The Disbelieving Michael Shermer: A Review Essay of Michael Shermer's *The Believing Brain*

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Michael Shermer. *The Believing Brain: From Ghosts and Gods to Politics and Conspiracies: How We Construct Beliefs and Reinforce Them as Truths.* New York: Times Books, 2011. ISBN-13: 978-0805091250 (hardcover). 400 pages. \$28.00

Introduction

Michael Shermer is an interesting man. He is a former professional cyclist, a professor at Claremont Graduate University in California, and the Executive Director of the Skeptics Society. It is in this last role as a professional unbeliever that Shermer has really made a name for himself. Raised within a household largely apathetic to religious issues, Shermer embraced Christianity as a teenager and pursued his new spirituality with gusto. But after some time Shermer's faith began to wane and ultimately guttered out. Now, armed with an education in experimental psychology and history, Shermer opposes belief in all things supernatural and paranormal by writing books on these issues, publishing a magazine entitled *Skeptic*, debating prominent believers, and standing in as the designated doubter in various media appearances.

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Shermer's latest book, *The Believing Brain: From Ghosts and Gods to Politics and Conspiracies—How We Construct Beliefs and Reinforce Them as Truths*, pursues this very track, sketching out the various dynamics that undergird human thought and then analyzing a range of beliefs he finds incredible with reference to that theoretical framework. Unsurprisingly, given Shermer's own religious skepticism, he dedicates a fairly sizable chunk of his book to debunking religious notions like life after death and the existence of God.

It is in connection with this material, then, that this essay will evaluate Shermer's book and the reasoning that he employs. Specifically, this review will concern itself with a few major topics that have a bearing (some more, some less) on religion: (1) Shermer's views regarding human minds, (2) Shermer's treatment of belief in the afterlife (and religion generally), and (3) Shermer's handling of the existence of God. There is also the matter of Shermer's deep indebtedness to a field called "evolutionary psychology", and, since it undergirds his thought throughout, I shall address that topic as well, numbering it as issue (0), to indicate its fundamental position in Shermer's thinking.

Before getting into these highly-contestable topics though, it bears stating that at least some of the more general theses of Shermer's book seem fairly uncontroversial: (A) People naturally look for patterns and therefore find them when they exist and (sometimes) even when they do not—what Shermer calls "patternicity"; (B) People are prone to identify agency—both when it is real and (sometimes) even when it is just imagined—what Shermer calls "agenticity"; and (C) Once people have a certain belief in their heads they can and will seek to reinforce that idea with unconsciously biased thinking. These ideas fall under the rubric of psychology—Shermer's area of education and expertise—and they seem fairly well established experimentally.

His other point, (D), that "beliefs come first; reasons for beliefs follow," is more dubious. Certainly this *sometimes* happens, especially when the beliefs in question are relatively ideological in nature. But this little maxim simply cannot be taken as a universal law of human thought. I have the belief that I am looking at a laptop computer at this very moment as I write this review. Am I just choosing to believe this observation as a matter of blind faith, with reasons only being sought after the fact to rationalize my choice? Of course not; I have sensory data to this effect and mental referents that my mind accesses so quickly that my belief is automatically and rightly motivated by credible reasons. So if Shermer intends (D) to be merely an asterisk affixed to human thought as a little

^{2.} Michael Shermer, Believing Brain, 133.

reminder of the pitfalls people can sometimes face, that is fine. If he intends it as a universal explanation of all thought, however, then he is wrong.³

We now turn to the focal issues, which I have numbered 0 through 3.

(0) Shermer's Indebtedness to Evolutionary Psychology

Shermer builds much of his skepticism on evolutionary psychology. His whole theory of the mind is ultimately grounded in this conceptual soil, and it affects his thinking regarding belief in an afterlife and God as well. It is not surprising then that Shermer has a very high opinion of the field: Shermer calls it a "full-fledged science." He claims that "Evolutionary psychologists... have demonstrated unequivocally ... [this or that phenomenon.]" And he states that there is "a body of uncontestable evidence" for the evolutionary origins of certain human behavior. 6

These are serious-sounding claims. And coming from someone with Michael Shermer's credentials one might be inclined to take them seriously. Unfortunately for Dr. Shermer, however, those who specialize in evolutionary theory—actual biologists, for example—are not nearly so keen about evolutionary psychology.

Take Jerry Coyne, a thorough-going evolutionary biologist at the University of Chicago and certainly no friend of religion; he has echoed the sentiments of many others in his field by stating that evolutionary psychology "is not science, but advocacy" and that its promoters are "guilty of indifference to scientific standards. They buttress strong claims with weak reasoning, weak data, and finagled statistics... [and] choose ideology over knowledge." Further, in Coyne's

^{3.} Shermer is also rather fond of applying this maxim to his ideological opponents while only rarely applying it to himself. For example, compare Shermer's statements about Francis Collin's conversion to Christianity on , 31-36 against his statements concerning his own conversion to atheism on , 43-45. Collins's change of mind was facilitated by an "emotional trigger;" Shermer's reorientation was facilitated initially by an "intellectual consideration."

^{4.} Ibid., 42.

^{5.} Ibid., 48.

^{6.} Ibid., 73.

view, evolutionary psychologists "deal in dogmas rather than propositions of science."

Massimo Pigliucci, the celebrated geneticist and philosopher (and another atheist) concurs with Coyne, writing in the context of a chapter entitled, "Is Evolutionary Psychology Pseudo-Science?" that evolutionary psychology's fundamental problem with testability "certainly moves it away from mainstream evolutionary biology and into territory uncomfortably close to purely historical research" because "Empirical testing... is one major characteristic distinguishing science from nonscience. Although something might sound 'scientific,' such as in the case of string theory in physics or the borderline examples of evolutionary psychology... a field does not belong to science unless there are reasonable ways to test its theories against data."

Similarly, Dan Agin (a molecular geneticist) has stated that "There's much in evolutionary psychology that's not pseudoscience, but unfortunately there's enough to be worrisome." ⁹

One finds precisely these untestable "borderline examples" which constitute just so much pseudoscience throughout Shermer's book. Perhaps the most glaring is the claim that people's willingness to wear television's Mr. Rogers' iconic cardigan sweater is to be explained in connection with phallic bananas and contagious diseases. ¹⁰

That Shermer would enthusiastically embrace this sort of fantasy as a "full-fledged science" is made all the more surprising given that he approvingly cites another researcher in the midst of this very section to the effect that, if something is "not substantiated by a body of reliable evidence", it is therefore "supernatural and unscientific."

To be fair, it is not that all of Shermer's evolutionary psychology is necessarily bunk. (The idea that humans evolved to recognize faces swiftly seems plausible enough given the data in hand and his methodology. 12) It is merely

^{7.} Quoted in *Evolution's Rainbow*, by Joan Roughgarden (University of California Press: 2004), 174.

^{8.} Massimo Pigliucci, Nonsense of Stilts (University of Chicago Press: 2010), 304, 45.

^{9.} Dan Agin, More Than Genes (University of Oxford Press: 2010), 303.

^{10.} Shermer, 88-89.

^{11.} Ibid., 88.

^{12.} Ibid., 69-72.

Shermer's emphatic confidence that most or even *all* human beliefs and actions can be explained in this fashion—and with a scientific degree of certainty at that—which makes it highly dubious.

Indeed, it is precisely this willingness on Shermer's part to explain *all* belief with recourse to Darwinian pressures that begins to get him into trouble with religious/metaphysical problems. After all, on Shermer's view, "the evolutionary rationale for superstition is clear: natural selection will favor strategies that make many incorrect causal associations in order to establish those that are essential for survival and reproduction.' In other words, we tend to find meaningful patterns whether they are there or not... In this sense patternicites such as superstition and magical thinking are... natural processes of a learning brain." ¹³

Given this view, though, what confidence can Shermer have that his own cherished beliefs such as the reliability of inductive reasoning and the scientific method are not just "superstition and magical thinking"? He might appeal to an inductive proof—that induction is probably reliable because of X, Y, and Z—but such a proof would be circular since, as a form of inductive reasoning, it presupposes the reliability of the very thing that is being questioned here. It would seem that Shermer has thus hurled himself into the teeth of Alvin Plantinga's "Evolutionary Argument against Naturalism." ¹⁴

More broadly, Shermer's enthusiastic willingness to call non-science "science" gives one reason to think that he is playing with loaded dice. Later in the book he will oppose popular religious and near-religious claims with reference to evolutionary psychology (e.g. visions, near death experiences, etc.). But rather than say honestly, "Here is one non-scientific view and here is my view that competes with it—and it is also more of a guess than strict science," he will set up the conflict as if it is between some folk belief and the established deliverances of modern science. This sort of thing smacks of emotional manipulation, intentionally keying into the reverence that many people have for hard science even where it is not applicable. It is essentially an attempt to

^{13.} Ibid., 62.

