

Two Towers - The Relationship Between Science and the Bible

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By Martin P. Sponholz

There is no relationship between science and the Bible.

I believe that with every fiber of my being. The one and only almighty God has wonderfully made all things in the full counsel of the Trinity. Scientists, human beings, creatures of God have made the laws of science. These laws are imbued with the philosophy of the men who created the laws. The laws of science bear the imaginations of their inventors. Science is entirely a human endeavor, and God's ways are not man's ways. Thus we have two towers. The first is built by God, including all things. The second is built by men. Of course, its bricks and mortar are made from God's clay, but without God's fire man's tower must be rebuilt again and again and again and bears little resemblance to God's. End of assignment:

This has been perhaps a disappointing conclusion for some. In this scientific age dominated by countless technological gadgets such as X-rays, radar, computers, nuclear energy, DNA molecules, plate tectonics with continental drift and sea floor spreading, satellite surveillance, many desire a more reasoned answer. It is true the Christian reading his Bible, starting where most books do on page one, instantly finds himself at odds with the science of today. *In the beginning...* Where was the beginning? ...*God...* How could all this get started? Perhaps a big bang? ...*created...* Randomly distributed atoms favor progressive order in rearrangement... *the heavens and the earth*. Man is sure insignificant in the immense cosmos. Surely there exist more and advanced forms of life.

Why is there such a contrast? If we have indulged in the idols of science, plastics, hybridization of food crops, medical technology and vaccines, comfortable living, and high speed transportation, our reason begs for harmony. Harmony is the expectation of this assignment, "The Relationship Between Science and the Bible." We expect a true science. We expect a delineation between laws and what is just a theory. I am amazed that there does exist a fair amount of this kind of harmony. We could survey some of the failures in the many evolutionary methods. Half life decay, by its very definition, is dependent on a random nuclear decay of an element, and randomness precludes formula predictors. Where such decays are predictable such as yttrium, it usually requires careful observations over two half life periods before the unknown empirical constants required in the formulas can be adequately determined. That is difficult to do for the long half life of several thousand or million years. Specifically, Carbon 14, when compared with tree rings, goes awry two thousand years ago and becomes unusable past an age at which we could conveniently fix the date of the Flood (5000 to 7000 years before the present). Louis Pasteur's careful work against spontaneous generation destroys the hope of general evolution from non-organic substances. The so-called geological time table never exists as a single complete column anywhere in the world. And the many examples of fossils in the wrong place are a delight to creationists. Determining the age of the fossils from the rocks and the age of the rocks from the fossils is a classic textbook example of circular reasoning. I heard this first condemned at the public university in logic class, but rode the same circular merry-go-round in geology class in another building across campus. Flood waters generally provide a more reasonable explanation for sea type fossils found in the highest

mountains in the central portions of every continent. Some claim destruction by water to be a better explanation of the Ice Age. A list could truly go on indefinitely.

These efforts perhaps are not useless, “but they are meaningless, a chasing after the wind.” If a harmony between science and the Bible were sought, if true science were expected to emerge from this study, then I will fail you. To have such expectations for science, I believe, is not to understand science or at least to expect from science things it cannot do. Our hero, Louis Pasteur, who is given credit for disproving spontaneous generation, today is known as the father of chemical evolution primarily for showing that life forms existed in a non-oxygen environment, and thus he pointed the way toward a spontaneity among the chemicals for the origin of life, in spite of his own conclusions. Louis Agassiz was a strong opponent of Charles Darwin’s *Origin of Species*. Today the *Encyclopedia Americana* counts him as one of the founders of modern evolution. Modern revisionism has not helped the cause for searching for true science. But it’s worse than that.

The process of all science is what denies its certainty and hope for what might be called true science. It is ever changing. New evidences are continually being raised. Rehwinkel’s work showing the failure of ice age theory caves in to the evidence brought from the central ice cores of Greenland and Antarctica. Indeed, huge masses of ice 14,000 feet thick exist, and they do not melt of their own weight. Was Rehwinkel a poor scholar? Indeed not: He used the best laws of physics available when he wrote. Since then new evidence has encouraged new laws. One more expectation is dashed.

Martin Luther had his problems with science and the creation account also. We never hear what Luther has to say in modern attempts to harmonize science with the Bible. We no longer care if fire, a hot and light element, was above the earth. Yet Luther knew with the presence of water above the firmament, such fire could not exist. This is the stuff of what I call true science.

