In Defense of New Atheism:

A Response to Massimo Pigliucci

Victor J. Stenger

Abstract

Philosopher Massimo Pigliucci has written an article highly critical of the new atheists and accusing them of scientism. He implies that only professional philosophers like himself are qualified to discuss the subject. However, the books Pigliucci criticizes were not intended to be philosophical treatises. They are popular books addressed to a public that is becoming increasingly disenchanted with organized religion and its negative influence on society. The new approach takes a harder line in criticizing religion than was previously the case amongst secularists. The new atheists question whether faith, which is belief despite the absence of evidence or even in the presence of contrary evidence, has any moral or intellectual authority. New Atheism recognizes religion for what it is—a set of unfounded superstitions that have been the greatest hindrance to human progress that ever existed on this planet.

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Philosopher, biologist, "a-theist," and "a-unicornist" Massimo Pigliucci has written an article titled "New Atheism and the Scientistic Turn in the Atheism Movement"(2013) that is highly critical of four of the five authors who founded the movement with their bestselling popular books published in the period 2004 to 2007: Sam Harris (2004), Richard Dawkins (2006), Christopher Hitchens (2007), and me (Stenger 2007). He does not refer to my book *The New Atheism* that summarizes the views of these authors and responds to the many criticisms that bombarded their books as soon as they appeared (2009).

Pigliucci seems to think that only professional philosophers, such as him, are qualified to write on the subject of atheism. So, he goes easy on new-atheist founder, philosopher Daniel Dennett (2006) and also praises Alain De Botton (2012) and A.C Grayling (2013), whom he calls "post-new atheists." As Pigliucci notes, they are "not coincidentally, both philosophers." (2013, 153)

Pigliucci also has little regard for the writings of new-atheist biologists, and non-philosophers, Jerry Coyne and P.Z. Myers, whose blogs have huge followings. Coyne's book *Why Evolution Is True* (2009) was also an instant new-atheist bestseller. Certainly the popularity of all these authors testifies that New Atheism has struck a responsive chord among the reading public.

The books Pigliucci criticizes were not intended to be philosophical treatises, which are read mainly by other philosophers. They are popular books addressed to a public that, as polls continue to show, is becoming increasingly disenchanted with organized religion and its negative influence on society. That audience was

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clearly open to proposals for a different approach to atheism than the one provided by most atheist authors prior to 2004.

Need I remind Pigliucci that Socrates did not write at all but walked the streets.

The new approach takes a harder line in criticizing religion than was previously the case amongst secularists. The new atheists question whether faith, which is belief despite the absence of evidence or even in the presence of contrary evidence, has any moral or intellectual authority. New Atheism recognizes religion for what it is—a set of unfounded superstitions that have been the greatest hindrance to human progress that ever existed on this planet.

The celebrated paleontologist Stephen Jay Gould, an avowed atheist, exemplified the older, softer approach to religion in his last book, *Rocks of Ages*, published in 1999, the year he died. There he introduced the term NOMA, *Non-Overlapping Magisteria*, to describe a suggested demarcation between science and religion (1999).

Gould, full of good intentions, was trying to minimize conflicts between science and religion by carving out separate "magisteria" for each. He suggested that science should limit itself to the empirical world while religion should deal with moral values. In Gould's phrase, religion deals with the "rock of ages," while science deals with the "ages of rocks."

As many reviewers pointed out, Gould was trying to limit the scope of religion by redefining it as moral philosophy. But religion is more than moral

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philosophy; it has always made and continues to make doctrinal statements about how the natural world supposedly works. And as moral philosophy, religion has relied more on Bronze-Age revelations than the study of humanity and society and consequently has long been a drag on the improvement of moral philosophy.

Various Christian sects do not hesitate to take positions contrary to science on empirical topics such as evolution, contraception, stem cell research, and climate change. At the same time, science is not precluded from considering moral issues, which involve observable human behavior in response to different types of social and personal stimulations.

