

## Article

# Evaluating Warfare Myths about Science and Christianity and How These Myths Promote Scientism

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**Abstract:** Many people assume that there has been ceaseless conflict between science and Christianity. I argue that the real conflict has been between scientism and religion. Scientism is the view that only the sciences generate knowledge or rational belief. Scientism, as typically articulated, entails the opinion that reliable belief about divinity (theological realism) is impossible. I debunk four historic science–Christianity conflict myths and show how they have promoted scientism. These four science–religion myths function as part of a larger warfare narrative about science and Christianity. This misleading warfare thesis often comes packaged with an alternative anti-theistic “myth” in the anthropological sense—in this case, a worldview-shaping narrative that awakens the imagination to interpret the world in scientific and non-theistic ways. I call this the scientific warfare myth and explore its major flaws.

**Keywords:** scientism; science and religion; myth; Christianity; medieval; spiritual atheism; theoretical virtues; early modern



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## 1. Introduction

“The idea of a ceaseless conflict between” science and religion “seems to be an integral part of the public consciousness.” (Elsdon-Baker and Lightman 2020).<sup>1</sup> So observe two historians in a recent academic anthology about science and religion. The historians go on to argue that this “conflict thesis” is largely faulty, while at the same time noting that it is “more ingrained in the scholarship than previously imagined”, and so the “only way to root it out is to pursue a multidisciplinary reenvisioning” of science and religion studies.<sup>2</sup> The present essay contributes to this multidisciplinary reconceptualization by analyzing several claims relating to the history of Christianity and science.

The impression that Christianity is typically at war with science has been perpetuated by many specific myths about the history of science. I will debunk four of these myths.

1. The Dark Myth: Christianity produced 1000 years of anti-science, the “Dark Ages”.
2. The Flat Myth: Church-induced ignorance caused European intellectuals to believe in a flat Earth.
3. The Big Myth: A big universe has been a problem for Christianity.
4. The Demotion Myth: Copernicus demoted us from the cosmic center, and thereby destroyed confidence in a divine plan for humanity.

I will also explore how these four myths (false stories) have been incorporated into a larger non-theistic “myth” in the anthropological sense of that word. Anthropologists use the term “myth” to refer to a worldview-shaping narrative that awakens the imagination to interpret the world in certain ways (Witzel 2012).<sup>3</sup> Both kinds of myths analyzed here—the fake histories and a particular imaginative anthropological myth—condition us to

<sup>1</sup> (Elsdon-Baker and Lightman 2020).

<sup>2</sup> *Ibid.*, 10.

<sup>3</sup> (Witzel 2012).

interpret everything within the confines of scientism. Scientism is the view that only the sciences generate knowledge or rational belief. Scientism, as typically articulated, entails the opinion that reliable belief about divinity (theological realism) is impossible.

An integrated historical and philosophical analysis of scientism in relation to science–religion warfare myths is long overdue. This essay is a prolegomenon.

## 2. The Dark Myth: Christianity Produced 1000 Years of Anti-Science “Dark Ages”

Atheist biologist Jerry Coyne once wrote: “Had there been no Christianity, if after the fall of Rome atheism had pervaded the Western world, science would have developed earlier and be far more advanced than it is now.”<sup>4</sup> Theological realism infused in culture inhibits the growth of science, Coyne believes. He expresses his belief as a counterfactual if-then historical assertion. Coyne admits he “can’t prove this,” but he “maintains” it nonetheless. The situation is worse than this. There is no way to even test his statement by the methods of historiography or any other discipline.

At first glance, scientism and Coyne’s historical-sounding assertion seem to reinforce each other. If you want to be on the right side of history, then distance yourself from traditional religions that corrode your ability to think responsibly. This scientistic message appears to be advanced by appeal to the history of science. This is ironic because scientism ostensibly is about reserving the word “knowledge” for those things that can be “scientifically” supported, which includes passing rigorous tests. And yet Coyne’s scientism-motivated pseudo-historical statement is untestable. I will evaluate scientism later—citing the recent literature of its major proponents and opponents. For now, let us stick with testable historical inquiry.

Here is what we can objectively evaluate: Is there evidence that Christianity pushed the West into anti-scientific “Dark Ages” stretching from the fall of Rome to approximately 1450 AD? The historiography of science gives us reliable tools to assess this question. Although we do not have the space here to fully settle this question, the vignettes that follow show where recent scholarship points (Keas 2019).<sup>5</sup>

### 2.1. Early Medieval Light: 400–1100

The great Church Father Saint Augustine (354–430) laid some of the foundations for science. He contributed to Aristotelian physics in his *Literal Commentary on Genesis* (Harrison 2006; Lindberg 2003).<sup>6</sup> More broadly, Augustine expressed confidence in our ability to read the “book of nature” because it is the “production of the Creator.” (Eastwood 2013).<sup>7</sup> He insisted that we should proceed “by most certain reasoning or experience” to discern the most likely way God established “the natures of things,” a phrase that became a popular medieval book title for works emulating Augustine’s investigative approach (Eastwood 2013).<sup>8</sup>

The English monk Bede (673–735) studied and wrote about astronomy in the tradition of Augustine and Ptolemy. Historian Bruce Eastwood called Bede’s book *The Nature of Things* (ca. 701) “a model for a purely physical description of the results of divine creation, devoid of allegorical interpretation, and using the accumulated teachings of the past, both Christian and pagan.”<sup>9</sup> Note how Bede’s Christian worldview was compatible with analysis of the natural world as a coherent system of natural causes and effects.

