

Feature Article: JAF3374

MATERIALISM FOR THE MASSES: COSMOS REBOOT DISTORTS THE HISTORY OF SCIENCE AND SCRUBS THE EVIDENCE FOR INTELLIGENT DESIGN

by Casey Luskin

This article first appeared in the CHRISTIAN RESEARCH JOURNAL, volume 37, number 04 (2014). For further information or to subscribe to the CHRISTIAN RESEARCH JOURNAL, go to: <http://www.equip.org/christian-research-journal/>.

SYNOPSIS

In the original 1980 *Cosmos* series, Carl Sagan famously declared, “The cosmos is all that is, or ever was, or ever will be.” This spring, a new thirteen-episode *Cosmos* series aired on Fox, aiming to bring Sagan’s materialistic message to a new generation. Hosted by atheist astrophysicist Neil deGrasse Tyson, and executive produced by atheist comedian Seth MacFarlane and atheist Star Trek writer Brannon Braga, the series has an unhidden antireligious agenda.

The *Cosmos* reboot has been sharply criticized—even by evolutionists—for inventing stories about religious persecution of scientists while whitewashing religion’s positive historical influence on science. It promotes “unguided” and “mindless” evolution while omitting scientific evidence that challenges neo-Darwinism or supports intelligent design. It promotes the Copernican Principle, claiming it is a “delusion” to believe Earth occupies a “privileged position.” The series seeks to inspire an atheistic scientific utopian vision of the future by throwing off the shackles of religion, and branding dissenters from the “consensus” as unthinking “deniers” who lack “scientific literacy,” and threaten human progress. Ironically, the show endorses nonconsensus views, such as panspermia and the multiverse.

While the new *Cosmos* boasts high quality computer-generated imagery and offers lucid explanations of uncontroversial scientific topics, it was created by celebrity

atheists seeking to advance a materialistic worldview and public policies consistent with their ideology. Public school teachers have already expressed their intent to use *Cosmos* in the classroom. It is therefore vital to understand *Cosmos's* agenda and be prepared to rebut its errors and omissions regarding history and science.

If there were any doubt that the rebooted *Cosmos* series would be politically charged and have a materialistic message, consider what viewers saw in the first sixty seconds of its Fox premiere on March 9. The opening featured President Obama, with the Presidential Seal in the background, endorsing the series and praising “the spirit of discovery that Carl Sagan captured in the original *Cosmos*.” Taken alone, Obama’s words are uncontroversial and politic. However, *immediately* following the president’s statement, the show replayed Sagan’s famous materialistic credo from the original 1980 *Cosmos* series, stating: “The cosmos is all that is, or ever was, or ever will be.”

Is this what President Obama meant when he promised in his first inaugural address to “restore science to its rightful place”?¹ Or did the president merely provide a general endorsement, which was co-opted by the producers to create the appearance he had endorsed Sagan’s atheistic worldview? Whatever the case, the show’s intent to open with a heavy-hitting endorsement of materialism was loud and clear.

CELEBRITY ATHEIST ACTIVISM

In the second episode, astrophysicist Neil deGrasse Tyson, the series’ host, explains that life is the result of “unguided” and “mindless evolution.” Knowing Tyson’s personal views, this is unsurprising. Bill Moyers described Tyson as the “unabashed defender of knowledge over superstition and clearly the rightful heir to Carl Sagan’s curiosity and charisma.” Tyson admitted to Moyers that *Cosmos* has larger, nonscientific goals, stating we must “think of ‘*Cosmos*’ not as a documentary about science,” but rather about “why science matters” and why “science is an enterprise that should be cherished as an activity of the free human mind.” He hopes after watching *Cosmos*, “it’s these states of mind that you carry with you for the rest of your life.”

And what are those “states of mind”? When asked by Moyers whether faith and reason are compatible, he answered, “I don’t think they’re reconcilable,” and later stated, “God is an ever-receding pocket of scientific ignorance.”² A Tyson fansite condenses his worldview into the following mission—taken from an apparent Tyson quote: “The more I learn about the universe, the less convinced I am that there’s any sort of benevolent force that has anything to do with it, at all.”³

Through *Cosmos*, Tyson aims to influence not only the public's worldview but also to "compel the electorate to think scientifically" so "they won't tolerate elected officials" whom he calls "scientifically illiterate."⁴ In particular, he wants to convince people to exclude views he deems "religious" from the science classroom: "You're not doing science. This is not science. Keep it out."⁵

The Unknown War of Knowledge vs. Faith

And just what are the views *Cosmos* hopes to stigmatize? In an interview with the *Los Angeles Times*—titled "Seth MacFarlane Hopes 'Cosmos' Counteracts 'Junk Science,' Creationism"—executive producer Seth MacFarlane acknowledged the series' intent to oppose "a resurgence of creationism and intelligent design quote-unquote theory," which has caused "a real vacuum when it comes to science education." MacFarlane is concerned about "the rise of schools questioning evolution," which is "incredibly damaging to the evolution of any society," and means "we've lost our way in terms of our scientific literacy."⁶

