The Trinity Review

For though we walk in the flesh, we do not war according to the flesh, for the weapons of our warfare [are] not fleshly but mighty in God for pulling down strongholds, casting down arguments and every high thing that exalts itself against the knowledge of God, bringing every thought into captivity to the obedience of Christ. And they will be ready to punish all disobedience, when your obedience is fulfilled. (2 Corinthians 10:3-6)

The Bible and the Idolatry of Science

By Ronald L. Cooper

Editor’s note: With students going back to school, and today’s emphasis placed upon the sciences, this article is apropos for Christians to assess our thinking, especially in the area of the sciences. Do we believe that science, (especially science put on a par with Scripture) furnishes us with truth? What do the Scriptures say? “O Timothy, keep that which is committed to thy trust, avoiding profane and vain babblings, and oppositions of science [knowledge in modern translations] falsely so called: Which some professing have erred concerning the faith” (1 Timothy 6:20, 21). Also think of the first empirical “scientific” experiment performed: “And the woman saw that the tree was good for food, and that it was pleasant to the eyes, and a tree to be desired to make one wise, she took of the fruit thereof, and did eat, and gave also unto her husband with her; and he did eat” (Genesis 3:6). Where did such an empirical experiment get us? Into an estate of sin and misery. Science does not furnish us with truth; rather, God reveals truth to his people in his Word.

Additionally, the scientific method was developed by a known occultist, Francis Bacon, and much of “science” has since been connected with the occult – think also of the Nazis, and the root of the occult in their sciences. America envied them, and so absolved many Nazis of their crimes and quietly absorbed them into many scientific fields. Today, Germany still requires children to be trained in witchcraft in the school system. The teaching of the occult has now taken root in America’s schools and in the entertainment industry.

What about medical science? Has that not brought us many benefits? Certainly, there have been improvements, but again, what do the Scripture say? “Neither repented they of their murders, nor of their sorceries, nor of their fornication, nor of their thefts;” “And the light of a candle shall shine no more at all in thee; and the voice of the bridegroom and of the bride shall be heard no more at all in thee: for thy merchants were the great men of the earth; for by thy sorceries were all nations deceived” (Revelation 9:21; 18.23).

Greek the word for sorcery is pharmakeia from which we get our modern words, pharmacy and pharmaceuticals. “And Asa in the thirty and ninth year of his reign was diseased in his feet, until his disease was exceedingly great: yet in his disease he sought not to the LORD, but to the physicians. And Asa slept with his fathers, and died in the one and fortieth year of his reign” (2 Chronicles 16:12, 13). “And a certain woman, which had an issue of blood twelve years, and had suffered many things of many physicians, and had spent all that she had, and was nothing better, but rather grew worse, when she had heard of Jesus, came in the press behind, and touched his garment. For she said, If I may touch but his clothes, I shall be whole. And straightway the fountain of her blood was dried up; and she felt in her body that she was healed of that plague” (Mark 5:25-29). “And a woman having an issue of blood twelve years, which had spent all her living upon physicians, neither could be healed of any, came behind him [Jesus], and touched the border of his garment: and immediately her issue of blood stanched” (Luke 8:43, 44 – and Luke himself was a physician). In America, where the allopathic medical system is dominant, allopathic medical errors are responsible for between 250,000 to 440,000 deaths a year, making it the third leading cause of death,¹ we should keep in mind that it is YAHWEH (the LORD), who is the Great Physician who heals. How did Jesus heal while on Earth? How did he instruct his people in both the OT and NT on how they were to be healed?

Many believe today in the false doctrine of “new revelations” that are on par, or in fact, above the Scripture

and call themselves prophets and prophetesses. Many more have made modern sciences the newest, unquestionable “revelation.”

The reader should also read or reread the following Trinity Reviews: “Science and Truth”; “The Scientist as Evangelist”; “The Hoax of Scientific Creationism”; “The Sagan of Science”; and “The Biblical View of Science.” The purpose of this Review is to get Christians to recognize our idolatry of science in order to repent of it, and to take God at his Word, for it alone has a monopoly on truth.

**Introduction**

Once started, the idea that science is able to discover truth has never disappeared both within Christian and non-Christian circles, and even when refuted, it revives and reasserts itself more strongly than before. In his Foreword to Gordon Clark’s *The Philosophy of Science and Belief in God*, John Robbins says both “Christians and non-Christians alike commonly believe that science is an ever-growing body of knowledge about the universe. Scientific knowledge…has been extracted from Nature…by a group of extremely intelligent, highly educated, disinterested, and scrupulously honest men and women.”¹² In the nineteenth century, and even before that time, it was believed that science, especially physics, not only discovers truth, but it was increasingly considered to be the sole gateway into all knowledge. This unproven, but nevertheless widely accepted proposition, has intimidated many theologians who felt the need to reinterpret the Bible, particularly *Genesis*, to accommodate the views of science. Modern creation research societies, controlled by scientists who are Christians, also promote the false idea that there is such a thing as true science. Henry Morris of the Institute for Creation Research (ICR), states “True science always supports the Scriptures.”¹³ Jeff Miller of *Apologetics Press*, referring to the first and second laws of thermodynamics, says, “As far as science can tell, its laws have never been violated. They are without exception.”¹⁴ Numerous theologians, writing in the *Christian Scholar’s Review*, argue the laws of science are true and must be integrated with theology, with both learning from the other.¹⁵ Even Reformed theologian, R. C. Sproul, who argues that chance cannot be the cause of anything, seems to embrace the possibility that science can find truth. “Chance as a real force is a myth. It has no basis in reality and no place in scientific inquiry. For science and philosophy to continue the advance in knowledge, chance must be demythologized once and for all.”¹⁶

**Historical Attacks on Scripture from Science**

Beginning in the Middle Ages the first major attack on the authority of Scripture was launched by Copernicus who challenged the Ptolemy model, which held the Earth to be the center of the universe. The heliocentric view, while temporarily opposed by Rome, gained momentum, and it was given a tremendous boost by Isaac Newton, who, due to his law of action at a distance, required all planets, including the Earth, to revolve around the Sun.⁷ Andrew White wrote a comprehensive history documenting the attack of Robbins correctly points out that science can never discover truth, so scientific creationism is an oxymoron.

---

³ Henry M. Morris, “True Science,” *Days of Praise* (October 10, 1995), Institute for Creation Research. John W. Robbins, in his article, “The Hoax of Scientific Creationism,” *Trinity Review*, August 1987, charged that the scientific creation movement, which was attempting to get it into the curriculum of public schools, and subsequently failed, deserved to fail because it was deceptive. Henry Norris, one of the leaders of the scientific creation movement took strong exception to Robbins’ argument of deception, stating that there was no other way to make creation acceptable in the public schools than by leaving out the Bible from the argument (Henry M. Morris, “Is Creationism Scientific?” *Acts & Facts*, Institute for Creation Research, Volume 16, No. 12, December 1987. In his response to Robbins, Morris retorted that there is a true science and the pseudoscience of evolutionary humanism, which shows again that he considers science as a source of truth, as well as the Scriptures. However,

⁵ A typical example is, Alan G. Padgett, “The Mutuality of Theology and Science: An Example from Time and Thermodynamics,” *Christian Scholar’s Review*, Vol. XXVI, No. 1 (1996), 12-35. According to Padgett, “...there needs to be an ongoing dialogue between theology and science in which each discipline learns from the other” (31).
⁶ R. C. Sproul, *Not a Chance*, Baker Books, 1994, 214. It is interesting that Sproul refers to Clark who rejected empirical epistemology. “Because of the subject-object problem Clark insisted that via sense perception we can never get beyond probabilities. Certainty comes only through reason and the Bible.” Neither of these statements is true. Clark argued that we can never get beyond sense perception because nobody knows what it means, and Clark’s epistemology is not reason and the Bible, but the latter alone. Clark never mentions probabilities. In addition, Sproul appeals to John Montgomery, whose epistemology is empiricism, claiming that he is an “…ardent defender of Scripture…” (95). Both Sproul and Montgomery endorse the silly empiricist argument, “don’t you read [i.e., have sense perception of] your Bible?”
⁷ In the solar system, the mass of the Earth was considered far too small for the Sun to revolve around it. Andrew White documented the attack of heliocentrism on the geocentrism of the Bible. Andrew D. White, *A History of the Warfare of Science with Theology in Christendom*, D. Appleton and Company, 1896, Chapter III.
science on theology, which included the Copernican attack. By the nineteenth century heliocentricity was assumed by most people to be an established fact.

