

Philosophy over Science

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Abstract

Science is the product of a historic movement in Western culture away from creating theories of the causes of Cosmic phenomena and towards merely describing the immediate facts of conscious experience. Relativity and Quantum Theory were the results of Bishop Berkeley's attempt to inoculate Judeo-Christianity against natural philosophy. He created a Science that only describes and mathematically correlates the observer's experience. Einstein adopted his approach to knowledge. This is why Science is anti-theoretical. Science continues to prevent us from understanding the Cosmos or ourselves; it keeps the Judeo Christian mental virus alive.

Key words: absolute space, Cosmism, Idealism, mass-energy, mathematics, motion, philosophy, Relativity, Science, spiritualism, subjectivism, symmetry, time

1. Introduction

Today, we are offered **only two** paths to truth: **Religious and Scientific**. For everyone who is not religious, Science is considered the ultimate arbiter of truth and Scientists the ultimate seekers of truth. The only meaningful judgment one can pass on any idea or statement is whether or not it is scientifically valid. Science certainly has its merits. It is disciplined. It pays attention to the facts. It produces technological wonders. Yet we all know that something is lacking in Science. It is merely technical, it concentrates on mathematical correlations among measurements instead of on explaining things. It seeks only regularities, not causes. It increases our knowledge of facts but not our understanding. Scientists repeat statements like: "Science doesn't ask why, but only how". "Science only describes what is, it cannot say what should be". You'll be surprised to know that, contrary to what all experts say, Science has no theory of the nature or causes of the most fundamental physical phenomena--nor therefore any way of grasping the evolution of complexity of this Cosmos. Science has also not helped us to analyze or resolve the biggest problems we face--poverty, exploitation, violence, war, mental disorder, authoritarianism, education, etc.

It's hard to get a handle on Science because it is a mixed bag of ideas. Some sciences (little "s") like biology stride from strength to strength because they are based on working theories of the causes of things. Darwin's theory of evolution replaced the merely descriptive creationist biology and put biology on a productive path. The combination of Mendel's gene theory and evolutionary theory led us to the blueprint of life--DNA. Molecular biology--the study of DNA and its changes through time and between species--reinforces the theory of evolution. Of course we don't know everything about biological evolution, but at least biology is in the right ballpark.

On the other hand, on the fringes of our knowledge about the physical and human world, religious and political ideas dominate our culture. These sciences merely describe what is and

avoid forming theories of the causes of things, as religion, society, and authorities are supposed to provide the “meaning”. Among these corrupted sciences are Relativity and Quantum Theory at one end, and medicine, anthropology, psychology, sociology, and political science at the other end. The journals of these sciences are full of articles in which things are counted, and mathematical correlations discovered, but they are singularly lacking any deep, working theories of what causes the phenomena discussed! The human sciences try to ape Relativity, they attempt to pose as “hard” sciences which merely count the facts and find the equations that correlate the facts. Psychiatry, for instance, tries to reduce complexity of human thought and behavior to descriptive diagnoses, drugs, and false theories of genetic and biochemical causes of behavior. It has not theory of the nature of the human child and the effects of childhood emotional trauma, nor of the effects of false and inadequate ideas upon human life and society.

So what's going on here? Why is Science so smart in some fields, and so blind and stupid on others? I think I've found the answer to this question. It wasn't easy. I had to acquaint myself with orthodox and alternative ideas in many fields of knowledge. I had to read hundreds of books over a period of fifteen years. Then I had to spend ten years unraveling the intellectual knot called Relativity and Quantum Theory and creating a working physical theory to replace it. I had to leave my home, Protestant America, both physically and intellectually, in order to gain a larger perspective.

All this research and theorizing allowed me to discover that we have no understanding of the Cosmos and ourselves. Religious ideas still dominate our thinking inspite of the devotion of our culture to Science. I discovered that Science is not the full use of our mental faculties in pursuit of the truth. Science is instead a deliberately restricted version of philosophy, a form of voluntary stupidity and blindness created for the precise purpose of preventing philosophy from revolutionizing and modernizing our thinking, in order to preserve Judeo-Christianity. I discovered that “Modern Science” was created in the “Enlightenment” by Christian men living in authoritarian cultures. They wanted to pursue their curiosity in technical matters, but didn't want philosophy to threaten to their cherished religious and political ideas. Having seen the effect of the Copernican revolution and Newton's Mechanics on their Faith, they wanted to prevent any further philosophical revolutions. They felt that Christianity and society as a whole were being jeopardized by natural philosophy—by “materialism”. They wanted to prevent any more “scientific revolutions”--and this was before Charles Darwin! They failed to prevent the evolutionary theory from surfacing, but the Science they created still works to limit evolution's impact and its application to human behavior, beliefs, and society.

To take you along the path that I have trod, I must help you to understand what happened to theoretical physics and Cosmology since the 16th century. You must grasp how utterly unreal, contradictory, and inadequate is Einstein's Relativity--which stands as the quintessential example of modern Science. I will show you where Relativity came from, why it persists, and why Einstein is so worshipped that he was named “Man of the Century” by *Time* magazine. Then you will understand just how inadequate Science is.