MacFarlane is known for creating *Family Guy* (which he admits is "not family-friendly"⁷), and was roundly criticized—even by the left—for his "juvenile"⁸ performance as the 2013 Oscars host, that lacked "the ability to translate"⁹ for mainstream America. Why was this comedian tapped as an executive producer for *Cosmos*? Probably due to his status as a celebrity atheist and expectations he could contextualize Sagan's worldview for a Millennial audience. As MacFarlane has stated, "There have to be people who are vocal about the advancement of knowledge over faith."¹⁰

Another executive producer of *Cosmos* is former *Star Trek* writer Brannon Braga. At an atheist conference in 2006, Braga described his involvement in *Star Trek* as creating "atheist mythology," and his "conviction that religion sucks, isn't science great, and how the hell can we get the other 95% of the population to come to their senses?" He said *Star Trek* provides a "template for a world" where "religion has been vanquished, and reason drives our hearts"—a future he "longs for."¹¹ *Cosmos* is apparently an attempt to achieve these goals, as he stated the series aims to combat "dark forces of irrational thinking," since "religion doesn't own awe and mystery. Science does it better."¹²

A final writer and executive producer on the *Cosmos* reboot is Ann Druyan, who cowrote the 1980 *Cosmos* series and married Carl Sagan the following year.

These celebrity atheists now seek to use *Cosmos* to promote their views to the public.

POSITIVES ABOUT COSMOS

Before offering further critique, it's important to appreciate genuine positives about the series. The expensive computer-generated imagery that animates the *Cosmos* reboot is spectacular, and successfully appeals to sci-fi fans, probably reflecting Braga's influence. Tyson tours the universe in a sleek CGI-generated "Spaceship of the Imagination," giving viewers a front-row seat for supernova explosions, black holes, and brilliantly animated alien worlds.

Another positive is Tyson's gifting as a science communicator. Set to outstanding computer animation, he offers lucid explanations of atomic structure, DNA, the electromagnetic spectrum, stellar spectroscopy, molecular machines, plate tectonics, and numerous other scientific concepts.

These elements are sure to spark student interest in science, and public school teachers are already expressing their intent to use *Cosmos*.¹³ If only Tyson had used the series simply to communicate science, rather than science plus a heavy dose of materialist philosophy.

DISTORTING THE HISTORY OF SCIENCE

Throughout *Cosmos*, Tyson invokes the theme that religion is at war with science and opposes scientific advancement. The first episode covers the sixteenth-century philosopher Giordano Bruno, whom Tyson says lived in a world without "freedom of speech" or "separation of church and state," and fell prey to the "thought police." The program shows angry Catholic priests with evil-sounding British accents dressed in full religious garb burning Bruno at the stake.

This story is simply untrue. Bruno wasn't a scientist, and he was not executed for promoting heliocentrism. As Jay Richards points out:

*Bruno's execution, troubling as it was, had virtually nothing to do with his Copernican views. He was condemned and burned in 1600, but it was not because he speculated that the Earth rotated around the sun along with the other planets. He was condemned because he denied the doctrine of the Trinity, the Virgin Birth, and transubstantiation, claimed that all would be saved, and taught that there was an infinite swarm of eternal worlds of which ours was only one.*¹⁴

Even staunch evolutionists—people strongly predisposed to support *Cosmos*—have criticized the series' false claims about Bruno and scientific history. Hank Campbell points out that Bruno not only denied the church's teachings but also *promoted the occult worship of Egyptian deities*. Campbell notes, "Bruno was only revived as a 'scientist' and a martyr for science by anti-religious humanists in the 19th century."¹⁵ Likewise, Peter Hess of the National Center for Science Education writes, "I also saw—among the compelling video of the solar system and galaxies—considerable slipshod history of science and a curiously antireligious bias....It is troubling that *Cosmos*—as its only historical background—chose to portray a fallaciously interpreted version of the tragic story of Giordano Bruno."¹⁶

It is tragic that Bruno was killed for his beliefs, however heretical they were. But this was not a case of the church persecuting a scientist—it was a case of the church persecuting an occult philosopher. *Cosmos* rewrites history to fit atheist myths.

SCRUBBING RELIGION'S POSITIVE INFLUENCE ON SCIENCE

While *Cosmos* promotes false stories about religion's opposition to science, it scrubs religion's positive historical influences on science. In the third episode, Tyson claims Isaac Newton's religious studies "never led anywhere," since faith serves as "the closing of a door. It doesn't lead to other questions." The message is simple: doing science requires throwing off the shackles of religion.