The second significant attack on Scripture was from geology, based in part on the writings of James Hutton and Charles Lyell, which challenged the literal twenty-four hour, six-day creation and young Earth, with the inference that the age of the Earth was millions of years old. Terry Mortenson analyzed the writings of nineteenth century geologists, and stated it was the Galileo affair of challenging the Earth as the center of the universe that led to the idea that true science (physics) can help in giving the true interpretation of the Bible. Scripture tells us about spiritual matters, while science tells us how the world works. It was the growing authority of science that led to the second challenge regarding the age of the Earth. Just as astronomy brought forth observational proof that the Earth revolves around the Sun, so it was that observational proof from geology demonstrated the Earth to be old. This was followed by the third major attack on Scripture, viz., Darwinian evolution, the idea that man evolved from natural processes, denying a literal Adam and Eve. Because of these three major assaults, many theologians found it necessary to reinterpret Genesis to accommodate the supposed discoveries by science. According to Babinski, “The Bible’s geocentric passages were ‘reinterpreted’…by Christians, [and] next came the challenge of the age of the Earth.”

Nineteenth and Twentieth Century Physics
In the latter half of the nineteenth century there was a strong movement among physicists to believe science has the potential to explain everything. It would be just a matter of time before physics could tell us all truths about the location and speed of every particle in the physical universe, and this would include human behavior because the mind is also made up of particles. However, this optimism regarding the prowess of science was short-lived because by the end of the nineteenth and into the twentieth century there were dramatic changes that resulted in a loss in the belief of certainty. Gordon Clark summarizes some of the major events among physicists in the abandonment of nineteenth century theories. The theories of special relativity (SR), general relativity (GR) and quantum mechanics (QM) were two of the most dramatic theoretical developments in the twentieth century. With relativity came the abandonment of the belief in absolute motion, the end of independence between time and space, and the speed of light being the same for all observers in all reference frames. With the advent of QM the position and speed of certain particles could no longer be determined simultaneously, and electrons, confined to discrete (quantized) orbits, could jump between them without traveling.

It did not take long before philosophers of science prepared the science-discovers-truth coffin for burial. Thomas Kuhn explains science as competing paradigms, being a primitive brute who is under the control of deterministic principles of population growth and the growth of the food supply.

8 See White, A History of the Warfare of Science with Theology in Christendom.
9 For a history of how the heliocentric view came to replace geocentricity, see Dorothy Stimson, The Gradual Acceptance of the Copernican Theory of the Universe, 1917. Also, J. L. E. Dryer, History of the Planetary Systems from Thales to Kepler, Cambridge UP, 1906. Despite the almost total acceptance of the heliocentric system, Dryer pointed out that the Tychonian system is from an observational view just as valid as that of the Copernican system (363).
10 James Hutton, Theory of the Earth, Burlington House, 1899.
11 Charles Lyell, Principles of Geology, John Murray, 1830.
12 It is noteworthy that a revolution in geology has been going on since the latter half of the twentieth century, analogous to that of physics, which is discussed in this paper. It was formerly believed that the geological column based on uniformitarian assumptions and the fossil record gave an accurate description of the relative ages of the strata. This is now challenged in mainstream geology due to considerations of moving continents and cataclysmic extinctions of animal species. See, Brian J Skinner, “Can You Really Believe the Evidence? Two Stories from Geology,” American Scientist, Vol. 74, No. 4 (July-August 1986), 401-409. Skinner also states that the development or radiometric dating has revolutionized how geologists think about the Earth (403).
13 Terry Mortenson, “British Scriptural Geologists in the First Half of the 19th Century: Part 1,” CEN Tech. J., Vol. 11, No. 2 (1997), 224. According to Mortenson, a group of Christian geologists existed in the nineteenth century who defended the literal accuracy of Genesis 1–11, disputing the long ages estimated by the secular geologists. They were attacked and ridiculed as being incompetent, which is similar to the current attacks on the current young Earth Creation ministries.
14 For a discussion of the influence of Eding to Taylor, it was the Reverend Robert Malthus who is mainly responsible for the origins of Darwin’s theory, based mainly on his view of man...
and when one becomes accepted, it becomes normal science.\(^{19}\) Normal science continues until some sort of crisis develops in which an extant theory cannot explain some new observations.\(^{20}\) According to Karl Popper, science consists of nothing but opinions or conjectures and their refutations, and “...neither observation nor reason can be described as a source of knowledge, in the sense in which they have been claimed to be sources of knowledge, down to the present day.”\(^{21}\) For Imre Lakatos, science is nothing but a set of research programs.\(^{22}\) Justificationism dominated philosophy for many years, but this idea fell into disrepute as it was concluded from inductive logic that “all theories are equally unprovable.”\(^{23}\)

Further doubt was cast on science by probabilism, the view that scientific theories can be at most highly probable. This idea was destroyed by Popper, who stated that all theories are not only unprovable, but they are equally improbable.\(^{24}\) In the view of Lakatos, one research program lasts until another considered more powerful replaces it. Well-known astrophysicist, Stephen Hawking, agrees that there is nothing true about science. “Any physical theory is always provisional, in the sense that it is only a hypothesis: you can never prove it. No matter how many times the results of experiments agree with some theory, you can never be sure that the next time the result will not contradict the theory.”\(^{25}\) Hans Reichenbach says, “The way toward an understanding of the step from experience to prediction lies in the logical sphere; to find it we have to free ourselves from one deep-rooted prejudice: from the presupposition that the system of knowledge is to be a system of true propositions.”\(^{26}\) The closest we can get to knowledge is to have a system of wagers (probabilities).

---

20 Kuhn, 66-76.
23 Lakatos, 95. Some science philosophers have given contradictory statements. For example, James Jeans says, “Physics gives us exact knowledge because it is based on exact measurements.” This is followed by “Our studies can never put us into contact with reality, and its true meaning and nature must be forever hidden from us” (Sir James Jeans, *Physics & Philosophy*, The MacMillan Company, 1945, 7, 16). At the end of his book he says no conclusions can be made from modern physics regarding determinism, causality or free-will (217).

After discussing developments in twentieth century nuclear physics, Max Born, says, “The riddle of matter is still unsolved, but it is reduced to the problem of ultimate particles…. We have reached the end of our journey into the depths of matter. We have sought firm ground and have found none.”\(^{27}\) Philosopher Bertrand Russell, who rejected Christianity, said of the scientific method, “All inductive arguments in the last resort reduce themselves to the following form: ‘If this is true, that is true: now that is true, therefore this is true.’ This argument is, of course, formally fallacious. Suppose I were to say: ‘If bread is a stone and stones are nourishing, then this bread will nourish me; now this bread does nourish me: therefore it is a stone, and stones are nourishing.’ If I were to advance such an argument, I should certainly be thought foolish, yet it would not be fundamentally different from the arguments upon which all scientific laws are based.”\(^{28}\)

Now, how does the invalidity of the scientific methodology affect Christian theology? One thing it may mean is that even the time-honored belief in heliocentrism may be an invalid inference.