All science follows circles of reason through imaginative and interpretive controls of paradigms. A preconceived paradigm determines what is important to observe and what is not important. It ignores anomalies. It outlines the constructs of vital instruments. All of which in turn confirms the paradigm. It is easy to harangue the circle of reason within the fossil record, but what of the circle of reason within the law of gravity? In Newton’s equation for universal gravity, he has two unknowns, the mass of the earth and the universal gravity constant. He miraculously guessed the earth’s mass. Or perhaps his guess determined the universal constant. Cavendish, using the laws of gravity, developed instruments to determine the law of gravity. The excitement during Newton’s time was that the universal law of gravity confirmed Kepler’s laws of planetary motion. They should have.

Newton used the laws of planetary motion to get his law of gravity. The laws of planetary motion were accepted as law by Newton’s time, but ancient questions raised by Aristotle were ignored. In fact, some of these questions led to the demise of Newton’s laws in Einstein’s day.

Science is truly like a great tower being built higher and higher to be seen by all. Continual repairs are needed with every storm, but no part of it is immune from replacement, no beam, no window, no wall, no roof, not even the foundation. Some replacement efforts might topple the tower. A new one is planned and constructed with more enthusiasm than the first. If in theology you were to abandon a doctrine, you would cease to be in fellowship with your colleagues. Yet in science when a scientist must recant his most fundamental doctrines, he emerges with new dynamic insights and explanations worthy of countless honors, awards, and credits. Science proceeds more rapidly from error. Science progresses by refutation. Science is

continually facing total revolutions and overthrow. The laws of science are continually changing. In such a changing climate we dare never hold to a hope of harmonizing changing laws of men with the changeless as Word of God.

In today's age where science is the public god and evolution its mistress confirmed in the divorce courts of law, we need a new semantics. I do not see the creationist movement attempting to win in court as a new hope, but rather as a measure of hopelessness. The creationists have lost in the laboratory through no fault of their own. They have been denied publication in the prestigious journals; they have been driven away from the lecterns of the university classroom; but also they have quit work in the lab in preference to debate shows and publicity. Science can never be determined in court or in timed debates, rather only in the lab, only by publishing, only by teaching.

A hundred years ago when *The Descent of Man* was still debated, when Agassiz could still classify fossils according to the Creator's great design and teach at Harvard that all of nature showed ascendance to man placed there by God by divine design, one could speak in terms of true science, proved laws of science, and just theories of science. Even fifty years ago Einstein was not isolated when he spoke about God in a scientific context. Today evolution is dominant. You may have any religious belief you want, but in science class it will be evolution. The debate for this century is over. We can not teach our youth that laws of science are proved or will always confirm God's truth. We face a new and cruel game of semantics. We must respond with a new semantics that separates the works of God from the works of men. We can not wait the centuries until the evolution tower topples. You know it will, but you can not be sure the children you teach will see it change.

Church history shows a constant struggle for new words to describe the changeless truths of Scripture. It was not enough to know Jesus, or God the Father, or the Holy Spirit. We confess the triune God. The Holy Spirit proceeds from the Father and the Son. The Athanasian Creed became a necessary unconditional surrender of reason to faith. "In, with, and under" became the worded formula to describe the miracle of the Lord's Supper. The "inspired Word" was not enough, and we turned to the "inerrant Word." These different wordings or additions were never intended to be a new doctrine, only new words to explain the same things which had been corrupted by others using the more familiar words of Scripture.

True science in many circles means evolution. By most historical standards, a system of algorithms, classifications, and processes explaining a subject to the satisfaction of most of the practitioners within a given academic discipline for more than a century is construed to be acceptable and worthy of being called laws of science. Of course evolution is not true, but the average scientist is only following the common practices of his discipline by teaching evolution as fact. Gravity is taught as fact; atoms are taught as fact. Continental drifting yields new-found oil and mineral reserves. Success dictates it must be "true." Nuclear energy must be "true." The laws governing these modern beliefs have less evidence collected over less time than the laws of evolution: We must get used to the laws of evolution and accustomed to the fact that most scientists accept evolution as factual. We must also recognize when some use the expression theory of evolution after the hundred years since Darwin, in all probability, they mean something much stronger than hypothesis. To most publishing scientists the terms are interchangeable. Sometimes law is used to mean a temporary test formula such as logarithmic law, trig law, or just an empirical law. None of this changes your and my belief, nor does it change truth. We must distinguish between the laws of science of men and the ordinances governing nature created

by God. We must differentiate between nature as God now maintains it and science as described and interpreted in the laboratory by men.

The need for such a change in semantics or even just the recognition that much of science from men is an art form may not be readily acceptable among theologians. Their training has not been in the language of science—mathematics.