Again, history tells a different story. The founders of modern science, including Newton, were inspired to research *precisely because of their religious beliefs*. Newton believed in a loving, truthful, personal God who created an orderly, intelligible universe—one that God wanted us to discover and enjoy. These theological beliefs propelled Newton and others to investigate nature. Tyson tells viewers none of this, promoting a revisionist history that ignores the views of numerous prominent historians of religion and science.

John Hedley Brooke explains that early scientists "saw the study of nature as a religious duty," since, "for Newton, as for Boyle and Descartes, there were laws of nature only because there had been a Legislator."¹⁷ Holmes Rolston likewise explains: "It was monotheism that launched the coming of physical science, for it premised an intelligible world, sacred but disenchanting, a world with blueprint, which was therefore open to the searches of the scientists. The great pioneers in physics—Newton, Galileo, Kepler, Copernicus,—devoutly believed themselves called to find evidences of God in the physical world."¹⁸

Ian Barbour explains how religion inspired the scientific revolution: "The charter of the Royal Society instructed its fellows to direct their studies 'to the glory of God and the benefits of the human race.' Robert Boyle (1627–1691) said that science is a religious task...Newton believed the universe bespeaks an all-powerful Creator. Sprat, the historian of the Royal Society, considered science a valuable aid to religion."¹⁹ *Cosmos* mentions that early scientists worked with the Royal Society, but omits mention of the strong positive influences of religion within that group.

The series also distorts facts about pre-Christian conceptions of science. In episode five, Tyson praises the ancient Chinese philosopher Mozi, whose ideas included "early stirrings of the scientific approach." Attempting to cast Mozi as a secular innovator, Tyson apparently says Mozi's famous book was titled "Against Faith," and warned "against blind obedience to ritual and authority." But Mozi's work was actually titled "Against Fate" or "Rejecting Fatalism," and according to historian Klaus Schlichtmann: "Mozi advocated a monotheistic religion, in which God reigned as King in Heaven...as well as the concept of...love...quite similar to the Christian idea."²⁰

Science never blossomed in China, and *Cosmos* ignores a crucial question that has puzzled historians: *Why did modern science arise in the West?* Barbour answers, "Many historians of science have acknowledged the importance of the Western religious tradition in molding assumptions about nature that were congenial to the scientific enterprise."²¹ Thus, Ronald Numbers explains, "The greatest myth in the history of science and religion holds that they have been in a state of constant conflict."²² Likewise, David Lindberg writes, "There was no warfare between science and the church."²³

Cosmos whitewashes a chorus of historians refuting the warfare thesis of science and religion. It presents a shallow and misleading revisionist formula: science good, religion bad.

TELLING "TERADIDDLES" FOR SCIENCE

Aware that *Cosmos* presents distortions about the history of science, historians have been mulling whether it's acceptable for *Cosmos* to "lie" when defending the authority of science. Historian Joseph Martin proposes granting *Cosmos* "the artistic license to lie" when done "in service of a greater truth." He writes, "Perhaps the greater truth here is that we do need to promote greater public trust in science if we are going to tackle some of the frankly quite terrifying challenges ahead and maybe a touch of taradiddle in that direction isn't the worst thing."²⁴

A "taradiddle," of course, is a lie, meaning he's suggesting *Cosmos* could "lie" if that helps "promote greater public trust in science." There shouldn't even be a debate

over whether, in defending truth, it's ever justified to lie. If *Cosmos* must enlist falsehoods to gain our trust in what it considers "science," is that trust deserved?

ACADEMIC FREEDOM AND SCIENTIFIC CONTROVERSIES

Though its narrative about scientific history is grossly inaccurate, *Cosmos* rightly articulates the importance of intellectual freedom. "Science needs the light of free expression to flourish," Tyson explains, since it "depends on the fearless questioning of authority" and "open exchange of ideas." However, Tyson never asks whether scientists today may freely question neo-Darwinian theory, and ignores the many recent examples of persecution against scientists who challenged Darwinian evolution.²⁵ Darwin defenders today may not be burning dissenters, but they have become so intolerant that in 2007, the Council of Europe adopted a resolution calling intelligent design (ID) a potential "threat to human rights."²⁶ Even evolutionary scientists have admitted that freedom to challenge Darwin is lacking.

Epidemiologist W. Daniel Hillis laments "a feeling in biology that scientists should keep their dirty laundry hidden," which creates "a strong school of thought that one should never question Darwin in public."²⁷ Two Rutgers cognitive scientists say essentially the same: "We've been told by more than one of our colleagues that, even if Darwin was substantially wrong to claim that natural selection is the mechanism of evolution, nonetheless we shouldn't say so. Not, anyhow, in public."²⁸

Likewise, biologist Guenter Theißen writes, "It is dangerous to raise attention to the fact that there is no satisfying explanation for macroevolution."²⁹ Even Sagan's first wife Lynn Margulis and their son Dorion Sagan cowrote, "Honest critics of the evolutionary way of thinking...are often dismissed as if they were Christian fundamentalist zealots or racial bigots."³⁰

Tyson rightly admits that "scientists are human," with "blind spots and prejudices," and accurately retells how mistaken scientific ideas such as geocentrism or the fixity of continents were overturned. However, these are all tales from the annals of scientific history; *Cosmos* never covers *current* scientific controversies, conveying the impression that today's science is unassailable.