<sup>4</sup> <https://whyevolutionistrue.wordpress.com/2013/10/18/did-christianity-and-other-religions-promote-the-rise-of-science>, accessed on 10 February 2021.

<sup>5</sup> (Keas 2019).

<sup>6</sup> (Lindberg 2003; Eastwood 2013).

<sup>7</sup> St. Augustine, *Contra Faustum Manichaeum* 32.20, as cited in (Harrison 2006).

<sup>8</sup> (Eastwood 2013).

<sup>9</sup> *Ibid.*, 307.

## 2.2. *The Light of the High Middle Ages: 1100–1450*

In approximately the 1100s, European intellectuals graduated from limited translations and commentaries on Aristotle to a more extensive recovery and further development of Aristotelian logic. As refined within a Christian worldview, this advance included a reasoning method well suited to natural science.

Scholars called this form of argument “*ratio*” (reason), contrasting it with mathematical demonstration. Mathematics begins with first principles thought to be certain and deduces conclusions that carry the same certainty. *Ratio*, in contrast, uses premises inferred as likely true from sensory experience, and then reasons from there to probable conclusions (Burnett 2013).<sup>10</sup>

*Ratio*, a logic appropriate to observational science, enriched the study of motion and change in the natural world. Historian Walter Laird writes, “The study of motion in the Middle Ages, then, was not a slavish and sterile commentary on the words of Aristotle . . . . Part of the measure of their success . . . is that some of these insights and results had to be rediscovered later by Galileo and others in the course of the Scientific Revolution.” (Laird 2013).<sup>11</sup>

The institution in which most scholars investigated natural motion is also noteworthy—the university. This Christian invention began with the University of Bologna in 1088, followed by Paris and Oxford before 1200 and more than fifty others by 1450. The papacy supported this unprecedented intellectual ferment (Grant 1984).<sup>12</sup>

Universities provided additional stimulus to the medieval translation movement already under way, in which Greek and Arabic texts were rendered in the common European intellectual tongue of Latin. This movement greatly outperformed the comparative trickle of imperial Roman translations. If European Christians had been closed minded to the earlier work of pagans, as the Dark Ages myth alleges, then it would be difficult to explain this ferocious appetite for translations.

The Franciscan cleric and university scholar Roger Bacon (ca. 1220–1292) read much of the newly translated work of earlier Greek and Islamic investigators, including Euclid, Ptolemy, and Ibn al-Haytham, or Alhazen (ca. 965–1040). By evaluating them and introducing some controlled observations—what we now call experiments—Bacon substantially advanced the science of light. (Lindberg and Tachau 2013).<sup>13</sup>

Subsequent authors summarized and reevaluated Bacon’s work, transmitting it through books used in university instruction. That is how it came to the attention of Johannes Kepler (1571–1630), whose account “helped spur the shift in analytic focus that eventually led to modern optics,” in the words of historian A. Mark Smith (Kepler and Donahue 2000; Smith 2014).<sup>14</sup>

By one estimate, 30 percent of the medieval university liberal arts curriculum addressed roughly what we call science (including mathematics) (Grant 1984).<sup>15</sup> Between 1200 and 1450, hundreds of thousands of university students studied Greco-Arabic-Latin science, medicine, and mathematics—as progressively digested and improved by generations of European university faculty.

Contrary to the Dark Ages myth, medieval European Christians cultivated the idea of “laws of nature,” a logic friendly to science, the science of motion, human dissection, vision-light theories, mathematical analysis of nature, and the superiority of reason and observational experience (sometimes even experiment) over authority in the task of explaining nature. Medieval trailblazers also invented self-governing universities, towering

<sup>10</sup> (Burnett 2013).

<sup>11</sup> (Laird 2013). There were some notable deficiencies in scholastic (medieval) methodology, but there is insufficient space here to cover this topic. For example, scholasticism often focused on logical abstractions that did not lead to rigorous knowledge of nature.

<sup>12</sup> (Grant 1984).

<sup>13</sup> (Lindberg and Tachau 2013).

<sup>14</sup> (Smith 2014) Inside jacket synopsis. See (Kepler and Donahue 2000).

<sup>15</sup> (Grant 1984).

cathedrals with stained glass, and much more. Although labeling *any* age with a single descriptor is problematic, the so-called Dark Ages would be far better labeled an “Age of Illumination”.