Think about this. Right now, there is no generally recognized theory of the basic physical constituents and processes of the Cosmos--no objective theory of space, matter, and motion to explain the causes of inertia, gravity, neutrinos, light, or any other phenomena. Light is known to

move at the velocity c , but relative to what? Why? No answer from physics. Similarly matter cannot move at the speed of light. Why? No answer. Matter resists acceleration, it has inertia. Why? With what is matter interacting to prevent its acceleration? No answer in Relativity. Academic physicists don't even acknowledge the need for a theory to explain such things. Their Relativistic physics is a collection of models which attempt only to *describe* these phenomena quantitatively *as measured in any observer's frame*. Relativity is about measurements and the observer's experience. It is anthropocentric. It relates the velocity of light to the human *observer* or any frame you happen to choose, not to the matter of this Cosmos. It is not a theory of the Cosmos or its physical causes. Relativity's foundational concepts, mass-energy and space-time, are just measurements that are transformed into mathematical Ideals. Nothing in Relativity or Quantum Theory is physically explained or even rationally explicable. Math has replaced physical theory.

Our modern "theoretical" physics is thus in an immature state similar to that of celestial mechanics before Copernicus and of biology before Darwin, and for the same reasons. Like them, Relativity contains many true facts. Like them, Relativity's errors are philosophical; not scientific, and not mathematical. As pre-Copernican astronomy merely described motion in the Earth-observer's frame, so Relativistic physics merely describes motion in any observer's frame--as if the observer is not *really* moving in a physical Cosmos. As pre-Darwinian biology merely described the species without trying to explain their genesis or alterations, (they were just created that way by God!) so Relativistic physics merely describes observed entities and events without trying to explain their causes (God or Nature just makes things happen that way!). As was the case with Ptolemaic astronomy and creationist biology, this atheoretical Relativity is revered and persists *because* it protects an entire realm of Cosmic phenomena from natural philosophy. Where naturalistic explanation is absent, mystical and religious ideas can persist (there are lots of gaps for the "God of the Gaps" to inhabit). Since Relativity precludes any naturalistic explanation of the Cosmos, it stands in the way of our understanding of the most basic aspects of reality, and reinforces our culture's suppression of natural philosophy. It perpetuates the idea that Science is all that one needs. This is good news to every authority and institution, for it allows them to impose their ideas on the masses who do not know how to see through their lies.

Why is the science that treats the fundamental aspects of physical reality in such a state? How can we understand what **we** are if we don't know what **physical reality** is? I will address all these questions, but I will have to take you on a brief tour of philosophy and history.

2. Definitions

To resolve thorny philosophical problems, one must use clear, unambiguous definitions. So allow me to define some terms. There are two unambiguous, mutually-exclusive theories about what exists and how it relates to *Homo sapiens'* conscious experience:

Idealism: Mind, spirit, or consciousness exists. All that we know with complete certainty is that we are conscious and are having certain experiences. The existence of anything apart from our conscious experience is uncertain and unknowable.

Cosmism: The Cosmos exists. It is the source of our existence and the cause of our sensations. Human consciousness is a product of Cosmic evolution.

These two metaphysical theories imply two different epistemologies:

Subjectivism: Since no physical reality exists or causes anything, knowledge consists only of the description of our sensations.

Objectivism: Knowledge consists of our attempts to describe and to understand the Cosmos itself, as it exists and evolves apart from our sensations.

David Kelley¹ has described these alternatives as the "primacy of consciousness" and the "primacy of existence". Much of written philosophy consists of complicated and confused attempts to evade this simple dichotomy. Cosmism is common to objectivism, naturalism, realism, and materialism. Idealism is the common thread in spiritualism, subjectivism, sensationalism, idealism, mentalism, empiricism, positivism, and Relativity. It is the philosophical version of spiritualism--the idea that our minds participate in a spiritual reality. Thus idealism is a central aspect of all religions and myths. This is why idealism still dominates our thinking, and why our attempts to combine idealism and Cosmism create endless contradiction and intellectual confusion.

In theoretical physics, the science of the most fundamental aspects of space and motion, these two distinct theories of reality and conscious experience prescribe two different ways to acquire factual knowledge:

Subjectivistic Description: The observer describes his experience--what he senses and measures with his instruments. Since no physical or material Cosmos exists, these events are related only to the observer and his frame-of-reference (FoR).

Objectivistic Description: The observer posits an observer-independent or Cosmic FoR which plays a unique or causal role in what he experiences. He relates his measurements and experienced events to this FoR.

If our knowledge is not to remain arrested at the level of description, we must construct models which attempt to account for the regularities we observe:

Subjectivistic Modeling: Regularities are noted among the observed events and measurements in the observer's FoR. The observer then constructs a system of assumptions about what he measures and, using this system, finds the "laws" and equations that fit his observations and successfully predict future observations. The result is a model of the entities and events in the observer's experiential "world" or FoR.

Objectivistic Modeling: Regularities are noted among events and measurements as they relate to a Cosmic FoR. The observer finds the "laws" and equations that describe motion in this FoR and that predict future observations. The result is a model of an objective reality or Cosmos.