^{14.} Alvin Plantinga, "Methodological Naturalism Part 2" in "Philosophical Analysis Origins & Design" 18:2 available at http://www.arn.org/docs/odesign/od182/methnat182.htm.

intimidate the opposition (or reassure his partisans) in a slightly mendacious way. 15

Given that much of Shermer's confident rejection of this or that supernatural or religious claim in the book is predicated on his less-than-fully-scientific evolutionary psychology, a reader would do well to take such confident denials with a very large grain of salt.

(1) Shermer's Theory of Mind

Shermer has a somewhat slippery theory of mind. Given that he proudly declares himself to be a materialist, ¹⁶ it is not entirely surprising that he makes statements that are at least indicative of a hardcore materialistic reductionism and which sometimes give a glimpse of an even harder-core eliminativism. ¹⁷ But then, after seeming to deny the very existence of things like awareness, beliefs, desires, and intentions, ¹⁸ he turns around and tells his readers that humans evolved the capacity to "be aware of such mental states as desires and intentions in both ourselves and others."

Also, while Shermer sometimes denies the very existence of minds "in" human beings and repudiates all of the "mentalistic" terminology that goes along with them, he is quite willing to use that very terminology to describe the actions of even single-celled organisms: "E. coli... formed meaningful associations between stimuli (visual, taste) and their effects (dangerous, poisonous)." And E.

^{15.} This strategy recalls a parody of arguments against God written up by a Christian philosopher named Glenn Peoples: "When it comes to God and morality... the Catholic Church molests children. Are you defending that? And in conclusion, the Crusades. And science." Glenn Peoples, comment on "Debate Review: William Lane Craig and Sam Harris," Say Hello to My Little Friend, comment posted April 12, 2011, http://www.beretta-online.com/wordpress/2011/debate-review-william-lane-craig-and-sam-harris/ (accessed February 24, 2012).

^{16.} Shermer, 22.

^{17.} E.g. "[M]y current belief [is] that there is no such thing as 'mind,' and that all mental processes can be explained only by understanding the underlying neural correlates of behavior." Ibid., 41 and "We now have a fairly sound understanding of the machinery [of the brain], thereby rendering the theater of the mind an illusion. There is no theater, and no agent sitting inside the theater watching the world go by on the screen." Ibid., 130

^{18.} Ibid., 130.

^{19.} Ibid., 87.

coli swim "toward the taste of a substance chemically similar to aspartate because of its original *preference* for the real thing." (emphasis added)

This contradiction is made all the more incoherent by Shermer's openness to the notion of "emergence"—the coming into being of meaningfully distinct levels of reality at certain thresholds of size, complexity, or some other quality. He cites emergence when he scolds those who would seek to reduce the mind to mere atomic physics. But then, on what grounds can he avoid being scolded himself for trying to reduce the mind to mere cellular biology? After all, if minds are just brains, and brains are just neuronal cells, and cells are just atoms, why is an atomic reductionism out of line but neuronal reductionism right on the money? If one such reductionism can be rebuffed on the basis of emergence, surely all such reductionisms can be rebuffed on the same basis: just as genuine stability emerges from quantum instability when one moves from atoms to cells, so (plausibly) genuine mentalistic phenomena can also emerge from physicalistic phenomena when one moves from cells to minds. But if that is the case then all of Shermer's confident declarations concerning neural determinism and how human free-will is an illusion are merely category errors. He made the same basis:

Indeed, once Shermer invokes emergence it would seem that all bets are off and that all of his reductionistic materialism suddenly finds itself only telling part (and that perhaps the less interesting part) of the story of the natural world. Perhaps at a certain threshold of mental reality entirely new levels of awareness emerge that connect one to transcendent conceptual domains—offering one at least possible ways of imagining veridical awareness of moral truth, mathematical certainties, and spirituality—even from within Shermer's purely materialistic anthropology.

That is not to say that such a thing is *certainly* happening, not even that it is *probably* happening. It is only to say that it is just *possible* that it might be happening. But even that is enough to seriously undermine one of Shermer's arguments that will come to the fore a bit later in connection with religion: that "it is *not possible* for a natural finite being to know a super-natural infinite being." (emphasis added)

^{20.} Ibid., 74.

^{21.} Ibid., 151. For a fuller treatment of emergence in the natural world see the diagram in Arthur Peacocke's Theology for a Scientific Age (Fortress: 1993), 217.

^{22.} Shermer, 72.

^{23.} Ibid., 177.

Shermer goes so far as to say that his position on the chasm between the finite and the infinite is true "by definition." But the phrase "by definition" is a bit of rhetorical overreach on Shermer's part; what he should say is that it is true because of 1) the "essential nature" of humanity according to his preferred reductive materialistic anthropology, and 2) the nature of God according to conventional theism. He claims that the human mind is strictly finite and can only formulate finite concepts based on input from finite physical senses observing the finite physical world and then processing such data through a finite physical brain. And since God is supposed to be infinite and exist "outside" the physical world, then a God could only exist outside of our sensual and conceptual net, and would, thus, be unknowable.²⁴

This argument is already pretty shaky from an empirical point of view, given that mathematicians pursuing set theory routinely analyze intangible, non-physical, infinite magnitudes. But Shermer's willingness to embrace the notion of emergence—that the whole might not be just *greater than* the sum of the part but *categorically different from* the sum of its parts—invalidates the argument completely. Yes, God might not exist as a matter of fact, or God might exist but still be unknowable to humans as limited physical creatures, but no mere dogmatic appeals to reductive definitions or supposed essential natures can establish such conclusions at this point. Thus, to remain coherent, the only way to make progress is by evaluating the conclusions by giving the evidence a fair hearing.

And it is here that we encounter the overtly anti-religious presuppositions of Shermer's book.

(2) Shermer's Treatment of Belief in an Afterlife (and Religion Generally)

Shermer thinks he knows why people believe in an afterlife; he lays out the various factors that conspire to foist this idea on people in chapter seven: (A) "agenticity" as he defined it earlier, (B) the innate belief in anthropological dualism, (C) our "theory of mind" as he defines that phrase—which is our ability to think about minds other than our own, (D) mental "body schema", (E) our "left brain interpreter"—the story-telling module of the brain, and (F) our imagination. ²⁵ In Shermer's entire presentation of these points, however, he never offers any actual arguments that would make his list anything more than mere

^{24.} Ibid., 185.

^{25.} Ibid., 143-144.

assertions. It seems to be little more than an enumerated "just-so story." Now, we can recall Shermer's own maxim that beliefs come first and reasons for the beliefs are only sought later (a view reiterated in this very chapter). Consequently, one could say that he is merely being consistent with his maxim insofar as he presents no arguments here *at all*. He could be seen as announcing his beliefs and postponing the disclosure of reasons for them for a later time, after he has sought for such reasons and found them. One could, then, infer that all he is offering as his own gut-level non-rational beliefs. That would be fine, but it is not convincing; indeed, it does not even seek to be convincing. Why should anyone accept such an unfounded claims?