Pigliucci severely misrepresents the views expressed by Harris in his 2010 book, *The Moral Landscape: How Science Can Determine Human Values* (2012), presenting them as examples of the New Atheism's *scientism.* Pigliucci defines scientism as "a totalizing attitude that regards science as the ultimate standard and arbiter of all interesting questions; or alternatively that seeks to expand the very definition and scope of science to encompass all aspects of human knowledge and understanding." (2013, 144)

With religion always having intruded into the realm of natural phenomena, and science learning more and more about the foundations of human moral and ethical behavior, it seems odd for Pigliucci to claim that questions of atheism and belief should be the exclusive province of philosophers. His failure to successfully grapple with these points severely hobbles his thinking.

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Nowhere does Harris's book claim that moral questions should be settled *exclusively* by science. Rather he argues that science should be allowed a place at the table, where it has been previously excluded. In an email message to me, Harris explained (2014):

> The *Moral Landscape* wasn't a claim that current science, narrowly defined, can answer all our moral questions. It was an argument against moral relativism—the idea that questions of right and wrong have no answers, or that such answers are merely made up, culturally constructed, etc. More generally, the new atheists are not arguing that science covers all of human knowledge. We are saying that in every domain of knowledge there is an important distinction between having good reasons for what one believes and having bad ones. Religion consistently falls on the wrong side of that divide. In fact, it even has a doctrine that appears to justify staying on the wrong side (faith).

Indeed, one of the common themes of New Atheism is to persuade scientists, the majority of whom are atheists, to play a larger role in many contested issues that affect the future of humanity on this planet. Left to their own devices, many scientists—perhaps most—would rather not be bothered, so that they can concentrate on their own, narrowly specialized research. How is it "scientism" to encourage the members of an important group in society to more widely apply their discipline and analytic skills for human betterment?

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Most scientists are all too willing to trust other institutions to handle matters that do not directly concern them. They fail to realize that many of these matters do affect them, directly and indirectly. Already we can see antiscientific policies, promoted by morally corrupt corporations and egged on by the equally morally corrupt religious right, resulting in drastically reduced funding for many types of important basic scientific research. While still the leader in technology, the United States no longer leads the world in basic research. If current policies continue, the lead in technology will surely also be lost, resulting in serious consequences for the U.S. economy.

Furthermore, how can scientists sit back and ignore forces at work that, if allowed to continue, will make this planet unlivable for their grandchildren?

The new atheists do not reject the important roles played by social institutions other than science. However, it is not outside the bounds of science or atheism to be highly critical of those institutions, especially religion, that promote detrimental policies based on ignorance and superstition.

In yet another misrepresentation, Pigliucci wrongly sees scientism in the writings of the (non-philosopher) new atheists. Specifically, he objects to the independent proposal by Dawkins and me that we can treat God as a falsifiable scientific hypothesis. Here's what Pigliucci says: "There is no coherent or sensible way in which the idea of god can possibly be considered a "hypothesis" in any sense remotely resembling the scientific sense of the term. The problem is,

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that the supernatural, by its own (human) nature, is simply too swishy [I think he meant "squishy"] to be pinpointed precisely enough." (2013, 144)

Here Pigliucci, like Gould, is trying to deal with religion by redefining it. If religion made no claims about how the world actually works, and made no claim that God intervenes in the world to create or avoid particular real effects, then Pigliucci might have a bit of a point. But religion as understood and experienced by most believers entails explicit or implicit claims about the real world and God's supposed role in controlling and influencing the real world. It is Pigliucci, not religion, that is being "squishy" on this point.

And, I don't think the idea of the supernatural is "squishy" at all. It is clearly understood as referring to phenomena beyond the natural world. Science can be said to have begun in the sixth century BCE when Thales of Miletus and the other Presocratic Greek philosophers sought to find causes for phenomena that were based on observable entities rather than imaginary gods and spirits. Instead of an earthquake being caused by Poseidon striking the ground with his trident, Thales suggested it was the result of Earth resting unstably on water.