In the ninth episode, *Cosmos* covers the Permian extinction, the largest mass-extinction in Earth's history. Tyson tells a convoluted tale, as if scientists universally agree on why a peculiar grab bag of marine and terrestrial organisms perished in this extinction. But one 2012 paper observes, "Few events in the history of life pose greater challenges or have prompted more varied speculation than the end-Permian mass extinction,"³¹ and another states, "The debate has given rise to a thousand papers or

more,” where geologists are “at risk of shifting towards a ‘nihilistic’ scientific position.”³² Some causes of the Permian extinction offered by *Cosmos* may be correct, but the show conceals a raging debate.

A Certain Uncertainty

Likewise, Tyson uncritically advocates the disputed savannah hypothesis of human origins. According to this idea, a drier climate in Africa diminished the woodlands, forcing our forbearers out of the trees, causing them to evolve upright walking and larger brains. Once the climate dried, Tyson says, “Before you know it,” human intelligence evolved. This noncompelling story lacks biological details of how our supposed ancestors acquired higher intelligence and ignores prominent paleoanthropologists who challenge the model.

As *Time* magazine put it, the discovery of *Ardipithecus ramidus* in a woodland environment “demolishes” the savannah hypothesis and suggests “there must have been another reason” for human evolution.³³ Paleoanthropologist Tim White argues the evidence has “undermined” an “environmentally deterministic view that involves globally shrinking forests spawning savanna-striding hominids.”³⁴ Indeed, recent palaeoclimate studies suggest humans appeared during a wet period in Africa rather than a dry one.³⁵ The concern isn’t that *Cosmos* discusses the savannah hypothesis, but that it wrongly suggests scientists agree on crucial questions surrounding human origins.

EVOLUTIONARY APOLOGETICS

Comparing evolution to gravity and calling it “scientific fact,” *Cosmos* offers a dumbed-down version of evolutionary biology and omits evidence that contradicts neo-Darwinian theory.

In episode two, Tyson calls natural selection “the most revolutionary concept in the history of science” and claims the “transforming power” of this “mindless” and “unguided” process produced life’s diversity. Following Darwin, Tyson uses artificial selection as an analogy for natural selection. Noting that many dog breeds “were created in only the last few centuries,” Tyson asks, “What can natural selection do operating over billions of years?” His answer is: producing “all the beauty and diversity of life.” Aside from the fact that artificial selection involves intelligent agents rather than unguided mechanisms, Ernst Mayr explained why Tyson’s mindset is wrong: “Some enthusiasts have claimed that natural selection can do anything. This is not true....There are definite limits to the effectiveness of selection.”³⁶

Indeed, dog breeders encounter limits because artificial selection manifests defects that would prevent survival in the wild. “The limited potential of the genotype,” Mayr wrote, imposes “severe limits to further evolution.”³⁷ Tyson might reply that evolution can overcome genetic barriers through mutations—which he calls “entirely random”—which provide new variation for selection to preserve. He asserts that the 3.5 billion year history of life provides “plenty of time” for evolution, but ignores ID research showing how many traits that require multiple mutations before providing any advantage could not be generated over Earth’s entire history.³⁸ Even ID critics admitted that obtaining only two specific mutations via Darwinian evolution in humans is “very unlikely to occur on a reasonable timescale.”³⁹

Tree of Life

Cosmos also whitewashes controversies about the “tree of life.” Showing a beautifully animated tree, Tyson claims “solid science” reveals that “all life on earth is one,” where humans occupy merely one “tiny branch among countless millions.” Tyson’s evidence entails DNA similarities between humans and other species. With evolutionary apologetics in full force, Tyson says that “accepting our kinship with other animals” offers a “spiritual experience.”

Spiritual or not, Tyson ignores the possibility that genetic similarities could result from common design, and excludes data challenging common descent. A 2009 article in *New Scientist* concluded that the tree of life “lies in tatters, torn to pieces by an onslaught of negative evidence,” leading one scientist to say, “We’ve just annihilated the tree of life.”⁴⁰ The problem is one gene yields one version of the tree of life, but another gene suggests a sharply conflicting tree. As a 2012 paper stated, “Phylogenetic conflict is common, and frequently the norm rather than the exception.”⁴¹ Tyson fails to disclose that leading biologists have said things like, “The more we learn about genomes the less tree-like we find their evolutionary history to be,”⁴² or, “The history of life cannot properly be represented as a tree.”⁴³

In episode six, Tyson explains that on the “basis of his theory of evolution,” Darwin successfully predicted a specialized insect capable of pollinating a unique Madagascan flower. Tyson reveals that a moth exists on Madagascar, “exactly as Darwin expected.” He boasts, “There can be no stronger test of an idea than its predictive power,” as if this moth confirms Darwinian evolution.