Shermer does a much better job when he attempts to debunk the reasons that "believers" offer for why they believe in an afterlife. Here he notes a number of reasons given and then proceeds to offer arguments for why the reasons are inadequate. He states that "the case for the existence of the afterlife is built around four lines of evidence" and lists them as (A) information fields and the universal life force, (B) ESP and the evidence of mind, (C) quantum consciousness, and (D) near-death experiences.²⁷

Looking over this list and the treatment that followed, though, one may be surprised to find that the reasons he lists have nothing to do with the classic case for an afterlife as propounded by the majority faith cluster of humanity: Christianity, Islam, and Judaism—which are often called the Abrahamic faiths. None of these religions argue for the existence of an afterlife on the basis of "information fields" or ESP or quantum mechanics. And while near-death experiences are *sometimes* factored in, they are generally only a footnote to the more central reasons.

As for the actual reasons most informed "believers in the afterlife" (i.e. Christians, Muslims, and Jews) have given, they run as follows: (A) the essential faithfulness and loving nature of God,²⁸ (B) promises of the existence of an afterlife offered by an authoritative prophet of God in sacred scripture,²⁹ and, for Christians at least, (C) the down-payment on that promise found in Jesus' own

^{26.} Ibid., 145.

^{27.} Ibid., 145 ff.

^{28.} E.g. Dale C. Allison, *Resurrecting Jesus* (T & T Clark: 2005), 217-219; Richard Swinburne, *The Existence of God*, 2nd ed. (Oxford University Press: 2004), 261-262; and John Polkinghorne, *The Faith of a Physicist* (Fortress Press: 1996) 122.

^{29.} E.g. Daniel 12:1-3, 1 Thessalonians 4:13-16, Surah 75 (*al-Qiyamah*)

personal triumph over death through his resurrection into a renewed, physically embodied life in the course of known history.

That Shermer would just not address these issues *at all* in this context seems incredible, especially considering that most people who will read his book come out of a cultural background in which an Abrahamic faith predominates. Again, these reasons might be wrong, but if Shermer intends to address "the case for the existence of the afterlife" as put forward by believers in an afterlife, then presumably he should address the *actual* case put forward by most such believers. Indeed, given the focus of his arguments in this section, it therefore seems that when Shermer speaks of "believers in the afterlife," what he really means is a small minority within that larger group composed mostly of New Agers and the occasional secular humanist, such as John Beloff.

So why this strange oversight? The reason is straight-forward and beyond debate, even though it might be deemed unkind by his followers: Dr. Shermer is not equipped to entertain knowledgeable discussions in theology or philosophy. When he makes such an attempt, he ventures not only far outside of his area of expertise, but even out of his competence. He is navigating in personally unfamiliar waters, and he has admitted as much.³⁰

Dr. Shermer was recently on the White Horse Inn radio show and in that context he discussed his time in college and his decision to move away from studying religion to focus instead on science. He said, "I was better in science than I was in philosophy and theology."

A sympathetic listener could reasonably take such a statement, in such a context, as little more than a bit of good-natured and self-effacing humor: the

^{30.} Please note that this point does not constitute a commission of the *ad hominem* fallacy, which avoids the rational discussion of a conclusion by pointing instead at the person holding those convictions. The issue in question in this and the following paragraphs is not Dr. Shermer's conclusions, but how he could ever come up with such tangential and somewhat bizarre ideas. This inquiry leads to the further puzzle as to whether he is even qualified to draw rational conclusions on these issues. Thus, the man is at the center of the discussion, and it is not fallacious or inappropriate to evaluate the man's attributes in such a context.

^{31. &}quot;WHI-1050: An Interview with Skeptic Michael Shermer", Out of the Horse's Mouth: White Horse Inn Blog, audio file, 1:55, http://www.whitehorseinn.org/blog/2011/05/22/whi-1050-an-interview-with-skeptic-michael-sherer/ (accessed February 24, 2012).

religious skeptic on a Christian broadcast declaring his own ostensible philosophical and theological ineptitude—with a wink.

But Shermer makes a similar statement in *The Believing Brain* that does not seem tongue-in-cheek. Early in the book, Shermer recounts a conversation he had with a Mr. D'Arpino. In that conversation D'Arpino made some comment about the mind observing itself and thus being both subject and object at the same time. In response to this, Shermer states, "I think this must be why I went into science instead of philosophy. You're losing me here."³²

In fact, the pages of *The Believing Brain* teem with striking errors in the areas of philosophy and religion. Most of my examples will have to wait for the section specifically dealing with God, but I shall present a few instances.

On the strictly philosophical side, on more than one occasion Shermer states that it is impossible to prove a negative.³³ This is simply incorrect; clearly it is not categorically impossible to prove a negative.³⁴ In fact, some negatives are effortless to prove: there are no five-sided squares; there are no married bachelors. Other negatives can be proven beyond a reasonable doubt with just a little more work through simple visual inspections: there are no elephants in my office right now, U.S. President Barack Obama is not a Chinese woman, etc.

On a different topic that is halfway between philosophy and religion, when describing the mystical Deepak Chopra's views on consciousness and the afterlife in connection with quantum theory, Shermer quotes Chopra saying, "in body experience is a socially induced collective hallucination. We do not exist in the body. The body exists in us. We do not exist in the world. The world exists in us." After a bit more Shermer responds thusly: "Uh? Read it again... and again... it doesn't become any clearer."

Obviously Shermer is totally baffled by Chopra's views. But Chopra's views are not baffling in the least; they are completely conventional Hindu spiritual monism—the flipside of Shermer's materialistic monism. In the West, Chopra's

^{32.} Shermer, 24.

^{33.} Ibid., 175, 176.

^{34.} Richard Bornat, *Proof and Disproof in Formal Logic* (Oxford University Press: 2005), 104.

^{35.} Shermer, 160.

views are often called "Idealism"³⁶ and they basically consist in just reversing Shermer's reductionisms: whereas Dr. Shermer believes that reality is *really* all just material and that "mind" is an illusion, Dr. Chopra and hundreds of millions of other Hindus believe that reality is *really* all just mind and that "material" is an illusion. Regardless of whether Chopra is right or wrong, his point is not difficult to grasp.

A little later, Shermer asserts that "To an anthropologist from Mars, all earthly religions would be indistinguishable" at the level of their fundamental beliefs.³⁷ Does Shermer honestly believe that these hypothetical Martian anthropologists would so obtuse that they could not perceive meaningful theological distinctions between, say, Sunni Islam's rigidly, unflinchingly transcendent monotheism and Shinto's animism? One gets the impression that Shermer is projecting his own conceptual limitations onto the maligned Martians.

Shermer says that "Christians believe that Christ was the latest prophet," despite the fact that the New Testament itself refers to about a dozen different prophets who arose after Jesus. He makes a similar statement about Mormons believing that "Joseph Smith is the latest prophet." Only, once again, he is mistaken: the Mormon church (i.e. The Church of Jesus Christ of Latter-day Saints) has several active established offices of leadership, the current occupants of which are believed to be genuine prophets. ³⁹

Shermer goes on to inform his readers that monotheistic religion was created during the "Bronze Age." That statement may gratify those believers who locate the very origin of humanity in the Bronze Age, but anyone who believes that humanity had an earlier history and still believed in the one God, would not agree. More liberally inclined scholars advocate that true monotheism was a much later phenomenon—emerging no sooner than the late Iron Age, while evangelicals and other conservative Christians believe in an original monotheism,

^{36.} Berkeley, California is named after George Berkeley, an influential English Idealist. Berkeley's philosophy and theology, however, were not akin to Eastern monism. Berkeley was a Christian theist of deep orthodox convictions, and he intended to use his idealist philosophy to counter the growing skepticism brought on by the materialism of the enlightenment.

^{37.} Ibid., 172.

^{38.} Acts 11:26-28, 13:1, 15:32, 21:8-10.

^{39.} The Church of Jesus Christ of Latter Day Saints, "Who is the Mormon prophet today?" The Church of Jesus Christ of Latter Day Saints, http://mormon.org/faq/present-day-prophet/ (accessed February 24, 2012).