Of course this explanation of earthquakes was wrong, as are many scientific ideas. But the scientific method of observation and hypothesis testing, and a ready willingness to replace old models with better ones, is the key to the success of science. Indeed, ancient Greek science and philosophy, starting with Thales, was notable for the way disciples built upon the teachings of their masters but also did not hesitate to disagree with them. Science never developed in those

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societies, such as China, where dissent resulted in the loss of the part of your body above your shoulders.

We would be a thousand years further along in the scientific quest had it not been interrupted when, in the fourth century of the Common Era, the Catholic Church assumed control of the Roman Empire and plunged Europe into the Dark Ages. Only with the Renaissance, when free thought once again became possible, did a new science develop that led to the modern world.

Pigliucci never discusses my central and unique argument in *God: The Failed Hypothesis*, which is that not only can we treat God as a scientific hypothesis, we can conclude from the data that the hypothesis that the God most people worship actually exists has been falsified. Since this is a far stronger statement than that made by Dawkins or any of the other new atheists, I will address it in detail.

First, I do not address the existence of every possible god, such as a deist or pantheist god, but only a personal God who is claimed to have created the vast universe and to reign over it all while at the same time playing a dominant role in every event, guiding every leaf that falls to the ground, listening to every human thought, and answering our prayers.

Since there are very possibly trillions upon trillions of other sentient life forms in the universe, God also must listen to their thoughts and control events on their planets as well. Assuming all these sentient beings are in need of

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redeeming, then it follows that Jesus must be dying on the cross every nanosecond or so across the universe.

Now, a Christian apologist might say God is infinite and fully capable of redeeming all the sentient beings in his creation. Certainly that is true, if such a God exists. But it is inconsistent with the deeply entrenched Christian tradition that humanity is a special creation of God, existing on a higher metaphysical plane than all other living creatures. This is a view that has been expressed by both evangelicals (Van Bebber 2014) and the director of the Vatican Observatory (Catholic News Agency 2008), who both say Jesus only visited Earth.

Second, I use the word "proof" to refer to scientific proof rather than deductive logical or mathematical proof. Scientific proof does not provide absolute certainty, but is more like the proof "beyond a reasonable doubt" that is applied in criminal courts in the United States. I dispute the common assertion that you cannot prove or disprove the existence of God. You can, if you mean scientific proof. If Pigliucci were to use the scientific definition of proof rather than the deductive one, he could remove the hyphen from a-unicornist since surely he believes beyond a reasonable doubt that there are no unicorns. And, while he is at it, he can take the hyphen out of a-theist, too.

Third, the hypothesis I am testing is not what Pigliucci seems to think Dawkins and I are doing, namely asking for some kind of physical evidence for the nature of a supernatural being. Rather we are asking for tangible evidence — *scientific* evidence—that a God who plays an important role in the universe

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exists. If such a God exists, then his actions should leave some observable effects in the real world, effects that should be at least as obvious as the footprints in the snow of passing wildlife that I see in the field behind my house. I rarely actually see those animals, but I know they exist. God has left no footprints on the snows of time.

I go further than the other new atheists, who simply say there is no evidence for God. I assert that we can now scientifically prove beyond a reasonable doubt that the God worshipped by most believers does not exist. In the following I present a summary of evidence that should be there but is not.

The Absent Evidence

1. Cosmology should have evidence for a God who miraculously and supernaturally created the universe. It has none. No violations of physical law were required to produce the universe, its laws, or its existence rather than nonexistence. Furthermore, current cosmological theories strongly suggest that our universe is just one of an unlimited number of other universes in a "multiverse" that always existed, in which case there never was a creation (Linde 1986, 1994; Vilenkin 2006).
2. If God is responsible for the complex structure of the world, especially living things, we should see evidence for it in nature. We do not. Complex systems are observed to evolve from simpler ones and show none of the expected signs of design. Indeed, the universe looks as it should look in the absence of design. What is more, well established cosmological

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knowledge indicates that the universe began with maximum entropy, that is, total chaos with the absence of structure. Thus the universe bears no imprint of a creator.

