

The Science of Unknowable and Imaginary Things

An Invited Position Paper By

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Editor's Note: The “Invited Position Paper” segment is a unique feature to SHERM journal where hand-selected scholars are invited to write their particular standpoint or attitude on a specific issue. While the position paper is intended to engender support for the paper's line of reasoning and overall conclusion, the paper is not intended to be a simple op-ed piece. Rather, each essay must be academic in nature by deriving its position from verifiable data and/or the author's training and experience as a scholar in a particular field of study.

In this particular case, the author was asked to answer the following question:

“Can the study of theology and/or metaphysics be classified currently or ever qualify in the future as a scientific endeavor? Why or why not? If yes, what criteria or methods would need to be in place and practiced to make them scientific? If no, what is it about ‘science’ that prevents theology and/or metaphysics from qualifying?”

Abstract: In this paper, I address the question of whether metaphysics and theology are or can become science. After examining the qualities of contemporary science, which evolved from an earlier historic concept of any body of literature into a formal method for obtaining empirical knowledge, I apply that standard to metaphysics and theology. I argue that neither metaphysics nor theology practices a scientific method or generates scientific knowledge. Worse, I conclude that both metaphysics and theology are at best purely cultural projects—exercises in exegesis of local cultural and religious ideas and language—and, therefore, that other cultures have produced or would produce radically different schemes of metaphysics or theology. At its worst, metaphysics is speculation about the unknowable, while theology is rumination about the imaginary.

Keywords: Science, Metaphysics, Theology, Exegesis, Cultural Comparison

Introduction

CONSIDER THE ETHER. BASED on the discovery that light was or was like a wave, and on the understanding that waves of sound or water require a medium that is “waving,” nineteenth-century scientists hypothesized the existence of a light medium that they dubbed the “ether” (i.e. light was waves

of ether). It was predicted that the speed of light should be relative to the ether, just as the speed of sound varies as sound passes through air, water, metal, etc., and that the movement of the earth through this omnipresent ether should generate an “ether wind” that affects the speed of light. Although fiendishly difficult to measure, Albert Michelson and Edward Morley devised an experiment in 1887 using mirrors in various positions to measure changes in the speed of light through the hypothetically moving ether. Detecting none of the predicted changes, the Michelson-Morley experiment conclusively disproved the existence of the ether, and scientists then and since have universally abandoned the idea.

Consider now “substance” and “God.” For Aristotle and much of subsequent philosophy, substance is that which “stands under” (*sub*, stand + *stare*, to stand, to make or be firm) the things that we experience. It is what makes things what they are. Aristotle regarded substance as the “essence” of a thing, the “ultimate substratum, which is no longer predicated of anything else” and cannot be further reduced.¹ Call it a hypothesis if you will, but what possible observation, measurement, or experiment could reveal anything of the nature of substance? How many substances are there—two à la Descartes (matter substance and mind substance), one à la Spinoza (which is equivalent to God), or more—and can we even know if substance exists? For traditional Christianity and related theisms, God is that which made and sustains the universe as omnipotent, omniscient, omnipresent, and omnibenevolent. It regards God as the ultimate cause, which/who is not caused by anything else. Call deity, along with Victor Stenger, a hypothesis if you will.² But what possible observation, measurement, or experiment could reveal anything of the nature of God? How many gods are there—one à la Christianity and other monotheisms, many à la polytheism—and can we even know if god(s) exist?

It should be obvious, given the contrast between the ether, substance, and god(s), what position I will be taking in this paper. On the question—are metaphysics and theology scientific, or can they be?—I answer with a resounding, no. Despite some feeble pleading on their part, neither metaphysicians nor theologians have practiced or can practice anything approaching a scientific method, nor have they produced anything approaching scientific knowledge (or arguably any knowledge at all). Indeed,

¹ English translation appears in Aristotle, *Metaphysics*, W. D. Ross, trans. (London: Global Grey Books, 2018), 78.

² Victor J. Stenger, *God: The Failed Hypothesis; How Science Shows That God Does Not Exist* (Amherst, NY: Prometheus Books, 2007).

I will posit that neither metaphysics nor theology constitutes a search for knowledge but that each is merely an elaboration and refinement of language and, therefore, a purely cultural enterprise: different culture and language, different metaphysics and theology. In the end, my conclusion is that at best, metaphysics is talk about the unknowable and at worst, theology is talk about the non-existent.

All three of the key terms in our question—science, metaphysics, and theology—are highly contested with vast libraries of literature offering contrasting and opposing definitions and characterizations. We are not going to settle these matters in a short position paper, and any statement that we make here about each of them could and will easily be objected by someone. With that caveat, let us proceed to define science.

Science

In pre-modern parlance, “science” was a very broad and vague term, not unlike “philosophy” itself. From the Latin *scientia* for knowledge, knowing, or expertness (further from *scire*, to know, in the sense of to make distinctions, to separate one thing from another, literally to cut), by the late pre-modern era it referred to any corpus of knowledge or learning. Virtually anything could be called a science if the suffix *-ology* (words or speech) was attached to it, from astrology to demonology to UFOlogy. “Theology,” as we will see below and as everyone knows, means “words/speech about god(s)” and has been construed, in the pre-modern sense, as “science of god(s).”

As the modern era dawned, science came to have a more technical meaning. A representative and formative moment was Francis Bacon’s 1620 *Novum Organum* (New Tool/Instrument). Asserting that “not much can be known about nature by the method that is now in use” (Book 1, §37) and that human minds are misled by myriad “idols” or “empty beliefs” received from tradition and authority, he insisted that “all the truer kind of interpretation of nature comes about through instances and well-designed experiments: the senses pass judgment on the experiment, and the experiment passes judgment on nature, on the facts” (§50). Logic in the form of the syllogism is valuable, but the “naked hand” and the “unaided intellect” can only go so far without appropriate “tools” or instruments of evaluation (§2).