^{40.} Shermer, 184.

though God disclosed more precise truths about himself over time in "progressive revelation." The point is that Shermer is out of touch with scholarship on this matter on either end, the liberal and the conservative. Since he has more likely been exposed to the late liberal view, apparently he gave in to the desire to make popular religions look archaic, therefore primitive, and therefore incredible, thus leading him to appeal to the minority view of the Bronze Age date. 42

We find even more egregious errors when Shermer resorts to a dubious mainstay of atheist activism: positing a multitude of virgin births and resurrections in ancient mythology. Shermer declares that "Virgin birth myths... spring up throughout time and geography." As evidence, he cites Dionysus, Perseus, Buddha, Attis, Krishna, Horus, Mercury, Romulus, and Jesus. But unfortunately for Shermer's wider credibility, none of these men really qualify except for Jesus—the very one that Dr. Shermer is obviously trying to trivialize.

Dionysus's mother had sex with Zeus to get pregnant, and ultimately died from enduring Zeus's god-like "potency." Perseus's mother had sex with a shape-shifting Zeus in the form of gold. Buddha's mother had been happily married before conceiving her son and thus offers no reason to think that she was a virgin at the critical moment. Attis was conceived when his mother was inseminated by the dismembered penis of a monster named Agdistis. Krishna was the *eighth* son of the married Princess Devaki, so again, no. Horus's mother was impregnated through sexual intercourse with her formerly-

^{41.} See, for example, Article V of "The Chicago Statement on Biblical Inerrancy."

^{42. &}quot;The ongoing recognition of different textual layers in the Hebrew Bible have led most scholars to the conclusion that there was no monotheism in Israel during the monarchical epoch and that its first articulation came during the exilic period in the sixth century BCE." Klaus Koch, "Ugaritic Polytheism and Israelite Monotheism" in Robert Gordon's *The God of Israel* (Cambridge University Press: 2007), 217. It would appear that Shermer directed himself subjectively against seriously debatable assertions such as this one.

^{43.} Shermer, 173.

^{44.} Richard S. Caldwell, *The Origin of the Gods* (Oxford University Press: 1989), 138-139

^{45.} William Hansen, Classical Mythology (Oxford University Press: 2004), 261.

^{46.} Carl Olson, Original Buddhist Sources (Rutgers University Press: 2005), 27.

^{47.} Robert E. Bell, Women of Classical Mythology (Oxford University Press: 1993), 15.

^{48.} Anna Libera Dallapiccola, *Hindu Myths* (University of Texas Press: 2003), 36.

dismembered-but-then-reassembled Frankenstein monster of a husband, Osiris. ⁴⁹ Mercury's mother, Maia, had sex with Jupiter. ⁵⁰ And Romulus's mother, Silvia, was forcibly raped by Mars. ⁵¹

As Howard W. Clark (a professor of Classics at UC Santa Barbara) writes, "although Greek mythology has examples of strange but divine impregnations (Danae by Zeus in a shower of gold, Leda by Zeus disguised as a swan, Alcmena by Zeus impersonating her husband) and unusual births (Dionysus from Zeus's thigh, Athena from his head), all the women had sexual relations of a sort."⁵²

Thus, as Raymond Brown (a scholar who taught at Columbia University's Union Theological Seminary) concluded:

"[While N]on-Jewish parallels Γto Jesus's virginal conception] have been found in the figures of world religions..., in Greco-Roman mythology, in the births of the Pharaohs..., and in the marvelous births of emperors and philosophers... these 'parallels' consistently involve a type of hieros gamos where a divine male, in human or other form, impregnates a woman, either through normal sexual intercourse or through some substitute form of penetration. They are not really similar to the non-sexual virginal conception that is at the core of the infancy narratives [concerning Jesus], a conception where there is no male deity or element to impregnate Mary.⁵³

Similar things could be said about Shermer's handling of "resurrection" beliefs. To be clear, when one speaks of a "resurrection," what one means is that someone has truly and completely died and then is brought back into the spatio-temporal world of normal experience to live once more as a healthy embodied person—indeed, that the former corpse actually gets up and walks away from its tomb in health and vitality. According to Shermer, this idea was also rather

^{49.} Dimitri Meeks and Christine Favard-Meeks, *Daily Life of the Egyptian Gods* (Cornell University Press: 1996), 237

^{50.} Carole Newlands, *Playing with Time: Ovid and the Fasti* (Cornell University Press: 1995), 83

^{51.} Helen Morales, Classical Mythology (Oxford University Press: 2007), 86.

^{52.} Howard Clark, *The Gospel of Matthew and Its Readers* (Indiana University Press: 2003), 6.

^{53.} Raymond Brown, *The Virginal Conception and Bodily Resurrection of Jesus* (Paulist Press: 1971), 62.

common in ancient mythology, just like virgin births.⁵⁴ He does not cite very many examples, but the one he does cite, Osiris, falls flat: Osiris was an Egyptian god who was supposedly cut into pieces by a rival, Set. Osiris's wife, Isis, gathered up the pieces and reassembled them like a jigsaw puzzle. At this point, now that he was back together in one piece, Osiris became ruler of the underworld. As Bruce Metzger (a recently deceased professor at Princeton Theological Seminary and Bart Ehrman's doctoral supervisor) wrote, "Whether this can be rightly called a resurrection is questionable, especially since, according to Plutarch, it was the pious desire of devotees to be buried in the same ground where, according to local tradition, the body of Osiris was still lying." (emphasis added)

Clearly this is not what the disciples claimed happened with Jesus. So the answer to Shermer's snarky question, "Sound familiar?" is simply "no."

Shermer makes a similar blunder concerning Christian apologetics when he states that Christians "believe that the disciples would never have gone to their deaths defending their faith were such miracles as the resurrection not true... the assumption is that millions of followers cannot be wrong." (emphasis added) Again, this is simply incorrect. Apologists do indeed routinely cite the established fact that the original disciples of Jesus were willing to face death for their faith. But that fact is cited to show that those original disciples really and truly believed what they claimed: that they had personally seen Jesus alive after his death. In other words, the death-defying courage of the apostles is evidence that they were not just lying. They could have been wrong, they could have been deceived, but they were not conscious deceivers themselves. The idea that "millions of followers cannot be wrong" never enters into the argument.

I could provide further instances of this sort of sloppy thinking and assertions contrary to the facts, but there is really no need for them. The above examples are enough to show that Shermer routinely demonstrates a lack of knowledge of religious and philosophical concepts on even a fairly rudimentary level. Given this sad truth, it is not at all surprising that he feels that the ubiquity of religious

^{54.} Shermer, 173.

^{55.} Bruce Metzger, *Historical and Literary Studies: Pagan, Jewish and Christian* (Brill: 1968), 21.

^{56.} Shermer, 174.

^{57.} Ibid., 178

^{58.} Gary Habermas and Michael Licona, *The Case for the Resurrection of Jesus* (Kregel: 2004), 94.

belief "staggers the imagination." ⁵⁹ It staggers *his* imagination because, when it comes to religion at least, he just does not get it.

(3) Shermer's Handling of the Existence of God

Shermer's treatment of the question of God's existence leaves much to be desired. It is so sophomoric, in fact, that perhaps seeing it deconstructed will lead a few open-minded skeptics to take the possibility of God's existence more seriously. After all, Shermer is an intellectual leader in unbelieving circles, and his book has been widely praised by his co-irreligionists. If even such purported giants of the faithless community can be shown to be consistently irrational and helpless when it comes to the arguments concerning God, maybe some of his minions will see that the movement is without meaningful intellectual support.

To start off, I must make a somewhat minor point: Shermer equivocates and contradicts himself on the matter of religious self-identifications in this discussion. When he tries to define atheism, he reasonably says that one should consult a dictionary and reach for the gold-standard: the Oxford English Dictionary. He notes that atheism is defined there as "Disbelief in, or denial of, the existence of a God." Excellent; atheism is an intellectual position, one involving disbelief/denial. He also notes that agnosticism is defined as "unknowing, unknown, unknowable."

Shermer then goes on to reveal that he thinks that "the God question is insoluble" on the very same page. So, given the above, one would expect Shermer to classify himself as an agnostic. If he thinks that the question is insoluble, then he must think that the answer is unknowable so he would be an agnostic. Not quite; after all this wandering through the possibilities of definitions on the intellectual side, Shermer abruptly shifts gears and states that "atheism is a behavioral position," and, thus, he considers himself an atheist. Thus Shermer's idiosyncratic definition just supplanted the supposed gold-standard of the Oxford Dictionary.