### 3. The Flat Myth: Church-Induced Ignorance Caused European Intellectuals to Believe in a Flat Earth

Celebrity astrophysicist Neil deGrasse Tyson is relatively ignorant about the early history of his own scientific discipline. Back in 2016, he responded to rapper B.o.B., a flat-Earth promoter, with a tweet. Tyson wrote, “Duude—to be clear: Being five centuries regressed in your reasoning doesn’t mean we all can’t still like your music.” Tyson follower Andy Teal responded: “Five centuries? I believe the knowledge of Earth’s shape goes back a bit farther than that.” Tyson tweeted back: “Yes. Ancient Greece inferred from Earth’s shadow during Lunar Eclipses. But it was lost to the Dark Ages.”<sup>16</sup> This modern perception of widespread medieval flat-Earth belief has been common in textbooks and popular literature since the 19th century (Russell 1991).<sup>17</sup>

#### 3.1. Church-Induced Ignorance?

People stopped believing in a spherical Earth during the Middle Ages? No. Medieval Europeans had many reasons for grasping that the Earth is round. Those reasons included the curved shadow of the Earth projected on the moon during a lunar eclipse. To deny medieval belief in a round Earth is to be guilty of what I call the Flat Myth. This is the most enduring component of the larger myth of the “Dark Ages.” The allegedly anti-science “Christian Dark Ages” never happened as typically claimed (see Section 2).

Tyson is obviously right about how ridiculous contemporary flat-Earth belief is. Some “believers” such as Shaquille O’Neal and Kyrie Irving of NBA fame have said they were only joking. And who can tell what the small number of people behind today’s flat-Earth societies *actually* think? If most of them are joking, it would come as little surprise. But the fact is that Tyson, probably the world’s most influential voice for science, is spreading misinformation about medieval views of Earth’s shape.

Tyson’s false ideas have a history. They trace back to writers in the 1800s. For example, the 19th-century chemist-historian John William Draper claimed that medieval Christians believed “the Scriptures contain the sum of all knowledge.” They therefore “discouraged any investigation of Nature,” including the study of the Earth’s shape (Draper 1874).<sup>18</sup> Supposedly this ignorance continued until the time of Columbus.

Consider the 1200 American college students to whom I have taught astronomy over the past quarter century. The vast majority (as indicated by a show of hands each semester) learned something false from their precollege teachers. They were told that Europeans in the Middle Ages were ignorant of the Earth’s roundness until Christopher Columbus proved it in 1492. Now they better understand how this fake history often perpetuates the myth of warfare between science and Christianity.

#### 3.2. Medieval Round-Earth Arguments

Imagine the year is 1300. You are a student at the University of Salamanca, Spain’s oldest university. In class, you have studied Aristotle’s argument for a spherical Earth based on the changing positions of the stars as one travels north or south. This was standard

<sup>16</sup> <https://twitter.com/neiltyson/status/692939759593865216>, accessed on 10 February 2021.

<sup>17</sup> (Russell 1991) Astronomy textbooks that have taught the false idea that medieval Christians believed in a flat Earth include the following: (Fix 2011, p. 58; Birney 1969, p. 15) (where he writes that medieval “Church scholars refused to accept the notion that the earth was round. Anyone, they reasoned, could see that it was flat.”); (Fath 1944, p. 25; Moulton 1906, p. 114; Todd 1897, p. 77; Darley 1830, p. 26; Carey 1824, p. 26; Smith and M’Donald 1818, pp. 20–21). These textbooks sometimes cast supposed medieval flat Earth belief as due to alleged anti-science Catholicism or due to a more general warfare between science and Christianity. Sometimes they do not explicitly convey any warfare between science and any form of Christianity. But as Russell (1991) shows, many other more popular accounts (since the mid-19th century) of the history of ideas about Earth’s shape have tended to push the science–Christianity warfare thesis.

<sup>18</sup> (Draper 1874).

in the medieval curriculum (Cormack 2009).<sup>19</sup> You wish to demonstrate it for yourself. How will you do this?

First you note that the apparently motionless North Star is located at approximately 40 degrees above your horizon in Salamanca. Then you travel to the southernmost point of Europe. There, you find that this star appears only approximately 35 degrees above the horizon. Why the change of angle? Almost every medieval university student learned a simple explanation: the Earth is round. This and other reasonable arguments combined to present a very strong case (Cormack 2015).<sup>20</sup>

### 3.3. Back Around to Today

Here is a surprise. My students have typically been *less* able to defend the Earth's roundness by such scientific arguments than the average medieval student. Upon completing my astronomy course, they finally caught up to the Middle Ages (as indicated by interactions with my students in laboratory settings in which they reenacted historical dialogues and observations concerning the science of Earth's shape)!

Virtually all students today accept the roundness of Earth as a fact. But they are unable to reason from observations to this conclusion. This is not an isolated observation, unfortunately. Science today is, more often than not, taught this way: as something to be accepted, not something understood through arguments for and against particular theories. That is a loss for students. Things were, in this respect, brighter in the so-called Dark Ages.

I have largely debunked the anti-Christian myth about Earth's *shape*. Let us examine a popular myth about its *size*—its utter smallness in relation to a really big universe.

