



# Knowing what is Real

## Reflections on the limits of Science...



Though we believe that God is everywhere and that “in Him we live and move and have our being” (Acts 17:28), God is not experienced through objective observation but must be experienced *inwardly*, by means of the heart. This is true for two basic reasons. First, God literally cannot be experienced as an “*object*” both because we are unable to see him in his essence, and also because as the “Ground of Being” he is necessarily beyond the domain of objective measurement or “definite description.” Secondly, God is a *spirit* who “dwells in unapproachable light, whom no one has ever seen or can see,” which again makes his infinite existence on a different plane altogether, beyond the horizon of human understanding. Therefore Scripture calls God “the King of eternity, immortal, invisible, and full of glory” (1 Tim. 1:17).

Now while we cannot directly see God, we can rationally *discern* or infer his existence though the effects of nature itself. “The heavens declare the glory of God and the firmament shows his handiwork” (Psalm 19:1); “the invisible things of God are clearly seen, being understood by the things that are made, even his eternal power and godhead” (Rom. 1:20; Rev. 4:11). Furthermore, God has “set eternity” within each human heart (Eccl. 3:11; Gen. 1:27) which provides inner witness to his reality as the Creator and Judge of all the world (Rom. 2:15).

This “general revelation,” as it has come to be called, has been expressed in various logical arguments for God’s existence over the years, including the “cosmological” argument (the universe exists because God is its first cause); the “teleological” argument (the universe displays purpose and intelligent design); the “ontological” argument (God is known intuitively by reflecting on the nature of existence itself); the “moral” argument (moral and aesthetic values indicate that right and wrong are grounded in God as the Lawgiver); the argument from religious experience (people encounter “transcendental” and spiritual meaning in life that points to God), and so on. In this present age, however, we see through “a glass darkly,” which means we see indirectly by means of analogy or “riddles,” and our language about God will therefore be analogical and incomplete. Faith is the “substance of hope” and the “conviction of the unseen” (Heb. 11:1) and the person of faith “sees the One who is invisible” (Heb. 11:27). It confesses that “we have a building of God, a house not made with hands, eternal in the heavens” (2 Cor. 5:1).



“Science,” defined to be an *empirical inquiry of observed natural phenomena*, is methodologically blind to God because God cannot be observed using its methods. In general science assumes that everything that happens in the world has “natural” (i.e., observable) causes and that experiments of specific observable instances are able to be used to form scientific *generalizations*. Scientific protocols attempt to guard against “hasty generalizations” by testing a number of samples and defining repeatable conditions that may be peer reviewed and confirmed, though I hasten to add that such observational corresponds are a form of *inductive reasoning* that is limited to forming probable and tentative conclusions, not to deductive certainty.

In general, the more observations of a *correlation*, the stronger the conclusion, and if a tested hypothesis suggests a constant correlation, it may be eventually accorded the status of being a “scientific law,” such as Newton’s three laws of motion. Nevertheless, even these “laws” are probable, since they are based on inductive logic, that is, they are grounded in individual observations or experiments, and we therefore cannot with certainty say that the future will resemble the past and conditions will necessarily apply to unobserved future instances.

This uncertainty is sometimes called the “*problem of induction*” and it is a problem because induction relies on assumptions about the uniformity of time and space that themselves are not observable using the tools of science itself. I should add that the problem of induction is not that science predicts outcomes or make inferences about cause and effect, but rather that it assumes *axioms* that must be unreflectively accepted and regarded objectively true to frame scientific conclusions. For instance, even though people have observed the sun rise every day, it is possible that it might not rise tomorrow. Likewise the observation of certain types of genetic mutations in plants or animals does not “prove” that it is the mechanism of evolutionary theory.

I believe that *true* scientific inquiry should understand its *epistemological limitations* and to acknowledge that its paradigms or models are inherently speculative and subject to revision (Thomas Kuhn). Epistemic humility is especially needed when science is employed as part of the medical industry to sell treatments, or when vaccines are “sold” as a remedy for viruses based on negligible subgroup sampling and outcomes that have weak (or no) statistical correlation to support such the marketing claims. As Karl Popper once wrote: “Science, like any other human aspiration, is liable to self-deception. If we are uncritical we shall always find what we want: we shall look for, and find, confirmations, and we shall look away from, and not see, whatever might be dangerous to our pet theories. In this way it is only too easy to obtain what appears to be overwhelming evidence in favor of a theory which, if approached critically, would have been refuted.”