I found the sharpest opposition to this new semantics from science teachers. They regard the laws they teach to be true and unalterable. But then they teach them; they do not create them as the scientists. They too are not linguists in mathematics. Professor Heinze Lettau, a world authority in micrometeorology, used to explain to me there are ten new laws governing the boundary layer of the atmosphere developed and published every year. The one closest to true, closest to fitting nature, is one developed from first principles and theoretically developed into mathematical models describing how nature must be. The scientist knows the artistic design he has impressed on nature. It is the embodiment of his humility. He is not willing to abandon his design even if at first nature shows him to be quite wrong. Data will be beaten into submission, but the scientist knows a law more esthetic, more pleasing to the mind, with less derivation and fewer first principles will quickly replace the best fitting laws.

Let us briefly look at what I mean by math as the language of science in order to show why I am convinced from a purely technical argument that the laws of science can not make a claim for certainty. Any abstraction a man formulates in a test tube is vastly separated from the real world. Think of the many inverse square laws: gravity, magnetic field strength, intensity of light, intensity of sound. Did God create all these things according to an inverse square law or is man's reason, especially of the eighteenth and nineteenth century, stuck on this one math function? Most certainly from a purely mathematical point of view, many more functions could equally well apply. Consider all the so-called universal constants. The speed of light drastically changes for different media; hence, one must use an index of refraction. Different physical substances radiate heat differently than the Stephan Boltsman Law; hence, a wide-ranging emissivity constant must be applied to the Stephan Boltsman constant. Plank's constant requires quantum number multipliers. The gas constant is defined with respect to an ideal gas. Very complicated formulas and additional manipulative constants are needed. The simple elliptical orbits of Kepler's Laws for planetary motions that we teach in the real world of astronomy turn into mathematical expressions of more than one hundred printed pages in length. A mathematical model of our solar system still presents baffling difficulties. When turning the computer backwards at the urging of a famous historian of science and mathematics, O. Neugebauer, using the most up-to-date theories of planetary motion, disagreement with well documented events in ancient times still requires several empirical adjustments. John Dalton established the Laws of Definite Composition and Definite Proportions which established the atomic theory beyond question today, but a whole generation of chemists had to follow who accepted the theory and beat the data into submission. Normal laboratory measurements did not produce the exacting numbers needed without adjustment and explanation. Examination of Figure 1 on the thermal conductivity of copper is an excellent example of the variety of data available for the same thing. These truly are the data from which are hammered man's laws.

Scientific laws are intellectual models of artistry. They bear little concern for material truths. This is an extraordinary thing to say! But just think of some material truths. There is a roof over our heads. Large parts of our nation experienced a considerable drought in 1981 that still continues. And this past winter was bitter cold. The stars are an unfathomable, magnificent sight to see. The scientist could care less. He is pursuing the truth of subatomic structure, black

holes in space, gravitational fields, protein synthesis, the particle structure of light, and the wave structure of light. He does not care that an apple falls from a tree. He desires to statistically fit a mathematical curve to the changing fall rate of that apple reduced to a point mass as it falls to earth, also a fictitious point mass, all taking place in a frictionless non-atmosphere. For science at its simplest level of research and development, the student of science must be fluent in the integral calculus and partial differential equations. It is here among the integration constants and the Eigen-values where the artistry takes place. Here is where the laws are impressed on nature. Here is also where the laws collapse as the mathematical constraints remove the laws too far from the real.

Did you know mathematically it is not yet possible to establish a theory governing the growth of a raindrop? Yet God still sends the rain. Did you know sea level is far from level nor can it stabilize according to current wisdom? Did you know the planet earth is a warm planet not capable of having glaciers such as Greenland and Antarctica? Did you know the first life-detecting satellites launched from earth failed to detect life on earth? Orbits of electrons have been abandoned at least since the 1940's. The mass of an atom may be non-existent at rest; it appears to derive its weight or maybe even existence from the motion of the protons. The concepts of magnetism all of us have learned are in total disarray. These are the data of true science.

Each race of people raise themselves in their tower to believe that they are infinitely wiser than the race before. Many have some circumstantial evidence for their claim. Comforts are more. Wealth of material is greater. Power and technology are all improved. But the understanding of the fundamentals: what is gravity, what is matter made of, what is the substance of this earth, remain unknown. The magnificent architectural design of one age too often becomes the rubble of the next.