In Bacon’s insights are contained most of the crucial elements of contemporary science. Science is not just any old collection of claims, no matter how venerable or how widely and passionately held and circulated;

otherwise, every mythology, conspiracy, folklore, propaganda campaign, and other unsubstantiated set of sentences would be a science. Like pre-modern *scientia*, science asks questions about reality and deposits a body of learning, a literature, from the proceedings of those inquiries. However, science is never merely, or even primarily, its literature. The books, papers, and essays of science house what we already know from prior scientific inquiries, but they are not where we turn to acquire new knowledge. The only source of new knowledge is the world around us.

Science must disregard, or at least suspend or bracket (in a Husserlian sense of the term), other would-be sources or bases of knowledge, including tradition, authority, popular opinion, subjective experience (i.e. some kind of privileged or mystical esoterica), and sacred religious texts. While those inputs may eventually be verified by science, they cannot be taken as a proper source for science. The ultimate, indeed the only, basis for the advancement of science is *observation* of the phenomenon in question—and not just observation casual or willy-nilly but sustained and systematic observation, probably over a long period of time and in excruciating detail. Imagine for example the painstaking efforts of Tycho Brahe (1546–1601) in making and recording observations about the movement of stars and planets.

The careful observation of the world, rather than recourse to books and other received wisdom, leads to three other qualities of modern science. The first is quantification: in order to make meaningful observations, and to establish trends and relations, scientists invariably count and assign numerical values. Quantification also entails the application of statistics to determine if the observations, trends, and relations are more common than chance alone would anticipate.³ Second, as much as possible, scientists try to exclude extraneous variables by controlling observational situations—that is, they conduct experiments. Experiments are not the essence of science (some entirely reputable sciences like astronomy and anthropology really cannot perform them), but experiments are extremely powerful aspects of the scientific method. Third, as Bacon predicted, science enhances human observational capacities by the creation and utilization of instruments and devices, like telescopes and microscopes. Obviously, not everything that scientists want to observe is visible to the naked eye (or ear or other organ),

³ For an example, see Stephen M. Merino, “Religious Involvement and Bridging Social Ties: The Role of Congregational Participation,” *Socio-Historical Examination of Religion and Ministry* 1, no. 2 (Fall 2019): 291–308, <https://doi.org/10.33929/sherm.2019.vol1.no2.10>.

which is why scientists deploy increasingly sophisticated Baconian organons to extend our perception (Marshall McLuhan was correct that every technology is finally an extension of the human body and sense organs).

“Seeing” is a basic way of collecting scientific knowledge, but seeing is only one version of *detecting*. We may not be able to see, for instance, protons decay, but we can detect in some fashion traces of such action in a supercollider. Science is thus literally “detective” work. This is why science is often accused of materialism, at least methodological if not epistemological. The accusation is not completely founded (science may study things that are not entirely material, like electromagnetic forces or the mind), but the bedrock point—if there is no conceivable way to detect a thing or its behavior, there is no way to know about it scientifically—is sound.

Everything we have said about science so far speaks of the collection of facts, which are the raw materials of science, but science is much more than a collection of facts. Science aims to accomplish three other, nobler goals. The first is the determination of causes (a metaphysical concept, perhaps), that is, the consistent and dependent relationship between phenomena; for this purpose, the isolation of phenomena achieved in experiments is invaluable. The second is the derivation of laws, that is, ideally mathematical statements of the relationships between variables, like Boyle’s law which establishes the mutual interaction of temperature and pressure or Newton’s law of gravity which equates the force of gravity to the product of the masses of two bodies divided by the square of their distance and then multiplied by a gravitational constant. Scientific laws are not normative or juridical like criminal laws (in that sense, “law” is an unfortunate choice of term) but simply descriptive. For example, there is no penalty for a gas or a planet that fails to obey these laws!

Still we have not reached the heart of science, which resides in the third goal—the “theory.” Although much maligned, theory is the highest attainment in science. A theory is not just any old kind of proposition, and it is far from a guess, a hypothesis, or an opinion, let alone a belief. A theory is the fullest and most powerful explanation that science can offer, and it differs from other kinds of answers in profound ways. Unlike other sorts of putative knowledge, a theory advances a *mechanism* to explain precisely *how* the premises and causes produce their effects (e.g. Einstein’s theory of gravity proposes the curvature of space, or atomic theory proposes how electrical charges and electron shells account for chemical bonds and reactions). A theory also necessarily makes *predictions*: if the theory and its mechanisms are correct, then certain things will occur under certain circumstances. If the

predictions of the theory are not borne out in experience, then there is a problem with the theory, which must be revised or rejected, as in the case of the Michelson-Morley experiment. Therefore, a theory is *falsifiable*. In fact, some philosophers of science like Karl Popper put falsifiability at the foundation of science: if a claim or theory is not in principle falsifiable, it is not scientific (which is why he and others discard Marxism or psychoanalysis as unscientific). Finally, a theory should be *productive*, in one or both of two senses. That is, it should be useful for producing additional knowledge (like the prediction of black holes in astrophysics), and/or it should be applicable for the purpose of inventing new technologies (like computers).

Some people attack science for its alleged uncertainty (e.g. scientists do not know for certain how gravity works, or worse that evolution is “just a theory”), but such criticisms are misguided. Certainty is not necessarily the best standard for knowledge claims (it is often more a psychological state than an epistemological one; that is, certainty is a matter of confidence rather than justifiability). More importantly, however, uncertainty is perhaps the driving impulse behind science. *Because* scientists are not certain about X, they make inquiries into X. They suggest a hypothesis—which is not a theory *and is most definitely not a belief*—and then set about to test that hypothesis. Scientists start from the position of skepticism about their hypotheses and about all received “knowledge.” According to the null hypothesis, a claim is false until proven true, and all claims are tentative no matter how well established. This is why we say that science is self-questioning and self-correcting: science is willing—no, eager—to test and abandon previous ideas (from the ether to phlogiston to spontaneous generation) and to question even its most basic assumptions. After all, no scientist makes their reputation by corroborating an old proposition or theory but by refuting it and substituting a new one.