Today we live in an age of “scientism,” an ideology that (unreflectively) claims that the scientific method is the only sufficient arbiter and source of all truth. However it must be mentioned at the outset that the *scientific method* itself is based on the formulation of hypotheses (educated guesses) combined with controlled observations and testing to identify probable patterns of cause and effect relationships. It’s inherent logic is “if p then q, q, therefore p,” which is not a valid form of deductive reasoning. Nevertheless advocates of “scientism” routinely disregard these limitations and go on to formulate dogmas about *metaphysical* realities: “God, the universe, and everything.”

The claim that science is the only source of knowledge is itself not a scientific statement, of course, nor is the assumption that the scientific method is the “best” way to know things. Indeed saying so expresses a bias and commits the fallacy of assuming the truth of its own conclusion (“begging the question”). Do we need science to teach us what it means to love our children? To explain what beauty is? To feel our pain? To validate our dreams? In a way scientism repeats the ancient adage of the sophistical thinker Protagoras who said “Man is the measure of all things.” Scientism is not real science, of course, but a *faith system* that believes fantastic theories about the “salvation” of the human species or finding “utopian outcomes” that will come through the powers of science and its technocratic scientific overlords. This is the fantasy of *Auguste Comte* who sought to establish a “priesthood” of the scientific elite that would on day rule the world. It is a simplistic and reductionistic philosophy that disregards other modes of knowing “God, the universe, and everything.”

In the Scriptures we are instructed to “renew” our minds (Rom. 12:2), which implies questioning the assumptions of worldly culture and resisting the temptation to flow with “preconscious” acceptance of programmed ways of seeing and thinking. For instance, our culture inculcates various forms of profane thinking by assuming a godless worldview that criminalizes those who question social engineering and propaganda....

Sanity is found when we understand that science is essentially a *faith system* that unreflectively believes many metaphysical axioms, including assumptions about *time* (i.e., that the future will “resemble” the past), about *motion* (i.e., that natural processes are “uniform”), about *space* (that there is an “external world” that is accessible to the human mind); about *causality* (i.e., that one event “causes” another), about the *capability of the mind* to accurately represent *reality* (e.g., that measurement “makes traction” with the world and can be used to describe things); about *values* (i.e., that it is “better” to know rather than not to know; or that the scientific method is a “valid way” to develop inductive inferences, or that a given theory is “elegant,” and so on).



Note that none of these *presuppositions* are derived by scientific inquiry itself (which is based on evidence and repeatable empirical measurement), but are *brought to science* as assumptions used to frame or organize a particular “paradigms.” In other words, science assumes many things about what constitutes “reality,” but like any other faith system, it should be tested to see if its inferences provide the best explanation or if there are other ways of understanding things. For instance, does the *naturalistic* view of reality, that is, the metaphysical belief that all that exists is “matter in motion,” as assumed by evolutionary theorists sufficiently explain the complexity of life? Does it account, for instance, for the electromagnetic pulse of the individual human heart? Can it account for the incredible complexity of the eye, or for the aesthetic wonder of the beautiful? For ideals of justice? For poetry, or the longing of heart for love? for friendship? truth? for eternal life?

It is important to realize the real limits of scientific claims to knowledge and its interpretations of reality (as explained by Immanuel Kant). The mind has a framework that *filters* experience. True science is a humble endeavor because it realizes its conclusions are tentative and open to *falsification*; it is based on verifiable research that has undergone the rigors of peer-reviewed testing and cross-examination. However not all that is claimed to be such science deserves the title. For example consider that the theory of materialistic cosmology claims (without any empirical evidence) the “universe” inexplicably exploded into being out of absolutely nothing for no logical reason whatsoever. It should be obvious that if we define science as “the observation, identification, description, experimental investigation, and theoretical explanation of phenomena,” such a cosmological theory is not true science, since it is not based on the direct observation of how the universe originated. The “noumenal” realm of reality, that is. what things are “in themselves,” is something whereof science must be silent...

Pop culture ascribes to “science” powers it simply does not have, and many people today are unaware that secular science is a quasi-religious system grounded in philosophical assumptions that transcend the realm of scientific knowledge altogether. It is wise, therefore, when presented with a scientific claim that something is true, to respectfully ask for the logical reasons and the evidence (i.e., data sets, methodologies, etc.) for believing the a certain claim is justified. Remember that relying on self-professed testimonial is not sufficient warrant since such testimony may be *biased* or the data is falsified, as for example when pharmaceutical companies claim the efficacy of particular medications or vaccines. As a matter of fact, genuine *scientific consensus is quite rare*, and we should remember that genuine scientific knowledge is an ongoing endeavor that is “asymptotic,” that is forever *approximating* the description of what is true.