## 4. The Big Myth: A Big Universe Has Been a Problem for Christianity

Self-appointed spokesmen for science often use the enormous size of the cosmos, with its billions of galaxies, as a club to beat up on Christianity. They say people in the Western tradition had to wait till modern science to grasp that the universe was huge, and had to shed historic Judeo-Christian views to do so. This is not true.

### 4.1. Bill Nye, *The Scientism Guy*

Prominent scientists from centuries past, including Nicolaus Copernicus (1473–1543) and Blaise Pascal (1623–1662), recognized that the universe is vast.<sup>21</sup> They saw in this no fatal contradiction with their Christian beliefs. Yet celebrity TV science educator Bill Nye, the “Science Guy,” is among those who suggest that the sheer scale of the cosmos means humans are insignificant in any conventionally religious sense. In the last minutes of his 2010 “Humanist of the Year” acceptance speech, Nye—speaking for science and all humanity—delighted the American Humanist Association with this:

I'm insignificant . . . . I am just another speck of sand. And the earth really in the cosmic scheme of things is another speck. And the sun an unremarkable star . . . . And the galaxy is a speck. I'm a speck on a speck orbiting a speck among other specks among still other specks in the middle of specklessness. I suck.<sup>22</sup>

Nye's audience laughed approvingly, no doubt because they believed that “I suck” really means “religion sucks”. We know this, in part, because near the end of his speech he declared that humans *are* significant after all because we can do science (in ways that allegedly free us from religion).

<sup>19</sup> “From the seventh century to the fourteenth, every important medieval thinker concerned about the natural world stated more or less explicitly that the world was a round globe, many of them incorporating Ptolemy's astronomy and Aristotle's physics into their work. Thomas Aquinas (d. 1274), for example, followed Aristotle's proof in demonstrating that the changing positions of the constellations as one moved about on the earth's surface indicated the spherical shape of the earth.” (Cormack 2009, p. 31).

<sup>20</sup> (Cormack 2015; Nothaft 2017).

<sup>21</sup> (Keas 2019, pp. 13–17).

<sup>22</sup> <https://www.youtube.com/watch?v=S4dZWbFs8T0>, accessed on 10 February 2021.

So Bill Nye is not so much *the science guy* as he is *the scientism guy* (as is Tyson). Scientism is the view that only the sciences (broadly or narrowly defined) generate rational belief.<sup>23</sup> According to the most influential articulations of this view, reliable belief about divinity is impossible.

As typically framed, scientism (at least) partially undermines itself because the very viewpoint of scientism is a non-scientific (philosophical) belief—a philosophical theory or stance in the field of epistemology—that declares non-scientific belief formation to be much less reliable (or completely unreliable). Some scientism advocates classify philosophy as a kind of science to avoid this self-referential inconsistency. But then other problems surface, such as when said philosophy is constrained by atheist assumptions that rule out the legitimacy of knowledge of divinity. This begs the God question. But that is what a recent study of scientism does (and this question-begging approach has some sympathizers) (de Ridder et al. 2018; Mäki et al. 2018).<sup>24</sup>

Johan Hietanen and his five “Helsinki Circle” colleagues have proposed that the “sciences” include certain philosophical ideas (including scientism itself to avoid its otherwise self-referential incoherence), but exclude the truth claims of revealed religion. How so? “Divine revelations” are “non-evaluable” sources because their alleged “divine nature” is “inscrutable”, they assert (Hietanen et al. 2020).<sup>25</sup>

But there are extensive arguments for the resurrection of Jesus, which (if successful) help warrant acceptance of his teaching as divine revelation. Scholars such as William Lane Craig have framed such arguments (Craig 2008; Crossan et al. 2006; Geivett and Habermas 2014; Habermas 2005; Habermas and Licona 2004; Habermas et al. 2009).<sup>26</sup> Craig appeals to some of the same theory virtues used in the sciences to infer that the resurrection of Jesus is the best explanation of the relevant historical data. Craig’s choice of theoretical virtues for evaluating naturalistic theories in comparison to the resurrection theory are: evidential accuracy, internal coherence, universal coherence, and unification (Keas 2018).<sup>27</sup> That is four out of twelve major theoretical virtues widely recognized by philosophers of science. Indeed, Hietanen and his colleagues (and many other scholars) acknowledge that inferring the best explanation of historical data (human history as an academic discipline) counts as a rigorous “human science.”<sup>28</sup> That is what Craig does in his historical argument for Jesus’ resurrection.

So it is possible to evaluate some of the central truth claims of Christianity by some of the criteria (theoretical virtues) used in the natural and human sciences. Those theoretical virtues include evidential accuracy, causal adequacy, explanatory depth, internal consistency, internal coherence, universal coherence, beauty, simplicity, unification, durability, fruitfulness, and applicability.<sup>29</sup> These are the major criteria for what is the best explanation of the relevant data for a question at hand (with latitude for modification appropriate to specific disciplines). Although scholars have various opinions about the outcome of this evaluation of Christianity, the fact that it is possible shows that scientistic attempts to disparage such academic work as “non-evaluable” (as my Helsinki philosophical colleagues express it) are unconvincing. Who is guilty of groundless dogma in this case? (Plantinga 2018).<sup>30</sup>

<sup>23</sup> Some weaken this claim to say that the sciences are the *best* source of knowledge. This grants some legitimacy to non-scientific fields, but with a weaker epistemic standing.