3. We should see evidence for a God who has given humans immortal souls. We do not. All the empirical facts indicate that purely physical processes determine human memories, thoughts, and personalities. No nonphysical or immaterial powers of the mind can be found. No evidence exists for an afterlife.
4. We should be able to verify that a personal God interacts with humans by means of revelation as recorded in scriptures. We cannot. Miraculous interventions that are claimed in scriptures are contradicted by the lack of independent evidence that these miraculous events took place. In fact, physical (archeological) evidence now convincingly demonstrates that some of the most important biblical narratives, such as the Exodus, the conquests of Joshua, and the magnificent, unified empire of David and Solomon never occurred.
5. With billions of prayers being solicited every year, by now there should be some evidence for prayers being answered. There isn't any. Careful scientific studies of the medical efficacy of prayer by several highly reputable research institutions have found none (Aviles 2001, Benson 2007, Sloan 2002).

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6. If humanity is made in God's image and is the reason he created the heavens and Earth, then the universe should be congenial to human life. It is not. Humans did not appear until the universe was already 13.8 billion years old. Furthermore, we are confined to a tiny speck of dust in a vast cosmos and unable to survive anywhere else within reach.
7. If God communicates directly with humans during religious experiences, then we should be able to verify that fact. We cannot. No claimed revelation has ever contained information that could not have been already in the head of the person making the claim.
8. If God is the source of morality and values then there should be evidence that revelations and religion are the source of a superior and unchanging morality and ethics. But history and anthropology show that morality and ethics have grown from social contact and the need to live in harmony. The moral pronouncements of religion have more often been an obstacle to improvement and even devout believers pick and choose for themselves what is good and what is bad. Hardly anyone accepts what were once religious teachings on the divine right of kings, the oppression of women, the conquest of infidels, slavery, the virtue of not bathing. Most Catholics now reject the Church's teachings on contraception as they earlier rejected it's teaching on sin as the cause of disease. Nonbelievers behave no less morally and, as some surveys indicate, arguably more morally than believers.

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I will grant that Pigliucci is justifiably miffed by the statements made by a number of scientists that question the value of philosophy. Scientists as a whole are a hard-headed lot and can be skeptical, if not downright dismissive, of thinking that they see as vague and muddled – which, it is fair to say, is true of much of what passes for philosophy. But anti-philosophy statements are not unique to the new atheist movement, and it is disingenuous to link this viewpoint with New Atheism. And of course the best philosophers over the ages have been highly intelligent and clear-thinking. I personally have benefited greatly from my reading of philosophy and interactions with philosophers, such as Larry Laudan and Daniel Dennett, who, I have found, often know more about the nature of science than those scientists that criticize them.

I do not think New Atheism is at war with philosophy. Nor are its principles in conflict with philosophy. Theology is another matter. The principles of New Atheism, as I see them to have been elucidated in the new atheist literature, are:

1. We should seek the "end of faith" because it is at best worthless and at worst harmful to believe without evidence, and downright dangerous to believe despite the evidence.
2. Religious claims – whether about the world or about human morality and ethics—should be studied scientifically and not be given a free pass from criticism.
3. Religion should be studied scientifically and not be given a free pass from criticism.

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4. Religion "poisons everything."
5. There not only is no evidence for God, there is ample evidence against the existence of a God, such as the Judaic-Christian-Islamic God, who plays and important role in the universe and in human life.
6. Yet, the situation is not hopeless. Surveys indicate that the tide is turning against theism, especially among the young who are the future.

As long as believers continue to promote a faith that claims divine revelation as a source of knowledge, they encourage the extreme elements of that faith to commit any horrific act, convinced they are carrying out the will of God.