Modern experimental science is a relatively young field of study, and it was not long ago that “science” proved that the earth was flat, that leeches and bloodletting were ways to cure illnesses; that phrenology and lobotomies were means to cure mental illness, that “spontaneous generation” was true, that cold weather can make you sick; that bats are blind, that cigarettes are good for your health, and so on. It behooves us, then, to keep perspective and be wise by testing scientific truth claims, friends. If there are peer-reviewed studies that independently confirm the conclusion of a given hypothesis and that cross check that the data has not been falsified or “cooked,” then it is proper to respect the research and its findings, but scientific statements made by unqualified people (such as politicians, mass media pop stars, or even a former Microsoft CEO) should be rejected as fallacies of false authority.

Some people have become jaded over the complexities of epistemology and regard the value of science in “pragmatic” terms, saying that a scientific conclusion may be called “true” simply because it “works” to bring about desired outcomes. William James wrote about this in his book on *pragmatism* where he said that “truth” only means that something has practical or “cash-value” in human experience. Of course this begs questions about what is a “good” or desired outcome (these may be very different things), and whether there is an *obligation* to prescribe utilitarian principles at all. Does the state have the right to enforce that a secular humanist and evolutionary worldview must be taught to young children in public schools because it of its practical benefits of controlling individuality and religious convictions? Do utilitarian principles apply to social, political, and religious ideas, and if so, is it a form of censorship to enforce “tolerance” as a means of social control and compliance? Is there really a “calculus” to determine the “greatest good for the greatest number of people,” and even if there is (which I doubt), does this not imply that the good of the majority is always the best?

As I hope you can see, science is not godlike in its power: it is neither omnipresent nor omnipotent, nor is it the exclusive domain of substantive knowledge about “God, the universe and everything.” Indeed there are *other ways of knowing* things that must be taken into account for the sake of understanding the whole picture about how we know things. Appeals to intuition, mystical awareness, spiritual experiences, the apprehension of beauty, the testimony of conscience - both good and evil - are inherent to the human condition. The careful study of history likewise can attest to the historicity of Jesus and his resurrection from the dead. Spirituality cannot be reduced to physics and biochemistry without being absurd. The secularist who claims that cosmic evolutionary theory is scientifically true is therefore absurd, for a moment’s reflection shows that origin of the universe is not based on observation but at best is a speculative story devised to account for being, time, and change without reference to the Creator of the universe...



I did not intend this to be a “deep dive” into *epistemology* (i.e., the study of how we can know things) or the *philosophy of science* (the study of how science attempts to justify its thinking), but merely to point out that any theory of reality that forgets or suppresses the existence of God is doomed to be wrong. Honest science may provide knowledge and applied technologies, but it cannot provide *wisdom*; it may believe that knowledge is good, but it cannot say why without *philosophical justification*; it can produce various technologies, but it cannot prescribe how to ethically use them; it may fantasize about utopia, nirvana, or eternal life, but it is powerless to find it.

Allow me to go a bit further in a different direction. True science, that is science conscious of its limitations, can discover facts that ultimately point to God. For example, the third law of Newton states that “for every action, there is an equal and opposite reaction,” and this gives reason to believe that everything that exists has a cause for its existence. The universe itself exists, so it requires a cause to explain its being. Why is there something rather than nothing at all? If time is “infinite,” how did the state of the universe arrive at this moment? The idea of a *Creator of the universe* is therefore a *rational belief*, perhaps even self-evidently true, that coheres with the observation of the physics of the universe. Of course the existence of God is something beyond the scope of empirical observation, but biology, mathematics, physics, and cosmology discover “fine-tuning” of the universe and its precise calibrations that allow for the existence of life. The astounding intricacy of gravity, magnetism, the distance of the earth from the sun, the viable atmosphere of the earth, etc., all are examples that indicate divine intelligence and design rather than the “randomness and chaos” that would result from an impersonal and inexplicable “big bang” and the happenstance of matter in motion. This same intelligent design is evidenced in biological systems, especially on the molecular level.

