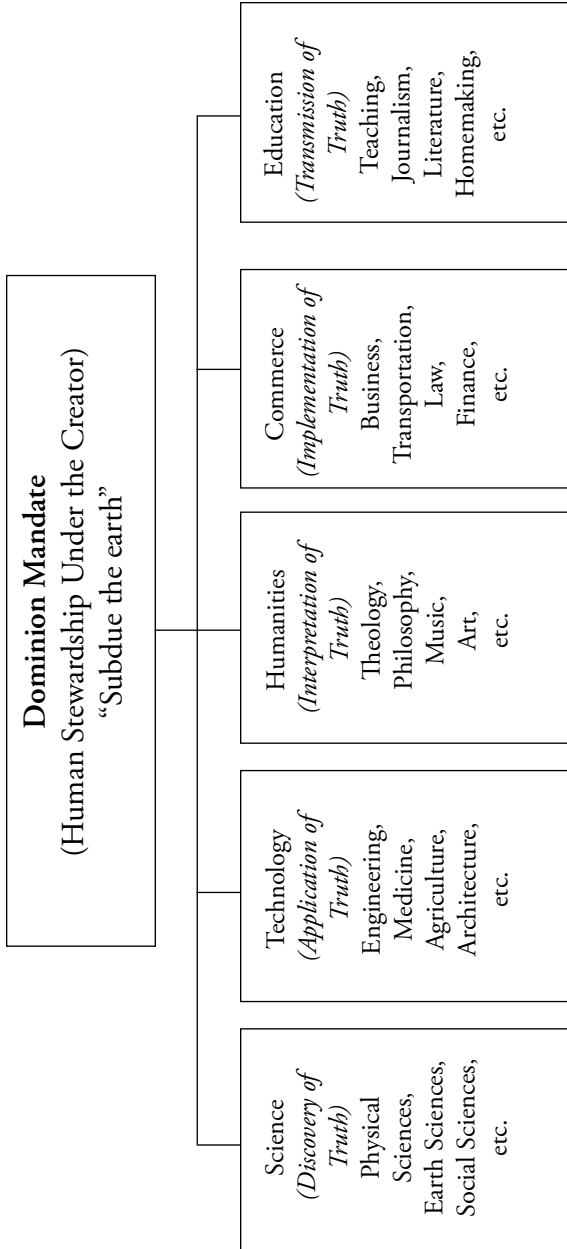
The first use relates to the physical world, the second to the living world, the last to the human world. Research and development related to these three "universes" can be divided into the physical sciences, the life sciences, and the socio-humanistic sciences (or the social sciences and humanities), respectively.

Purely physical materials constitute the fundamental basis of all systems. The "living creature" (Hebrew *chay nephesh*) "that moveth" (that is, *animals*, creatures that are "animated") is a physical



**FIGURE 3 — The Dominion Mandate**

*The first great commission to mankind was to “Be fruitful, and multiply, and replenish the earth and subdue it . . .” (Gen. 1:28). This commandment is still in effect, and is our fundamental warrant for research, development, education, and all other legitimate activities of mankind.*



system with life added. Similarly, a human being is a living system with God's "image" added. Animals are qualitatively different from physical systems, no matter how complex (plants, although they are highly organized replicating chemical systems, do not possess life in the biblical sense). Similarly, human beings, though both physical and animal, are qualitatively distinct from mere living systems, possessing the divine image, with all its implications. Thus, it is these three types of systems — physical, animal, human — that are the specific objects of God's primeval commission to man.

The physical sciences include such disciplines as physics, chemistry, geology, hydrology, meteorology, astronomy, and others. The technologies that build on these sciences include most of the branches of engineering (civil, electrical, mechanical, aerospace, chemical, petroleum, industrial, etc.). The life sciences utilize the physical sciences, but add to them data that are peculiar to the phenomenon of living and reproducing, becoming such disciplines as biology, physiology, genetics, and others. Since living systems must build on a physical base, a number of interdisciplinary fields between the physical sciences and life sciences have developed, such as biochemistry, paleontology, oceanography, and so on. The fields of botany and other studies related to the plant kingdom could be included in this category; although plants do not possess "life" (Hebrew *nephesh*) in the biblical sense, they nevertheless, as highly complex biochemical systems, do exhibit many of the attributes of life, such as reproduction and variation. The technologies that apply the life sciences and the interdisciplinary sciences include such fields as medicine, agriculture, bioengineering, food technology, and many others.

### **The Image of God**

The social sciences and humanities include all the disciplines that relate peculiarly to mankind and human society. Theologically, they relate to those aspects of human life and activity that go beyond the laws of physics and biology, associated with what the Scriptures call "the image of God" in man. Since most human activities do involve more than physics and biology, the vocations of most men and women in relation to the primeval commission can be

included in this category. The study of theology itself, as well as philosophy and the disciplines of literature, language, music, and art belong here, for example. The transmission and utilization of the knowledge of the data developed in the sciences, as well as the products developed in the technologies, in all the categories of man's dominion, involve activities of great numbers of people in the fields of education, communication, commerce, transportation, and even recreation.