<sup>24</sup> The best recent anthology that includes both proponents and critics of scientism is (de Ridder et al. 2018). Another helpful anthology is (Boudry and Pigliucci 2018). A closely related topic is addressed in (Mäki et al. 2018).

<sup>25</sup> (Hietanen et al. 2020). For an often overlooked alternative assessment of scientism see (Moreland 2018).

<sup>26</sup> (Craig 2008) See also (Habermas 2005; Habermas and Licona 2004; Crossan et al. 2006; Habermas et al. 2009; Geivett and Habermas 2014).

<sup>27</sup> This transposes Craig’s terminology into the more standard terms in (Keas 2018).

<sup>28</sup> (Hietanen et al. 2020, p. 538).

<sup>29</sup> (Keas 2018).

<sup>30</sup> Alvin Plantinga offers a different critique (but it is compatible with my critique) of scientism’s rejection of many religious truth claims. See (Plantinga 2018).

#### 4.2. C. S. Lewis on Dogma and the Universe

The British philosopher and literary scholar C. S. Lewis in his 1943 essay “Dogma and the Universe” effectively demolished Nye’s scientific way of thinking about the human implications of cosmic immensity. Lewis begins with an analogy. Imagine how a doctor determines that someone has been poisoned to death. The doctor can conclude this reasonably if “he has a clear idea of that opposite state in which the organs would have been found if no poison were present.” Similarly, if we try to disprove God by pointing out how small we are in a huge cosmos, we should clearly identify the kind of universe that is expected if God did exist.

But Lewis argues that such a project fails, because it is doomed to “succeed” no matter what the facts may be. “Whatever space may be in itself . . . we certainly perceive it as three-dimensional, and to three-dimensional space we can conceive no boundaries,” he writes. So we naturally feel that the cosmos is huge. What if we discovered nothing but our own sun and moon in such seemingly infinite space? “This vast emptiness would certainly be used as a strong argument against the existence of God,” Lewis notes. In that case, atheists would argue that no God would create such vast amounts of wasted empty space.

Lewis runs through the other options: “If we discover other bodies, they must be habitable or uninhabitable: and the odd thing is that both these hypotheses are used as grounds for rejecting Christianity.” If there are billions of habitable planets, then the skeptic would likely say that this means humans are not special. We would be lost in a crowd of aliens, or so the story goes.

Lewis continues: “If, on the other hand, the earth is really unique, then that proves that life is only an accidental by-product in the universe, and so again disproves our religion.” (Lewis 1970).<sup>31</sup> Atheists in that case might further complain that no God would create trillions of sterile planets—what a lousy design. What we have here is not truth seeking. It is scientific game rigging.

But what about our position within this enormous universe? Has modern science shown it to be mediocre? Our next myth gets the answer wrong.

### 5. The Demotion Myth: Copernicus Demoted Humans from the Cosmic Center, and thereby Destroyed Confidence in a Divine Plan for Humanity

In episode 8 of the 2020 *Cosmos* season, “Possible Worlds,” host Neil deGrasse Tyson delivered a favorite bit of wrong revisionist history: the claim that astronomer Nicolaus Copernicus (1473–1543) demoted humans from the privileged center of the universe and thereby challenged religious doctrines about human importance. “Demoting the earth from the center of the universe was a severe blow to human self-esteem,” he claimed on this *Cosmos* episode, which aired on the National Geographic Channel.<sup>32</sup>

Tyson is among a chorus of voices peddling this trope. Atheist Christopher Hitchens, for instance, called Christianity’s Earth-centered view its “greatest failure.”<sup>33</sup> Really?

#### 5.1. The Real Copernicus

Copernicus, a canon in the Catholic Church, did indeed challenge an Earth-centered cosmology, but he considered his sun-centered astronomical model to be compatible with Christianity. Indeed, he declared on one occasion that God had “framed” the cosmos “for our sake.” (Danielson 2001).<sup>34</sup> Most other early modern advocates of heliocentric astronomy similarly affirmed the harmony of the Bible with the new astronomy.

The myth that Copernicus demoted humans assumes that premodern geocentrism (Earth-centered astronomy) exalted humankind. But according to the geocentric view of the

<sup>31</sup> (Lewis 1970).

<sup>32</sup> <https://www.nationalgeographic.com/tv/shows/cosmos-possible-worlds>, accessed on 10 February 2021.

<sup>33</sup> <https://www.youtube.com/watch?v=0tYm41hb48o>, accessed on 10 February 2021.

<sup>34</sup> (Danielson 2001).

ancient Greeks—widely accepted well into the 17th century—the Earth was at the bottom of the universe, the dregs. “Up” pointed to the exalted, incorruptible cosmic heaven.