Subjectivism can go no further. Since it does not accept or attempt describe an objective reality or Cosmos, it cannot proceed beyond the level of modeling the observer's sensations and measurements. Thus Idealism and subjectivism method in physics has produced:

Relativity: The doctrine that all "laws" of physics are mathematical correlations of measurements made in the observer's or in any chosen frame. The existence of any physical reality which causes phenomena or affects measurements is denied or ignored.

Objectivism, however, encourages an additional level of investigation:

Theory: The attempt go beyond modeling and discover the inapparent *causes* of what is apparent--to discover what Cosmic entities and processes cause the regularities that the objectivistic, Cosmic model describes.

Having chosen to theorize about the Cosmos and its causes, one is inexorably drawn to:

Philosophy: The attempt to integrate all evidence and all theories into a comprehensive theory of what exists and what causes all the phenomena that we experience.

To illustrate the above definitions: The Ptolemaic astronomy held that the Earth was stationary at the center of the Cosmos, and the entire Cosmos whirled around the Earth. It wrongly related all motion to the Earth-surface observer's frame. The math worked (with lots of ad hoc fixes to describe those pesky planets) and it described what humans sensed and measured; but it's perspective was wrong and it never could have led to any understanding of nature of of motion. Copernicus replaced it with an objective model that related all motion to our Sun--explaining the observer's experience as caused by the Earth's rotation and revolution in the Sun's frame--even though the observer could neither feel nor measure this motion. This was a "leap of faith" in the intellect, a belief that the mind could understand more than the senses indicated. Only because of this "leap of faith" could Kepler model the orbits of the the planets, and Isaac Newton discover a simple model to explain that motion. Newton's Mechanics was a Cosmic model since it related all motion to an objective "absolute" space that was the physical frame for all motion even though it could not be directly sensed or measured. Newton failed to theorize about this space, at least publicly. He declined to present his hypotheses on the causes of gravity and inertia. Hendrick Lorentz created an objective model of an absolute (ethereal) space to account for the motion of light and also the results of the Michelson-Morley experiment. Einstein instead abandoned objectivism and theory embraced subjectivistic modeling. Special Relativity, General Relativity, and Quantum Theory are subjectivistic models; seeking only the "laws" which model measurements made within any observer's or any arbitrarily-chosen frame. These models deny the existence of, or need for, any Cosmic frame of reference or physical causes of phenomena. They relate all reality to the human observer as if there is only the observer and his experiences and no physical reality that was causing any of that. His 1905 papers on Relativity and the lightquantum put the existence of the physical Cosmos, its physical substance(s), and the causes of all physical phenomena outside the purview of Science. Einstein claimed that he had reversed the Copernican revolution—that Relativity made the historic struggle between the views of Ptolemy and Copernicus “meaningless” since it was only a matter of one's choice of coordinate

system.² In fact, if we want to model and to understand the Cosmos, we must again take the Copernican leap from observations to Cosmos.

3. A Brief History of Modern Science

Why did Einstein resort to subjectivistic modeling? How did this highly restricted epistemology come to dominate physics? Why don't we abandon his approach and instead create objectivistic models and physical theories of Cosmic space, matter, and motion? These questions must be answered at two levels: the practical and the ideological. Practically, in the wake of the null M-M experiments, scientists were understandably dissatisfied with the Newtonian/Lorentzian theory of a single static ethereal space; but had none of the information or tools needed to create a working dynamic theory of space, light, and gravity. They did not know what we know today about the behavior of light, atoms, and atomic clocks at rest or in motion among the celestial bodies of this Cosmos. Theoretical physics was at an impasse. Einstein cut this Gordian knot by abandoning objectivism and causal theory altogether. He greatly simplified physics by dealing only with appearances and measurements, thus evading the difficult questions of the causes of Cosmic phenomena. Why did most other scientists eventually accept this approach? Why does it persist today? To answer the ideological question, we must briefly review the history of Cosmic philosophy and of its nemeses—idealism and subjectivism. We will then discuss the application of these ideas in Special Relativity, General Relativity, and Quantum Theory.

Philosophy originated in Ionia in the 6th century B.C when Thales of Miletus theorized that all physical entities and processes were the result of changes in and of water. Prior to this, mankind had explained the Cosmos on the basis of simple anthropocentric myths. Thales' historic conjecture replaced traditional mythological Cosmologies with naturalistic theory. It began a program of open-ended, non-dogmatic theorizing about the nature of the Cosmos and of the causes of things. Thales' own colleagues posited other substances as fundamental to the Cosmos. Later, on the Greek mainland, Leucippus and Democritus theorized that the Cosmos and all its manifestations were the result of invisible atoms flying through a void. Of course, these early theorists had little of the knowledge we have today. Their theories were thus inadequate and full of difficulties.