Controversies aplenty remain. Is science the best or only way of knowing? Does science progress in a straight line of improved knowledge, or does it leap from one incommensurable Kuhnian paradigm to another? How socially constructed is science? Are social sciences like anthropology and sociology really scientific—or put another way, is physics the sole model for science? In the end, how closely does our scientific knowledge correspond to the real world? These questions are worth contemplating, but if science is anything distinct and worthwhile, it has the qualities that we have outlined above. For that reason, many ideas and literatures that have passed for science—or have speciously wrapped themselves in the cloak of science—are nothing of the sort. A clear example is “creation science.” Creation science

fails utterly as science because 1) it conducts no actual or potential experiments; 2) it is totally non-quantitative; 3) it proposes no mechanism for creation; 4) it makes no predictions; 5) it is completely unfalsifiable; 6) it is unproductive (what can you use it for?); and 7) it never questions its own assumptions and conclusions. In fact, it has no desire to question itself. Creation science is religion in a (shabby and unearned) lab coat.⁴

Metaphysics

For purposes of this essay, we assume that we are not talking about metaphysics in the sense of “metaphysical bookstores” and “metaphysical fairs,” with their offerings of tarot cards, crystals, oils and herbs, and magical paraphernalia like wands and chalices. It is not entirely facetious to raise this point since “metaphysical” has been so corrupted in the popular mind as to include the speculative, the mystical, and the downright wacky. Yet, this sense of metaphysics shares much with the philosophical sense of the “science” of metaphysics. Here, metaphysics as a philosophical project is normally attributed to Aristotle, although he never used the term; “metaphysics” (from *meta ta phusika*, after physics) was assigned as the title of his ponderings on what he called the “first philosophy” (*prote philosophia*)—first not in time, certainly, but in depth, as in “the first causes and the principles of things.”⁵ He famously identified his first philosophy as the “science which investigates *being as being* and the attributes which belong to this in virtue of its own nature” or what has come to be known as “being *qua* being.”⁶ One way to construe this obscure reference is to distinguish between specific beings (cats, trees, humans) and being-as-such, prior to and independent of actual beings. He continued,

There are many senses in which a thing may be said to “be”... some things are said to be because they are substances, others because they

⁴ Shockingly, though not surprisingly, the Intelligent Design (ID) movement’s star “scientist,” Michael Behe, has openly admitted in court that according to his (and ID’s) definition of a scientific theory, both astrology and “the ether theory of the propagation of light” are legitimate scientific theories. See the full transcript of the 2005 *Kitzmiller, et al. v. Dover Area School District, et al.* court trial at “Kitzmiller v. Dover Area School District: Trial Transcript: Day 11 (October 18), PM Session, Part 1,” The TalkOrigins Archive, accessed July 28, 2019, <http://www.talkorigins.org/faqs/dover/day11pm.html#day11pm315>.

⁵ Aristotle, *Metaphysics*, 3.

⁶ *Ibid.*, 47.

are affections of substance, others because they are a process towards substance, or destructions or privations or qualities of substance, or productive or generative of substance, or of things which are relative to substance, or negations of one of these things of substance itself.⁷

Amusingly (but instructively), Helen Beebee, Nikk Effingham, and Philip Goff lament, “Most metaphysicians, however, are not at all sure what ‘being’ is supposed to be, and by and large avoid the term.”⁸

Although Aristotle introduced and examined many basic concepts, such as cause, element, nature, potency, quantum, affection, and so on, there is no doubt that his principle focus was *substance*, which included at least four forms—the essence, the universal, the genus, and the substratum.⁹ Elsewhere he designated three kinds of substances (the matter, the nature, and the “the particular substance which is composed of these two”).¹⁰ More fundamentally, he stated, “Some things can exist apart and some cannot, and it is the former that are substances.”¹¹ We might also think of substance, and perhaps all of the topics of the first philosophy, as that which is not dependent on anything else, which cannot be defined by or reduced to anything else (i.e. primary or most basic). Or, flowing from the ancient Greek distaste for changing things and following *The Stanford Encyclopedia of Philosophy*, substance is that which does not change because it is eternally itself.¹²

If substance and being are “behind” or “beneath” the things we experience by sense perception, it stands to reason that we cannot experience them directly but only in their various sensible incarnations. On this basis alone, we could argue effectively that academic metaphysics does not conform to science (except in the pre-modern definition of *scientia*) any more than the offerings in a metaphysical bookstore do. If we cannot, in practice or in principle, observe or detect them, how can we possibly measure them, quantify them, test them, experiment on them, or potentially falsify them? *How can we know anything about them?* In regard to cause, of course, David

⁷ Aristotle, *Metaphysics*

⁸ Helen Beebee, Nikk Effingham, and Philip Goff, *Metaphysics: The Key Concepts* (New York: Routledge, 2011), 15, <https://doi.org/10.4324/9780203835258>.

⁹ Ibid., 105.

¹⁰ Ibid., 200.

¹¹ Ibid., 202.

¹² Peter van Inwagen and Meghan Sullivan, “Metaphysics,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta (Stanford, CA: Center for the Study of Language and Information, 2014), <https://plato.stanford.edu/entries/metaphysics/>.

Hume long ago decided that we cannot, and the same would seem to apply to notions of substance, being, essence, and the like.