In this area, however, more than in the others, an additional factor has entered the picture, one which was not present when the primeval mandate was given to man by God. This is the "sin-factor," which has profoundly affected man's relation to God and to other men. Although the "image of God" is still present in all men (note Gen. 9:6; James 3:9; et al.), it has been profoundly marred, desperately needing renewal and restoration (Col. 3:9-10). Therefore, all the social sciences and humanities, as well as all human activities which involve interpersonal communication, must now give full cognizance to this factor if they are to be developed and used effectively.

### **The Effects of Sin**

The entrance of sin into man's nature, through Satan's rebellion and Adam's fall, had pervasive spiritual effects in all areas of life, even bringing God's curse on the earth and death into the world (Gen. 3:17-19; Rom. 5:12). Our immediate purpose here, however, is only to note sin's effect on man's responsibility under the dominion mandate. What changes have been introduced in man's relation to the earth concerning his dominion and his commission to subdue it for God's glory and man's good?

In one sense there has been no change. That is, man still is responsible to "subdue the earth" and to "have dominion" over it. Not only after Adam's sin but even after the worldwide sin of the antediluvians and the cataclysmic judgment of the Flood, God renewed the commission. To Noah and his sons (of whom "was the whole earth overspread," according to Gen. 9:19) was given the same command as to Adam: "Be fruitful, and multiply, and replenish the earth" (Gen. 9:1; Gen. 1:28). Furthermore, man's

dominion over the earth and its animal inhabitants was reaffirmed — “into your hand are they delivered” (Gen. 9:2). This dominion mandate was still in effect in David’s day. He wrote, “Thou madest [man] to have dominion over the works of thy hands; thou hast put all things under his feet” (Ps. 8:6). It was not withdrawn in the apostolic period (Heb. 2:6–8) nor is there any indication in Scripture that it has ever been withdrawn. Thus all men everywhere are still held accountable to God for its accomplishment.

There is one major difference, however. Before sin came into the world, there was no need for men to exercise dominion over one another. All were in the image of God, so there should have been no need for organized study of man’s nature or control of his activities. Such disciplines as psychology, sociology, criminology, politics, jurisprudence, military science, and many others would never have developed if man had not sinned. Neither would there have been any need for doctors or hospitals or mortuaries. The vast insurance industry and numerous other enterprises related to life’s uncertainties, as well as vast segments of the entertainment and other industries which cater to man’s lust and greed, would never have developed.

But since sin did come in, God has modified and extended His primeval mandate to include the fundamental institution of human government. Instead of the simple patriarchal system of authority, which involved training children until such time as they could establish their own homes (Gen. 2:24), social systems must be established which would maintain order between men. “Whoso sheddeth man’s blood, by man shall his blood be shed” (Gen. 9:6).

The responsibility of administering capital punishment is the greatest responsibility of human government. It implicitly entails the obligation also to control those human actions which, if unchecked, could easily (and often do) lead to murder (e.g., robbery, adultery, slander, greed). The dual role of government is that of both protection and punishment — protection of the lives, property, and freedoms of its citizens, and just retribution on those citizens who deprive other citizens of life, possessions, or liberty. When, later at Babel, different languages and nations were established (Gen. 10:5; 11:9), this command was naturally extended to relations

between nations as well as between individuals and groups within each nation. Neither has this new dimension of the primeval mandate — that of human governmental responsibility — ever been withdrawn, any more than the command to have dominion over the earth and the nonhuman inhabitants of the earth. The classic proof-text (supported by many others) is Romans 13:1–7, affirming that God has ordained governmental authorities, and that these have the responsibility “to execute wrath upon him that doeth evil” and also to collect “their dues” for their necessary support.

Sin has not only corrupted human relationships, but even the study of God’s creation. The natural sciences have been reorganized around the concept of evolution instead of creation, and the Creator has been pushed further and further away in both space and time until, for many, He no longer even exists. The origin of the universe has been attributed to a primordial explosion of unknown cause, the origin of life to unknown processes in a primeval soup, and the origin of man to supposed naturalistic evolution from an unknown animal ancestry. The social sciences and humanities likewise, instead of glorifying God, seek to exalt man as the godlike product of animal evolution. Their economic and social theories, their educational methodologies, and their amoral literature, music, and art similarly assume that man has a naturalistic animal ancestry and purely humanistic goals.

Though all men are still under the Adamic/Noahic mandate to exercise a faithful and productive stewardship over the earth to the glory of God, the truth is that “all have sinned, and come short of the glory of God” (Rom. 3:23). To a tragic degree, man’s science and technology, even his theology, philosophy, and fine arts, seem to have taken him further and further away from God. He is not subduing the earth for God’s glory, but destroying the earth (Rev. 11:18) for man’s lust.

The Christian believer, however, can and should lead out in fulfilling God’s first great commission as well as the second. Though the image of God has indeed been badly marred, he can “put on the new man, which is renewed in knowledge after the image of him that created him” (Col. 3:10), and thus he has great divine resources at hand.