Socrates' early interest in Cosmic theory gave way to a disappointed skepticism. The problems he encountered in such theories made him doubt the efficacy of all materialistic explanations and even of his own senses. He decided to "take recourse to the world of mind and seek there the truth of existence."³ Aristippus, a follower of Socrates, developed Socrates' skepticism. His Cyrenaic school rejected Cosmic theory, arguing that humans could only know their own sensations and experiences and could not have any knowledge of the external world. Protagoras, the earliest known sophist, argued further that "Man is the criterion of all objects, of those which exist that they exist, and of those that exist not that they exist not." Of him it was said "he posits only what appears to each individual, and thus he introduces relativity."⁴

Aristotle opposed the skepticism, subjectivism, and relativism of these thinkers with many arguments. He said,

*“For sensation is surely not the sensation of itself, but there is something beyond the sensation, which must be prior to the sensation; for that which moves is prior in nature to that which is moved...”*⁵

He demonstrated that subjectivism produces contradiction since it cannot account for illusions and because subjects must always disagree on what they experience and measure. In another passage, he states,

*“But if not all things are relative, but some are self-existent, not everything that appears will be true; for that which appears is apparent to someone; so that he who says all things that appear are true, makes all things relative.”*⁶

Aristotle argued that gravity was proof that all motion was not merely relative, as objects gravitated Earthward regardless of the position of the observer or the choice of frame;⁷ an argument against Relativity that is no less cogent today. Later, Isaac Newton also rejected subjectivism in physics:

*“But because the parts of space cannot be seen, or distinguished from one another by our senses, therefore in their stead we use sensible measures of them...And so, instead of absolute spaces and motions, we use relative ones; and that without any inconvenience in common affairs; but in philosophical disquisitions, we ought to abstract from our senses and consider things themselves, distinct from what are only sensible measures of them.”*⁸

Aristotelian philosophy and Christianity were married in the Dark Ages, but with the discovery of Aristotle’s works of natural philosophy, medieval churchmen perceived a threat to their beliefs and the marriage became strained. Thomas Aquinas attempted to reconcile the partners, but could not prevent the inevitable divorce. In 1277, just three years after Thomas’s death, the Bishop of Paris issued a condemnation of many Aristotelian-Thomist theses. This divorce was accompanied by a religious backlash against Aristotle and all natural philosophy.

William of Ockham (b. 1280) tried to completely free theology from Cosmic philosophy. To do so, he limited philosophy to the mere description of experience. Against physical causation and evolution, he stressed the omnipotence of God and the radical dependence of all created things upon God for both their existence and interaction. For Ockham, there was a created world, but there were no God-independent physical entities or processes. Therefore, to study nature was to study God’s free acts. Ockham therefore insisted that man should only describe his actual experiences using the fewest propositions necessary; he should only note the regular sequences of observed events, not hypothesize about any God-independent natural causes or mechanisms. For Ockham, experience-based propositions, not Cosmic entities and processes, were the proper objects of knowledge.⁹ The purpose of Ockham’s Razor was clear—to eliminate all complex, hypothetical theories of physical entities and causation in favor of the *simplest* explanation of the cause of all experienced phenomena—God. Yes—it is the simplest explanation for everything!

René Descartes went one step further towards spiritual subjectivism. He sought to confine knowledge to what was given to us by God and about which we could be certain—the “clear and distinct ideas presented to the senses”. His *Cogito*, “I think, therefore I am”, tacitly assumed

idealism—the primacy of consciousness—that consciousness existed prior to, and independent of the human body and the physical Cosmos. The apparent Cosmos could, he supposed, be a hallucination produced in his mind by some demon.¹⁰ Descartes was persuaded to believe in the existence of the physical Cosmos because it appeared to exist and he believed that God would not so deceive him if it were not so. However, he believed in “external” things only insofar as they were manifestations of geometrical and mathematical forms. In order to avoid error, Descartes asserted that we must shun all theorizing about physical entities and causes and confine ourselves to mathematical descriptions. He implied that theorizing about the final (Cosmic) causes of things was a sin.¹¹ He advised that we pursue the only certain, indubitable knowledge available—the mathematical description of our sensations—universal mathematics. To this purpose, Descartes invented the familiar three-axis coordinate system that represents space as a three-dimensional geometric matrix.

John Locke was also more certain of spiritual than of physical existence.¹² He claimed that we could only know the ideas that were presented to us by our senses and could never pass beyond them to any knowledge of the nature or hidden causes of things.¹³ Descartes and Locke were thus dualists, believing in the existence of two substances—spiritual and physical. Since they knew very little about physical reality or the human mind, they could not produce a good theory of how these two kinds of reality coexisted and interacted. They could not explain what matter was or how it interacted with our spirits. They therefore defaulted to the simpler, immediately accessible, conscious/spiritual perspective (idealism-subjectivism) and tried to discourage all theorizing about the unseen physical causes of phenomena.