Matter at one time was considered to be made of earth, fire, air, and water (600 B.C.). Democritus (400 B.C.) convinced his world all things were made of indivisible particles called atoms. These atoms were eternal and uncaused. All things could be explained by motion and realignment of these fundamental particles. Plato brilliantly overthrew the early atomic laws with arguments appealing to the presence of a soul and the uniqueness of a human being's mind. Since each person was truly unique, no assembly of atoms could account for the multitudinous variety of ideas of the mind. The world once again was made of continuous matter, all space being filled with ether, and all things made again of earth, fire, air, and water. The science of the Epicurean is preserved in the poetry of Lucretius where atoms return to be a changing influence in nature as creatures climbed Aristotle's ladder of nature. When atoms returned in the modern sense as parts of molecules with John Dalton, Charles Darwin's evolution quickly followed. Today Darwin's survival of the fittest is passe. Atomic evolution today is firmly entrenched via DNA. The atoms historically are the forerunners to each age of evolutionary thought. The chief quality of evolution is "uncaused" giving a nature independent of God. Today, while evolution has never been stronger, the concept of atoms might be facing extinction. The intense search for a more basic particle structure of the atom has led to over 250 subatomic particles. The ultimate to some may be the quark. But most physicists are perplexed by a seemingly continuous spectrum of the sizes of the basic particles, hinting at the possibility of nature not having basic particles. $E = mc^2$, mass annihilations and particle creations, are not helping the interpretations.

Astronomy is a subject taught with great certainty, at least with respect to the solar system. Kepler's elliptical explanations of planetary motions are the laws modern astronomy is built upon. Yet they replace the laws of planetary motion of Claudius Ptolemaeus (130 A. D.).

This ancient system of geometrically linked circles and epicycles describes the planetary motions so well that the position of the planets could be predicted. Little adjustment was needed for 800 years. After some minor adjustments by Al-Battani, planetary positions could then be calculated more accurately than early telescopes could measure. All the early world navigators and explorers used astronomy charts based on Ptolemaic law. We are told in college astronomy texts that Tycho Brahe made the most accurate observations that convinced the world to change the laws. Yet Tycho Brahe in his own writing was convinced of a Ptolemaic explanation even after Copernicus. The Copernican idea did not have the support of superior data. Even after it was improved by Kepler, the new laws could not explain the lack of observable opposite oscillations among the stars, a motion that had to be witnessed if the earth moved. Several others as far back as the Pythagoreans had theories of an earth in motion. They were always proved wrong by their inability to see what today is named heliocentric parallax. Even two hundred years after Copernicus and more than a century after Kepler's laws, heliocentric parallax evaded observation. Two generations of telescopes failed to see heliocentric parallax. The true way in which science works is revealed, and it does not necessarily reveal truth.

What does science do with condemning data? What does any branch of science do? It basically depends on the faith of the practitioners in the laws they work with. In the turbulent times that followed the Reformation, when the spirit of questioning pervaded all academic endeavors, little trust was left in ancient astronomical explanations even when the Copernican astronomers could not answer Aristotle. Negative data, anomalies, antitheses are never a problem in science. If science is good at doing anything, it is particularly good at using negative results to confirm the very opposite. Lack of heliocentric parallax led to the dynamic expanding universe with distances so vast and stars so far away that we should not be able to see heliocentric parallax. End of problem. Heliocentric parallax became a nagging problem when first observed by Bradley at the dawn of the nineteenth century. It was going the wrong way. Perhaps spring should precede winter and fall follow it. One more generation was needed to hammer at the data and shore up the walls of the astronomical tower. But when that generation was finished and heliocentric parallax confirmed the Copernican law beyond a question of a doubt, Michelson (1881) and Morley (1887) with fundamental studies of light were discovering that the speed of light measured consistently constant whether the earth moved in the direction of the beam of light or away from it or at any angle. What other conclusions could be made other than perhaps the earth was not moving? Our modern explanations have come to accept all the observable motions such as the rising and setting of the sun, retrograde loops for planets, and fixed star constellations as not real, but witnessed only as apparent results of the motion of the earth that could not be observed. The work of Michelson and Morley occurred one century too late. Heliocentric parallax was now explainable. The world had to move. And that Michelson and Morley had reproducible evidence to the contrary did not dare change the popular paradigm. In our century, -Albert Einstein resolved the problem with relativity insisting that length and time, thought to be absolute by Newton, change just enough as speed changes so that the earth may continue to move, and the Michelson and Morley experiment can continue to get constant measurements.

I don't intend to answer the many questions still unresolved, but I hope it shows true science, the true way scientists develop their profession. The true way of God's universe, nature around us, is quite different from these changing laws of men. A claim is made that macro-evolution, never observed, must be occurring so far in the distant past that it can not be seen. You see, they do the same thing the astronomers do. It is the true method of development

in all science. The same historical study could be made in geology and the earth sciences. I deliberately will not make this historical study at this point even though my training as a research scientist was steeped in those subjects. We in the church would take too much glee and delight in the confusions, contradictions, observational anomalies, and inadequate explanations that now are taught as laws and are used to confirm still more laws. The tower is tall with a labyrinth of passages. We would applaud seeing one passageway being built at the removal of needed support beams for other passageways. In our delight to see some laws of evolution crumble, we in false pride would fail to see that all laws of science contain the designs of men. All laws of science have at their root necessary over simplifying assumptions. All laws of science are founded on paradigms built in a circle of reason.

