

THE THEO-LOGICAL LIMITS OF SCIENCE | by R.L. Dabney¹

No naturalistic arguments from observed effects to their natural causes, however good the induction, have any force to prove a natural origin for any structure older than authentic human history, except upon atheistic premises. The argument usually runs thus: we examine, for instance, the disposition which natural forces now make of the sediment of rivers. We observe that when it is finally extruded by the fluvial current into the lake or sea where it is to rest, it is spread out horizontally upon the bottom by the action of gravity, tidal waves, and such like forces. The successive deposits of annual freshets we find spread in *strata*, one upon another. Time, pressure, and chemical reactions gradually harden the sediment into rock, enclosing such remains of plants, trees, and living creatures as may have fallen into it in its plastic state. The result is a bed of stratified stones. Hence, infers the geologist, *all stratified and fossil bearing beds of stone have a sedimentary origin*, or other such like natural origin. Hence winds and waters must have been moving on this earth long enough to account for all the beds of such stone on the globe. Such is the argument in all other cases.

Grant now that an infinite, all-wise, all-powerful Creator has intervened anywhere in the past eternity, and then this argument for a natural origin of any structure, as against a supernatural, creative origin, becomes utterly invalid the moment it is pressed back of authentic human history. The reason is, "that the possible presence of a different cause makes it inconclusive. Now, I well know that this conclusion, simple and obvious as it is, awakens a grand outcry of resistance from physicists. "What," they exclaim, "do not like causes always produce like effects? This principle is the very *fulcrum* of the lever of induction; unsettle it, and you shake all science; remove it, and all her exploits are at an end." Very true; all these illegitimate exploits in this region, of a past eternity, whose solemn romance so piques the curiosity and inflames the enthusiasm of the human mind, in which science vainly seeks to measure strength in the dark with an inscrutable omnipotence; all these delusive exploits are ended. But within the proper

¹ The title given for this excerpt signals the character of Dabney's argument: naturalistic science is logically limited by the premises of theism. Excerpted from *A Caution Against Anti-Christian Science*, A Sermon on Colossians, II. 8 (Richmond, VA: James E. Goode, 1871); reprint, *Discussions of Robert Lewis Dabney (DRLD)*, III:116-136. The publication was first a sermon on Col. 2:8, preached, *extempore*, in the Synod of Virginia, Oct. 20, 1871. In general, a warning against the teachings of Huxley, Tyndale and Darwin, et al. Its publication provoked the beginning of the Woodrow controversy in the PCUS. James Woodrow of Columbia Theological Seminary took the sermon to be an attack on his views and defended the same in two essays: "An Examination of Certain Recent Assaults on Physical Science," *Southern Presbyterian Review (SPR)* 24 (1873): 327-376 and "A Further Examination of Certain Recent Assaults on Physical Science," *SPR* 25 (1874): 246-306. Dabney replied to the first in "The Caution Against Anti-Christian Science Criticized by Dr. Woodrow," *SPR* 24:4 (Oct. 1873): 539-586; reprint, *DRLD*, III:137-180. See *Life and Letters*, pp. 339-348, for an account of the controversy, and especially a printed letter from RLD to Woodrow on creation and science. Slight editorial changes have been introduced by the editor of this excerpt.

sphere of science, we leave her the full use of her foundation principle, and bid her good speed in its beneficial use. And that is the sphere of practical inquiry, within the historical past, the present, and the finite, terrestrial future, where we can ascertain the absence of the supernatural.