Despite the abandonment of the belief in determinism and mechanism by most of those involved in science, Clark states that the general public seems to be persuaded that the great advances in technology in the twentieth century have something to do with the newly discovered laws in physics, especially Einstein’s relativity.\(^{29}\) What is not understood by them is that instead of new laws being added to old ones, new ones replaced the old.\(^{30}\) Clark gives some examples, starting with Newton’s first law of motion or the law of inertia, which says a moving body continues in rectilinear motion until an external force is imposed on it.\(^{31}\) This was replaced by SR, whereby all bodies are moving, so there are no fixed points by which rectilinear motion can be measured. Clark, quoting Newton, recognizes there is also a problem with the law of inertia for bodies supposedly at rest because all bodies are supposedly moving.\(^{32}\)
Ernst Mach, commenting on Newton’s absolute motion experiment, 33 said, with respect to the issue of whether the Sun or the Earth is the center of the universe, we can think of an Earth-centered Ptolemaic system or the Copernican one because each is equally valid. 34 Mach did not believe in either absolute motion or absolute space, but it can be assumed that Newton’s bucket is fixed with respect to the celestial bodies rotating around it. Possibly because Clark did not disagree with the accepted view of heliocentrism, he did not criticize Mach’s comments on absolute motion. 35 If we begin with the assumption of absolute rotation of the Earth, then the equator becomes oblate where the force of gravity is reduced, the Foucault pendulum 36 plane rotates, etc. “All these phenomena disappear if the [E]arth is at rest and the other heavenly bodies are affected by absolute motion around it, such that the same relative motion is produced. This is, indeed the case, if we start ab initio with the idea of absolute space.” 37

What we have here is a philosophical choice rather than science, 38 and both the Ptolemaic and Copernican systems are correct, the latter having been chosen due more to simplicity. 39 Even Einstein in comparing the Earth-centered to the Copernican system said, “But as motion is relative and any frame of reference can be used, there seems to be no reason for favoring one CS [coordinate system] rather than the other.” 40 This paper does not focus in any detail on the arguments for a geocentric universe with the Earth immobile, a view rejected by secular astronomers, though the author believes it is Scriptural. For instance, there are approximately seventy verses of Scripture that defend a fixed Earth and a moving Sun. Sadly though, heliocentrism is accepted by most Christian astronomers and creation parachurch organizations. 41 CMI Ministries strongly defends heliocentrism, as demonstrated by Jonathan Sarfati 42 and Robert Carter. 43 Besides the error of asserting science is a source of truth, the typical response for ignoring the many Scriptural verses is that geocentrism is only phenomenological language, or possibly poetry. However, one Christian astronomer, Geradus Bouw, defends geocentrism on the basis of Scripture, 44 and a geocentric mathematical model can be constructed which is as equally valid as the heliocentric model. 45 If the Earth does not move, then we have absolute motion and absolute space. Even though Newton believed in absolute motion and heliocentrism, he could not demonstrate absolute motion, and he considered the solar system to be an isolated system independent of the rest of the universe. 46

---

33 In his bucket experiment, Newton twisted a rope connected to a bucket filled with water, and then he released it. At first the surface of the water stayed flat, and then it became concave indicating it was rotating. Newton argued the water was rotating relative to a fixed space. 34 Ernst Mach, The Science of Mechanics, The Open Court Publishing Co., 1919, 542-543. 35 Clark, 67. 36 The Foucault pendulum supposedly proved the Earth rotates under a fixed pendulum, but this experiment is contrived and proves nothing. See Malcolm Bowden, True Science Agrees with the Bible, Bromley Publications, 1998, 510-511. 37 Mach, 231. 38 In defense of Clark, he recognizes the concepts of absolute versus relative space and motion is more philosophical than scientific (The Philosophy of Science and Belief in God, 68). 39 Mach, 232. 40 Albert Einstein and Leopold Infeld, The Evolution of Physics, Simon and Schuster, 1938, 223.

---


45 Luka Popov, “A Newtonian-Machian Mathematical Analysis of Neo-Tychonian Model of Planetary Motions,” European Journal of Physics, 34 (January 2013), 282-391. 46 Isaac Newton, Proposition 43. In his Proposition 43, outside of Principia, Newton stated that a geocentric system is possible in which the Earth is the center and the universe rotates around the Earth. This was quoted in a paper by Roman Catholic apologist,
With the acceptance of relative motion, Newton’s first law had to be abandoned, and this was the alleged reason for Einstein’s SR. However, there was a much more important reason for Einstein’s theory. In the latter nineteenth century, an experiment was conducted by two physicists, Michelson and Morley (MM), who attempted to measure the speed of the Earth as it was moving through the ether in its rotation about the Sun. These results shockingly indicated that the Earth was not moving. Steps were taken immediately to explain away these findings, one of the first being the invention of shrinking meter sticks that affected the measurement in such a way that the null result was obtained. Einstein eliminated the null result of MM by denying the existence of the ether in his SR theory. Special relativity made the Earth an arbitrary coordinate system rather than a fixed reference frame. According to Arndts, “The assumption that the Earth is in motion—along with the data from the Michaelson-Morley experiment—led directly to the postulates of special relativity.” Thus, the primary reason for SR was to avoid the unthinkable conclusion of MM that the Earth does not move, which would destroy the Copernican system.

While SR was designed to explain away the MM result of absolute motion, absolute motion by the inertial effect can be detected due to a change in direction or velocity. In this case the observer inside the accelerating elevator space ship can detect the acceleration, indicating there is absolute motion, which still presented a problem for Einstein due to the MM null result. If there is absolute motion, then there is absolute space as well, which is inconsistent with SR. The way Einstein dealt with this problem was to develop the theory of GR, which postulated that acceleration and gravity was the same thing. However, Arndts demonstrated that they are only the same under certain conditions and not the same under other conditions.

“The Alice-in-Wonderland conclusions found in general relativity are the result of the Alice-in-Wonderland assumption that acceleration and gravity are the same thing.” He says all this was necessary to avoid the unacceptable conclusion that the Earth is motionless at the center of the universe.

Another serious problem is while SR abolished the ether, GR put it back in. Arthur Eddington, a supporter of Einstein’s relativity, said, “Some would cut the knot by denying the aether altogether. We do not consider that desirable, or, so far as we can see, possible; but we do deny that the aether need have such properties as to separate space and time in the way supposed.” Space was again a substance with physical qualities, including curvature when masses are nearby. However, what is most important to note is the fact that there was nothing discovered in either SR or GR, and they were designed mainly to explain away the MM results. Not only do SR and GR contradict each other, the various experiments conducted that supposedly have confirmed SR led to unintelligible results. Since this is the case, the invalidity of science leaves open the possibility that geocentrism, which I believe is supported by the Bible, is true.

Another significant difficulty arose in twentieth century physics for subatomic particles, called the Heisenberg uncertainty principle, which found that the position and momentum of a particle could not be known simultaneously because any attempt to measure these led to a disturbance of the particle. Clark points out that the previous belief that both position and momentum can both be known is “…not a discovery based on observation, but an a priori thesis adopted for other reasons.” Another major problem that began in

---

47 Clark, 64-68.
48 Arndts, 17–32. Arndts states that some authors mistakenly believe the MM experiment was designed to test for the existence of an ether, but the purpose of the test was to measure the speed of light through the ether. Another perspective states, M-M attempted to measure differences in the speed of light coming from different directions due to the presence of the ether around the earth. When no difference in the speed of light was detected, several explanations were possible. (1) there was no ether. (2) the earth was not moving. This last possibility was so intolerable an idea that the scientific community ultimately concluded that there was no ether. It also led to acceptance of Einstein’s theory that the speed of light was absolute. – Editor.
49 Arndts, 33.
50 Supposedly, and observer can detect this acceleration by looking out the window of his accelerating elevator.
51 Arndts, 133.
the nineteenth century was whether light is a wave or a discrete particle (called a photon). Max Planck circa 1900 studied the relationship between heated bodies, and he observed different colors of light given off, which he considered to be different radiation frequencies. He constructed a model in which were small oscillators in the material that exchanged energy with an electromagnetic field not in discrete bundles rather than continuously. The size of each energy bundle was proportional to the frequency of radiation. Einstein combined Planck’s work on frequency with Thomson’s experiments with cathode rays, and the idea of the electron led him to develop the formula for the photon, $E = hv$.\(^{58}\) Despite these developments, the two theories are contradictory, and each demonstrated that the other contradicts certain observations.\(^{59}\) However, both are used in physics depending on which application is considered.\(^{60}\) The fact that both theories are used for light led to similar ideas about other particles. Louis de Broglie postulated that because light has dual properties, then electrons should also have dual properties. Another related idea in the late nineteenth century on the study of the atom was that energy existed in quantized discrete states. In 1913 Niels Bohr developed the quantum energy model, which gave accurate predictions for the hydrogen atom, but failed for atoms with more electrons.