First, one need not invoke evolution to make this prediction. Given the flower’s shape, and our knowledge of how flowering plants (angiosperms) reproduce, if there weren’t some insect capable of sipping its nectar and fostering pollination, the species would die.

Second, Darwinian evolution has made poor predictions about angiosperms and insects. Darwin himself called the abrupt appearance of angiosperms in the fossil record an “abominable mystery.”⁴⁴ This problem persists, as a paper in *Trends in Ecology and Evolution* states: “The origin of the angiosperms remains unclear. Angiosperms appear rather suddenly in the fossil record.”⁴⁵

Darwin also proposed that insects and flowering plants coevolved, or drove one another’s evolution.⁴⁶ Modern research has overturned this prediction since the mass diversifications of these two groups are off by some 100 million years. An article in *Science* observed, “The appearance and expansion of angiosperms had no influence on insect familial diversification.”⁴⁷

Perhaps *Cosmos* is correct to say “there can be no stronger test of an idea than its predictive power.” Somehow, Darwin’s failed predictions eluded mention.

HEDGING ON THE ORIGIN OF LIFE

In the second episode, Tyson admits “nobody knows how life got started,” but only discusses entirely naturalistic explanations. His explanation was: “Somehow, carbon-rich molecules began using energy to make copies of themselves.” This came immediately after Tyson acknowledged that DNA contains a “language” that is “written in an alphabet” and carries a “code.” Lest viewers sense “somehow” isn’t compelling enough to overcome the evidence for design, Tyson immediately reassures that DNA is a “masterpiece written by nature and edited by evolution.” For someone who claims he doesn’t know how life arose, he’s strangely confident that it happened naturalistically.

But *Cosmos* doesn’t imply “nobody knows” how life arose. Tyson heavily promotes panspermia, the idea that Earth was seeded with life from space, and life spreads “like a slow chain reaction through the entire galaxy.” He never discloses objections that lead a majority of scientists to reject panspermia. Panspermia was developed out of concerns that life could not arise on Earth, and merely pushes the question back. Philip Ball writes in *Nature* that panspermia is rejected by “most scientists” because it “is not only unsatisfactory as a hypothesis, off-loading the central question to another place, but unscientific—because it’s not obvious how it could ever be tested.”⁴⁸

Panspermia also faces major problems explaining how life spread from star system to star system. Astrophysicist Paul Wesson observes, “The majority opinion is that while organisms may be ejected from an Earthlike planet by the collision of an

asteroid or comet, the DNA and RNA is so degraded in space that the probability of seeding life in the Galaxy is low.”⁴⁹

Accordingly, *Nature News* explained that panspermia is only “possible, provided that the bugs don’t have to travel too far: they would probably be sterilized by cosmic rays and UV radiation during a journey from another solar system.”⁵⁰ Geophysicist H. Jay Melosh concluded, “It is very unlikely that even a single meteorite originating on a terrestrial planet in our solar system has fallen onto a terrestrial planet in another stellar system,” and thus “the origin of life on Earth must be sought within the confines of the Solar System.”⁵¹ A *Nature* blogger summed it up this way: “Mainstream science” rejects “interstellar panspermia.”⁵² Though Tyson heavily promotes panspermia, he acknowledges none of these objections, nor that his view is decidedly in the minority.

IGNORING THE EVIDENCE FOR COSMIC DESIGN

Cosmos promotes speculative materialistic ideas such as panspermia or the multiverse, but won’t even mention longstanding concepts in physics such as fine-tuning that support intelligent design. *Cosmos* ignores prominent physicists such as Nobel laureate Charles Townes who believe the universe is finely tuned for life:

*Intelligent design, as one sees it from a scientific point of view, seems to be quite real. This is a very special universe: it’s remarkable that it came out just this way. If the laws of physics weren’t just the way they are, we couldn’t be here at all. The sun couldn’t be there, the laws of gravity and nuclear laws and magnetic theory, quantum mechanics, and so on have to be just the way they are for us to be here.*⁵³

While *Cosmos* completely ignores fine-tuning, it does advocate the multiverse hypothesis, a materialist proposal for avoiding the ID-friendly implications of fine-tuning. However, we cannot observe these other universes, and the mechanisms proposed to generate the multiverse *themselves require fine-tuning*.⁵⁴

The final episode pushes the Copernican Principle—the idea that humanity occupies no special cosmic location. The show replayed a monologue from Sagan’s original *Cosmos* calling Earth a “mote of dust,” and “a lonely speck,” where “there is no hint that help will come from elsewhere to save us from ourselves.” Sagan’s quote embodies *Cosmos*’s materialistic message, citing “the delusion that we have some privileged position in the universe.”