I am grateful for comments and suggestions from Aaron Closson, Jerry Coyne, Sam Harris, Bill Jefferys, Don McGee, Brent Meeker, Dirk van Niekerk, Anne O'Reilly, Christopher Savage, Jim Wyman, and Bob Zannelli.

Victor J. Stenger is Emeritus Professor of Physics and Astronomy at the University of Hawaii at Manoa and Adjunct Professor of Philosophy at the University of Colorado at Boulder. He is the author of thirteen books including the 2007 New York Times bestseller *God The Failed Hypothesis: How Science Shows that God Does Not Exist.*

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References

Aviles, J.M., S.E. Whekan, D.A. Hernke, B.A. Williams, K.E. Kenny, W.M. O'Fallon, and S.L. Kopecky 2001. "Intercessory Prayer and Cardiovascular

Disease Progression in a Coronary Care Unit Population: a Randomized Controlled Trial." *Mayo Clinic Proceedings* 76 (12): 1192–98.

Catholic New Agency 2008. "Believing in aliens not opposed to Christianity, Vatican's top astronomer says." http://www.catholicnewsagency.com/news/believing_in_aliens_not_opposed_to_christianity_vaticans_top_astronomer_says/ (accessed August 15, 2013).

Coyne, Jerry A. 2009. *Why Evolution is True*. New York: Viking.

Dawkins, Richard 2006. *The God Delusion True*. Boston: Houghton Mifflin Co.

De Botton, Alain 2012. *Religion for Atheists: A Non-Believer's Guide to the Uses of Religion*. New York: Vintage Books.

Dennett, Daniel C. 2006. *Breaking the Spell: Religion as a Natural Phenomenon*. New York: Viking.

Gould, Stephen Jay 1999. *Rocks of Ages: Science and Religion in the Fullness of Life*. New York: Ballantine Pub. Group.

Grayling, Anthony C. 2013. *The God Argument: The Case Against Religion and for Humanism*. London: Bloomsbury Pub. Group.

Harris Poll. 2013. Americans' Belief in God, Miracles and Heaven Declines: Belief in Darwin's Theory of Evolution Rises. http://www.harrisinteractive.com/NewsRoom/HarrisPolls/tabid/447/ctl/ReadCustom%20Default/mid/1508/ArticleId/1353/Default.aspx (accessed February 26, 2014).

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Harris, Sam. 2004. *The End of Faith: Religion, Terror, and the Future of Reason*. New York: W.W. Norton & Co.

Harris, Sam 2010. *The Moral Landscape: How Science Can Determine Human Values*. New York: Free Press Pub. Group.

Harris, Sam 2014. Email communication with author.

Hitchens, Christopher 2007. *God is Not Great: How Religion Poisons Everything*. New York: Twelve.

Linde, Andrei 1986. "Eternally Existing Self-reproducing Chaotic Inflationary Universe" *Physics Letters B* 175 (4): 395–400.

Linde, Andrei 1994. "The Self-reproducing Inflationary Universe." *Scientific American* 271 (5): 48–55.

Pigliucci, Massimo 2013. "New Atheism and the Scientistic Turn in the Atheism Movement." *Midwest Studies in Philosophy* XXXVII 141–53.

Rovelli, Carlo 2011. *The First Scientist: Anaximander and His Legacy*. Yardley: Westholme.

Stenger, Victor J. 2007. *God: the Failed Hypothesis. How Science Shows That God Does Not Exist*. Amherst, NY: Prometheus Books.

Stenger, Victor J. 2009. *The New Atheism: Taking a Stand for Science and Reason Does Not Exist*. Amherst, NY: Prometheus Books.

Van Bebber, Mark 2014. What does the Bible say about intelligent life on other planets? *Christian Answers*. http://christiananswers.net/q-eden/edn-c012.html?zoom_highlight=intelligent+life (accessed February 17, 2014).

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Vilenkin, Alexander. 2006. *Many Worlds in One: the Search for Other Universe*. New York: Hill and Wang.

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