Bishop Berkeley (circa 1710) completed the move toward idealism and subjectivism and away from Cosmic philosophy. In his post-Copernican, post-Newtonian world, he feared that as more and more phenomena were explained by natural causes acting in a physical Cosmos, faith in the God of Christianity would gradually give way to materialistic natural philosophy (and this was before Darwin). He saw *all* philosophical explanation as a slippery slope leading to atheism, so he tried to replace Cosmic philosophy with a purely descriptive approach to knowledge that had no need for the Cosmos or for physical causation. He rejected Descartes and Locke’s dualism because it admitted the existence of a physical Cosmos and thus left the door open to natural philosophy. He argued instead that since we humans know only our own conscious experiences and have no *direct* knowledge of any material Cosmos, we must not assume that it exists.¹⁴ He argued that we should accept the simpler theory that all reality is purely spiritual;¹⁵ that our experiences are not caused by any physical world but are a “virtual” reality provided directly to our (disembodied) minds by God.¹⁶ Berkeley argued, for instance, that people would not worship the Sun once they realized that it was not an independently existing physical entity, but merely a God-given apparition.¹⁷ Berkeley asserted that the laws of optics were God’s means of creating the visual illusion of distance in our hallucinatory consciousness, an illusion properly coordinated with illusions of our own motion and action within this virtual space.¹⁸ (An analogue of Berkeley’s theory of consciousness was recently presented in the film, *The Matrix*.¹⁹ In it, humans believe that they are experiencing normal life in the physical world when in reality their bodies are lying in vats, their brains are hardwired to a master computer, and their minds are interacting with each others’ within a computer-generated virtual reality. Berkeley’s Matrix likewise consisted of individual human spirits interacting with each other within a God-generated spiritual reality.)

Berkeley publicly accused Newton of advocating an atheistic theory, because Newton's absolute space, absolute time, and physical matter were supposed to exist "without the mind" and thus without God.²⁰ Echoing Ockham, Berkeley argued that since God alone makes one experience follow another, philosophy should merely note these regularities and not pretend to explain things by corporeal causes.²¹ He argued that gravity was not an essential quality inherent in bodies but was simply a motion entirely dependent on the will of the God—who causes some bodies to tend towards each other, others to stay at fixed distances, and others to fly asunder as He sees convenient.²² Against Newton, he argued that we should treat motion not as absolute, Cosmic, or real but as merely *relative* to ourselves and to any other objects in our sensoria,²³ and treat time as the mere succession of events in our consciousness.²⁴

David Hume, following Berkeley in this "Enlightenment", denied that we could know any Cosmic causes, saying that our belief that an effect will follow from a cause is merely a "custom" we have acquired through repetitive experience.²⁵ He denied that we could ever know the cause of such a "custom" as gravity.²⁶ Like Berkeley, he reduced the Cosmos and its causes to correlations among experiences. Immanuel Kant agreed that we could only know the *phenomena* presented to our senses and could never pass beyond them to any knowledge of the *noumena*—things in themselves. Kant claimed that the mind imposed its own order on phenomena using *a priori* categories like space, time, and causality. These categories were ideals that were not inductively gained from experience but were innate mental structures.

Ernst Mach admitted his debt to Berkeley and Hume.²⁷ He stated, "The world consists only of our sensations".²⁸ He asserted that the aim of Science was to describe our sensations, and that the laws of Science merely stated general relationships among our sensations. Anything not directly perceived did not exist; inapparent entities posited to cause sensations were mere "metaphysical speculations"—nothing more than convenient fictions. Therefore Mach, as late as the early 20th century, denied the existence of atoms because they could not be seen, even though they were a necessary postulate in any attempt to *explain* our experiences. Mach redefined physical theories as mere quantitative instruments—mathematical models for facilitating the mental reproduction and prediction of facts. Mach wrote extensively and greatly influenced the scientists and philosophers of the late 19th and early 20th centuries. His idealist ideology, under the names "sensationalism", "phenomenalism" and "positivism", was considered the modern and enlightened approach to Science at the turn of the last century. In 1883, Mach followed Berkeley in branding Newton's theory of absolute space and motion as "devoid of content", saying that we have knowledge only of *relative* spaces and motions.²⁹ He called those who shared his view "relativists".³⁰ The Science we have today is Berkelian-Machian, because of the work of Albert Einstein.

Albert Einstein had a lifelong interest in philosophy—he had read Kant as a boy; he had read Berkeley; and he admitted that Hume and Mach influenced his development.³¹ So we can understand why he asserted:

*"The only justification for our concepts and system of concepts is that they serve to represent the complex of experiences; beyond this they have no legitimacy."*³²

Following Berkeley, Einstein eschewed Cosmic theory and natural philosophy in favor of descriptive Science, which he regarded as “methodical thinking directed toward finding regulative connections between our sensual experiences”³³ Einstein shared Berkeley’s belief in God as “a superior mind that reveals itself in the world of experience.”³⁴ Like Descartes, Einstein was a mathematical idealist—believing that “nature is the realization of the simplest conceivable mathematical ideas.”³⁵ He sought, therefore, to grasp the mathematical ideas by which God created our experiences by discovering the fewest and simplest “laws” that could account for them. Following Berkeley, Einstein defined the “real external world” intersubjectively, as the sum total of all experienced events about which subjects can agree.³⁶ Following Berkeley and Mach, Einstein initially refused to believe that space itself had any physical qualities because it was not directly evident to our senses or instruments.