But let us move on to the arguments about God himself.

Shermer addresses a few arguments for God, though he does not always name them. He briefly touches on (A) the Argument from Contingency, (B) the

^{59.} Shermer, 165.

^{60.} Ibid., 176.

Kalaam Cosmological Argument, and (C) the Teleological Argument. Also, while he does not address the (D) Ontological Argument, he nevertheless makes comments that bring this argument to mind.

We will examine each of these arguments and Shermer's handling of them.

The Argument from Contingency.

This argument reasons from the existence of something that exists but does not have to exist to the reality of something that not only exists but which exists as a matter of metaphysical necessity. The argument is sometimes called the classic Cosmological Argument, but it is the same argument and a fairly unsophisticated, but popular, version of it can be formulated along these lines:

- A. Everything that exists has an explanation for its existence either in an external cause or in its own metaphysical necessity.
 - B. The universe is a thing.
 - C. Therefore the universe has an explanation for its existence.
 - D. The universe is not a metaphysically necessary being.
 - E. Therefore the universe's existence is explained by an external cause.

Given the way that the argument is structured here, the universe's external cause is either a metaphysically necessary being itself or it too is caused by some additional external cause. Since infinite causal regresses become seriously problematic as a result of paradoxes and incoherencies, sooner or later one is compelled to a stopping point, which is an intrinsically metaphysically necessary being. And given Occam's Razor, rather than postulate a set of intermediate causal steps without any evidence whatsoever, one should just assume the simpler option: that the universe's cause is itself the metaphysically necessary being—the "Ultimate Ground of Being."

In this form, the argument establishes that the universe has some sort of intrinsically metaphysically necessary cause, a transcendent reality beyond itself that causes its existence—nothing more. Still, that is something. Quite a big something, actually. If nothing else it stands as a refutation of Shermer's

dogmatic claim that "In fact, there is no such thing as the supernatural." After all, as a reality that is "above" the natural world as a whole, the universe's metaphysically necessary cause would qualify as *super*nature in at least a rather modest sense.

How does Shermer deal with this argument then? He addresses the argument in the far simpler version that is really just a provocative question: Why is there something rather than nothing? To his credit Shermer attempts to tackle the question. But his answer is deeply confused: "Asking why there is something rather than nothing presumes that 'nothing' is the natural state of things out of which 'something' needs explanation. Maybe 'something' is the natural state of things and 'nothing' would be the mystery to be solved." He goes on to quote the rather eccentric Vic Stenger to the effect that "There is something rather than nothing because something is more stable [than nothing]."

In Shermer's answer one once again encounters his inability to address philosophical issues meaningfully. According to the Argument from Contingency, it is not that "something" requires an explanation because "nothing' is the natural state of things," rather "something" requires explanation because it is a thing, and things are subject to explanations. Nothing—literal non-being—is nothing at all; there is simply *no thing* there to be explained. So the Argument from Contingency just is not reversible as Shermer erroneously believes. Likewise, it is simply false to say that nothing is less stable than something; nothing is not anything at all—it has no properties whatsoever. ⁶³ It is neither hot nor cold, neither stable nor unstable; it is total non-being. So, Shermer's attempted evasion of the argument fails entirely, leaving it totally unscathed.

63. It is precisely in connection with this point that the Cambridge and University of

^{61.} Ibid., 184.

^{62.} Ibid., 323.

Virginia trained philosopher and theologian David Bentley Hart has stated that Vic Stenger is "incandescently unprepared to understand" the philosophical issues in question. "Believe It Or Not," *First Things*, May 2010, http://www.firstthings.com/article/2010/04/believe-it-or-not and see the comment on "Lupinity, Felinity, and the Limits of Method," On the Square, comment posted September 30, 2011, http://www.firstthings.com/onthesquare/2011/10/lupinity-felinity-and-the-limits-of-method/david-b-hart (accessed February 24, 2012).

The Kalaam Cosmological Argument

This argument works like this:

- A. Everything that begins to exist has a cause.
- B. The universe began to exist.
- C. Therefore the universe has a cause.

Premise A is universally attested to in experience and is entirely reasonable.⁶⁴ Premise B, however, was in times past more controversial and rested on philosophical arguments concerning the impossibility of an actual infinite series of real things. But recently those philosophical arguments have been bolstered by scientific considerations which have led essentially all physicists to believe that the universe did, in fact, begin to exist with the Big Bang. Michael Shermer accepts this too.

So how does Shermer handle this argument then? He tries to dodge it.

He tells the reader that when he debates "theologians", the argument "usually" goes something like this... 65

What triggered the big bang?

Theist: God did it.

Shermer: Who created God?

Theist: God is he who does not need to be created.

Shermer: Why not say the same thing about the universe?

^{64.} William Lane Craig is fond of saying that the denial of this premise is "literally worse than magic." The Blackwell Companion to Natural Theology (Blackwell: 2012) 186. As he has explained elsewhere, when it comes to magic, if someone were actually able to pull a rabbit out of a hat *ex nihilo*, at least one would still have the magician as a causal explanation.

^{65.} Shermer, 177.

Theist: Because the universe is a thing or event. God is an agent. Things need to be created, agents don't.

Shermer then goes on to note rightly that humans are agents, so according to the Kalaam Argument *people* must not need to be created, but that is obviously nonsense, so the Kalaam Argument must be flawed. The *reductio* works; the argument is invalidated.

Not quite.

According to the Kalaam Argument, the universe has a cause (a someone or something that made it) because it began to exist, and things that begin to exist have a cause. God (if he exists and thus is the cause of the universe) does not need a cause (a someone or something that made him) because there is no reason to think that he began to exist at some point—as opposed to existing in some eternal fashion. Indeed, the previous Argument from Contingency demonstrates that the Ultimate Ground of Being exists by virtue of its own intrinsic metaphysical necessity—that it was not and could not have been brought into existence by something else. So to ask "What caused the uncaused" is just an incoherent question. Notions of generic "agents" not needing causes never enter into it.

Now Dr. Shermer does not say who he is thinking of when he refers to these "theologians" he has debated. Still, given Shermer's past encounters with Doug Geivett, his odd willingness to call Geivett a "theologian", and the way Geivett formulates this problem and then answers it, chances are that Shermer was both thinking of Geivett *and* badly misunderstanding him.

As Geivett has written, "After I've sketched the kalam cosmological argument for an audience of skeptics, I'm almost always asked, 'So what caused God?' It might be easy to dismiss the question as sophomoric, except that some impressive minds have pressed it pretty persistently. Of course, there's an initially promising reply, 'God does not need a cause, God is not an event. I have argued that the beginning of the universe must be caused because it is an event.'" Geivett goes on to spell this all out in great detail over the course of many additional pages and the idea of "agents" of whatever kind not needing causes never once comes up.

^{66.} Doug Geivett, "The Kalaam Cosmological Argument" in Francis Beckwith, William Lane Craig, and J. P. Moreland, *To Everyone an Answer* (InterVarsity Press: 2004), 67.

So, in point of fact, Shermer's would-be *reductio* does not work and the argument therefore goes through.

To be fair, a discussion of agents (or *agency* at least) does generally follow in a presentation of the Kalaam Argument—just not in the way Shermer claims. The Argument from Contingency establishes that the universe exists because of a more fundamental reality outside of itself that exists, in turn, by virtue of its own internal metaphysical necessity. How that works, though not described in the argument itself, receives hundreds of pages of explanation by St. Thomas Aquinas and Aristotle. Presumably, according to that argument alone, the universe might be caused in a very static way by a very static cause—just as a building's not falling into the center of the earth is caused by the existence of the ground beneath it (though no knowledgeable advocate of the argument would let it rest there).

The Kalaam Argument takes one further: the universe is not caused in some static way, it was caused through an event, a change of sorts. In other words, action was involved. So the Ultimate Ground of Being is in some sense capable of action; it is not just some changeless, static reality "out there somewhere." That inference does not guarantee that the universe's cause possesses genuine agency, but it is moving in that direction. Of course, this is still quite a way off from all the various attributes of God (e.g. intelligence, etc), but there are further arguments to consider.