It is a human belief that all nature can be explained by mathematical models. That is not a Scriptural teaching. The nature God has made is not so symmetrical. Humans have a way of seeing more order than God designed. Look at a real honeycomb, but not with the geometry teacher's paradigm. You see a lot of hexagons, but not all hexagons, and you see many less-than-perfect hexagons. Look at a snowflake. It is started on a speck of dust, not a hexagon. Every "pure" raindrop has a kern of dirt or salt. Without it, the moisture would not condense, even up to 300% humidity, way beyond supersaturating. A soldier knows it is a man in the tall grass, not an animal, by the symmetry with which he crawls. God has taught his animal creatures a motion of rhythms we can not put to our geometry or mathematics. The motions among the stars are not a perfect clock as man might call perfect. There is no apparent symmetry. =here are collisions and explosions. Of course, some geometry, some classification in science, some attempt to see order is good, but always if it is of human origin, it is always inadequate, never complete.

There is still the other tower. The difficulty mankind has with commuting all of nature to laws through intellectual imagination and mathematical artistry does not in any way detract from the order that does exist. The God of the living Abraham and Isaac and us has created all with order. The first two chapters of the Bible spell out the details of that order. All of the Scriptures testify of God controlling His creation and exercising His providence over nature and history for the redemption of all human beings. "And we know that all things work together for good to them that love God, to them who are the called according to his purpose." The spiritual world and the material world for us are one. You can not live in the two separate towers at the same time. From the sixth day of creation until the last great day of judgment, man has been given dominion. He is commanded to use it, knowing who made it. The ancients knew this. Thales and the Pythagoreans insisted all of nature is expressible by human thought and mathematics. Hypocrates insisted for every observable effect in the universe there must be an understandable cause. Generally these ancients also knew God was intimately connected. And Aristotle rightly saw these causes must be related to a Creator who had motives for His creation. our modern age has abandoned that. Albert Einstein with Max Planck led the way to expressing all of nature in terms of quantized matter and energy. But when Bohr and Heisenberg turned the quantum characteristics into probabilities and degrees of randomness, Einstein waged a lonely war for a nature of order and determinism.

That in the long run, it should be possible to frame one great field theory in which the traditional concept of causality would re-emerge.

I differ decisively in my opinion about the fundamentals of physics from nearly all my contemporaries, and therefore I cannot allow myself to act as spokesman for the theoretical physicist. In particular, I do not believe in the necessity for a statistical formulation of the laws.

I can, if the worst comes to the worst, still realize that God may have created a world in which there are no natural laws. In short, a chaos. But that there should be statistical laws with definite solutions, i.e., laws which compel God to throw the dice in each individual case, I find highly disagreeable.¹

Such a debate raged for nearly forty years between Einstein and his physics contemporaries. It is best recorded in Niels Bohr's *Discussion on Epistemological Problems and Einstein's Reply*, readings C. P. Snow believes ought to be part of everyone's education. A similar great debate in the scientific literature raged between Louis Agassiz and Charles Darwin.

There is a manifest progress in the succession of beings on the earth. This progress consists in an increasing similarity to the living fauna, and among the vertebrata, especially, in their increasing resemblance to Man. But this connection is not the consequence of a direct lineage between the faunas of different ages. There is nothing like parental descent connecting them . . . The link by which they are connected is of a higher and immaterial nature; and their connection is to be sought in the view of the Creator himself, whose aim, in forming the earth, in allowing it to undergo the successive changes which geology has pointed out, and in creating successively all the different types of animals which have passed away, was to introduce man upon its surface . . . In the beginning the Creator's plan was formed, and from it He has never swerved in any particular . . . To study . . . the succession of animals in time, and their distribution in space is therefore to become acquainted with the ideas of God himself.²

. . . premeditation, power, wisdom, greatness, omniscience, providence. In one word, all these facts in their natural connection proclaim aloud the One God, whom man may know, adore and love; and Natural History must in good time, become the analysis of the thoughts of the Creator of the Universe, as manifested in the animal and vegetable kingdoms, as well as in the inorganic world.³

The facts must be collected, but their mere accumulation will never advance the sum of human knowledge . . . It is the comparison of facts and their transformation into ideas that lead into deeper insights into the significance of Nature . . . Facts are the work of God, and we may heap them together endlessly, but they will teach us little or nothing till we place them in their true relations, and reorganize the thought that binds them together as a consistent whole.⁴

¹ Einstein, *A Centary Volume*. Ed. By A.P. French, Cambridge: Harvard, 1979.