The new ideas from Bohr and de Broglie led Erwin Schrödinger in 1925 to develop an equation, a form of the wave equation in classical physics, which could predict quantum states for atoms with more than one electron, agreeing with experimental results.\(^{61}\) According to physicist, Paul Tipler, “we can’t derive the Schrödinger equation just as we can’t derive Newton’s laws of motion. The validity of any fundamental equation lies in its agreement with experiment.”\(^{62}\) In other words, Schrödinger’s equation has nothing to do with any real processes of nature; it is used simply because it works. Even more bizarre, the square of Schrödinger’s wave equation is magically transformed into a probability function that gives the likelihood of finding an electron in a particular location. The pre-twentieth century idea that light was a classical wave, and an electron was a classical particle disappeared, and each one “behaves like a classical wave when propagation is considered and like a classical particle when energy exchange is considered.”\(^{63}\)

Commenting on the historical corpuscular theory of matter, Schrödinger states, “what are these corpuscles really, these atoms and molecules?—I must confess honestly I know the answer just as little as I know where Sancho Panza’s second donkey came from.”\(^{64}\) He also comments on the nineteenth century notion that matter was considered to be of one solid substance, and there were true models that could explain all future movements of particles given the initial conditions. “Quite the contrary, we are now obliged to assert that the ultimate constituents of matter have no ‘sameness’ at all.”\(^{65}\) Regarding the idea of true models of reality, he says, “[T]his attitude has now been abandoned… As our mental eye penetrates into smaller and smaller distances and shorter and shorter times, we find nature behaving so entirely differently from what we observe in visible and palpable bodies of our surrounding that no model shaped after our large-scale experiences can ever be true.”\(^{66}\)

Besides the various contradictions among twentieth century physics theories, some concepts, such as energy, underwent significant definitional changes while maintaining the same names. Two glaring examples are energy and the first law of conservation or energy. Energy is nothing that can be observed. Investigators during the nineteenth century thought of it as some sort of physical substance, and before that it had the name *vis viva*, which is close to what is now called kinetic energy.\(^{67}\) Other forms of energy were invented, such as mechanical energy, chemical energy, potential energy, etc. Their sum represents total energy, which is nothing more than an arbitrary bookkeeping method. Bridgman, referring to a comment by Poincaré, says when the conservation of energy seems to fail, we just invent a

---

58 Tipler, *Modern Physics*, 118-119. E is total energy, $h$ is Planck’s constant, and $v$ is the frequency of the photon.

59 Clark, 70-72.

60 Tipler, 70-72.

61 Tipler, 202-237.

62 Tipler, 204.

63 Tipler, 190.

64 Erwin Schrödinger, *What is Life? & Other Scientific Essays*, Doubleday Anchor Books, 1956, 177. Sancho Panza was a character in *Don Quixote*.


67 Descartes, Leibniz, and others who followed them viewed *vis viva* as some kind of force that is somehow conserved. Another concept was developed called the principle of least action, which led to much confusion about the conservation principle. From Joules, the idea came that heat can be transformed into mechanical energy, and from Carnot developed the notion that heat flows from higher to lower temperatures but with the total constant. At the beginning of the nineteenth century, the concept of energy began to take on a form of a substance. Later in the century the idea of potential energy was added to kinetic energy, and it was believed by many that all phenomena, including all forces, could be reduced to energy and mechanics. The energy concept became the organizing principle of all physics. But as this happened, energy became less of a substance and more abstract. For an interesting discussion of how the concept of energy and conservation evolved historically, see Philip Mirowski, *More Heat than Light*, Cambridge UP, 1989.
new form of potential energy.68 The energy concept was becoming more and more intangible although the name remained the same. Commenting on the conservation of energy as the sum of kinetic and potential energy, Bridgman says the construct of the latter only has meaning in terms of operations, with the choice of its position being arbitrary.69 Electrical engineer, Fred Fish, says, “[T]his law is not susceptible to mathematical proof, but all experience leads to the conclusion that it is true, and it is to be accepted as one of the ‘Articles of Faith,’ for the scientist and the engineer.”70 Science philosopher, John Kemeny, says, “a brief look at the history of conservation laws will indicate that they hold not so much because of any attribute of nature, but because of a human desire for conservation laws.”71

Once QM was invented, the energy concept was becoming even more intangible, which presented major problems for the concept of the conservation of energy. According to Bridgman, “there are quantum phenomena which still may have to be treated by statistical methods, and this may mean having to give up conservation in detail. We have no experimental evidence…of what an electron is doing while jumping from one quantum orbit to another.”72 Bridgman comments on other physical concepts, such as length, which in terms of physical operations is completely different if we compare the measurement of the diameter of ordinary physical objects with that of electrons. In the former case we can use some sort of ruler, but in the latter case we have to solve electrodynamic mathematical equations combined with experimental data.73 This means the concept of length has different meanings depending on which operations are performed. Not only energy, but many other fictions were invented, such as forces, charges, electric fields, magnetic fields, atoms, heat, etc.74 The force construct in physics is a made-up concept that came from the idea of pushing or pulling ordinary objects. Bertrand Russell said, “‘Force’ was known [before Einstein] to be merely a mathematical fiction….”75 According to Kemeny, many concepts, such as force, are best described as fictitious.76 For example, in Newton’s Second Law of motion there is no way to measure force independently of the law, so this is really a definition of force rather than a law. If we substitute mass x acceleration (ma) for force, then we don’t have to mention force at all. The concepts of force, energy, mass, etc. are “free creations of the human mind.”77 Instead of mass and acceleration, we could have meleration, M, standing for (m + a), and accelass, A, meaning (a-m). Now force F is not m x a, but ½( M² – A²). The definition of force is arbitrary and fictitious.78

Bridgman, in agreement with Kemeny, says, regarding electric fields, “I believe that a critical examination will show that the ascription of physical reality to the electric field is without justification…. It seems to me that any pragmatic justification for postulating reality for the electric field has now been exhausted…. I cannot find a single physical phenomenon or a single physical operation by which evidence of the existence of the field may be obtained independent of the operations which entered the definition.”79 Also the electromagnetic field for moving particles has no correspondence to reality.80 Regarding atoms, “This [the atom] is evidently a construct, because no one ever directly experienced an atom, and its existence is entirely inferential. The atom was invented to explain constant combining of weights in chemistry.”81 Another fiction is the concept of heat. Bridgman says, “it is not possible in the general case to find anything which we can call heat as such…. The heat concept is in the general case a sort of wastebasket concept, defined negatively in terms of the energy left over when all other forms of energy have been allowed for.”82 The first law of thermodynamics, dE = dW +

70 Fred A. Fish, Fundamental Principles of Electric and Magnetic Circuits, McGraw-Hill Book Company, Inc., 1920, 6. The first concept of energy to be conserved was kinetic energy, but when it was found this was not conserved, potential energy was added to keep conservation. Eventually other things were added to keep conservation, but the concept of energy had changed. People mistakenly believe that the law of conservation had remained the same.
72 Kemeny, 5, 10, 21-22. Bridgman on this point is also quoted by Clark, The Philosophy of Science and Belief in God, 78-79.
74 Bridgman, in agreement with Kemeny, says, regarding electric fields, “I believe that a critical examination will show that the ascription of physical reality to the electric field is without justification…. It seems to me that any pragmatic justification for postulating reality for the electric field has now been exhausted…. I cannot find a single physical phenomenon or a single physical operation by which evidence of the existence of the field may be obtained independent of the operations which entered the definition.”79 Also the electromagnetic field for moving particles has no correspondence to reality.80 Regarding atoms, “This [the atom] is evidently a construct, because no one ever directly experienced an atom, and its existence is entirely inferential. The atom was invented to explain constant combining of weights in chemistry.”81 Another fiction is the concept of heat. Bridgman says, “it is not possible in the general case to find anything which we can call heat as such…. The heat concept is in the general case a sort of wastebasket concept, defined negatively in terms of the energy left over when all other forms of energy have been allowed for.”82 The first law of thermodynamics, dE = dW +
The conservation of energy, is supposedly the most well tested law in physics.