The Teleological Argument

So there are good grounds for believing that beyond the universe of space and time there exists some sort of transcendent reality, some sort of thing that exists by virtue of its own internal metaphysical necessity, which is also capable of action. That is remarkable. But it is still not all that specific. Is this Ultimate Reality intelligent and purposeful—something approximating a mind? Or is it something utterly mindless? After all, hurricanes and volcanos exist and are capable of action in a non-intentional mechanical way, but they are just mindless things. Is Ultimate Reality—the thing that made the universe—just the metaphysical equivalent of a super-charged Krakatoa?

To answer that question one can look to the character of what it has made. Is the universe the kind of thing that seems to be purposefully and intelligently made? Or does it appear to be just the random and chaotic product of some blind force?

For centuries theistic thinkers have argued vigorously that the universe clearly seems like the former, a thing that demonstrates purpose, an orientation to seek an "end" or *telos* and thus its cause is purposeful and intelligent—a genuine agent. Just look around; considering all the dull, drab, and unremarkable ways the universe conceivably *could* have been, it is quite striking that in point of fact it has developed in such a way that it formed plants, animals, and even conscious embodied agents that can ask the big questions of existence: people. Surely this description bespeaks purpose and intelligence behind it all.

Historically, the skeptical response had been that these developments just are not all that surprising, that no matter how the universe was constituted, no matter what physical laws it obeyed, these things would have inevitably developed somehow or other.

As time marched on, though, and science has grown in its understanding of the world around us, that skeptical response became increasingly implausible. Indeed, given the current state of knowledge, that response has essentially become impossible.

It seems that the laws of physics are precisely calibrated—and that to an extraordinarily exact degree—to allow for the emergence of life. Were the laws to be changed in even the most utterly minute way, no life would emerge at all: no plants, no animals, no people to wonder "why" and study the universe that birthed them. Indeed, the theistic intuitions of yesteryear have become the strongly supported scientific conclusions of today.

Shermer is aware of this development in the sciences and helpfully recounts a number of examples, citing the work of the cosmologists Martin Rees and Roger Penrose. Among other statistics, Shermer cites Roger Penrose's astounding finding that the chances of our universe possessing even just one of its life-friendly qualities is 1 part in 10^10^23. Such a number is impossible for our minds to grasp, and it establishes that the possibility that some random, unintentional, purposeless universe would allow for the development of life is *profoundly* unlikely. It is actually worse than Shermer lets on though because he misquotes Penrose's work. Whereas Shermer quotes Penrose's number as 1 out of 10 to the power of 10 to the additional power of 23, the number is actually 1

^{67.} Shermer, 330; the specific reference here is to the universe's low-entropy condition.

out of 10 to the power of 10 to the additional power of $\underline{123}$ —a number so large (or so small, rather) that it is literally inconceivable in standard notation. ⁶⁸

In other words, the odds that our remarkable universe was just the product of blind forces and random chance (as opposed to purposeful design) is *almost* literally zero. It is for this reason that Michael Shermer begrudgingly concedes that the so-called "fine-tuning problem" (the fine-tuning of physics for the emergence and development of life in the universe, that is) is "the best argument that theists have for the existence of God."

The irreligious are no slouches though, and when the philosophically and scientifically inclined among them have recovered from the unpleasant shock of seeing theism's Teleological Argument vindicated so dramatically, they set about conceiving of interesting ways of defusing the problem. Shermer lays out six of these possibilities, ⁷⁰ but the fact of the matter is that five of them are so irrelevant, implausible, or contrary to fact that very few serious thinkers take them seriously. ⁷¹ And Shermer seems to know it; for all his love of lists, he does not spend much time developing any of the speculative evasions he lays out except one: the multiverse.

The multiverse theory is the one serious alternative to design in the fundamentals of the universe which has garnered a sizeable following among contemporary non-religious philosophers and scientists. The idea here, as

^{68.} Roger Penrose, The Road to Reality (Knopf: 2005), 762-765.

^{69.} Shermer, 324.

^{70.} Ibid., 325-327.

^{71.} For an example of these sorts of weaker evasions take Shermer reference to Vic Stenger's cosmogony computer simulation "MonkeyGod." (Shermer, 329) Stenger claims that his simulation shows that the fine-tuning of our universe is an illusion and that most hypothetical universes (or at least a great many of them) could potentially produce life. How has MonkeyGod been received by others in the cosmology community? Consider the response of Luke Barnes, an astrophysicist associated with both the University of Sydney and the Swiss Federal Institute of Technology in Zurich. Dr. Barnes has written that the MonkeyGod program utilizes eight criteria and "Of these eight criteria, three are incorrect, two are irrelevant, and one is insufficient. Plenty more are missing. Most importantly, all manner of cherry-picked assumptions are lurking out of sight, and the whole exercise exemplifies the cheap-binoculars fallacy... We conclude that MonkeyGod is so deeply flawed that its results are meaningless." Luke Barnes, "The Fine-Tuning of the Universe for Intelligent Life,", 68, 71, arXiv, submitted December 20, 2011, http://arxiv.org/pdf/1112.4647v1.pdf (accessed February 24, 2012).

Shermer notes, is that even if it is almost infinitely improbable that our universe is the product of mere chance, if there are an infinity of randomly ordered universes (out there, somewhere) the likelihood that some of them will be life-producing increases to the point that it becomes a plausible possibility.

Before moving on to address the specific kinds of multiverses that Shermer discusses, it is important to note that there are a number of problems with the whole notion of the multiverse as an atheistic argument—problems of which, unsurprisingly, Shermer seems totally unaware. Only two will be mentioned here, but there are more.

First, resorting to a multiverse to explain the fine-tuning of the universe is methodologically dubious. Ockham's Razor asserts that when one seeks to explain something, one should not multiply causal factors beyond necessity. It is against this backdrop—one that has factored into scientific theory for a long, long time—that the British astrophysicist Rodney Holder has described the idea of a multiverse as "anti-Ockhamite." As he says, "It is grossly uneconomic to multiply universes in this prodigal manner, and goes against the grain of scientific method" "72"

Second, postulating a multiverse instead of a universe does not necessarily eliminate the strong appearance of design in the fabric of nature. After all, just as our universe operates according to laws, some multiverse would also presumably operate according to laws. So if *those* laws are precisely such that they eventuate in a universe that produces life which ultimately develops to the point of becoming self-aware agents, the appearance of design persists. As the Oxford bio-chemist Arthur Peacocke remarked,

"Whatever constraints and framework of meta-laws and supervening relations that operate in bringing about the range constituting any postulated ensemble of universes, they must be of such a kind as to enable in one of the universes (*this* one) the combination of parameters, fundamental constants, etc., to be such that living organisms, including ourselves, could come into existence in some corner or it. So, on this argument, it is as significant that the ensemble of universes should be of such a kind that persons have emerged as it would be if ours were the only universe."⁷³

^{72.} Rodney D. Holder, God, the Multiverse, and Everything (Ashgate: 2004), 53.

^{73.} Peacocke, 109.

Thus, as the formerly atheistic philosopher turned deist Antony Flew concluded: "So, multiverse or not, we still have to come to terms with the origin of the laws of nature. And the only viable explanation here is the divine Mind."⁷⁴

It is not looking too good for the scientific status or the atheistic argumentative value of the multiverse theory. But things get much, much worse for Dr. Shermer.

Shermer sketches out six different ways a multiverse might be: (1) an oscillating "eternal return" multiverse, (2) an inflationary "multiple creation" multiverse, (3) a quantum mechanical "many worlds" multiverse, (4) a multidimensional string theory multiverse, (5) a quantum foam multiverse, and (6) Lee Smolin's evolutionary multiverse.

To his credit, Shermer has the honesty to admit that (1) is totally implausible given the current understanding of physics. Also to his credit, Shermer concedes that (3) seems utterly ridiculous with its postulation of infinite numbers of copies of particular individuals—all different from one another and filling every possible existential scenario (e.g. an infinity of Betty Whites in parallel realities, some the pleasant version known from TV, some a neo-Nazi, and some so utterly bizarre as to defy description). Readers of all stripes should be grateful that Shermer concedes that this option is "even less likely than the theistic alternative." What Shermer does not seem to realize is that (5) cashes out in the same infinities of Betty White with all the same absurdities and thus, presumably, is also less likely than theism.