² Louis Agassiz and A. Gould, *Principles of Zoology*, Boston, 1848.

³ Louis Agassiz, *Essay on Clarification*, 1857, ed. by Edward Lurie, Cambridge: Belknap, 1962.

⁴ Louis Agassiz, "Methods of Study in Natural History," *Atlantic Monthly*, Vol. X, July, 1862.

Isaac Newton, the founder of today's physics, and Leibniz, the formulator of the calculus, waged lengthy debates via private letters concerned with God's work in nature. Privately Newton took a stand centered on the providence of God and His omnipoence. Newton saw God as immanent enough in the natural world to know it intimately, to sustain its routine operations, and to suspend or alter them as He willed. And Leibniz, under strong Calvinist influence, saw the universe and all of nature as a perfectly working clock, as a display of God's omniscience. These metaphysical debates continued long after the death of the participants. This debate around nature and science is an excellent study for us still today. To emphasize God's providence in nature at the expense of His foreknowledge is to make a changing, evolving God. And to emphasize the perfect clock, the immutable laws, leads to fatalism. We must let God be God and let much of nature be a mystery. But the importance of these debates in science is the study of nature, scientists struggling with things they should properly struggle with.

In these debates, Einstein vs. Bohr, Agassiz vs. Darwin, Newton vs. Leibniz, the spiritual problem is rightly mixed with science. Aristotle knew it with his four causes. You can not comprehend a thing unless you know its four causes. Material causes and formal causes are still the substance of most scientific pursuits. These are the searches for God's order. What are the substances? What is its shape and function? But the other two causes, efficient and final causes, that Aristotle identified are lost in today's science. In scientific journals no longer is it asked, much less attempted to answer, the questions, "Who made this thing of nature?" and "Why was nature made to be and function as it does?"

Of course the efficient cause is our God of creation. Indeed the final cause, God's motives, are beyond our comprehension unless He tells us in the Scriptures. But with science quitting at the first two causes, today Aristotle would have to say to our Nobel laureates, to our science lawmakers, "You still don't know. Your explanations are inadequate." These are the only hopes of harmonizing nature with science. When did science go wrong? It is wrong perhaps to blame one scientist, but certainly the modern tower of science was seen as separate from God's tower of nature when Newton refused to make the proper debate publicly and kept his arguments for efficient and final causes hidden in private letters. In Newton's public writings,

It was a fatal over simplification that reduced nature to the simply quantitative and then defended the inadequacy of its position by a loud and righteous disclaimer of the responsibility to give explanations. To make sense, it was insisted is not science. Newton could not say why all bodies attract each other, and therefore, he insisted that the question was none of his business or the business of science at all. "I do not feign hypothesis." This was the crucial moment in the history of science—the moment of its treason to its own proper kingdom and the betrayal of the trust it had won as natural philosophy . . . In remaining agnostic, Newton illustrated a great philosophic truth, that a dead nature can give no reasons. All ultimate reasons are in terms of aim at value. A dead nature aims at nothing . . . Yet this is precisely what science did in Bacon and Newton. That it did conscientious work on projects within its narrowly prescribed area, and that it produced gadgets galore is no justification for its refusal even to be involved in the quest for understanding.⁵

⁵ Fehl, Noah Edward, *Science and Culture*, Chung Chi Publications, Chung Chi College, The University of Hong Kong, 1965.

No more did writers look for efficient and final causes. Only a few rare individuals would dare—Agassiz, Einstein. Today editorial policies and grants for scientific research do not permit explanations of efficient and final causes. Even if Darwin's *Origin of Species* adequately explained material and formal causes, of a certainty it fails with efficient and final causes. The lack of those causes in quantum structure is a failure of understanding in our time. To these causes the Scriptures speak quite plainly. A universe evolving of itself denies God. This is a sin against the First Commandment. Evolution denies beginning with a perfect creation. This robs God of His power and wisdom. Evolution denies all mankind as descendants from one set of parents. Evolution denies sin and man's accountability to his Maker. Evolution denies God of His justice. It denies God of His mercy and grace. Evolution robs man of His Savior. These "laws of Satan" turn us from Christ.