According to Henry Morris, everything God created, including all mass, can be expressed as energy. God finished his creation on day six, so the total amount of energy in the universe is constant, i.e., no energy added and none destroyed. “Nothing is now being created and this is what was finally formalized by science in the first law of thermodynamics—the total energy remains unchanged; no energy is either created or destroyed, although its form may and does change. This is the first law of thermodynamics, the law of conservation of energy. This law has been validated on both the cosmic and sub-nuclear scales and is a truly universal law, if there is such a thing.”

Science philosopher, Kemeny, corrects this erroneous view: “The assumption that occurs most frequently in the modern physics text is that nature obeys certain conservation laws...but a brief look at the history of conservation laws will indicate that they hold not so much because of any attribute of nature, but because of a human desire for conservation laws.” For Bridgman, “The first law of thermodynamics properly understood is not a statement that energy is conserved, for the energy statement without conservation is meaningless.” In other words, the first law is a definition. The Second Law of Thermodynamics, or the law of entropy, which is often used by confused Christian apologists to argue this is a proof that the universe had a beginning, is just as imaginary as the First Law. One definition is that it shows that heat, itself a fictitious concept, is always transferred from a body of higher temperature to a body of lower temperature, with both bodies in contact with each other. Another definition, based on statistical analysis, says maximum entropy will occur in the most probable state of a system. While the Second Law tells us that energy systems lose their ability to do work over time, there is a slight probability that entropy could reverse itself. Since the argument for the Second Law is probabilistic, nothing can be proved from the Law.

And if we keep in mind Clark’s philosophy of science, nothing can be proved from the Second Law. One way of considering the concepts of physics is as a set of arbitrary rules for operating in a laboratory. Clark says the significance of Bridgman’s operationalism should not be missed. “Length, mass, electric charge and all the concepts of physics are descriptions of operations performed in laboratories. They are not descriptions of natural objects or physical realities.”

Inventing Reality by Adding New Words

Physicist Bruce Gregory describes physics as nothing but an invented language to talk about the world, and there is no correspondence between theories and reality. Beginning with Newton, he says the first law of motion is simply an assumption. For convenience, the term energy was invented to describe a mechanical system; Newton’s fictitious force no longer had to be mentioned. Coulomb added to the science vocabulary by inventing electrical force, which differed from gravitational force due to two polarities of electricity. However, “It is well to bear in mind that electricity is no more a ‘something’ than anger is a ‘something’; electricity is a way of talking about how things behave.” Faraday invented the word field to enhance electrical theory and to add magnetic theory as useful concepts, and Maxwell expressed the electrical and magnetic fields mathematically as electromagnetic waves traveling at a fixed speed. But “it is important to keep in mind that in the wave description no physical object is going at this speed.” Wave and particle fictions were invented to talk about light. Likewise, electric and magnetic waves are a very useful way of talking about nature, but they are purely imaginary. The language of gravity has changed from a force on a given object by another object to a gravitational field which exerts a force on a particle in its immediate vicinity. The gravitational field makes the same predictions as Newton’s action at a distance, but it is no more real.

During the twentieth century physics has become much more abstract than in the nineteenth century, as has been the case for atoms. The physicists themselves acknowledge that Einstein’s GR conflicts with Quantum mechanics. Regarding Einstein’s GR in which space and time are no longer independent but linked together, “Einstein demonstrated the power of talking about space

---

83 This equation states the change in energy is equal to the amount of work done on a system plus the amount of heat added to the system.
85 Kemeny, 55.
86 Bridgman, 127.
87 Entropy is defined in different ways. In thermodynamics, it refers to the inability of heat to do mechanical work, and it can also be a general concept referring to disorder of some kind, perhaps a winding down of the universe or a messy bedroom.
89 Holman, 190.
90 Clark, 79. Clark includes further discussion of operationalism and some objections that have been raised against it (81-95).
92 Gregory, 42.
93 Gregory, 43.
94 Gregory, 46.
and time as though they were a unity, and in the process he showed that space and time are human inventions—ways of talking about the world. The advent of the photon theory of light was inconsistent with Maxwell’s wave theory of light, but both theories are useful, so the normal physics language had to make allowance for these contradictions. This led to further development of the physics language to all objects by de Broglie’s postulating a universal duality for all matter. Each particle also has a wavelength, and there is a whole number of wavelengths (or standing waves) that fit into each orbit of an atom. New experiments on the nature of the atom led to new problems, which required even more words to be added to the physics dictionary. Bohr invented the idea that electrons exist in discrete stable orbits about the nucleus, and photons are emitted only when an electron moves from one orbit to another.

Heisenberg took a different approach from Bohr by ignoring the concept of orbits and developed a technique, called matrix mechanics, to calculate the frequencies of radiation emitted from atoms. In contrast, Schrödinger (discussed above) tried to preserve the concept of orbits and the classical wave interpretation of the atomic structure by developing the wave function. However, experiments showed problems with the predictability of the wave equation, and it seemed under certain conditions to spread out as a cloud. Max Born solved this problem by inventing a new language to describe the wave function. Solutions to the wave equation no longer represented electrons, but they are really probabilities of finding an electron at a particular point in space. This result seemed to be the final demise of any idea of determinism in physics. Indeterminism was further enhanced by the uncertainty principle of Heisenberg, who stated that we need to quit thinking about electrons as being tiny marbles and rely on QM for predicting behavior. Quantum Mechanics is nothing more than mathematical expressions used to predict the outcomes of experiments, and there is nothing that corresponds to anything real. Problems in the theory of QM led to a further new language called quantum electrodynamics (QED) developed by Richard Feynman. In this new theory, the idea of a field was eliminated, and there were only probabilities associated with electrons and photons to get from one place to another.

Conservation laws of energy and momentum were also redefined in twentieth century physics. For example, Einstein had to include the energy represented by the mass of the particle in $E = mc^2$. Further, new inventions of conservation laws for momentum had to be invented for the subatomic world to account for unexplained occurrences, such as the failure of the proton to decay. Gregory concludes, “physics is only indirectly about the world of nature. Directly, it is talk about experimental arrangements and observations.” Particles such as electrons, which used to be considered bits of matter are now not even a part of elementary matter. The success of physics tells us only that this subject is useful in making predictions. It provides man with no true propositions.

The So-Called Physical Constants of Nature
What is often not understood by people unfamiliar with physics is that the estimates of masses, charges, and other constants is based on nothing observed. The only things that can be observed from experiments are effects in the form of dots or lines on photographic plates or similar materials. The numbers themselves are derived from both experimental data and theory. For example, the so-called discovery of the electron by Thomson originated in an argument between British and German physicists regarding whether electricity was a wave or a particle. The German experiments by Hertz favored a wave theory, but Thomson made a correction to the experiment overlooked by Hertz, and the evidence favored a charged particle that he called a corpuscle. Further experiments combined with electric ($qE$) and magnetic ($qvB$) forces led to the measurement of the mass-charge ratio of the electron. Thomson’s work was followed by experiments of J. Townsend and M. Millikan that led to estimating the negative charge on the electron. No electrons were ever observed.

In a study of how physical constants are estimated, Taylor, Parker, and Langenberg, state that the physical constants are related to each other throughout the different branches of physics. This was demonstrated by a new estimate of the ratio of the charge on an electron to Planck’s constant $(e/h)$, which was obtained from an

---

95 Gregory, 70.
96 Gregory, 73-77.
97 The idea of a discrete or quantized orbit for electrons was necessary to overcome the classical physics objection that electrons with their negative charges would collapse into the larger nucleus which has a positive charge. 
101 Born, 93.
103 Gottlieb and Pfeifer, 181.
104 The charge on a particle is $q$, $e$ is the electric intensity, $v$ is the velocity of the particle and $B$ is the magnetic induction.
experiment in solid state physics. Once a new estimate was obtained, this forced the other physical constants to be revised because they are interrelated.\(^6\) “Our analysis is based on a complete least-squares [see below] adjustment of the fundamental physical constants. These constants are important links in the chain of physical theory which binds all the diverse branches of physics together, and the careful study of their numerical values as obtained from various experiments in the different fields of physics can give significant information about the over-all consistency and correctness of the basic theories of physics themselves.”\(^7\) New calculations for physical constants can lead to new theoretical calculations as well, which in turn can lead to further revisions of the constants.\(^8\) There are no discoveries of physical constants.