Fascinatingly, many professional metaphysicians appear to agree, including a number of textbook writers whom we presume would not want to scare away students and prospective future metaphysicians with inconvenient truths. For instance, Quentin Smith and L. Nathan Oaklander warned,

The reader will not learn something in the same sense that she might in reading a textbook on chemistry or biology. There is no established body of knowledge in metaphysics....One reason for this difference between science and metaphysics is that scientific theories lead to predictions of observations that can be used to settle disputes....However, the subjects that are studied in metaphysics do not lead to predictions of observations and consequently, disputants in this field must rely on logical argument from premises and try to demonstrate logical fallacies in the argument of their opponent.¹³

Equally stunningly, Peter van Inwagen, in his own metaphysics text, claimed that his field “attempts to tell the ultimate truth about the World, about everything,” but that after all its efforts, “There [is] no such thing as metaphysical information.”¹⁴ He continues, “There is no list of established facts the student ... can be expected to learn (nor are there accepted methods or theories the specialist ... can apply to search out and test answers to unresolved ... questions).”¹⁵ Most damningly, he confessed,

[If metaphysics] were suddenly to undergo a revolutionary transformation and began, as a consequence, to yield real information, it would cease to be regarded as a branch of philosophy and would come to be regarded as one of the sciences. It is, in fact, a very plausible thesis that this is just how “the sciences” began.¹⁶

¹³ Quentin Smith and L. Nathan Oaklander, *Time, Change, and Freedom: An Introduction to Metaphysics* (New York: Routledge, 1995), x, <https://doi.org/10.4324/9780203980668>.

¹⁴ Peter van Inwagen, *Metaphysics*, 4th ed. (New York: Routledge, 2018), 4, <https://doi.org/10.4324/9780429495021>.

¹⁵ *Ibid.*, 11.

¹⁶ *Ibid.*

Honestly, there is no need to continue. If metaphysicians themselves (no doubt not all of them, but some at least) admit that their discipline is not scientific because it possesses neither the methods nor the knowledge of science, but that it would transform into science if it ever suddenly yielded “real” knowledge or method, then the case is already made: metaphysics is not and does not look in the near future to become science. Nevertheless, the problem is much more interesting than this, especially if we ask what exactly metaphysicians are doing. A tantalizing clue comes in Staffan Angere’s *Theory and Reality: Metaphysics as Second Science*, where he describes how metaphysics and much of philosophy operate. He writes, “A debate is set up on certain premises, and these are seldom questioned by the debating parties. As the debate proceeds, it takes on a life of its own, and defines its own norms for evaluating what is a good or a bad argument.”¹⁷ He remarks further,

The best methods for finding out what about this world is true or false are empirical, so it is easy to see why traditional metaphysics in the vein of the presocratics, Plato, Descartes and Leibniz must fail. “Armchair philosophy,” as its detractors call it, is rationalistic, and though no metaphysician would categorize herself as an armchair philosopher, the fact remains that it is very rare for metaphysicians to do actual empirical experiments, or even to design or propose them, and so the armchair remains her weapon of choice.¹⁸

It seems that Angere is merely seconding the previous opinions that metaphysics does not qualify as science in any way. Additionally, though, he is keying us in to what metaphysicians (and arguably many other philosophers) are actually doing—starting from certain premises and extrapolating the consequences. But where do these premises come from? I contend that the great majority, if not all, of metaphysical premises *come from the surrounding culture and its language*. Metaphysics, which pretends to be analyzing “the world” or “reality,” is in fact practicing deep cultural introspection. The implication is this: *the premises and line of reasoning within a local metaphysical system would be and are radically different* when set in a different culture with a different language.

¹⁷ Staffan Angere, *Theory and Reality: Metaphysics as Second Science* (Lund, Sweden: Lund University Press, 2010), v.

¹⁸ *Ibid.*, xii.

A few examples will have to suffice. Buddhism contains one of the world's most robust metaphysical systems but one that directly contradicts Aristotelian/Western philosophy. According to Noa Ronkin's study of early Buddhism, the Buddha "presents a vision of human experience as a transitory array of phenomena that are not held together by any underlying substrate."¹⁹ In other words, there is no substance or essence, the very bread and butter of Western metaphysics. The Buddhist doctrine of *anātman* (no soul/self) posits that there is nothing enduring or eternal about individuals and their experience. This insight extends to all existing things in the principle of *pratityasamutpada* or *paticcasamuppada* (dependent origination or interdependent co-arising), the idea that there are no permanent underlying substances behind reality but that reality originates or arises in each moment from the nexus of relations and actions in the preceding moment. It is of course not true that every school of Buddhist thought assented to this claim: the later Abhidharma literature defended "the notion of ultimate, self-sufficient elements."²⁰ And Buddhism in other cultural contexts, such as China, absorbed and made room for local concepts like soul and spirit.²¹ Struggles over such issues involved differences of interpretation of the sort of initial premises that Angere mentioned above; in the words of Ronkin, "The development of Buddhist thought hinges upon a long-lasting debate regarding the tradition's notion of the term *dhamma*, its signification, and of what its true nature and its ontological status are."²² This is a debate that never entered the minds or language of Western metaphysicians.

Even more exotic languages and cultures did or would have spawned even more exotic metaphysics. The Navajo and other Native American peoples do not share ancient Greek or medieval European aversion to change. Carolyn Epple discovered that for the Navajo, *Sa'ah Naaghai Bik'eh Hozho* (the natural order) was not composed of eternal unchanging essences, the bedrock of Western metaphysics. Instead, for them, reality "is a living cycle and organizes everything as a cycle; it interconnects everything; through that interconnectedness it cycles everything into everything; and it is an ongoing cycle, since each male or female has the other (i.e., female or male,

¹⁹ Noa Ronkin, *Early Buddhist Metaphysics: The Making of a Philosophical Tradition* (New York: Routledge, 2005), 14, <https://doi.org/10.4324/9780203537060>.

²⁰ Ibid.

²¹ For example, see Jungnok Park, *How Buddhism Acquired a Soul on the Way to China* (Bristol, CT: Equinox Publishing, 2012).