Einstein’s Relativity and the Quantum Theory were thus faithful implementations of Bishop Berkeley’s vision of Science. They merely described the observer’s experience with no reference to any physical Cosmos or causes—as if humans were experiencing a shared hallucination and wanted only to discover its rules. These models’ only reality was consciousness and its contents. They dealt with the observers’ “information”, not with the Cosmos. Their “laws of physics” were just mathematical correlations of the observers’ measurements; their “space” a number of the observers’ measuring rods; their “time” a number of ticks of the observers’ clocks; their “mass” a measured or calculated quantity, their “light” just a probability that a future quantized event will be observed. The foundations of Einstein’s model of reality, “mass-energy” and “space-time”, were nothing but quantities and geometries invented by the observer to model the mathematical order behind his measurements. Thus we are saddled today with a theoretical physics that does not and cannot theorize about the Cosmos or the causes of physical phenomena; a physics based upon a spiritualistic theory of the relationship of our minds to the Cosmos. For a complete analysis of Einstein’s physics, see [Beyond Consciousness to Cosmos—Beyond Relativity and Quantum Theory to Cosmic Theory](#).

5. Cosmism over Idealism

We see that Relativity was an outgrowth of Bishop Berkeley’s subjectivistic Idealism. The world is made of ideas. Is Idealism a good theory of the nature of consciousness and its objects? Perhaps it was in mankind’s infancy, but not anymore. The simplest, non-contradictory explanation for how we came to exist and why there appears to be a material Cosmos is that there is a material Cosmos from which we evolved and which causes our sensations. Likewise, the simplest, non-contradictory explanation for the behavior of light and matter in our experience is that a Cosmos of space and matter exists which determines all motion within it.

Against Idealism and spiritualism, I assert that Cosmism is the superior theory of what exists and of how we experience it. Cosmism holds that the physical Cosmos exists, and that we humans and our reflective self-consciousness are products of its evolution. **There are now highly plausible naturalistic theories of the evolution of language and consciousness.**^{37,38,39,40,41} The evidence indicates that we are intelligent primates who acquired language, and with it a new kind of self-consciousness and ability to understand the Cosmos that is absent in other animals. There is no longer any need for the hypothesis that consciousness arises from an unknown spiritual reality that was “added” to our physical bodies. Our consciousness no more requires the spirit

hypothesis than does that of any other animal. We have animal consciousness plus language. With language we weave a web of understanding and interpretation that other animals lack. There is thus no need to restrict our knowledge to the mere description of our conscious. We can and must form theories of every aspect of the Cosmos and its evolution.

Here are the foundational metaphysical and epistemological hypotheses of an evidence-based theory of the Cosmos and its relationship to human consciousness:

1) The Cosmos exists and evolves. It has produced hierarchical levels of complexity:

Astrophysicochemical

Biological

Neuropsychological (higher animals)

Linguo-mythic (early *Homo sapiens* and most people today)

Consciophilosophical (where humans should be).

At each higher level of complexity, pre-existing entities combined and interacted in new ways to produce new entities and new processes. (See [Hierarchical Cosmism](#) for an outline of this evolutionary process.)

2) The nervous system of *Homo sapiens*, like that of other animals, has evolved via natural selection to capture certain Cosmic motions which it synthesizes into mental representations of Cosmic entities and events.

3) As the result of evolutionary selection, *Homo sapiens* acquired the information-processing tool of language.

4) *Homo sapiens* learned to use language not only to name and describe things, but also to create theories of the underlying and inapparent causes of the entities and events they perceived. This ability to theorize evolved from mythology to Cosmology.

5) *Homo sapiens'* increasingly sophisticated use of language produced an increasingly sophisticated knowledge of self and Cosmos--an increasing awareness and self-consciousness.

6. Philosophy over Science

I am saying that we can judge between Idealism and Cosmism, subjectivism and objectivism. On what basis do I do so? How do we judge theories in general? What do we call the act of gaining knowledge and theorizing about the causes of things? What do we call the methods and standards that we use? What do we call this most advanced and difficult intellectual endeavor?

The birth of philosophy in Ionia in the 6th century BC was a pivotal event in the evolution of human consciousness. It was the invention of an open-ended, non-dogmatic attempt to explain things naturalistically. It was able to replace the comfortable and familiar myths of the Greek religion. This naturalistic method was most evident in the work of the Milesian school, the Atomists, the Epicureans, and Aristotle. They created a philosophy that consisted of theorizing in the broadest sense--attempting to explain everything and to discover the inapparent causes of apparent phenomena. Their philosophy was scientific--beginning in the facts of sensation and

measurement, but going beyond the facts, trying to explain the facts. Philosophical theories can be submitted to testing inasmuch as possible.

The philosophy they created is not arbitrary whim or wish; its theories are based on the Cosmos which it seeks to explain. It has "rules" to assure that our ideas represent Cosmic reality. Consider the first rule of philosophy: non-contradiction. Since the Cosmos contains nothing like a "contradiction", neither can philosophy. Since the Cosmos is an interacting whole of entities and causal processes with hierarchical levels of complexity, so must be our ideas about it.

Knowledge cannot be separated into non-communicating scientific specialties as it is today. As the Cosmos is a physical entity evolving by cause and effect, so must be our representation of it.