But to show how utterly out of place the principle is in the past eternity, in which it must meet an Almighty First Cause, and meet him we know not where, let me add two very simple thoughts: "Like causes always produce like effects?" Yes, provided the conditions of action remain the same. But is it forgotten that a proposition does not prove its converse? The admission, that like causes always produce like effects, is not enough to demonstrate that all similar effects have come from the same causes. Suppose we are compelled to grant the presence of another, independent, unlike, yea, omnipotent cause; and suppose we are compelled to admit that it may have intervened at any time prior to actual human history, as all except atheists do admit? Now, in the presence of this vast, *unlike cause*, where is your valid inference, from like effects to the like causes? It is wholly superseded. It may be asked: "Must we then believe, of all the pre-Adamite fossils, that they are not, as they obviously appear, organized matter; that they never were alive; that they were created directly by God as they lie? The answer is, that we have no occasion to deny their organic character, but that the proof of their pre-Adamite date is wholly invalid, when once the possibility of creative intervention is properly admitted, with its consequences. For the assumed antiquity of all the rocks called sedimentary is an essential member of the argument by which geologists endeavor to prove the antiquity of these fossils. But if many of these rocks may have been created, then the pre-Adamite date of fossils falls also. Moreover, when we are confronted with an infinite Creator, honesty must constrain us to admit, that amidst the objects embraced in his vast counsels, there may have been considerations, we know not what, prompting him to create organisms, in numbers, and under conditions, very different from those which we now term natural. After the admission of that possibility, it is obviously of no force for us to argue, "These organisms must have been so many ages old, supposing they were produced, and lived, and died tinder the ordinary conditions known to us." This is the very thing we are no longer entitled to suppose.

But hear the other thought. Grant me any creative intervention of a God, in any form whatsoever, and at any time whatsoever, then it is inevitable that any individual thing, produced by that intervention, must have presented, from its origin, every trait of naturalness; for it was produced by a rational Creator for the purpose of being—if inorganic—a part of a natural system, to be providentially governed through the laws of nature; or—if organic—to be, moreover, the parent of a species or race of organisms like itself. The inference is as sure as geometry; for if the first, the parent organism, had not all the properties natural to the species, how could it generate that species? What is the definition which science itself gives of identity of species? It is the aggregate of those properties, precisely, which are regularly transmitted through natural generations. Then, the first organism, made by the Almighty to be the parent of the species, must have been endued with all the properties natural to the species, or to its subsequent members. Now, then, if the argument of our physicists to a natural origin is universally valid—that the like effects must be from the like natural causes—it is valid to prove that this first supernatural organism was also natural. But, according to our case as agreed on, it was not natural. And from this reasoning there is no possible escape, save in absolute atheism.

As this is a conclusion of fundamental importance, let us make it still clearer by applying it in a fair instance. We will suppose that within the lifetime of Seth an antediluvian physicist

appeared, investigating the origin of the human species precisely upon the modem principles. He exhumed the remains of Abel and of Adam, and submitted them to a critical examination. He also enquired of Seth what was his belief concerning the origin of the race. That patriarch answered, that the testimony of God, delivered by the venerable Father of Man, Adam, perfectly cleared up the matter; that he, his murdered brother Abel, the unnatural murderer Cain, were all the natural progeny of a first pair, who were themselves the supernatural, adult productions of the Creator, without human parents. But to this simple account of the matter the man of science necessarily demurred; for he had examined Adam's bones, and found them exhibiting every mark of growth from a natural infancy. He had, for instance, possessed himself of that very armbone with which, as the unphilosophic myth of Seth would fain teach, Adam had cultivated the primeval garden. Our naturalist had sawed out a transverse section of this bone; he had polished it down to a translucent film; he had poured a pencil of microscopic light through it; and lo, there appeared plainly, as in any other bone, the cellular tissue filled with that earthy salt, phosphate of lime, which gives to all natural bones their rigidity. And then our naturalist exclaimed, "Why, Seth, the very microscope contradicts you. "We have learned from human physiology that all bony matter is thus formed by nature: first, the cellular tissue grows, and then the infant's little frail, flexible bones acquire a gradual solidity by the deposition of phosphate of lime in the cells, until, as the child becomes a mature adult, the full charge of this earthy substance gives the density and firmness of the bone of the sturdy man. Now, you observe that this bone of Adam has that density. By the unfailing maxim, that 'like causes produce like effects,' I know that this bone must have been thus produced; that it was once the flexible, gelatinous structure of the fœtus then the soft bone of the babe, and at length, by gradual growth and deposition of the earthy salt, the mature adult bone which we see. Hence, science must pronounce your story untrue, when you say that this person's body had no natural parentage, but was produced in a mature state by a Creator." To this beautiful induction the common sense of Seth doubtless objected; that God told Adam, for all that, he had made him without natural parents, the first of his kind; a testimony which Adam's own recollection confirmed, in that, from his earliest consciousness he had been a grown man, and there had been no older human being with him at all. Seth doubtless protested, that this testimony he should believe in spite of seeming science. And we may imagine that our naturalist grew quite impatient with his stupid obstinacy, and, as he thrust the microscope under his nose, exclaimed, "Why, man, look here; seeing is believing; your own eyes will tell you that this is natural bone, and so must have grown naturally."