²² Ronkin, *Early Buddhist Metaphysics*, 14; italics in original.

respectively) into which it can cycle.”²³ A similar worldview is evident in Mongolian shamanism with its ontology based not on being but on transition. The physical and spiritual world that Mongolians inhabit and that makes shamanism possible is one of “perpetual metamorphosis, malleability, and fluidity expressed in the unpredictable movements of wild animals and the inchoate trajectories of the shamanic spirits.”²⁴ Indeed, Pedersen recommends that we think of spirits—and the shaman and perhaps all humans—less as “beings” and more as pure movement, transition, or change—that is, as processes rather than persons.

Speaking of movement and change, the Aztec philosophy revealed by James Maffie depends on a concept of *teotl* (reality and energy) that “is essentially power: continually active, actualized, and actualizing energy-in-motion. As ever-actualizing power, *teotl* consists of creating, doing, making, changing, effecting, and destroying. Generating, degenerating, and regenerating are what *teotl* does and therefore what *teotl* is.”²⁵ *Teotl* in this account is not a “first cause” or “prime mover.” And a metaphysics based on *teotl* would reflect its constant “motion-change” in the specific forms of *olin* or oscillating, revolving, arcing motion; *malinalli* or twisting/spinning; and *nepantla*, perhaps the primary pattern of motion-change, a kind of back-and-forth, reciprocal, intersecting/uniting motion. Finally, most devastating to conventional metaphysics, the Warlpiri (Australian Aboriginal) language contains no word for “to be,” so the term “being,” the phrase “being *qua* being,” and titles such as *Being and Time* and *Being and Nothingness* would be impossible to utter in their tongue. On the contrary, Warlpiri metaphysics would begin from the indigenous premise of *jukurra* or “the Dreaming/Dreamtime.”

It should be apparent by now that metaphysics is not (and cannot be) science because a) it does not practice a scientific method or derive scientific knowledge; and b) it is not an investigation into nature or reality at all. Instead, metaphysics, as commonly practiced, is nothing more than analysis of

²³ Carolyn Epple, “Coming to Terms with Navajo ‘Nádleehí’: A Critique of ‘Berdache,’ ‘Gay,’ ‘Alternate Gender,’ and ‘Two-Spirit,’” *American Ethnologist* 25, no. 2 (1998): 276, <https://doi.org/10.1525/ae.1998.25.2.267>.

²⁴ Morten Axel Pedersen, *Not Quite Shamans: Spirit Worlds and Political Lives in Northern Mongolia* (Ithaca, NY: Cornell University Press, 2011), 164, <https://doi.org/10.7591/9780801460937>.

²⁵ James Maffie, *Aztec Philosophy: Understanding a World in Motion* (Boulder: University Press of Colorado, 2014), 23, <https://doi.org/10.5876/9781607322238>; italics in original.

the local culture and language—in a word, *cultural exegesis*. Metaphysics explores not reality but, unwittingly, how locals think and talk about reality and the repercussions of thinking and talking that way. As William Charlton puts it, “The words which seem to signify the topics of metaphysics”—substance, being, cause, *dhamma*, *teotl*, or *jukurrpa*—“apply primarily not to things about which we think and speak but to our speech and thought about such things; they are words about words, second-order words, though they can also be used to give our speech a certain form.”²⁶ In short, metaphysics mistakes a worldview for a world.

We might ask, in the end, whether it is even possible to practice metaphysics in the first place, and some philosophical traditions have answered no. Kant placed metaphysics beyond the reach of the senses and, therefore, beyond empirical knowledge. On the other side of an impenetrable Kantian wall was the noumenon, the thing-in-itself; all we had access to was the phenomenon or the thing-as-we-perceive-it. In his famous and fatal antinomies, he demonstrated that we could rationalize either position in a metaphysical debate but that we could not settle it. Logical positivists went further, declaring metaphysical talk to be literally nonsensical, an exercise in grammatical but nonsense sentences. Nietzsche dismissed the whole of metaphysics as “the history of an error” that began with belief in a “true world,” knowable only by the sage or philosopher (like Plato emerging from the cave), which then developed into a true world “unattainable, indemonstrable, unpromisable” (for him, Kant’s metaphysics), and ending in a true world that is merely “an idea which is no longer good for anything, not even obligating—an idea which has become useless and superfluous—consequently, a refuted idea: let us abolish it!”²⁷ While I am not a Kantian philosopher or a logical positivist (although I am Nietzschean in many regards), the fact that respectable philosophers have despaired of metaphysics should make us somewhat wary of its use at all.

Theology

Some scholars have classified theology as a branch or culmination of metaphysics, including Aristotle himself who opined that theology is highest

²⁶ William Charlton, *Metaphysics and Grammar* (New York: Bloomsbury, 2014), 5, <https://doi.org/10.5040/9781472594327>.

²⁷ Walter Kaufmann, ed., *The Portable Nietzsche* (New York: Penguin Books, 1976), 485.

of the “theoretical philosophies/sciences” since “it deals with the highest of existing things,” namely god(s).²⁸ Another way of phrasing this, as theologians from Aquinas to Paul Tillich have done, is to understand their god as precisely the first principle, the uncaused cause, the primary (or for Spinoza, the only) substance, that which is most eternal, unmovable, and independent, upon which all else depends—which makes the question of god(s) a thoroughly metaphysical question. If it is true that theology is a subset or apotheosis of metaphysics, then by the transitive property, all of our criticisms against metaphysics apply equally to theology. It is not and cannot be science.