Ironically, that quote inspired a project by Guillermo Gonzalez and Jay Richards—*The Privileged Planet*—that showed that Earth *does* occupy a privileged position that fosters both intelligent life and scientific discovery. Tyson promotes a straw man caricature of the “privileged planet” hypothesis, claiming, “Our ancestors believed that the universe was made for them,” but only in a “prescientific age.” He argues that those who reject the Copernican Principle must believe Earth is literally at “the center of the universe,” and think “they know everything they need to know,” since “their knowledge is complete.”

This is false. The founders of science and many influential modern scientists have believed the universe was “made for” us, and that we occupy a special position. Moreover, the privileged planet hypothesis opens up new doors of investigation.

Working from his ID convictions, in 2001, Gonzalez cowrote a cover story of *Scientific American* developing the galactic habitable zone.⁵⁵ This theory holds Earth resides in a special band in the middle of the galaxy that escapes the large zones of deadly radiation at the core, yet contains heavy elements necessary for life. Our position between the galactic spiral arms is also important, which avoids extreme radiation from supernovae and star nurseries.

While the privileged planet hypothesis yields good scientific fruit, Gonzalez and Richards note that the Copernican Principle has wrongly proposed that many properties of Earth, the Moon, the Sun, the Solar System, our galaxy, and the cosmic architecture, are unimportant for life.⁵⁶ To appreciate how Sagan’s view hinders scientific discovery, consider what he wrote in his book, *Cosmos*, based on the original series: “We live on an insignificant planet of a humdrum star lost between two spiral arms in the outskirts of a galaxy.”⁵⁷ Had Gonzalez followed Sagan’s approach, he would never have discovered the galactic habitable zone and developed a fruitful argument for cosmic design.

COSMOS’S ENDGAME

The Copernican Principle, a materialistic outlook, and the notion that religion hinders science are the central ideological lessons of *Cosmos*. But the series also promotes a pseudo-socialistic view, lamenting that our economic system is “profit driven,” and endorses the Gaia hypothesis, calling Earth “a self-sustaining intercommunicating organism.” It employs environmental alarmism, claiming that those who disagree with the “consensus that we’re destabilizing our climate” are “in the grip of denial.” Notice the irony. Tyson rejects the consensus on panspermia, yet uses the consensus on global warming as a club to bully dissenters. Whether one agrees or disagrees with the global

warming consensus, this is no way to foster free speech on important scientific questions. It gets worse.

When covering climate change, *Cosmos* shows crowds cheering for Hitler while Tyson says, “Human intelligence is imperfect, surely, and newly arisen. The ease with which it can be sweet-talked, overwhelmed, or subverted by other hard-wired tendencies sometimes themselves disguised as the light of reason is worrisome.” The meaning is that skeptics of the “scientific consensus” are like unthinking Nazi-followers or Holocaust deniers. This attitude threatens freedom of scientific inquiry.

Tyson correctly warns against misusing scientific authority to mislead the public. But recall the inaccuracies: *Cosmos* has advanced untrue claims about the influence of religion on science and has flatly ignored well-established ideas that contradict the Copernican Principle and reveal a designed universe. This, apparently, is what results when celebrity atheists are given millions of dollars and unchecked license to promote their views on national television.

Casey Luskin is an attorney with graduate degrees in science and law. He is research coordinator for the Discovery Institute, and cofounded the Intelligent Design and Evolution Awareness (IDEA) Center.

NOTES

- 1 “President Barack Obama’s Inaugural Address,” <http://www.whitehouse.gov/blog/inaugural-address/>.
- 2 Bill Moyers, “Neil deGrasse Tyson Tells Bill Moyers Why Faith and Reason Are Irreconcilable,” AlterNet, March 11, 2014, <http://www.alternet.org/news-amp-politics/neil-degrasse-tysons-new-show-cosmos-and-why-faith-and-reason-are-irreconcilable>.
- 3 “Tysonism,” <https://m.facebook.com/Tysonism?v=info&expand=1>.
- 4 Chris Sasaki, “Science Superstar Neil deGrasse Tyson Thrills at Sold-Out Dunlap Prize Lecture,” University of Toronto, March 18, 2014, <http://news.utoronto.ca/science-superstar-neil-degrasse-tyson-thrills-sold-out-dunlap-prize-lecture>.
- 5 Moyers, “Neil deGrasse Tyson.”
- 6 Meredith Blake, “Seth MacFarlane Hopes ‘Cosmos’ Counteracts ‘Junk Science,’ Creationism,” *Los Angeles Times*, March 7, 2014.
- 7 Ibid.
- 8 Marlow Stern, “The Juvenile Oscars,” *The Daily Beast*, February 25, 2013, <http://www.thedailybeast.com/articles/2013/02/25/seth-macfarlane-s-juvenile-oscars-sexism-assassination-nazi-jokes.html>.
- 9 Alyssa Rosenberg, “Why Seth MacFarlane Bombed the Oscars — And What It Says about