Yet, still the naturalist was wrong, and Seth was right. He could have proved it even without claiming Adam's testimony; he could have reminded this naturalist that, if his reasoning necessarily proved that Adam had a parent, then the same reasoning, applied to a bone of Adam's father, would prove with equal certainty that *he* had a father in his turn, and then that there must have been a grandfather, a great-grandfather, and so backwards forever. But now it is a conclusion of science itself, that an infinite series backward, without original cause outside of itself, is an impossible self-contradiction. This conclusion is of geometrical rigidity, and is recognized by all modern philosophers, even the most anti-Christian. The denial of it is, moreover, blank atheism. Now, then, if the antediluvian naturalist cannot hold this absurd and atheistic history of an infinite series of human generations literally, without beginning from past eternity, he must admit that somewhere in the past there was the *first man*. But his arguments from the natural properties of that first man's remains must inevitably be false in that case. Well,

then, he might just as well admit that the argument from Adam's bone was worthless in his case. Seth's testimony is found, after all, strictly competent to the question: and, if his character is seen to be trustworthy, perfectly decisive of it. Seth could, moreover, have supported his own credibility by most weighty experimental facts: such as the exceeding fewness, in his day, of those very bones and other remains of dead human generations; the scantiness of the members of the human family, compared with their evidently prolific powers, and the obvious marks of recency attaching to the whole condition of the race.

Now I claim that my instance is fair; the parallel defect will appear in every attempt of modem science to push the Creator's intervention back of the earliest human history by such inductive reasoning. And I ask, with emphasis, if men are not in fact reaching after *atheism*; if their real design is not to push God clean out of past eternity, why this craving to show his last intervention as Creator so remote? Why are they so eager to shove God back six millions of years from their own time rather than six thousand? Is it that "they do not like to retain God in their knowledge "? It is not for me to make that charge. But have I not demonstrated that the validity of their scientific logic, in reality, gains nothing by this *regressus*?

Once more: let men explicitly relinquish the horrible position of atheism; and they must admit, somewhere in the past, the working of a Being of "eternal power and Godhead." And that admission contains another: that this eternal, sovereign Maker was, of course, *prompted by some rational design* in making what he then chose to make. That is, in the language of natural theology, God must have some *final causes* for what he does, of some sort or other. While we may not audaciously speculate as to what they were, yet so much is obvious, that in this vast and inscrutable counsel of the Maker's purpose, amidst all the wide designs of the Infinite Reason, the material is intended to subserve the spiritual. As the body is for the mind, and not the mind for the body, so the whole world discloses thus much of its Maker's purpose, that the irrational creation is for the sake of the rational. Shall philosophers be the men to impugn this? They cannot. All nature would cry shame on them for doing so. For what is their preferred glory over the rest of us common men? It is the superior use of their reason.

Now God is manifestly so infinite in wisdom and power, that any creative exploit to which his own final causes might prompt him is as easy to him as any smaller one. Suppose that he may have had rational ends to gain from the production of a world already organized and equipped for the home of a reasonable race of his servants. Then it was no more fatiguing or inconvenient to him to produce such a world six thousand years ago, in all its completeness, than to produce, six millions of years ago, simply a nebulous, incandescent mass of vapor, out of which to grow a world. But, it will be said, is not that statement purely hypothetical? I reply, yes; in advance of revealed testimony, it is. But its legitimate use is to show that there is a competent and relevant case here for just such testimony. Now, then, if such a witness appears, and his credibility has sufficient moral supports, his testimony is good. And this view of the matter is as really the most scientific as it is the most Christian.