Despite this *prima facie* conclusion, theologians have repeatedly and desperately claimed scientific status for their field. In his 1887 *Abstract of Systematic Theology*, James Petrigru Boyce, the first president of the Southern Baptist Theological Seminary, asserted that theology (*theos* + *logos*) “means literally a discourse concerning God but in analogy with other words, as geology, chronology and biology, it means the science which treats of God.”²⁹ Today, *The Catholic Encyclopedia* clings to this entitlement, stating that by adding *-ology* to *theos*, theology somehow becomes scientific. It explains,

[Theology is] the science treating of God, subjectively, the scientific knowledge of God and Divine things. If defined as the science concerning God (*doctrina de Deo*), the name of theology applies as well to the philosophical knowledge of God, which is cast into scientific form in natural theology or theodicy.³⁰

Notwithstanding that adding *-ology* to a word does not a science make (see below), and that there exist many different kinds of theology (dogmatic, systematic, natural, ascetical, moral, mystical, pastoral, etc.), as well as innumerable theological positions, it is unclear in what specific way theology would qualify as science. It produces no quantitative facts, derives no laws, advances no hypotheses, offers no theories, posits no mechanisms,

²⁸ Aristotle, *Metaphysics*, 186.

²⁹ James P. Boyce, *Abstract of Systematic Theology* (Philadelphia, PA: American Baptist Publication Society, 1887).

³⁰ Joseph Pohle, “Theology,” in *The Catholic Encyclopedia: An International Work of Reference on the Constitution, Doctrine, Discipline, and History of the Catholic Church*, ed. Charles G. Herbermann et al., vol. 14, *Simony-Tournély* (New York: The Encyclopedia Press, Inc., 1913), 580.

makes no predictions, and provides no conditions for falsifiability of any of its claims. Indeed, falsifiability is anathema to theology, as Louis Berkof confessed in his *Systematic Theology*: “We start the study of theology with two presuppositions, namely (1) that God exists, and (2) that He has revealed Himself in His divine Word.”³¹ There is, of course, no encouragement to prove that this god does not exist; the god of theology is not a hypothesis (despite Stenger’s title), because a hypothesis is assumed false until proven true (i.e. the null hypothesis). In theology, a god is assumed true and subjected to no test. Berkof explained, “The Christian accepts the truth of the existence of God by faith. But this faith is not a blind faith, but a faith that is based on evidence.”³²

What is this evidence, and how do they arrive at it? Again, Berkof remarks, in a dazzlingly circular argument, “The evidence is found primarily in Scripture as the inspired Word of God.”³³ The great Karl Barth concurred:

Theology is science seeking the knowledge of the Word of God spoken in God’s work—science learning in the school of the Holy Scripture, which witnesses to the Word of God; science laboring in the quest for truth, which is inescapably required of the community that is called by the Word of God.³⁴

That is, like metaphysics (but infinitely more so), *theology is exegesis*, the explication of texts. Stephen Paynter admits as much in his work where he explains that theology is “concerned with the articulation of the Christian or Biblical ‘world-view,’ grounded in exegesis....The world-view articulation is typically done by dealing with the Bible’s teachings on a number of more-or-less standard topics.”³⁵

Thus, theology is not a study of the external world but of a worldview entextualized in a specific body of texts belonging to only one religious tradition. John Frame is more honest when he subtitles his *Systematic Theology* openly as *An Introduction to Christian Belief*, as is Millard Erickson

³¹ Louis Berkhof, *Systematic Theology: New Combined Edition* (1938; repr., Grand Rapids, MI: William B. Eerdmans Publishing Company, 1996), 19.

³² *Ibid.*, 21.

³³ *Ibid.*

³⁴ Karl Barth, *Evangelical Theology: An Introduction* (Grand Rapids, MI: William B. Eerdmans Publishing Company, 1963), 49–50.

³⁵ Steve Paynter, *Systematic Theology: Introduction and Prolegomena* (Unpublished, 2014), 3, www.academia.edu/9755310/Systematic_Theology_Introduction_and_Prolegomena.

with his blunt *Christian Theology*.³⁶ It should go without saying that a science is not and cannot be limited to exegesis of books in its field, no matter how logical and systematic. No scientist would say, “I am a biologist, I study Darwin’s *On the Origin of Species*.” It is certainly possible to do a science of texts, by performing content analysis and comparison and such, which is perfectly respectable, but this activity gives us knowledge of the texts and not of the world. Even worse, theology decides in advance which texts are worth extrapolating (namely, Christian texts) and thus which god(s) are worth theorizing (namely, the Christian god). In other words, while theology “literally means ‘thinking about God,’” in actual “practice it usually means studying the sources of Christian belief like the Bible and the Creeds, and exploring the meaning of Christianity for today.”³⁷ *The Catholic Encyclopedia* adds insultingly that “pagan mythology and pagan doctrines about the gods must at once be set aside as false theology. The theology of heretics also, so far as it contains grave errors, must be excluded.” A less scientific attitude could hardly be imagined—except perhaps what Charles Hodge, in his *Systematic Theology*, identified as the “methods” of theology: specifically, induction (from the Bible as a “store-house of facts”), speculation (deistic, dogmatic, and transcendental), and mysticism!³⁸

This all may be *scientia*—a body of propositions, or of propositions about propositions—but it is not science. So, let us agree with Paul Tillich that theology, “in spite of its name, is not ‘science of God,’ but it is the *logos* determined interpretation of the symbols of God’s self-manifestation in a concrete situation.”³⁹ But the plurality of concrete situations—for our purposes, specific historical religio-cultures—and of gods themselves guarantees a plethora of diverse and incommensurable theologies. Even within Christianity, multiple theologies have spun out conflicting views on their deity, Jesus, ritual, icons, and every other conceivable subject as expressed in the many controversies and heresies in Christian history (Gnosticism, Montanism, Arianism, Pelagianism, Monophysitism, *ad infinitum*). And,

³⁶ John M. Frame, *Systematic Theology: An Introduction to Christian Belief* (Phillipsburg, NJ: P&R Publishing, 2013); Millard J. Erickson, *Christian Theology* (Grand Rapids, MI: Baker Book House, 1983).

³⁷ Paul Badham, “What is Theology?” *Theology* 99, no. 788 (1996), 101, <https://doi.org/10.1177/0040571x9609900203>.

³⁸ Charles Hodge, *Systematic Theology* (1872; repr., Bellingham, WA: Lexham Press, 1997), 1:§5, 9–15.