Thus could Galileo, in the century after Copernicus, write, “I will prove that the Earth does have motion . . . and that it is not the sump where the universe’s filth and ephemera collect.”<sup>35</sup> He framed his argument as a promotion, not a demotion, for Earth and its inhabitants.

### 5.2. Distorting Copernicus

The idea that Copernicus demoted humans and thus challenged religion was invented in the mid-1600s as an anti-Christian narrative. By the mid-1800s, the myth had entered astronomy textbooks, and by the 1960s it had become textbook orthodoxy.<sup>36</sup>

The latest edition of this narrative enlists the discovery that exotic dark matter may predominate in the universe: “It is interesting to consider how far we have moved from our Earth-centered view,” write Stephen Schneider and Thomas Arny. They claim that our cosmic location is not special, despite recent evidence otherwise that they ignore (Gonzalez 2014; Wei and Wu 2018).<sup>37</sup> They continue: “And now we are realizing that the kind of matter that makes up everything we know is just a minor kind of matter in the universe. This is the Copernican revolution taken to extremes!” (Schneider and Arny 2018).<sup>38</sup>

This is subjective spin, not rigorous science. One could just as easily have declared humans unimportant owing to our bodies being composed mostly of common, humdrum hydrogen, oxygen, and carbon. “See, there is nothing special about the material me!” Thus, one could invoke either the commonness or rarity of our material composition as grounds for our unimportance. Humans in any conventionally religious sense are losers either way: heads or tails. It is a rigged game, not a serious argument for a godless view of life and the cosmos.

### 5.3. Spiritual Atheism

Some atheistic astronomers attempt to salvage some meaning and dignity from the Copernican “demotion.” For example, in his book *Astrophysics for People in a Hurry*, Neil deGrasse Tyson argues that despite a series of scientific discoveries humiliating to humankind, we can still find meaning and purpose because “the cosmic perspective is spiritual—even redemptive—but not religious.” (deGrasse Tyson 2017).<sup>39</sup>

Tyson insists the Copernican demotion story is redemptive because it saves us from religious ignorance: “The cosmic perspective opens our eyes to the universe, not as a benevolent cradle designed to nurture life but as a cold, lonely, hazardous place . . . . The day our knowledge of the cosmos ceases to expand, we risk regressing to the childish view that the universe figuratively and literally revolves around us.”

If Tyson had discovered that our solar system was jam packed with dozens of smart extraterrestrial species (and billions of other kinds of intelligent life “out there” further), he surely would have used this as an excuse to remove humanity from any special place within a divine plan. Because of never-ending godless stunts like this (regardless of the evidence), C. S. Lewis (as cited above) identified such maneuvers as hopelessly subjective. But it seems reasonable when one’s plausibility structures have been shaped by scientism. Lewis was a pioneering critic of such scientific storytelling (West 2012).<sup>40</sup>

Tyson’s *Cosmos* series will broadcast this spiritual atheism to schools and colleges. How so? Darwin is said to be the “greatest spiritual teacher of the last 1000 years.” He “worshiped nature,” Tyson proclaims approvingly. Tyson also announced: “Life is an

<sup>35</sup> Ibid., 150.

<sup>36</sup> (Keas 2019).

<sup>37</sup> (Gonzalez 2014; Wei and Wu 2018).

<sup>38</sup> (Schneider and Arny 2018).

<sup>39</sup> (deGrasse Tyson 2017). See also the foreword to (Bennett et al. 2017).

<sup>40</sup> (West 2012).



emergent property of chemistry. Science is an emergent property of life. Life can begin to know itself." In *Cosmos* episode 7, Tyson shares his strange belief that bees and trees can think much like us. But, of course, these animals and plants cannot do science! So humans are special after all in the spirituality of the new cosmic atheism.

So, the new atheists want it both ways. On the one hand, they claim humans are insignificant—provided we conflate significance with size and geometric centrality. On the other hand, the process of "scientific discovery" that allegedly implicates God's nonexistence renders *us* significant because we are smart and brave enough to reach this conclusion. This is confused atheist sentimentality parading as though it were science.

Such thinking should not shock us, in light of mythologist Gregory Schrempf's study demonstrating that popular science writing often tries to "show that reality as envisioned by science compensates for the loss of the fantasies allegedly offered by [traditional religious] myth," accomplished, he argues "through the construction of a new myth." (Schrempf 2012).<sup>41</sup>

Let us explore further how the 2020 *Cosmos* TV documentary perpetuates such non-theistic mythology dressed up as "science." To do so, we turn to the final episode of that series.