The sciences, properly understood, are branches of philosophy: they gather evidence and create, criticize and test theories dealing with specific aspects of the Cosmos. As no aspect of the Cosmos is isolated from the rest, neither can the various sciences thrive in isolation. An improvement in our understanding of any aspect of the Cosmos affects our understanding of all others. We must be philosophers first, scientists and other experts second.

Theories can be compared to one another. We can determine which theory is best by applying certain tests. The best theory has these qualities:

- 1) Non-contradiction
- 2) Comprehensiveness - explaining all aspects of the phenomenon
- 3) Coherence with all other good theories
- 4) Correspondence to the facts of observation and experimentation
- 5) Simplicity - containing no unnecessary postulates
- 6) Predictive power
- 7) Testability

(This is not an exhaustive list.)

In addition, philosophy contains many conventions and rules which are an aid to linguistic human thought. These are the rules of logic, which have no meaning apart from their proper role of helping us to assure that our verbal formulations correspond to Cosmic reality. The identification of fallacies is also a task of philosophy. Mathematics is just logic applied to the treatment of quantities and geometries. We invented mathematics, just as we invented philosophy.

No doubt many readers will still want to insist that Science (capital S) is identical to philosophy as I have described it; that theory and the tests of theory are aspects of Science. I have shown, however, that this is not the case. Science, as created by Enlightenment thinkers, is a degenerate form of philosophy. Modern Science fully accepts Relativity as the paradigmatic example of its methods, and therefore has, at best, an ambiguous and ambivalent relationship to Cosmism and to causal theory in general. We are taught that Science only asks "How" (description) not "Why" (cause). Since it does not attempt to explain Cosmic phenomena, Science has become virtually indistinguishable from technology in many fields. "Philosophy of Science" is a contradiction in terms; its courses in universities are little more than a description of the ascendance of Relativity and Quantum Theory as the quintessential example of Science. Intellectually inadequate, Science

has not and cannot replace philosophy. Science has created and perpetuated a gaping void in the intellectual life of humankind. (see below).

Philosophy, not Science, can integrate all good scientific data, models, and theories into a comprehensive, coherent theory of the Cosmos and everything in it. This overarching theory can then be used to inform and criticize our sciences - creating a feedback loop which is crucial to the advancement of knowledge. This overarching theory must deal with such questions as the origins and nature of human consciousness and its relationship to the Cosmos, the physical constituents of the Cosmos, the hierarchical levels of Cosmic complexity, the nature and usefulness of mathematics and theories, the existence and types of causality, the relationships of the various sciences, the natural foundations of human morality and society, etc. Philosophy, not Science, is the most productive and powerful application of our human intuition and intelligence, the only way to satisfy our innate desire for understanding, and the best way to assure our survival and happiness as a species.

7. The Purpose of Science

Why did Christian men (women are not so easily alienated from reality) create subjectivistic Science? What is the use of this anthropocentric, anti-Cosmic ideology? We need only realize that the Enlightenment thinkers lived in a Christian Era, prior to Darwin and his theory of evolution. They believed in the existence of a spiritual reality prior to, and controlling the Cosmos. They had no knowledge of brain function and no theory of consciousness besides the spirit theory. Theirs was also an era of universal superstition when philosophy was brutally suppressed by the cooperating Church and State. In Descartes' time, offering a naturalistic explanation for miracles could get one killed. These men were theists and mystics. Having experienced the stifling dogmatism of the Aristotelian/Religious Schools, and having witnessed the crisis of faith caused by the Copernican theory, they invented a purely descriptive, atheoretical, mathematical Science as a way to pursue knowledge and yet avoid threatening their society's or their own beliefs. Without philosophy—without a disciplined process or conversation about the most important questions we face--authorities are free to impose their own ideologies on the population. Science thus supports authoritarianism in all its forms.

Contrary to propaganda, Science didn't abandon religion and mysticism; it preserved them. By eschewing causal theory, Science temporarily rescued the mystical, spiritualistic core of religion from the threat of philosophy. Religious scientists are right: there is no conflict between Science and Religion! Science, containing no explanation of the causes of things, leaves it to the individual to believe in whatever causes he or she prefers--be they gods, demons, powers, alien-visitors, mathematical ideals, etc. Having dispensed with the Cosmos and its causes, Science leaves reality wholly dependent on the conscious observer and his activity. It makes reality relative. Since subjects will always disagree on what they perceive, subjectivistic Science produces contradiction; it thus further erodes philosophical cognition whose primary rule is non-contradiction.

Thus we see that the rise of Relativity is not an isolated aberration. It is part of a recurring trend in the history of Western thought. Whole areas of Cosmic phenomena have been viewed as incomprehensible mysteries requiring the "God hypothesis". Man, in his ignorance, has

explained Cosmic phenomena with myths that ranged from simplistic animism to the more refined anthropomorphic theisms of today. Even today, Judeo-Christian Theism depends on the existence of phenomena that "cannot" be explained naturalistically. These phenomena can be viewed as the "work of God". Opposing this conservative religious tendency, freethinking persons have, through the ages, introduced theories that eliminated the need for God by explaining phenomena as due to natural processes--inherent in the Cosmos itself. These philosophical theories about the causes of things, such as the Copernican theory, Newton's theory, Darwin's theory, genetic theory, and the latest theories of language and consciousness all have had the effect of reducing the extent of the mysteries that require the "God hypothesis".