The creationist of the Calvin camp would continue to abandon efficient and final causes in the American courts. Their effort to get people to see a creation model on an equal footing with evolution or on a scientific footing without religion or the Bible is this same abandonment of efficient and final causes. These are the Judases we must never applaud. With this scientific approach they betray the very Creator they surmise they must go to court for. No matter how strongly the courts deny religion in the public schools, we know with all certainty that the firmament showeth His handiwork. The earth is the Lord's, and the fullness thereof; the world, and they that dwell therein. For he hath founded it upon the seas, and established it upon the floods. Even the wind and the sea obey Him.

Teach our people to continue to pay the high price of Christian education where all of God's causes of nature might be known. Behold the fear of the Lord, that is wisdom; and to depart from evil is understanding: We have no education at all and no science at all unless we as human creatures fear the Creator. Education begins knowing who God is, knowing the First Commandment, and knowing He has marvelously and wondrously made all things as told us in the first chapters of the Bible. It is in God's tower, one like Jacob saw, one of continual ascending and descending between God and man, one that leads up Calvary and ascends to heaven where the true nature God has made can be fully understood. God has blessed our synod with a good unified philosophy of education where reason guided by faith in the true Word inculcates all academic endeavors. It is the only hopeful approach for knowledge. In the past they correctly wrote:

Now it may be contended that purely geographic facts can be taught and learned from a neutral point of view, without specific Christian or anti-Christian bias. Facts are facts, it might be said, without regard to the glasses through which they are viewed. However, that, too, is an erroneous notion. Facts, knowledge, ideas, if they are true, are creatures of God as truly as are the fowls of the air and the plants and herbs of the field. If, then, these "bare facts" are separated in any fashion from their origin, divine creation, that very circumstance causes a distortion which makes of them something false and misleading. For origin is always an absolutely essential factor in any essence; and if that is clouded or denied, the entire picture is out of focus and thus becomes false and misleading. Only that can be true altogether that conforms in every part to the truth, the Word of God.⁶

Where God has spoken, reason must bow in submission, every thought

⁶ H.A. Sitz, "The Teaching of Geography, an Approach from the Christian Point of View," an educational monograph, Wisconsin Synod, Northwestern Publishing House, 1955.

must be subjected to the obedience of Christ. In this wise is our approach to all things directed and our attitude conditioned. This attitude is the result of faith that we have in Christ Jesus as our Savior, faith that has been created by the Holy Spirit through the Sacrament of Baptism and the preaching of the Gospel of salvation. It is not a result of an ability to reason, it is in fact entirely unreasonable. We make confession of that in the Third Article of our creed. "I believe that I cannot by my own reason or strength believe in Jesus Christ, my Lord, or come to Him, but the Holy Ghost has called me by the Gospel, enlightened me with His gifts, sanctified and kept me in the true faith." All the forces and influences that are involved in the creation of our faith are foreign to our nature. They negate our natural volitions and militate against the natural inclinations which reason would require us to follow. Reason has been dethroned and faith in Christ enthroned as the guiding principal our lives. This is the attitude with which we approach all things in life and therefore science also.⁷

This obedience to God's Word and subjecting our reason to it requires staying in the correct tower. You can not safely walk a tightrope between man's laws of science and the ordinances of nature God has created and sustains. I am not saying a scientific profession is denied the Christian, but in today's world where laws of evolution dominate, such a person must climb the tower with a heavy cross on his back. God has sustained men like Daniel even as governor of the magi. God has also sustained the poor and imprisoned. Ridicule, scorn, and failure of scientific recognition faces the Christian. The cross might be lightened by not stressing efficient and final causes in science, but then that person is in the wrong tower, and the longer he ascends, the farther he is away from the true tower.

Walking the tightrope of creation science in the church, I believe, gets us all into trouble. The processes of science should remain in the market place where ideas, imaginative formulas, invented classifications, and systems of thought may be debated freely without loss to God's kingdom. Science among our people must not be cloistered in a WELS institute. Let those who pursue creationist science write for the National Science Foundation, The National Academy of Science, and The American Association for the Advancement of Science. If works fail there, let them. Failure proves nothing. They might succeed in raising honest questions. But the pseudo science of Calvinist leanings takes us from faith. Remember Luther's problems with fire above the firmament. Thanks to Thomas Aquinas, Galileo had the most difficulty from his church leading almost to his execution for a science that suggested earth motion. A fraudulent use of the Second Law of Thermodynamics today turns the church into court jesters professing laws a century outdated, before atoms, and in harmony with erroneous caloric laws.