### God's Revelation in Nature

Certain faint-minded Christians (Heb. 12:3), alarmed at the dominance of humanistic evolutionary thought among modern scientists and unwilling to stand forthrightly against this untoward philosophy, have propounded what they call the Double Revelation Theory. According to this idea, God has provided two revelations to man, one in Scripture, the other in nature. Both of these, they say, are equally valid when rightly interpreted. The theologian is the interpreter of God's Word, dealing with matters of faith and conduct; the scientist is the interpreter of God's world, dealing with matters of fact in science and history. When these two revelations appear to conflict, the scientist must defer to the theologian if it is a matter of faith, but the theologian must defer to the scientist if it is a supposed matter of fact.

This Double Revelation Theory must, however, be unequivocally rejected by Bible-believing Christians. The writers of Scripture deal abundantly with real matters of fact in science and history (unlike the sacred writings of Buddhism, Confucianism, Hinduism, and other world religions, which do, indeed, deal almost exclusively with faith and conduct). To take the position that the Bible is unreliable when it deals with verifiable data of science and history will almost inevitably cause thinking inquirers to reject its teachings on theological beliefs and right behavior. Jesus said, "If I have told you earthly things, and ye believe not, how shall ye believe, if I tell you of heavenly things?" (John 3:12).

The Bible must be accepted as absolutely inerrant and authoritative on all matters with which it deals at all. Otherwise, it is not really the Word of God! If any man, or group of men, are empowered to tell us authoritatively what God's Word means, then we may as well entrust them with a commission to write the Bible altogether. Man seeks to become God if he (whether he is a theologian or scientist or anyone else) insists that *his* word must be accepted authoritatively as to what *God's* Word means.

We do not question that God "speaks" through His creation, but such natural revelation must never be considered equal in clarity or authority to His written revelation, especially as it often

is “interpreted” by fallible human scholars, many of whom do not even believe the Bible. The Scriptures, in fact, do not need to be “interpreted” at all, for God is well able to say exactly what He means. They need simply to be read as the writer intended them to be read, then believed and obeyed. This applies to their abundance of “factual” information as well as to their religious and practical instructions.

By the same token, we must also recognize God’s world must always agree with God’s Word, for the Creator of the one is author of the other, and “he cannot deny himself” (2 Tim. 2:13). God’s revelation in nature can often amplify and illustrate His Word, but His written revelation must always inform and constrain our interpretation of nature.

With such premises to caution us, we soon see that the Bible contains numerous statements affirming that God does, indeed, speak to us through His creation. A few of these, for example, are abstracted from such Scriptures as the following:

But ask now the beasts, and they shall teach thee; and the fowls of the air, and they shall tell thee: Or speak to the earth, and it shall teach thee: and the fishes of the sea shall declare unto thee (Job 12:7–8).

By his spirit he hath garnished the heavens; his hand hath formed the crooked serpent. Lo, these are parts of his ways: but how little a portion is heard of him? but the thunder of his power who can understand? (Job 26:13–14).

The heavens declare the glory of God; and the firmament sheweth his handywork. Day unto day uttereth speech, and night unto night sheweth knowledge (Ps. 19:1–2).

The heavens declare his righteousness, and all the people see his glory (Ps. 97:6).

Nevertheless he left not himself without witness, in that he did good, and gave us rain from heaven, and fruitful seasons, filling our hearts with food and gladness (Acts 14:17).

God that made the world and all things therein, seeing that he is Lord of heaven and earth, dwelleth not in temples made with hands; Neither is worshipped with men's hands . . . seeing he giveth to all life, and breath, and all things . . . that they should seek the Lord, if haply they might feel after him, and find him, though he be not far from every one of us: For in Him we live, and move, and have our being (Acts 17:24–28).

For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse (Rom. 1:20).

These and other similar passages clearly show that God has spoken to men through His creation. Therefore, the proper use of science and technology not only helps to implement the Edenic commission but also teaches men more and more about the person and work of the great Creator God.

God's revelation in nature, therefore, must always supplement and confirm His revelation in Scripture. It cannot be used to correct or interpret it. If there is an apparent conflict, one that cannot be resolved by a more careful study of the relevant data of both science and Scripture, then the written Word must take priority. This is not the place for an exposition of the evidences for the inerrancy of Scripture, but these are impregnable and compelling, and many works setting these forth are available to the open-minded searcher. In this study, it is assumed that the Bible is completely true and authoritative.<sup>22</sup>

With this assumption, it will soon become clear that the numerous biblical references to science are not only compatible with the known facts of science but that they often even anticipate scientific discoveries. Even though the Bible is not a scientific textbook, it does speak authoritatively on the fundamental principles of

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22. See, for example, the writer's book, *Many Infallible Proofs* (Green Forest, AR: Master Books, 1996), 396 p.



science. Furthermore, it speaks correctly even on details of science whenever it refers to them at all.

These relationships will be explored and discussed in the subsequent chapters of this book.