(4) is much better in that it is not manifestly absurd; but neither is it entirely scientific—string theory is devoid of observational and experimental support and seems to be mostly a mathematical endeavor at this point, something which has led the Columbia University mathematical physicist Peter Woit to call it "not even wrong" as a result.⁷⁷ Even more problematic, though, is that a random string-based multiverse (such as Shermer describes it at least) just is not capable of producing enough universes to get the job done. Shermer says that a string multiverse could produce upwards of 10^500 universes. This certainly sounds like a lot, but it is nevertheless woefully inadequate for this particular problem.

^{74.} Antony Flew & Roy Abraham Varghese, *There Is a God* (HarperOne: 2007), 121.

^{75.} Shermer, 328-331.

^{76.} Ibid., 329.

^{77.} Peter Woit, Not Even Wrong (Basic Books: 2006).

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Remember that if the postulated universes are really randomly ordered, it would require *vastly* more universes to overcome Roger Penrose's one part in 10^10^123 odds. Roger So, contrary to Shermer's naïve declaration that the *absence* of a universe like ours in a manifold of 10^500 random universes would be so unlikely as to seem miraculous, such an absence would really just be essentially and dully certain.

That assessment leaves Shermer with the inflationary model and the evolutionary model. Given, though, that these two models are the most clearly driven by a central dynamic or mechanism, these two are the most clearly subject to Peacocke and Flew's observation about the apparent design of the "metalaws." Still, Shermer is quite enthusiastic about Lee Smolin's evolutionary multiverse theory, so it merits further discussion. 80

Smolin's theory is basically Darwinian biology applied to cosmogony. It argues that universes "give birth" to daughter universes inside black holes. These daughter universes eventually produce black holes of their own, and so on, resulting in an ever-expanding population of universes. Each daughter universe is supposed to be similar to (but slightly different from) its parent universe in terms of its physics, thus allowing for minor variations in physical fundamentals ("mutations") to accumulate and compound over time. Those universes that are most likely to produce life are also supposed to be the most likely to produce black holes (and vice versa), so as time goes on more and more black-hole/life-producing universes come into being and life-producing universes thus come to predominate within the multiverse. The idea is that through this process a small number of universes not fine-tuned for life will grow into a huge collection of nested universes, most of which are fine-tuned for life without the need for design.

^{78.} Donald N. Page (a cosmologist at the University of Albert) puts forward a similarly pessimistic picture for getting a life-friendly universe just by chance: 1 out of 10^10^124. Quoted in "A Classic Debate on the Existence of God," November 1994, University of Colorado at Boulder, Dr. William Lane Craig and Dr. Michael Tooley: Dr. Craig's Opening Statement," note 5, LeadershipU, http://www.leaderu.com/offices/billcraig/docs/craig-tooley1.html (accessed February 24, 2012).

^{79.} Shermer, 329.

^{80.} The inflationary option is subject to a massive problem with what are called "Boltzmann Brains," but since Shermer does not pursue this option there is no need to critique it in detail. See Barnes, "Fine-Tuning," 61-62

Lee Smolin's idea is popular with a handful of biologists and other non-specialists.⁸¹ But Smolin's theory is not at all popular with astrophysicists and their professional associates, the specialists most clearly qualified to comment on the physical origins of the universe. Even such a Smolin booster as Richard Dawkins admits to this fact while trying to downplay the situation: "Not all physicists are enthusiastic about Smolin's idea." ⁸²

Why might this be? Because Smolin's theory is a farrago of non-factual assumptions and falsified predictions.

First off, Smolin's theory assumes that efficient star formation requires carbon. It does not. All our universe's first-generation stars were made of nothing but hydrogen and helium.⁸³

Second, Smolin's theory assumes that our universe (as a representative life-producing universe) will possess a maximal amount of black holes. It does not. Our universe falls short of such a maximal number by a factor of 10,000.⁸⁴

Third, Smolin's theory assumes that black holes produce baby universes. They do not. Stephen Hawking proved that (much to his own personal dismay) several years ago in connection with a humorous bet. 85

Fourth, Smolin has stated that his theory predicts that in our universe "there should be no neutron star more massive than 1.6 times the mass of the sun." But subsequent to that prediction a neutron star was discovered with fully twice the mass of the sun. The sun star was discovered with fully twice the mass of the sun.

And fifth, Smolin's theory assumes that life-producing universes will produce more black holes over many "generations" than non-life-producing universes. They would not. Universes that explode into existence only to swiftly congeal

^{81.} Shermer's comment about "physics envy" comes to mind. Shermer, 151

^{82.} Richard Dawkins, *The God Delusion* (Houghton, Mifflin, Harcourt: 2006), 175.

^{83.} Holder, 65.

^{84.} Ibid., 65

^{85. &}quot;Hawking Illuminates Black Hole Reversal," *Los Angeles Times*, July 22, 2004, http://articles.latimes.com/2004/jul/22/science/sci-hawking22 (accessed February 24, 2012).

^{86.} Lee Smolin, *The Trouble with Physics* (Houghton, Mifflin, Harcourt: 2006), 167.

^{87.} Paul Demorest, Tim Pennucci, Scott Ransom, Mallory Roberts and Jason Hessels, "A two-solar-mass neutron star measured using Shapiro delay," *Nature* (October 2010), 1081-1083

into black holes without any multi-generational stellar development (and thus without any life) will contain the most black holes over time, thereby causing lifeless universes to predominate in the multiverse instead of life-producing universes. ⁸⁸ As a result, "Smolin's cosmic evolutionary scenario actually serve[s] to weed out life-permitting universes."

Now, to be fair, if Smolin's theory had only one or maybe two of these problems, then one could perhaps be cautiously open to it, knowing that the problems *might* evaporate with future discoveries. As Shermer helpfully notes earlier in his book, the "residual problem" should not terrify one into universal skepticism; it is unavoidable that "for any given theory there will always be a residual of unexplained anomalies." But that is not what one finds with Smolin's theory. Rather, the problems have piled up one on top of another a mile high, crushing the theory under the weight of its errancy. As Joseph Silk (a professor of astronomy at Oxford University) has written, in the end Smolin's theory "fails at almost every encounter with astronomical reality."

So, to recap, multiverse theories do not follow the well-established scientific principle of Ockham's Razor, they do not really seem to avoid the clear appearance of design, and Shermer's own preferred multiverse theory fails at every turn when evaluated against established astrophysical science. In other words, Shermer's attempt to undermine the Teleological Argument not only fails, it fails *spectacularly*. As such, the Teleological Argument stands: the natural world really, really looks as if it were the product of a rational, purposeful agency.

The Ontological Argument

Shermer does not mention the Ontological Argument in his book. In fact, he does not even seem to be aware of its existence. One gets that impression from

^{88.} John Polkinghorne and Nicholas Beale, *Questions of Truth* (Westminster John Knox: 2009) 110

^{89.} William Lane Craig, "Theistic Critiques of Atheism" in Michael Martin, *The Cambridge Companion to Atheism* (Cambridge University Press: 2006), 81

^{90.} Shermer, 162; It is a pity that Shermer did not recall this fact when considering the "problem of evil" as a younger man.

^{91.} Joseph Silk, "Holistic Cosmology," *Science* (August 1997), 644. Silk reasserted his evaluation of Smolin's theory as recently as 2008, see Polkinghorne and Beale, *Questions of Truth*, 158 n. 20.

his assertion that "any scientific *or rational* attempt to prove God's existence can result only in our awareness of an intelligence greater than our own *but considerably less than the omniscience traditionally associated with God.*" (emphasis added)

On the contrary, the Ontological Argument is precisely a "rational attempt to prove God's existence" which (if successful) results in an awareness of an omniscient Being—one that is omnipresent and omnipotent too.