- Hollywood," ThinkProgress.com, February 25, 2013, <http://thinkprogress.org/alyssa/2013/02/25/1632871/why-seth-macfarlane-bombed-the-oscarsand-what-it-says-about-hollywood/>.
- 10 Stacey Grenrock Woods, "Hungover with Seth MacFarlane," Esquire.com, August 18, 2009, <http://www.esquire.com/features/the-screen/seth-macfarlane-interview-0909>.
 - 11 "'Star Trek as Atheist Mythology' Brannon Braga," <http://www.youtube.com/watch?v=ijm6vCs6aBA>.
 - 12 Marshall Honorof, "Rebooting 'Cosmos': Neil DeGrasse Tyson Explains Why Iconic TV Series Returns in 2014," Yahoo.com, January 14, 2014, <http://news.yahoo.com/rebooting-39-cosmos-39-neil-degrasse-tyson-explains-131522449.html>.
 - 13 David Klinghoffer, "There's No Question That Cosmos Is Coming to Public School Science Classrooms," EvolutionNews.org, May 19, 2014, http://www.evolutionnews.org/2014/05/theres_no_quest085761.html.
 - 14 Jay Richards, "Cosmos Revives the Scientific Martyr Myth of Giordano Bruno," EvolutionNews.org, March 10, 2014, http://www.evolutionnews.org/2014/03/cosmos_revives_083061.html.
 - 15 Hank Campbell, "Cosmos: A Spacetime Odyssey – The Review," Science 2.0, March 7, 2014, http://www.science20.com/science_20/blog/cosmos_spacetime_odyssey_review-131240.
 - 16 Peter Hess, "A Burning Obsession: Cosmos and Its Metaphysical Baggage," National Center for Science Education, March 14, 2014, <http://ncse.com/blog/2014/03/burning-obsession-cosmos-its-metaphysical-baggage-0015452>.
 - 17 Ibid, 9.
 - 18 Holmes Rolston, *Science and Religion: A Critical Survey* (West Conshohocken, PA: Harcourt Brace, 1987), 39.
 - 19 Ian Barbour, *Religion and Science: Historical and Contemporary Issues* (San Francisco: Harper San Francisco, 1997), 19–20.
 - 20 Klaus Schlichtmann, *Japan in the World: Shidehara Kijuro, Pacifism, and the Abolition of War* (Plymouth, UK: Lexington Books, 2009), 12–13 (internal citations removed).
 - 21 Barbour, *Religion and Science*, 29.
 - 22 Ronald Numbers, *Galileo Goes to Jail and Other Myths about Science and Religion* (Cambridge, MA: Harvard University Press, 2010), 1.
 - 23 David Lindberg, "Medieval Science and Religion," in *The History of Science and Religion in the Western Tradition: An Encyclopedia*, ed. Gary Ferngren (New York: Garland, 2000), 266.
 - 24 Joseph Martin, "We Need to Talk about Cosmos," H-Net, May 14, 2014, <https://networks.h-net.org/node/25318/discussions/26537/we-need-talk-about-cosmos>.
 - 25 Casey Luskin, "Cosmos with Neil DeGrasse Tyson: Same Old Product, Bright New Packaging," EvolutionNews.org, March 10, 2014, http://www.evolutionnews.org/2014/03/cosmos_with_nei083031.html.
 - 26 "Resolution 1580 (2007): The Dangers of Creationism in Education," Parliamentary Assembly, <http://assembly.coe.int/main.asp?link=/documents/adoptedtext/ta07/eres1580.htm>.
 - 27 W. Daniel Hillis, "Introduction," in *The Third Culture: Beyond the Scientific Revolution*, ed. John Brockman (New York: Touchstone, 1996), 26.
 - 28 Jerry Fodor and Massimo Piattelli-Palmarini, *What Darwin Got Wrong* (London, UK: Profile Books, 2010), xx.
 - 29 Guenter Theißen, "The Proper Place of Hopeful Monsters in Evolutionary Biology," *Theory in Biosciences* 124 (2006): 349–69.
 - 30 Lynn Margulis and Dorion Sagan, *Acquiring Genomes: A Theory of the Origins of the Species* (New York: Basic Books, 2003), 29.
 - 31 Jonathan Payne and Matthew Clapham, "End-Permian Mass Extinction in the Oceans: An Ancient