## 6. *Cosmos* TV Series Concludes with Triumphant Non-Theistic Mythology

Like the 1980 original with Carl Sagan and the 2014 reboot with Dr. Tyson, the 2020 *Cosmos* series advanced numerous myths about the relationship between science and religion. Here is the final narration from *Cosmos* 2020:

Stars make worlds, and a world made life. And there came a time when heat shot out from the molten heart of this world and it warmed the waters. And the matter that had rained down from the stars came alive. And that star stuff became aware. And that life was sculpted by the earth, and it struggles with the other living things. And a great tree grew up, one with many branches. And six times it was almost felled, but still it grows. And we are but one small branch, one that cannot live without its tree. And slowly we learned to read the book of nature, to learn her laws, to nurture the tree, to become a way for the cosmos to know itself, and to return to the stars.<sup>42</sup>

Tyson ends his summary of cosmic history since the Big Bang with this story focused on Earth. It sounds like the book of Genesis—minus God. Contemplating this parallel gives us greater appreciation for Tyson's mantra, cited above, that "the cosmic perspective is spiritual—even redemptive—but not religious." Tyson's "cosmic perspective," especially as expressed in the *Cosmos* 2020 quotation above, is a worldview-shaping narrative that awakens the imagination. That means it is a "myth" in the way anthropologists use that term.

### 6.1. *Interpreting the Myth*

When connected with earlier *Cosmos* episodes that give details (often without sufficient evidence), this narrative answers profound questions. Or it seeks to answer them. Where did we come from? Answer: we are star stuff shaped by the branching tree of evolution, powered by unguided material processes. What is our purpose (teleology)? Answer: to be one of the ways, along with extraterrestrial civilizations, that the universe knows itself through science. Where are we going (eschatology)? Answer: our destiny is to become connected with civilizations located around countless other stars, and thereby be liberated completely from anti-science terrestrial religions and scientific infancy (Tyson earlier held a baby to make this point). Six times terrestrial life worked hard to avoid total extinction and

<sup>41</sup> (Schrempf 2012).

<sup>42</sup> <https://www.nationalgeographic.com/tv/shows/cosmos-possible-worlds>, accessed on 10 February 2021.

succeeded, but in the seventh period we will enter our cosmic rest of extraterrestrial (ET) enlightenment.

While resting in the lap of ET, we will read the *Encyclopedia Galactica*, Tyson suggests. This book represents the fantastically advanced accumulated knowledge of cosmic communal intelligent life, an idea that Carl Sagan helped transfer from science fiction to “documentary” film back in the 1980 *Cosmos* series. We will enjoy heavenly bliss while reading the good book. That is a key message from the *Cosmos* franchise.

#### 6.2. *Seven Wonders of the New World*

The season finale is titled: “Seven Wonders of the New World.” In biblical terms, seven symbolizes completion. Are we uncovering Team Tyson’s numerological opium for the masses? The *Cosmos* storytellers invented a 2039 New York World’s Fair with seven theme park attractions that celebrate cosmic history and life’s heroic accomplishments. The year 2039 would be the centennial of the 1939 New York World’s Fair that helped awaken Carl Sagan’s scientific-materialist imagination (also depicted endearingly in this final episode). Sagan’s legacy grows with each multimillion-dollar retelling.

Such World’s Fair science-fiction storytelling works well as it builds upon a certain measure of legitimate science. There are five widely recognized mass extinction events in our planet’s history. Throw in human-caused global warming as the sixth catastrophe (purportedly in the making in our own time) and you have a great recipe for cosmic mythology. Let us save our Mother Earth in act six and join the extraterrestrial choir of enlightened ETs in the triumphant seventh act. This secular eschatology also entails opposing those fanatically religious Earth-centered, flat-Earth-believing science deniers who are destined for extinction. Science is our only salvation. But, as shown above, Christianity was neither the motivation for flat-Earth belief nor unthinking resistance to an orbiting Earth.

#### 6.3. *Prophets and Preachers*

The makers of *Cosmos* wish to reach your heart with their message. It is a materialistic imitation of biblical religion and eschatology. Mother Nature is god and Tyson is her prophet. “Learn her laws,” he declares, echoing Moses. Nurture the Tree of Life she has mindlessly created. Many times in the series, Tyson says “Come with me,” imitating Jesus’ call for disciples. The grand story is dressed up to look scientific, but at heart it is mostly materialistic mythology rooted in scientism. It teeters between atheism and pantheism (Midgley 1996).<sup>43</sup>

#### 6.4. *Back Down to Earth Day (or Easter?)*

The season finale of *Cosmos* 2020 aired on April 20, which was two days before Earth Day. Many have celebrated Earth Day over the past 50 years within a Deep Ecology worldview that owes much to pre-modern pagan Earth worship. Easter, which also falls at this time of year, had long ago largely displaced the old Earth-worshipping holidays in Europe. Do the makers of *Cosmos* hope that Earth Day will win back this time of year from Easter? It sure looks that way. It is no surprise that the National Geographic Channel blasted *Cosmos* viewers with many Earth Day-related TV advertisements (I lost count of just how many).

Meanwhile, after celebrating or ignoring Easter and Earth Day, many coronavirus-besieged Earthlings toggled between anxiety and quarantined boredom. *Cosmos* 2020 did not seem to be helping much. For some, futuristic dreams via *Cosmos* might bring comfort. Team Tyson envisions how in the near future a person’s neural network (connectome) might be resurrected. In this future world, maybe with ET’s help (or so the story goes), we will be able to recreate a deceased person’s connectome. It is your own personal techno-Easter, if you will (provided that others in the future approve of your reappearance). The

<sup>43</sup> (Midgley 1996).

details for how this could happen are not provided. Sci-fi is under no such obligation. The constraints on this kind of storytelling are minimal.