Why does Shermer not know about this? Perhaps the Ontological Argument has just resided in some niche where only a few fringe thinkers ponder, or maybe it is some relic from a bygone era, debunked long ago and now largely ignored. If that were the case, then Shermer's lack of reference to the argument would be understandable despite the fact that he is the Executive Director of the Skeptics Society, debates theologians and theistic philosophers, and has written a book seeking to debunk belief in God. But, again, unfortunately for Dr. Shermer, this just is not the case.

Gareth Matthews (a philosopher at the University of Massachusetts who died last year) wrote that "The ontological argument is certainly not neglected today. No other argument for the existence of God—indeed, for the existence of anything!—has received such lavish attention in the last half-century as has the ontological argument." Two atheist philosophy professors at Vanderbilt University, Scott Aikin and Robert Talisse, have gone so far as to say that they "take the Ontological Argument as the litmus test for intellectual seriousness, both for atheists and religious believers alike. Anyone who takes the question of God's existence seriously must grapple with this fascinating argument. Those who simply cast it aside, or wield it indiscriminately, prove themselves intellectually careless." Clearly the Ontological Argument is alive and well, and Shermer's ignorance of it just serves to underline the shortcomings of his philosophical and theological knowledge.

This is yet another argument, then, for God's existence that Shermer simply does respond to meaningfully—by default in this particular case.

^{92.} Shermer, 166.

^{93.} Gareth Matthews, "The Ontological Argument" in William Mann, ed., *The Blackwell Guide to Philosophy of Religion* (Blackwell:2005), 81.

^{94.} Scott Aikin and Robert Talisse, Reasonable Atheism (Prometheus Books: 2011), 81.

In any event, the Ontological Argument can be formulated in a number of ways, including one that relies on modal logic that appears below:

- 1. It is possible that a maximally great being exists. 95
- 2. If it is possible that a maximally great being exists, then a maximally great being exists in some possible world. 96
- 3. If a maximally great being exists in some possible world, then it exists in every possible world.
- 4. If a maximally great being exists in every possible world, then it exists in the actual world.
- 5. If a maximally great being exists in the actual world, then a maximally great being exists.
- 6. Therefore, a maximally great being exists.

Philosophers generally grant steps 2 through 6. It is step 1 that is controversial. But as the earlier sections of this article demonstrate, there are good reasons to believe that the universe is the product of a transcendent, self-existent, eternal, active, intelligent agency. Is it at least *possible* then that this "Thing" is God and thus a maximally great being? Obviously the answer is "yes"; that is at least *possible*. But if that is the case, then such a statement affirms the first step in the Ontological Argument, and at that point the next five uncontroversial steps kick in and the argument establishes that a maximally great being actually exists—God with all his various "omni" qualities.

^{95.} A "maximally great being" is one with every possible excellence and that to the most excellent degree (i.e. omnipotence, omniscience, etc.)—in other words, God.

^{96.} A "possible world" is just some logically conceivable way in which reality could have been different from the way the actual world is.

^{97.} William Lane Craig, "Richard Dawkins on Arguments for God," in William Lane Craig and Chad Meister, *God Is Great, God Is Good* (InterVarsity Press: 2009), 29.

Summary Thoughts on God and Shermer's Skepticism

It is clear that Dr. Shermer is either not willing or capable of rebutting the classical arguments for God's existence. Time after time he either bungles standard formulations badly or just ignores them altogether. The fact of the matter is that using the so-called "convergence method" of inquiry—a method that Shermer himself approves of —one sees that there are good rational grounds for believing that God exists. The Argument from Contingency shows that there is a transcendent and self-existent cause of the universe. The Kalaam Argument shows that the universe is the product of something capable of action. The Teleological Argument gives good grounds for thinking that the universe is the product of purposeful intelligence. And the Ontological Argument can spring-board off these various bits of data towards a genuinely maximally great Being. Taken together, all these arguments converge to strongly support the theory that God exists.

Why then does Shermer resist the well-evidenced conclusion that God exists? Why the transparently unreasonable denialist stance? Why the remarkable gaps in his philosophical and theological knowledge? Why the willingness blindly to accept ideas that echo among the uninformed irreligious (e.g. virgin birth stories being common) while simultaneously putting religious claims under the most punishing and hostile, not to mention distorted, of mental microscopes?

As the author Aldous Huxley conceded after dabbling in materialistic atheism for a time, "Most ignorance is vincible ignorance. We don't know because we don't want to know. It is our will that decides how and upon what subjects we shall use our intelligence." ⁹⁹

It would seem that Shermer agrees; as he says speaking for himself: "Sometimes I'm even charged with denialism—I don't want X to be true, therefore I unfairly find reasons to reject X. That is undoubtedly sometimes the case " 100 "

Consider also this bit from the NYU professor of philosophy, Thomas Nagel, on the "fear of religion":

^{98.} Shermer, 338-39.

^{99.} Quoted in James S. Spiegel, *The Making of an Atheist* (Moody Press: 2010), 73.

^{100.} Shermer, 162.

In speaking of the fear of religion, I don't mean to refer to the entirely reasonable hostility toward certain established religions and religious institutions, in virtue of their objectionable moral doctrines, social policies, and political influence. Nor am I referring to the association of many religious beliefs with superstition and the acceptance of evident empirical falsehoods. I am talking about something much deeper—namely, the fear of religion itself. I speak from experience, being strongly subject to this fear myself: I want atheism to be true and am made uneasy by the fact that some of the most intelligent and well-informed people I know are religious believers. It isn't just that I don't believe in God and, naturally, hope that I'm right in my belief. It's that I hope there is no God! I don't want there to be a God; I don't want the universe to be like that. ¹⁰¹

My guess is that this cosmic authority problem is not a rare condition and that it is responsible for much of the scientism and reductionism of our time.

This reviewer gets the impression that Shermer may share Nagel's sentiments here. After all, that a staunchly libertarian Ayn Rand fan who describes herself as "a radical for liberty" would find contemptible the idea of an all-powerful God to whom she may have to answer is not particularly surprising. Add to that attitude Shermer's own youthful experiences of a decidedly fundamentalist faith one which viewed God as the ultimate micromanager and the picture becomes even more predictable. In leaving behind the rigid religiosity of his adolescence for an overly distrustful and stubborn incredulousness, one seems to find in Shermer yet another example of what Craig A. Evans called the "flight from fundamentalism."

^{101.} Thomas Nagel, The Last Word (Oxford University Press: 1997), 130.

^{102.} Shermer, 46.

^{103.} Shermer describes his former faith as "fundamentalist" on page 203.

^{104.} E.g. "as a non-believer I realized the power that the believing paradigm has in filtering everything that happens through a religious lens. Chance, randomness, and contingencies dissolve into insignificance in the Christian worldview. Everything happens for a reason, and God has a plan for each and every one of us." Shermer, 43.

^{105.} Craig A. Evans, Fabricating Jesus (InterVarsity Press: 2006), 25

Sadly, it appears then that in Dr. Shermer's own case at least, his private dogma actually applies: (un)belief comes first; rationalizations follow. Only, as one can see, his rationalizations just do not stand up to scrutiny when confronted with argument.

Conclusion

Shermer states that were he one day to be confronted by God and the error of his intellectual ways, he would say, "I did the best I could." If that is really true then Shermer's "best" in this area is surprisingly bad. And, given his standing in irreligious circles, that point of view does not bode well for that community's wider intellectual foundations.

Shermer opened his book with a quote from Francis Bacon, the "inventor" of the scientific method:

For the mind of man is far from the nature of a clear and equal glass, wherein the beams of things should reflect according to their true incidence, nay, it is rather like an enchanted glass, full of superstition and imposture, if it be not delivered and reduced.¹⁰⁷

In the same vein let me close this article with another quote from that same man:

It is true, that a little philosophy inclineth man's mind to atheism; but depth in philosophy bringeth men's minds about to religion. For while the mind of man looketh upon second causes scattered, it may sometimes rest in them, and go no further; but when it beholdeth the chain of them, confederate and linked together, it must needs fly to Providence and Deity. 108

^{106.} Ibid., 55

^{107.} Ouoted in Shermer, ix

^{108.} Francis Bacon, "On Atheism," in Nancy K. Frankenberry, ed., *The Faith of Scientists* (Princeton University Press: 2008), 74.