³⁹ Paul Tillich, “Relation of Metaphysics and Theology,” *The Review of Metaphysics* 10, no. 1 (1956): 58.

although Christian theologians implicitly ignore or explicitly disqualify other religions, if theology is merely an exegesis of Scripture, then it must necessarily be a rejection of other sacred texts and other theologies. Islamic theology (commonly called *'ilm al-kalam* or, more accurately than the science of god(s), “the science of argument/debate”) starts from different sources while arguing and debating different points. Most fundamentally, the Islamic doctrine of Allah’s oneness (*tawhid*) excludes notions of their deity’s incarnation in the flesh (Allah, after all, neither begets nor is begotten). Hinduism has a rich textual repertoire with its own problems to sort out. Other religions from ancient Greek, Egyptian, and Norse to Baha’i, Sikhism, and Scientology would generate their own situation-specific culture-theologies.

Then there are religions with wildly different conceptions of god(s) whose theologies would be unrecognizable (and heretical) to Christian theologians. Among the Azande of north-central Africa, the god Mbori or Mboli was understood as morally neutral and generally uninterested in human affairs.⁴⁰ On the Micronesian island of Ulithi, none of the several gods were seen as a creator (the society lacked a creation myth), and the high god Ialulep was pictured as a very large, old, and weak character who held the “thread of life” of each human and decided when a person would die by breaking the thread.⁴¹ For the Ainu of northern Japan, the many gods had particular assignments, such as the god of house, of ground, of bear, of wolf, or of fox.⁴² The foraging Kung or Ju/hoansi of the Kalahari had a great god Gao Na and a lesser god Kauha, each with a wife and children in a sky-home; Gao Na possessed human form and human tastes and shortcomings (including hunger, passion, stupidity, and frustration) and did not inspire awe or reverence—and neither god was the prime religious focus of the society.⁴³ Speaking of unpleasant gods, the Piaroa of Venezuela recognized two gods, Kuemoi and Wahari, the former envisioned as a violent, ugly cannibal.⁴⁴ Likewise, the

⁴⁰ E. E. Evans-Pritchard, *Witchcraft, Oracles, and Magic Among the Azande* (New York: Oxford University Press, 1937).

⁴¹ William A. Lessa, *Ulithi: A Micronesian Design for Living* (New York: Holt, Rinehart, and Winston, 1966).

⁴² Emiko Ohnuki-Tierney, *The Ainu of the Northwest Coast of Southern Sakhalin* (New York: Holt, Rinehart, and Winston, 1974).

⁴³ Richard Katz, *Boiling Energy: Community Healing Among the Kalahari Kung* (Cambridge, MA: Harvard University Press, 1982).

⁴⁴ Joanne Overing, “Images of Cannibalism, Death, and Domination in a ‘Non-Violent’ Society,” in *The Anthropology of Violence*, ed. David Riches (Oxford, UK: Basil Blackwell, 1986), 86–102.

Semai of Malaysia, renowned for their nonviolence, were partly kept passive by a god who tormented them as a “vicious ludicrous monster” and “a stupid, incontinent, violent dupe” who deserved their “frightened distaste.”⁴⁵ What extraordinary theologies scholars of those societies could do!

But then, not all religions have god(s) at all, which means that there are religions where theology would be meaningless or impossible. In at least some iterations of Buddhism, there are no gods or no concern about gods. Warlpiri religion contained no gods, only ancestral beings (part human, part plant or animal) that lived, fought, and died long ago in the Dreamtime but now linger as sources of spiritual energy in the land today. If the Amazonian Yanomamo know of any gods, they are much less interested in them than in the *hekura* spirits, sometimes understood as evil beings but also the source of shamanic powers. A Yanomamo shaman’s body literally becomes an abode for *hekura* and is a composite of both humanity and spirits, “a total but divided being: a fractal multiple ‘one.’”⁴⁶ Yanomamo religion is not conducive to theology, but it would make for some fascinating metaphysics.

Finally, while metaphysical concepts like substance and essence are speculative, unknown, and potentially unknowable, there is a fair chance that there is no such thing as deity in the first place. Like the logical positivists, Michael Martin among others has made a strong case that religious language (in this case, god-talk) ultimately has no sense: saying “Jesus is the son of God” or “God is three persons in one” is equivalent to saying “Two plus two equals red” or “Boogah boogah.”⁴⁷ Even Kant put his god on the other side of the Kantian wall, demonstrating in his antinomies that reason could argue just as effectively against deity as it could for deity. Arguments for atheism have come fast and hot recently, and the existence of god(s) cannot be taken for granted anymore, making the very foundation for practicing theology questionable. In short: no god(s), then no theology. Theology is rendered a discipline without a subject, like unicornology or leprechaunology. Or so one would think, but theologians have invented some clever ways to keep doing theology without god(s), including “death of God theology” and “atheism,”

⁴⁵ Robert Knox Dentan, *Overwhelming Terror: Love, Fear, Peace, and Violence among Semai of Malaysia* (Lanham, MD: Rowman & Littlefield, 2008), 84.

⁴⁶ Zeljko Jokic, *The Living Ancestors: Shamanism, Cosmos, and Cultural Change among the Yanomami of the Upper Orinoco* (New York: Berghahn, 2015), 74, <https://doi.org/10.2307/j.ctt13wwz6f>.

⁴⁷ Michael Martin, *Atheism: A Philosophical Justification* (Philadelphia, PA: Temple University Press, 1990).

or a post-Holocaust theism that is left with “a nonsovereign, nonmetaphysical God ... whose very powerlessness gives us power.”⁴⁸ It would still be possible, and maybe interesting, to talk about cross-cultural god-beliefs, but it would be supremely pointless to “study” god(s). There could be no science of god(s), only a science of words about god(s)—exegesis and linguistic analysis of talk about god-talk.