The Christian philosopher Immanuel Kant (1724-1804) indicated the limits of science by restricting it to the realm of *phenomena*, shifting the focus of knowledge away from objects to the role of the observing subject. What is observed is constrained by how the mind imposes “categories” that inform the apprehension of sense of space, time, and causality in the world. Kant believed that this is part of being created in the image of God (i.e., *be'tzelem Elohim*: אֱלֹהִים בְּצַלְמֵם) wherein the structures of the mind enable us to find correspondence between our language and reality. There are indeed limitations to how we can know, however, as the “thing in itself” (German: *Ding an sich*) is hidden from us, though God has endowed human beings with *practical reason* to be able to live and to navigate intelligibly in this world.



Kant's famous "three questions," namely "What can I know?" "What ought I do?" and "What may I hope?" all concern what it means to be a human being, and each of these questions are answered from beyond the scope of the scientific method. Kant appealed to the inner sense of awe and wonder of life as evidence for the presence of God. He wrote: "Two things fill the mind with ever new and increasing admiration and awe, the most often we steadily reflect on them: the starry heaven above and the moral law within me. I do not seek or conjecture either of them as if they were veiled obscurities or extravagances beyond the horizon of my vision; I see them before me and connect them immediately with the consciousness of my existence" (Critique of Practical Reason).

Science purports to value truth, but it is powerless to reveal the *reverence* for what is most important about life itself. Kant's appeal is not to abstract knowledge but to the *intuitions of the heart* that are basic to human existence.

The Scriptures state: "The awe of the LORD is the beginning of wisdom, and the knowledge of the holy is understanding" (Prov. 9:10). The one essential truth from which there is no escape is the fact of God, and yet, like father Abraham, we must *choose to see what is invisible* in order to discern what real. Each of us must "come to himself," that is, turn and reconnect to our spiritual essence, our identity, and our heart (Luke 15:17). We have to start the journey there, because ultimate reality is intensely personal, being grounded in the "who-ness" of God. It is within the consciousness of our own "I am," our deepest identity as a personal, thinking, and feeling being, that we are able to relate to the person and heart of the great "I AM" of the LORD.

Abraham is the exemplar of faith for us and indeed he is called the "father of faith" (Isa. 51:1-2; Rom. 4:16; Gal. 3:29). Abraham courageously searched for God in his emptiness, and God graciously answered the cry of his heart. He left everything behind as he journeyed into the realm of promise - regarding himself as someone chosen to know God's blessing and grace. He was able to "walk by faith" because he stopped listening to the worldly and unbelieving parts of himself - and therefore he was able to hear and to see God's truth. As we receive light, more light will be given (John 13:17).

"You compass my path and my lying down, and are acquainted with all my ways" (Psalm 139:3). Quite literally. God is *present*; His name YHVH (יהוה) means this very thing. All of life, all of existence, bears witness to his power, his beauty, and his goodness. We see it in the stars; we feel it in the evening breeze; we ache for it in our heart's cry for love, for mercy, for home. "Holy, holy, holy, is the LORD of Hosts (צְבָאוֹת יְהוָה), all the earth is filled with his glory" (Isa. 6:3).



The French philosopher and scientist Blaise Pascal once wrote in his *Pensees*: “The heart has its reasons that reason knows not of,” and he added that “the last function of reason is to recognize that there are an infinity of things which surpass it.” Human intuition, our feelings, a sense of wonder and awe, our personal encounters with the Spirit of God, and our hope for ultimate meaning, all provide us with genuine understanding that is not accessible through pure logic and rational thought alone.

We encounter God’s presence when we reverently read the Bible and when we earnestly pray. We hear God whisper to our hearts and His Spirit comforts us. We sense him in our deepest hopes and fears; we glimpse his glory as we surrender to the beauty of a sunset or feel the expanse of the sea; we feel his heart as we embrace our spouse or hug our children; we know his care as we tend our pains, sigh our heartaches, and find hope despite the fragility of our waning days. And we know him in our resolute conviction that one day we shall rejoice with unspeakable joy as we are taken “beyond the veil” of this mortal world to there behold Him face to face... *Amen*.

**Psalm 19:1-2**

הַשָּׁמַיִם מְסַפְּרִים כְּבוֹד-אֱלֹהִים

“The heavens declare the glory of God,

וּמַעֲשֵׂה יָדָיו מִגִּיד הַרְקִיעַ:

and the sky above proclaims his handiwork.

יוֹם לְיוֹם יַבִּיעַ אָמַר

Day to day pours out speech

וּלְיָמָה לְלַיְלָה יַחְוֶה-דָּעַת:

and night to night reveals his knowledge.”