As mentioned above, the authors discuss a revised estimate of ratio $e/h$, and from this revision they are able to get a better estimate of the fine-structure constant, $\alpha$, which is associated with the electron property of spin (the fourth quantum number that describes the energy states of an atom).\(^9\) The apparent weakness of previous estimates of $\alpha$ was that it was obtained from both QED theory and experiment. However, while the new method of estimating $\alpha$ avoids the direct use of QED, a new problem arose because there were multiple estimates of $\alpha$ depending on the particular equation chosen. The method of least squares\(^10\) was used for the “…calculation of a best compromise value of $\alpha$ that approximately satisfies all of the relevant equations.”\(^11\) Once the revised constants are estimated, revisions to other related constants were to be made. In the revised calculations, inconsistent or bad data, based in part on improper experimental procedures, were deleted.\(^12\) The data are arbitrarily separated into auxiliary constants, those with errors so small they are assumed to be known with certainty, and stochastic input data, those with larger errors. Errors can be different due to different investigators using different methods to calculate them. Least squares adjustments and various types of averages are taken due to different methods of estimating the constants. Because of ad hoc adjustments and other difficulties, the authors state “the adjusted values of the constants should always be viewed with caution.”\(^13\)

After extensively analyzing the experimental data,\(^14\) combined with theoretical calculations, making other ad hoc decisions about what data to retain and what to throw out and using least squares to combine different estimates, the authors conclude, it is “rather difficult to decide objectively just which of the measurements should be retained and which should be discarded.”\(^15\)

Despite the admission of both physicists and philosophers that science is not cognitive, the abandonment of Scriptural inerrancy by theologians, combined with the acceleration in technological advancement throughout the twentieth century, has vaulted science to be the highest authority, not only among theologians, but in the general populace as well.

### Modern Theologians and Science

As mentioned previously, following wide acceptance of heliocentrism, theologians felt it necessary to reinterpret Scripture, often using phenomenon (what appears to our senses)\(^16\) to describe the apparent movement of the Sun. Even nineteenth century conservative Reformed pastors, such as Louis Gaussen, accepted the rotation and revolution of the Earth around the Sun.\(^17\) Despite approximately seventy verses of Scripture that speak of the Sun moving or the Earth fixed, he denied any error in Scripture, e.g., attributing Joshua’s long day (Joshua 10:12) to a miracle of God. Regarding the apparent movement of the Sun and stars, he also attributed them to observed phenomena. In contrast, liberal scholars and Bible critics considered the replacement of geocentrism by heliocentrism as a major victory for science, and a major defeat for the authority of the Bible.

In response to the alleged proof by science of an old Earth, the gap theory was presented by Thomas Chalmers and popularized by G. Pember. The idea was postulated that a major rebellion occurred led by Satan between Genesis 1:1 and 1:2, with pre-Adamic beings perishing before Adam and Eve were created. Pember

---

12. Taylor, Parker, and Langenberg, 5.
14. Least squares is a statistical method used to estimate of set of parameters used to predict a dependent $y$, from one or more independent variables $x$. To predict the best value for $y$, some sort of average is taken of the independent variables. This is all based on human judgment. There is nothing in the data that requires least squares or any other adjustments.
15. Taylor, Parker, and Langenberg, 4.
17. Taylor, Parker, and Langenberg, 8.
18. Taylor, Parker, and Langenberg, 11–272. This analysis is much too technical to consider in this paper.
20. Two theologians in the nineteenth century who promoted the language of the Bible is phenonemonal were J. H. Pratt (*Scripture and Science Not at Variance*, 1872), and Taylor Lewis (*The Six Days of Creation*, 1879). Ramm also supports this view that the language of the Bible is not scientific. Bernard Ramm, *Christian View of Science and Scripture*, 1954, 65-73.
stated nothing in creation proves the Lord created everything in six days, and “without form and void” in verse 2 really means chaos due to a pre-Adamic rebellion, not a logical sequence in the creation process. Another attempt to reconcile Scripture with the view of an old Earth is the progressive creation theory in which the days of creation were long ages, with man-like creatures before Adam. In addition, numerous reinterpretations of Scripture were made, such as the flood of Noah being only local rather than global. With the advent of Darwinism, some theologians were convinced they needed to incorporate evolution into the creation process. Harvard biology professor, Asa Gray, was instrumental in inventing the concept of theistic evolution. He said *Genesis* does not specify the origin of kinds, and evolution does not rule out God in the process. In responding to the charge by Princeton theologian, Charles Hodge, that evolution is atheistic, Gray said, “…the difference between the theologian and the naturalist is not fundamental, and evolution may be as profoundly and as particularly theistic as it is increasingly probable.” Agreeing with this view were theologians George Wright, James Orr, and Benjamin Warfield. According to Warfield, “evolution” cannot act as a substitute for creation, but at best it can supply only a theory of the method of the Divine providence. He also stated that how long man has been on Earth is irrelevant to theology, and he rejected Bishop Ussher’s date for a young Earth. Warfield apparently held to two sources of truth: science and Scripture.

Writing in the 1950s, Theologian Bernard Ramm argued it is imperative that Christianity be harmonized with science. He says the battle for respect of the Bible was already lost in the nineteenth century due to the continuing revolt of man from religion, as well as the idea that science can progress only when it is freed from religion. Simultaneous with the rapid advancement of science was a growing liberalism in the church, an increasing number of scientists who were atheists and a lack of development by Christians in the philosophy of science. Christians who are scientists must be convinced that they can maintain their faith in Christianity without compromising their views about science. To bring about harmony we must “pay due respect for both science and Scripture… We must be as ready to hear the voice of science as we are on Scripture on common matters.” It is also the case that science needs theology as much as theology needs science, and without theology science is meaningless because there is no purpose to human existence. However, it is true science rather than actual science that theology cannot contradict because the former is never final. Because we never know true science, we never know we have a contradiction between them. Despite this problem, Ramm concludes: 1) it is not necessary for evangelicals to believe in either a recent creation or a recent appearance of man on Earth; 2) It is not necessary for evangelicals to believe the Earth is the center of the solar system; 3) evangelicals can believe theistic evolution is consistent with faith; 4) the principle of objectivity prevails in science but not in Christianity because what is true for believers is not true for unbelievers.

---


120 Ken Ham, “What’s Wrong with Progressive Creation,” *Creation Ministries International* (August 1999). In this view, gradual steps of creation took place over long periods of time, each one by divine intervention. Macroevolution is rejected, but microevolution is generally accepted by most of its adherents. The long ages are based on the acceptance of secular geology and cosmology. A similar argument is the Day-Age theory, which holds the creation days to be long periods of time. The Earth and the universe are estimated to be 4.5 and 14 billion years respectively. Theistic evolution is accepted. Richard Niessen, “Theistic Evolution and the Day-Age Theory,” *Impact*, No. 81 (March 1980), Institute for Creation Research.

121 Asa Gray, *Darwinia: Essays and Reviews Pertaining to Darwinism*, Harvard UP, 1876, 270-271.


125 It was also Warfield who (unknowingly) betrayed the *Westminster Confession of Faith* by adopting modern textual criticism, the method by which rationalist methods are used to reconstruct the original text of Scripture that somehow was not preserved by God. He was confident that the principles of modern textual criticism would restore the New Testament text to its original form. Benjamin B. Warfield, *An Introduction to the Textual Criticism of the New Testament*, Thomas Whittaker, 1887. Benjamin Breckinridge Warfield, *The Inspiration and Authority of the Bible*, The Presbyterian and Reformed Publishing Company, 1948. See also, Theodore P. Letis, *The Ecclesiastical Text*, The Institute for Renaissance and Reformation Biblical Studies, 1997, 1-29.