Carl Sagan's widow, Ann Druyan, is the key figure who made the *Cosmos* series rise again (twice now). She had this to say about her team's storytelling:

Every story that we tell has to satisfy different criteria. . . . We're aiming for your brain, your eye, your heart, your senses, your ear . . . via effects. Everything has to be working together in concert to give you a consummate experience, and to attract you to want to know more.<sup>44</sup>

Referring to traditional religions, especially the one that celebrates Easter, she finally says in the same interview: "I think we have a much better story to tell than they do."

### 6.5. More on "Telling the Story"

Hollywood atheist Seth MacFarlane introduced Ann Druyan to Brannon Braga, who helped Ms. Druyan produce the two reboots of *Cosmos*. Speaking at the 2006 International Atheist Conference, Braga celebrated his part in creating "atheistic mythology" in more than 150 episodes of *Star Trek: Next Generation*. He summed up his mission as showing that "religion sucks," "isn't science great," and finally "how the hell do we get the other 95 percent of the population to come to their senses?" These are remarkable confessions.

According to Braga, teaching atheistic myth is the work of sci-fi films and TV documentaries such as *Cosmos* (Braga 2006).<sup>45</sup> Indeed, he said that *Cosmos* 2014 was designed to combat "dark forces of irrational thinking." He emphasized: "Religion doesn't own awe and mystery. Science does it better." (Honorof 2014; Klinghoffer 2014).<sup>46</sup> But as I have argued, rendering Christianity as the historical enemy of science is itself an exercise in unreasonable and reckless historiography. Myth, not science, recognizes the cosmos as "all that is, or ever was, or ever will be." Sagan knew this statement would inspire awe because it imitated the biblical description of God. No doubt Braga and his team of like-minded creators were delighted to rerun this mythical mantra at the beginning of *Cosmos* 2014. It served well what they take to be the greater good of anti-theism.<sup>47</sup>

## 7. Conclusions

I have debunked four myths that make Christianity appear as if it is perpetually at war with science: the Dark Myth, the Flat Myth, the Big Myth, and the Demotion Myth. Discussion of several of these myths included critique of an associated misconception, that none of the core teachings of Christianity can be evaluated using some of the criteria for good theories in the sciences (theoretical virtues). This methodological slander falsely preconditions us to think of Christianity as a hindrance to the growth of the evaluative procedures used in the sciences. The history of science shows otherwise.

This methodological science–religion warfare thesis deserves greater attention. It is a central component of scientism. Indeed, it helps unite many disparate versions of scientism.

I have only pointed to the mere existence of historical arguments for Jesus' resurrection that appeal to some of the same theoretical virtues used in the sciences. Future work on this topic would need to evaluate just how well competing naturalistic theories—in comparison to the resurrection theory—instantiate a wide range of theoretical virtues. The existing literature<sup>48</sup> does so by reference to only a subset of the major theoretical virtues that have been well studied by philosophers. This needs to be expanded.

However, for our purposes here, I only needed to establish the fact that the theory "God raised Jesus from the dead" has been subject to serious assessment by reference to

<sup>44</sup> <https://www.technewsworld.com/story/86584.html>, accessed on 10 February 2021.

<sup>45</sup> (Braga 2006).

<sup>46</sup> Marshall Honorof interview of Brannon Braga. (Honorof 2014). Rebooting *Cosmos*. *Yahoo News*, January 14, as cited in (Klinghoffer 2014).

<sup>47</sup> (Keas 2019, pp. 153–54).

<sup>48</sup> See footnote 26.

some of the theoretical virtues. This work has included dialogue with respected scholars such as the late atheist-turned-deist Anthony Flew.<sup>49</sup> This is just the beginning of a project to show that scientistic attempts to disparage such academic work as totally “non-evaluable” is mostly just uninformed anti-theistic sentiment. We can do better—atheists, theists, and others. Let us work together.

The four historical science–religion myths function as part of a larger warfare narrative about science and Christianity. This misleading warfare thesis often comes packaged with an alternative anti-theistic “myth” in the anthropological sense—in this case, a worldview-shaping narrative that awakens the imagination to interpret the world in scientistic and non-theistic ways. I hereby call this the *scientistic warfare myth*. The *Cosmos* documentary franchise has spent millions to promote it globally. Although many have found such storytelling inspiring, it has major flaws, including a disrespect for historical accuracy in its propagation of an outmoded myth of the essential conflict of science and religion. Further, it advances its own sensationalist redemptive message of salvation through extraterrestrial enlightenment. The real conflict is not between science and Christianity, but between scientism and religion. Scholars owe it to the public to both discuss these deficiencies among themselves as well as make the results of their work accessible to a broad audience.

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<sup>49</sup> (Habermas et al. 2009).

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