I do not believe we as a synod want to get mired down with the scientific debates that must come with imaginative ideas such as universal climate, pre-flood geology, or ice age theory. Where contradiction is found, then of course, the Scriptures must prevail, and they will. But a problem exists when ideas of men, our own men, concoct theories not necessarily in contradiction. Watch the hassle then. But don't you dare permit one widow's mite to be wasted on such folly. I have had so much training in glacial meteorology that it is not difficult for me to weave an ice age model together with the Noachic flood and post flood times. I know many here may not accept any ice age theory. Now, who will drill the cores from the ice caps of Greenland

⁷ Paul G. Eickmann, "Science, An Approach from the Christian Point of View," an educational monograph, Wisconsin Synod, Northwestern Publishing House, 1955. Paul G. Eickmann, "Science, An Approach from the Christian Point of View," an educational monograph, Wisconsin Synod, Northwestern Publishing House, 1955.

and Antarctica? What funds will be found to climb the mountains required to settle our little differences? For what? Vanity? When debate comes with an evolutionist, it must be fought on what think ye of Christ. Is Jesus the Son of God? Was He born of a virgin? Did He suffer and die for my sin? Did He rise on Easter? Will I see God in eternity with my own eyes? This is what all our teaching must lead to. This is how our children after us must also learn and teach. It is Satan who directs attention away from the true questions and true answers.

Certain philosophers, it is true, did get a glimpse of the truth amid the fog of their own fallacies and did try to build it up to solid conviction and persuasiveness by means of carefully worked-out argumentation—such truths, for example, as God’s creation of the world, His providential governance of it, the excellence of virtue, of patriotism, of loyalty in friendship, of good works and all other things pertaining to morality. They saw these things even when they did not know what final end, or how, they were to be referred. But in the City of God these truths are found in the words of the Prophets-God’s words, even though spoken by men. And they were not driven into her people’s heads amid the tumult of twisting and turning argumentation, but simply delivered to them. And those who heard them trembled, for they knew that if they despised them they were despising not the wisdom of man, but the word of God.⁸

How does God govern nature? Well, can you put a formula on these data? He created the world in six days. He cursed the ground because of man’s sin. He clothed them. He cleansed the world with a flood. He set His rainbow in the clouds. As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night, will never cease. He confused their language and scattered them all over the earth. Why did Sarah laugh? Is anything too hard for the Lord? Consistently it is God who blesses the marriages with children—Sarah, Rebekah, Leah, Rachel. The Lord rained down burning sulfur on Sodom and Gomorrah. Isaac planted crops in that land and the same year reaped a hundredfold because the Lord blessed Him. In spite of Jacob’s trickery, he obtained the blessing from his father Isaac, and was blessed for his labor with Laban as well. God revealed to Pharaoh what He was about to do—seven years of great abundance, seven years of famine. I will go down to Egypt with you, and I will surely bring you back again. Who are these? They are the sons God has given me here. So God was kind to the midwives and the people increased and became even more numerous. And because the midwives feared God, He gave them families of their own. He plagued Egypt. He divided the waters and dried the passage with a strong east wind. He controlled the wheels of the chariots, not the chariot drivers. He stopped the sun for His people. (An incident, by the way, the modern astronomer Carl Sagan accepts as possible. He calculated if the earth slowed on its axis over a span of four hours, the deceleration would be gentle enough not to cause major consequences. He knows it could not have happened since once the earth stopped, it could not start again.⁹ He denies God. The Bible calls his kind a fool.) He gave them meat to eat. He sweetened the water. He brought water out of a rock. I will take away sickness from among you and none will miscarry or be barren in your land. I will give you a full lifespan. I will send the hornets ahead of you to drive the Hivites, Cannanites, and Hittites out of your way. I have filled him (Bezalel)

⁸ St. Augustine, *City of God*, translated by Walsh, Zema, Monahan, and Honan, Image Books, Doubleday and Co., Inc., Garden City, N. Y., 1950.

⁹ Carl Sagan, “An Analysis of the Worlds in Collision,” in *Scientists Confront Velikovsky*, edited by Donald Goldsmith, W. W. Norton and Company, N. Y., 1977.

with the spirit of God, with skill, ability, and knowledge in all kinds of crafts. I have given skill to all the craftsmen to make everything I have commanded you.

He laid the earth's foundation.

He marked off its divisions.

He shut up the sea behind doors and fixed limits for it.

He commands the morning.

He controls the springs of the sea.

He holds the gates of death.

He watches over the doe at her birthing of a fawn.

He provides for the runaway donkey.

He provides the wild ox, the ostrich, and the warhorse with each of their unique qualities and roles for life.

He directs the hawk and eagle.

He controls the light, the darkness, the rain, the snow, the hail, the wind.

He binds the beautiful Pleiades and loosens the cords of Orion.

He brings forth the constellations in their seasons.

He knows HIS laws of the universe.

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