126 Ramm, 17-26.

127 Ramm, 32.

128 Ramm, 42.
Even supposedly twentieth century conservative Reformed theologians, such as James Boice, accepted theistic evolution. “Not that the Genesis record will be opposed to any established true scientific data; truth in one area, if it is really truth, will never contradict truth in another area.” Thus, while he wanted to save Christianity by denying that true science can conflict with Scripture, he in fact denied it by accepting two sources of truth. Further he states, “Actually, there is no firm [B]iblical reason for rejecting some forms of evolutionary theory, so long as it is carefully qualified at key points:... There is no reason to deny that... one form of land animal may have evolved from a sea creature." William Craig, Professor of Philosophy at Biola University, believes in the Big Bang Theory of cosmology, and he attributes the cause of the universe to be a something that transcends space and time, is eternal, uncaused and extremely powerful. But this something must be personal because temporal effects can only be caused by a personal being, which theists understand to be God. Craig is also a theistic evolutionist, who believes God used mutations to end up with Adam. Presbyterian Pastor, Tim Keller, also believes in an old Earth and theistic evolution. In an article written for BioLogos, he begins his discussion by posing an aut disjunction that exists between some young Earth creationists, such as Ken Ham, and Darwinian evolutionists, like Richard Dawkins. Either you can believe in God, or you can believe in Darwinian evolution. Keller does not accept this disjunction because it leaves no room for people who may be inquiring about Christianity or Christian laypeople that have great respect for science, which supports evolution. Fortunately, according to Keller, there are many who believe the irreconcilability between orthodox faith and evolutionary biology is greatly exaggerated. There are four objections among orthodox Protestants that must be discussed: 1) if evolution occurred, then we must take Genesis as non-literal; 2) those, like Dawkins, that say evolutionary biology explains everything so there is nothing left for God; 3) evolution precludes a literal Adam and Eve; 4) evolution is inconsistent with the Fall that led to death and sin. He has heard the first three objections the most. Some parts of the Bible are clearly taken literally while other parts are not, and some are not clear one way or the other, Genesis being one example. For Keller we can’t take Genesis 1 literally because it does not follow what he calls a natural order; for example, there is light before the physical sources of light. But there is a natural order in Genesis 2, and he appeals to the authority of theologian, Meredith Kline, who supports this position. Kline stated the first three days of creation in Genesis 1 must be figurative rather than literal because light appears before the natural sources of light, the Sun and the Moon were not created until the fourth day. According to Kline, there must not have been ordinary processes operating during the first three days of creation, or we cannot make sense out complexity (14, 317). He also says because life is so statistically improbable, it cannot be due to random chance. Then he says the antithesis of chance is non-random survival, and this is the true explanation for the existence of life. Single-step selection is random, but cumulative selection is non-random. Nowhere does Dawkins define cumulative selection, but he does say it is some kind of sorting or sieving process which converts a random process into a non-random one (45). It is then the sorting process, which he does not define, which becomes a being that has the power to do things. Regarding theologians, he says those that are sophisticated have long given up the idea of instantaneous creation, but many have smuggled God in the back door by some sort of guided evolution process (316). For Dawkins, science explains everything, and religion explains nothing. Richard Dawkins, “A Reply to Michael Poole,” Science and Christian Belief (August 1995), 7(1), 46-47. Tim Keller, “Creation, Evolution and the Christian Lay People,” The BioLogos Foundation, February 23, 2012. Meredith G. Kline, “Because It Had Not Rained,” Westminster Theological Journal 20 (1957-58), 439-443. One major problem with Kline’s interpretation is that the word yom comes with evening and morning, and it is modified by a number, which means it must be a twenty-four-hour day. Jonathan Sarfari, “Hebrew Scholar affirms that Genesis means what it says!” Creation 27(4):48-51. Creation Ministries International. This was an interview with Hebrew Scholar, Dr. Ting Wang.

130 Boice, 163.
132 William Lane Craig, “Evolutionary Theory and Theism,” Q&A#253, February 20, 2012, www.reasonablefaith.org. Another stating this argument is Christian apologist, Norman Geisler, Christian Apologetics, which begins with a contingent being, who must have a cause that is non-contingent, i.e., a necessary being, who then becomes an all-knowing being, and then is transformed into an infinitely all-knowing being, which finally becomes the Creator. He could have just as well carved a puppet god to worship. See, John W. Robbins, “A Lie in My Right Hand,” The Trinity Review (February/March 1996).
133 An aut disjunction means either one proposition is true or the other is true. Both cannot be true, and both cannot be false. Gordon Clark, Logic, 91.
134 Richard Dawkins, The Blind Watchmaker, W. W. Norton & Co., 1987. Dawkins says everything that exists has come into being by gradual and small steps due to cumulative natural selection, which is the only possible explanation of organized
of Genesis 2:5. Unfortunately, neither Kline nor Keller apparently understands Genesis 1 or 2.137 Genesis 1 refers to God’s creation work during the six days of creation, while Genesis 2 focuses on creation only on the sixth day. It is the domesticated animals and cultivated plants that were created on the sixth day, and it is only these animals that Adam named. Vegetation and wild beasts outside the Garden had already been created. The second issue Keller addresses is whether biological evolution completely rules out God.138 He says no, because there is a difference between a grand theory of evolution (GTE) and an evolutionary biological process (EBP), and believing it as a worldview. He does not see any problem with EBP, the modus operandi of The BioLogos Foundation.139 However, he and the leaders of BioLogos apparently fail to recognize that science is not cognitive, which means it cannot generate any true propositions. Therefore, it cannot prove anything, including whether the creation days in Genesis 1 were 24-hour days or not. The third issue is belief in evolution rules out a literal Adam and Eve. One response by Keller is that C. S. Lewis did not believe in a literal Adam and Eve, but he does not question “…the soundness of his personal faith.”140 However, in this case Keller says Paul believed that Adam and Eve were real people, so there is no reason not to take this part of Genesis as literal even though the rest of it does not have to be taken literal. Also, man is in a covenantal relationship with Adam, and believers are in a covenantal relationship with Christ, which would not be possible if Adam was mythological.141 Keller concludes that it is possible to harmonize EBP with the idea that Adam and Eve were real people, who fell into sin. To think otherwise, is too narrow.142 However, what he fails to tell us is how evolved knuckle-draggers magically transformed themselves into two people.

Some parachurch creation organizations defend a young Earth and a literal six twenty-four days of creation. Two such organizations are the Institute for Creation Research (ICR) and Creation Ministries International (CMI). Scientists from both organizations have demonstrated that geological and radiometric dating arguments for an old Earth have no credibility.143 However, other scientists who claim to be Christians have attacked the work of these organizations for questioning the authority of science. Christian Astronomer, Hugh Ross, says “they [including Henry Morris at ICR] are misguided and are misguiding many whose science education and [B]iblical training are inadequate to aid them in evaluation.”144 Ross, who agrees with the Big Bang theory, says estimates show the universe to be 12 to 14 billion years old,145 and planets and stars evolved by natural processes.146