After Metaphysics and Theology

Metaphysics and theology are not science, and they are not about to become science. Neither discipline practices a scientific method or emerges with scientific knowledge; neither observes, quantifies, hypothesizes, theorizes, predicts, tests, or applies. Both are introspection and exegesis of a specific language and cultural tradition (metaphysics) or still more narrowly of a specific corpus of texts and doctrines within a specific language and cultural tradition (theology), which is not what science does. Worse, it is probable, if not certain, that metaphysics ponders the unknowable and theology posits the imaginary—and the unknowable, the imaginary, and the nonexistent are indistinguishable in the end—which cannot be the province of science.

The only question that remains is whether there is any way to continue doing metaphysics or theology and what they would look like after their thorough de-sciencing. Both are possibly useful intellectual exercises, not for learning about the world by any means whatsoever but for honing one’s logical and literary skills. Indeed, metaphysics actually shares one significant quality with science, which is a degree of skepticism and doubt: metaphysics, and all of philosophy, is born from reflections like “What is justice *really*?” or “Do we *really* know what piety is?” This is not to say that the metaphysical quest is a scientific one; as philosopher Kevin Schilbrak remarks,

Metaphysical claims seek to describe absolutely all things, or in other words they purport to be true under all conditions. Such claims allege to be necessary and therefore, if they are true, they cannot conceivably be falsified. Because they cannot conceivably be falsified, metaphysics cannot be understood as an empirical inquiry that

⁴⁸ Richard Kearney, *Anatheism: Returning to God After God* (New York: Columbia University Press, 2010), 66.

compares hypotheses to states of affairs. Rather, metaphysics [at best] is a form of logical inquiry.⁴⁹

The result of metaphysical inquiry is, thus, interesting but not science. Theology, to the contrary, does not even have a veneer of scientificity. Its essence and its subject are a *creed*—it is the exegesis of a specific religious creed—and it at no time entertains the possibility that the creed itself is false. Falsification would be the death of theology and of all theological careers.

But there *is* a scientific project to do in the arena of metaphysics and theology. It is a scientific study *of* metaphysical and theological statements and systems, a comparative metaphysics and a comparative theology, a *meta*-metaphysics and a theology-*ology*, if you will. We have previewed in this essay something of what that project would look like. It would expand to include *other* cultures, languages, and religions which are overlooked by standard metaphysics and disallowed by standard theology. It would recognize the plurality of metaphysicises and theologies (or the lack of the latter in many societies). By exploring and comparing multiple metaphysicises and theologies, it would implode Aristotelian and Western metaphysics and theology, which for too long have had the hubris to appoint themselves the only ones. Expanding our minds to embrace what anthropologist A. Irving Hallowell decades ago called *ethno-metaphysics*—the metaphysical thinking of different societies, whether or not they “do metaphysics” in a formal and professional way—will enable us, compel us, to perceive our own metaphysics as another ethno-metaphysics, Western ethno-metaphysics.⁵⁰ By extension, conventional Western/Christian theology will become one among many ethno-theologies, with no privileged claim to truth, which we can expect will be much more corrosive to theology than to metaphysics.

The effect of comparative metaphysics and comparative theology, of a science of metaphysicises and theologies, will be, as anthropologist Eduardo Viveiros de Castro predicts and welcomes, “the de-Hellenization, the decolonization, of thought.”⁵¹ Because so far, he continues, “If there’s one

⁴⁹ Kevin Schilbrak, “Myth and Metaphysics,” in *Thinking Through Myths: Philosophical Perspectives*, ed. Kevin Schilbrak (New York: Routledge, 2002), 91, https://doi.org/10.4324/9780203398449_chapter_4.

⁵⁰ A. Irving Hallowell, “Ojibwa Ontology, Behavior, and World View,” in *Contributions to Anthropology: Selected Papers of A. Irving Hallowell*, ed. Paul Radin (Chicago, IL: University of Chicago Press, 1976), 358.

⁵¹ Peter Skafish and Eduardo Vivieros de Castro, “The Metaphysics of Extra-Modems: On the Decolonization of Thought—A Conversation with Eduardo Vivieros de

thing that Western philosophers are not aware of, it's the existence of other peoples with different intellectual traditions."⁵² But if he is correct—and he is—that knowledge of “other peoples and of the Other in general are necessary conditions of thinking,”⁵³ then metaphysics, theology, and philosophy as a whole will finally begin their mission when they take these other human experiences and thought-systems seriously. Science can rescue metaphysics and theology from irrelevance and error, but neither will be the same, and both will be humbled after a good scientific purging.

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⁵² *Ibid.*, 399.

⁵³ *Ibid.*, 414.

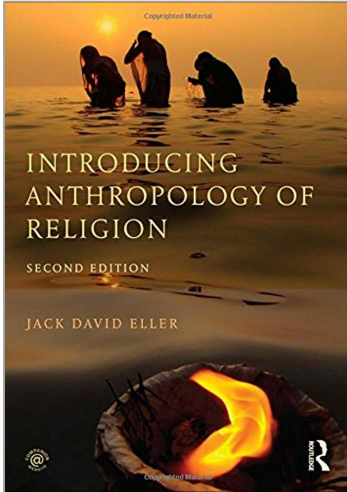
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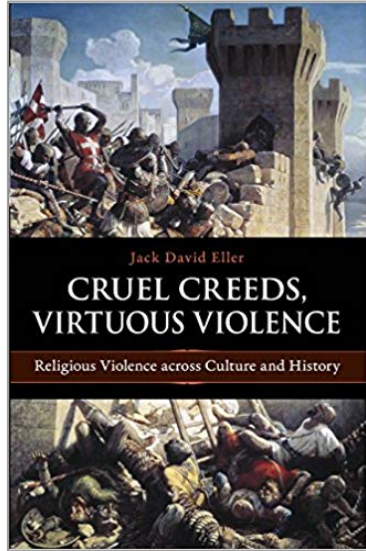
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