- Analog for the Twenty-First Century?" *Annual Review of Earth and Planetary Sciences* 40 (2012): 89–111.
- 32 E. Farabegoli and M. C. Perri, "Millennial Physical Events and the End-Permian Mass Mortality in the Western Paleotethys: Timing and Primary Causes," in *Earth and Life: Global Biodiversity, Extinction Intervals and Biogeographic Perturbations through Time* (Heidelberg, Germany: Springer-Verlag, 2012), 719–58.
- 33 Michael Lemonick and Andrea Dorfman, "Excavating Ardi: A New Piece for the Puzzle of Human Evolution," *Time*, October 1, 2009.
- 34 White et al., "Response to Comment on the Paleoenvironment of *Ardipithecus ramidus*," *Science* 328 (May 28, 2010): 1105.
- 35 See Casey Luskin, "For Neil Tyson and Cosmos, Serious Scientific Controversies Are All a Thing of the Past," *Evolution News*, May 6, 2014, http://www.evolutionnews.org/2014/05/for_neil_tyson_085291.html.
- 36 Ernst Mayr, *What Evolution Is* (New York: Basic Books, 2001), 140.
- 37 Ibid.
- 38 Casey Luskin, "Letting Science, Not Rhetoric, Drive the Debate over Intelligent Design," *Christian Research Journal* 35, 1 (2012): 40–43.
- 39 Rick Durrett and Deena Schmidt, "Waiting for Two Mutations: With Applications to Regulatory Sequence Evolution and the Limits of Darwinian Evolution," *Genetics* 180 (2008): 1501–9.
- 40 Graham Lawton, "Why Darwin Was Wrong about the Tree of Life," *New Scientist*, 2692 (January 21, 2009): 34–39.
- 41 Lilia M. Dávalos, Andrea L. Cirranello, Jonathan H. Geisler, and Nancy B. Simmons, "Understanding Phylogenetic Incongruence: Lessons from Phyllostomid Bats," *Biological Reviews of the Cambridge Philosophical Society*, 87 (2012): 991–1024.
- 42 Eric Baptiste, Leovan Iersel, Axel Janke, Scot Kelchner, Steven Kelk, James O. McInerney, David A. Morrison, Luay Nakhleh, Mike Steel, Leen Stougie, and James Whitfield, "Networks: Expanding Evolutionary Thinking," *Trends in Genetics*, 29 (2013): 439–41.
- 43 W. Ford Doolittle, "Phylogenetic Classification and the Universal Tree," *Science* 284 (June 25, 1999): 2124–28.
- 44 William Friedman, "The Meaning of Darwin's Abominable Mystery," *American Journal of Botany* 96 (2009): 5–21.
- 45 Stefanie DeBodt, Steven Maere, Yves VandePeer, "Genome Duplication and the Origin of Angiosperms," *Trends in Ecology and Evolution* 20 (2005): 591–97.
- 46 Friedman, "The Meaning of Darwin's Abominable Mystery."
- 47 Conrad Labandeira and J. John Sepkoski, Jr., "Insect Diversity in the Fossil Record," *Science* 261 (July 16, 1993): 310–15.
- 48 Philip Ball, "Special Feature Part One; Origins of Life," *Nature News*, April 22, 1999.
- 49 Paul Wesson, "Panspermia, Past and Present: Astrophysical and Biophysical Conditions for the Dissemination of Life in Space," Cornell University Library, <http://arxiv.org/ftp/arxiv/papers/1011/1011.0101.pdf>.
- 50 Philip Ball, "Alien Microbes Could Survive Crash-Landing," September 2, 2004, <http://www.nature.com/news/2004/040902/full/news040830-10.html>.
- 51 H. J. Melosh, "Exchange of Meteorites (and Life?) between Stellar Systems," *Astrobiology* 3 (2003): 207–15.
- 52 Bruce Braun, "Life Traveling in Space: A Story of Panspermia," *Scitable*, September 11, 2013, http://www.nature.com/scitable/blog/postcards-from-the-universe/life_traveling_in_space_a.
- 53 Bonnie Azab Powell, "'Explore as Much as We Can': Nobel Prize Winner Charles Townes on

Evolution, Intelligent Design, and the Meaning of Life," UC Berkeley News, June 17, 2005, http://berkeley.edu/news/media/releases/2005/06/17_townes.shtml.

- 54 Bruce Gordon, "Balloons on a String: A Critique of Multiverse Cosmology," in *The Nature of Nature*, ed. Bruce Gordon and William Dembski (Wilmington, DE: ISI Books, 2011), 558–85.
- 55 Guillermo Gonzalez, Donald Brownlee, and Peter Ward, "Refuges for Life in a Hostile Universe," *Scientific American* (October, 2001): 60–67.
- 56 Guillermo Gonzalez and Jay Richards, *The Privileged Planet: How Our Place in the Cosmos Is Designed for Discovery* (Lanham, MD: Regnery, 2004), 247–74.
- 57 Carl Sagan, *Cosmos* (New York: Ballantine, 1985), 159.