137 Keller, 3-6.
138 He refers to Richard Dawkins who holds this view. See also footnote, 20.
139 The BioLogos Foundation (www.biologos.org) was formed in 2007 by Francis Collins. The presuppositions of this organization are both that God has revealed himself in two ways, through the Bible and through creation, or the Book of Nature. Science has demonstrated that evolution is true, so Scripture needs to be accommodated to the theory of biological evolution. Anti-evolution literature presents a false choice between science and faith, which causes a loss of credibility among young people in the church.
140 Keller, 7. One has to wonder how sound Keller’s assurance about Lewis’ salvation was when he denied the inerrancy of Scripture, believed works in addition to faith are necessary for salvation and rejected the doctrine of Christ’s atonement. See John W. Robbins, “Did C. S. Lewis Go to Heaven?” The Trinity Review (November, December 2003).
141 Modern Bible skeptics claim that Genesis originated from the Babylonian creation account (Enuma Elish). Linguist, Charles Taylor (“The Myth About Myths in Early Genesis,” Creation (August 1984), of Creation Ministries International informs us it is history that has to happen before myth can arise.
142 Keller, 12-13. There is a raging debate now within the church concerning the search for the historical Adam, just as there was some years ago about the search for the historical Jesus. Matthew Barrett and Ardel Caneday, editors, Four Views on The Historical Adam, Zondervan, 2015. This book is reviewed by Shawn Doyle, “A Review of Four Views on the Historical Adam,” Journal of Creation 28(2), 35-40. The fact that this issue is considered a legitimate topic for discussion shows how low the view of Scripture is in the current Protestant church.
143 At ICR, see various articles on the fallacy of radiometric dating by physicist, Vernon R. Cupps. At CMI there are numerous articles on geology which expose the fraud of dating methods by different scientists, including, engineer, Tas Walker. Rock dates are accepted only if they agree with the presuppositions of the investigator. Tas Walker, “The Way It Really Is: Little known Facts about Radiometric Dating,” Creation 24 (4) (September 2002), 20-23. Geologist, John Woodmorappe, analyzes the modern dating methods, including dogmatic claims of their success in proving the Earth is very old. He says these claims are laughable because of their fatal flaws. See John Woodmorappe, The Mythology of Modern Dating Methods, The Institute for Creation Research, 1999, vii, 95-96. Alexander Williams reports that isotope dating reflects the persistence of the investigator rather than anything else. Data and methods are changed until the long-age acceptable results are found. Alexander R. Williams, “Long-Age Isotope Dating Short on Credibility,” CEN Tech J., volume 6(1), 2-5.
144 Hugh Ross, The Fingerprint of God, Promise Publishing Co., 1989, 155. This is an example of the logical fallacy of the abusive ad hominem argument. If one is a creationist, then he is incompetent in science.
145 Ross, 123.
146 James Stambaugh, “Hugh Ross, ICR, and Facts of Science,” Institute for Creation Research, date unknown. Ross accepts the evolutionist doctrine of punctuated equilibrium, promoted by Harvard biologist, Elliott Gould. This theory says species came about abruptly at certain times in the past, which is supposed to explain the embarrassing lack of transitional forms in the fossil
Geologists, Howard Van Til and Davis Young of Calvin College, believe religion and science need to stay in separate compartments and not impose their views on the other. They also criticize creation scientists who impose the Biblical assumption of a young Earth on science rather than letting science determine the age based on its own criteria. They call “folk” science the view of either creationists or evolutionists who use science to support their preconceived philosophical or theological views. In another work, Davis Young says, “We Christians need to stop expending our energies in defending a false creationism and refuting a false creationism…. A vigorous Christian science will be of far more service in meaningful evangelism and apologetics than the fantasies of young-Earth creationism.” Another supposedly Christian physicist, Karl Giberson, takes the view that evolution explains life from molecules to man, there was no literal Adam Eve, the Gospels contain contradictions, and man was poorly designed. There is so much evidence the Earth is 5 billion years old, the young Earth creation account is no more believable than a flat Earth. He believes science is true, evolution is science, and therefore evolution is true. In a review of Giberson’s book, Jerry Bergman asks why this man still believes in God, and the author’s apparently candid answer is: rejecting God would upset his Christian parents, his wife, and he might lose his job at the Christian college where he is employed. The reason neither Ross, Young, nor Giberson believe in a literal twenty-four hour six-day creation and other Biblical truths is because they have adopted more than one source of truth—science in addition to the Bible. In addition, they view science as a higher authority than the Bible, so the latter must always be harmonized with the former. But if Biblical revelation cannot be satisfactorily harmonized with science, then we have contradictory epistemologies, and the end result is skepticism.

On the other hand, if we only have one source of truth, then this epistemological problem vanishes. The correct epistemology for Christians is the Bible alone, and God intended Scripture beginning with Genesis and ending with Revelation to be understandable to his people. The creation week of six twenty-four-hour days and the Sabbath day is clear, being verified by Exodus 16:26 and 20:9-11. In Genesis 1 and the other two references in Exodus, the context is ordinary days. In Genesis 1 God defines a day as the night plus the daytime. It is unfortunate that some Christians, particularly those that believe in theistic evolution, cannot stand being considered ignorant by the world (Galatians 1:10). However, Gary Crampton correctly states “since the Bible has a monopoly on truth, whatever is true about creation must be learned from the Bible.”

Summary
In the Postscript of his The Philosophy of Science and Belief in God, Gordon Clark says, “in the present state of affairs, the world at large holds science in such high regard that some Christians have begun to question the value of preaching the Gospel. They have begun to share in the idolatry of science” (97). Theories are chosen by physicists for all sorts of reasons, but none of them has anything to do with the truth. Today the idea that science are the truths of revelation; 2) all truths of revelation are truths of science, but some truths of science are not truths of revelation; 3) some but not all truths of revelation are truths of science, and some but not all truths of science are truths of revelation; 4) All truths of science are truths of revelation, but some truths of revelation are not truths of science; 5) there is no overlap between revelation and science. Thus, even if we allowed some propositions of science to be true, there is no way to determine whether these two sources of knowledge conflict or not. See Christian Philosophy, 22-23.

Russell Grigg, “How Long were the Days of Genesis 1?” Creation 19(1): 23-25 (December 1996). Grigg demonstrates there are different Hebrew words that would have been used for creation if long ages were intended.

The numerical qualifier demands 24-hour days of creation. “The word ‘day’ appears over 200 times in the Old Testament with numbers (i.e., first day, second day, etc.). In every single case, without exception, it refers to a 24-hour day…. Genesis 1:14 distinguish between days, years, and seasons…. Clearly the days here represents days, years represents years, seasons represents seasons.” Niessen, 4.

This point was made in a sermon by William Mencarow, “6 Day Creation & The Presuppositions of Science: How Important Is Creation & Belief In Six 24 Hour Days of Creation,” June 22, 2008, www.sermonaudio.com. He also points out that “created” out of nothing (baw raw) in Genesis 1:1 is a heading, and verses 2 onward are subheadings under the main heading.

discovers truth is a falsehood that is assumed as true within the Protestant church as it is in the secular world, which is baffling given all the counter information presented by physicists themselves and science philosophers. Not only is science not cognitive, it can’t explain anything. Only revelation – the Scripture – gives truth. The Bible alone has a monopoly on truth. Clark gives the illustration that because the atomic particle world consists mainly of empty space, nobody can explain when one picks up one end of a pencil that the other end comes with it (91). There may be numerous reasons why physicists choose particular theories, but none of them has anything to do with truth (70).

Not only is science not a cognitive enterprise, but it is not clear when somebody mentions the word science, they know what they are talking about. Christian philosopher, J. P. Moreland says, “There is no clear-cut definition of science. Neither are there any generally accepted necessary and sufficient conditions for drawing a line of demarcation between science and non-science. It is foolish to say, based on popular opinion, that science, by definition, rules out theological or philosophical concepts.”¹⁵⁷ Thus, not only is science not cognitive, neither is it intelligible. Christian astrophysicist, John Byl, believes that science should fall within the philosophy of instrumentalism,¹⁵⁸ which avoids the pitfall of the realist view of scientific theories. Science is at best useful opinion, but it is void of any epistemological content.¹⁵⁹ It is long overdue that seminary professors, pastors, and para-church creation organizations repent of worshipping the idol of science and return to Sola Scriptura. Finally, those creation groups that support the literal 24-hour six-day creation on the one hand, but endorse heliocentrism without taking into consideration what the Scripture says about geocentrism on the other hand, also need to repent of putting science before Scripture. More exegesis of Scripture needs to be done to evaluate the two models. Christians should not support any Christian group or church that does not adhere to Sola Scriptura as the source of all knowledge.

¹⁵⁷ J. P. Moreland, Christianity and the Nature of Science, Baker Book House, 1989, 56-57. Regarding the so-called scientific method, he concludes, “…there is no single thing called the scientific method” (101).

¹⁵⁸ This is the idea that laws, theories, and hypotheses are “…used to control, predict, explain, organize, and create possibilities for human experience. Whether ideas are true or false is not a serious question…” Peter Angeles, The Harper Collins Dictionary of Philosophy, HarperCollins Publishers, 1992, 147.