It is thus no coincidence that modern Science and its Relativistic physics have supported a revival of mysticism and spiritualism--they were designed to do so. Special Relativity tells us that light and matter, and thus all reality conforms to our consciousness. Light moves at c and matter at $<c$ relative to us--no matter where we are or how we are moving in the apparent "Cosmos". 4-dimensional space-time offers tantalizing topological bizarreries such as singularities, wormholes and time travel. These produce fantasies of crossing vast distances in an instant, traveling to other dimensions and universes, and traveling backwards in time in order to undo the past and alter the future. Last but not least, Quantum theory gives Homo sapiens a god-like role in nature. Our act of observing is supposed to create reality in some occult way. The mystical nature and implications of Relativity have been, and are being extensively discussed and exploited in popular fiction and non-fiction literature, on television, and in film. Relativistic Science feeds the popular demand for magic, mystery, and immortality.

8. Conclusion

As Francis Bacon observed, we today live are part of the old age of civilization. We can study all that has gone before and should thus know more and understand more than any previous generation. We ought not to slavishly follow ideas that are hundreds if not thousands of years old. We must question every belief that we have inherited from the past. We must look most critically at the foundational ideas that form the basis of our thought and our society. All ideas must be corrected and brought up-to-date. We should incorporate the latest data and best theories into a new and better theory of everything.

This wonderful, awesome, sometimes frightening task is philosophy. It is the open-ended, anti-dogmatic, uninhibited search for truth. It is the natural and proper religion of all mankind.

Philosophy is the only means whereby we can communicate with one another, understand our Cosmos, and understand ourselves.

References

1 David Kelley, The Evidence of the Senses (Louisiana State University Press, 1990).

2 Albert Einstein and Leopold Infeld, *The Evolution of Physics* (Simon and Schuster, New York, 1938) p. 224.

3 Plato, *Phaedo*, 100.

4 Sextus Empiricus, *Outlines of Pyrrhonism*, I. 216 sq.

5 Aristotle, *Metaphysics*, Bk . IV, chap. 5, 1010b, 35.

6 Ibid., Bk. IV, chap.6, 1011a, 18.

7 Aristotle, *Physics*, Bk. IV, chap.1, 208b, 14-24.

8 Newton, *Mathematical Principles of Natural Philosophy*, Definitions, Scholium, para. 8.

9 Ernest A. Moody, “William of Ockham”, in *The Encyclopedia of Philosophy*, 1st ed.

10 René Descartes, *Meditations on First Philosophy* (1641) Med. I, para. 10.

11 Ibid., Med. IV, para. 5, 9.

12 John Locke, *An Essay Concerning Human Understanding* (1690) Bk. II, chap. XXIII, para. 15.

13 Ibid., Bk. II, chap. XXIII, para. 29.

14 George Berkeley, *Principles of Human Knowledge* (1710) body, para. 18.

15 Ibid., para. 6.

16 Ibid., para. 26.

17 Ibid., para. 94.

18 Berkeley, *An Essay towards a New Theory of Vision*, 1709.

19 *The Matrix* (Warner Bros., 1999).

20 George Berkeley, *Principles of Human Knowledge*, paras. 92, 117.

21 Ibid., para. 66.

22 Ibid., para 106.

23 Ibid., para. 112.

24 Ibid., para. 98.

25 David Hume, *An Enquiry Concerning Human Understanding* (1748) sec. V, pt. II, para.11.

26 Ibid., sect. IV, part I, para. 12.

27 Peter Alexander, “Mach, Ernst”, in *The Encyclopedia of Philosophy*, 1st ed.

28 Ernst Mach, *Analysis of Sensations* (Translated by C.M. Williams and Sydney Waterlow, Chicago, 1914) p. 12.

29 Ernst Mach, *The Science of Mechanics* (Open Court Publishing Co., La Salle, Ill., 1960) p. 283.

30 Ibid., p. 293.

31 Einstein, letter to M. Besso, March 6, 1952; found in *Albert Einstein-Michele Besso Correspondence 1903-1955* (Hermann, Paris 1972) p. 464.

32 Einstein, *The Meaning of Relativity* (Princeton University Press, Princeton, N. J., 1922), p. 2.

33 Einstein, *Ideas and Opinions*, p. 50.

34 Ibid., p. 262.

35 Ibid., p. 274.

36.Ibid., p. 363.

37 Julian Jaynes, *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (Houghton Mifflin Company, Boston, 1976).

38 Derek Bickerton, *Language and Species* (The University of Chicago Press, Chicago, 1990).

39 Merlin Donald, *Origins of the Modern Mind* (Harvard University Press, Cambridge, 1991).

40 Daniel C. Dennet, *Consciousness Explained* (Little, Brown and Company, Boston, 1991).

41 John McCrone, *The Ape That Spoke* (William Morrow and Company, Inc., New York, 1991).