Hence, brethren, I hold that there is, and there can be, no proper collision between the most explicit and authoritative theistic testimony and sound natural science. They cannot clash, because wherever, in travelling backwards, the domain of creative Omnipotence is met, there true natural science stops. Let us hold this ground, and we have no need to debate any particular hypothesis as to the origin of organism, or to choose this rather than that. We have no call to leave the sphere of morals and theology to plunge into the secular disputes of anatomists or

mineralogists. Neither have we any need to force a strained exegesis upon God's record of his own omnipotence in order to conciliate uncertain and fluctuating human sciences.

The best antidote, my hearers, for all this naturalistic unbelief is to remember your own stake in the truth of redemption; and the best remedy for the soul infected is conviction of sin. "Beware lest any man despoil you through a vain, deceitful philosophy." Of what will they despoil you? Of a divine redemption, and a Saviour in whom dwell the divine wisdom, power, love, and truth, in all their fulness; of deliverance from sin and guilt; of immortality; of hope. Let naturalism prove all that unbelief claims, and what have you? This blessed Bible, the only book which ever told perishing man of an adequate salvation, is discredited; God, with his providence and grace, is banished out of your existence. But is consciousness discredited, which assures you that you are a spiritual and responsible being? Is sin proved a fancy and death a myth? Alas, no. These imperative needs of the soul still remain, and crush you as before; but there is no deliverer. In place of a personal God in Christ, Father, Friend, Redeemer, to whom you can cry in prayer, on whom you may lean in your anguish, who is able and willing to heal depravity and wash you from guilt, who is suited to be your portion in a blessed immortality, you are left face to face with this eternal nature, impersonal, reasonless, heartless. Her evolutions are but the movements of an infinite machine, revolving by the law of a mechanical necessity, and between her upper and nether millstones the corn is this multitude of human hearts, instinct with life, and hope, and fear, and sensibility, palpitating, writhing, and bleeding forever under the remorseless grind. Yes, for aught you know, forever! for this dreary philosophy cannot even give you the poor assurance of annihilation. Even though it should banish God from your creed, it cannot banish the anticipations of immortality from your spirit. Naturalism is a virtual atheism, and atheism is despair. Thus saith the apostle: They who are "without God in the world" are "without hope." (Eph. ii. 12.) Young man, does it seem to you an alluring thought, when appetite entices or pride inflates, that this false science may release you from the stem restraints of God's revealed law? Oh! beware, lest it despoil you thus of hope and immortality. Remember those immovable realities, sin, guilt, accountability, which no vain, deceitful philosophy will be able to hide in the hour of your extremity. Look at these great facts in that light in which, as you well know, death, "that most wise, eloquent, and mighty teacher," will place them. How poor and mean will all these pretentious sophisms appear in that hour?

Hence, I am not afraid to predict an assured final triumph for the Bible in this warfare. In the end, the spiritual forces of man's nature must always conquer, as they always have conquered. Look back, proud Naturalist, upon history; your form, and all other forms of skepticism, have been unable to hold their ground, even against the poor fragments and shreds of divine truth which met you in Polytheism, in Mohammedanism, in Popery. Man, however blinded, will believe in his spiritual destiny in spite of you. Let proud Naturalism advance, then, and seek its vain weapons groping amidst pre-Adamite *strata* and rotten fossils. The humble heralds of our Lord Christ will lay their hands upon the heartstrings of living, immortal man, and find there always the forces to overwhelm unbelief with defeat. Do men say their propositions are only of things spiritual? Aye, but spiritual truths are more stable than all their primitive granite. These imperishable truths rest on the testimony of consciousness, a faculty more valid than sense and experience: because, only by admitting its certainty can any perception or experience of the senses claim validity.

Centuries hence, if man shall continue in his present state so long, when these current theories of unbelief shall have been consigned, by a truer secular science, to that limbus where the Ptolemaic astronomy, alchemy and judicial astrology, lie contemned, the servants of the cross will be winning larger, and yet larger, victories for Christ, with the same old doctrines preached by Isaiah, by St. Paul, by Augustine, by Knox, by Davies.