Article

Do the Polls Show That Science Leads to Atheism?

Eugene A. Curry



Eugene A. Curry

Scientific findings are often cited to build a case for theism, but some critics respond that large numbers of American scientists are atheists; thus, such findings cannot have merit. This article examines the statistics concerning the rate of atheism among scientists, explores the causes of atheism in those disciplines, and concludes that atheism among scientists is not as extensive as often claimed, nor evaluative of the involved arguments.

n discussions concerning the existence of God, science and scientists are sometimes invoked. Theists will refer to certain scientific discoveries as evidence in support of God's existence. This or that finding, they say, renders theism more likely than not-or at least serves as a piece of a larger assemblage of data that, taken together, makes theism more likely than not. But atheists push back with appeals to the low levels of belief among American scientists relative to the general population. If science really supports theism, so the atheist retorts, then why do so few scientists believe? Indeed, far from providing support for belief in God, she or he continues, science seems to undermine the theistic worldview - thus all arguments for God ostensibly rooted in science must be ill-conceived.

This kind of atheistic counter-offensive can take many forms and appeal to many statistics. But one of the more common presentations of this argument relies on a 1998 survey of the National Academy of Sciences which indicated that conventional religious beliefs were quite rare among the members of that body. Sam Harris made reference to this survey in a 2006 article on Edge.org, concluding that "there are few modes of thinking less congenial to religious faith

than science is."² Richard Dawkins did the same in his best-selling book *The God Delusion*.³ And Alex Rosenberg of Duke University has adopted this line of attack in his *The Atheist's Guide to Reality*, published in 2011, taking the statistics as proof that an "unblinking scientific worldview requires atheism."⁴ In his February 2013 debate against William Lane Craig at Purdue University, Rosenberg put the numbers before the audience rather forcefully:

There are two thousand members of the National Academy of Sciences—the *most* important body of the *most* distinguished scientists in the United States ... of these two thousand people, 95% of them are atheists ... Is it a coincidence that this number of the members of the National Academy of Sciences are unbelievers? I think it isn't.⁵

Of course, strictly speaking, these sorts of appeals to authority do not prove anything one way or another. Truth is not defined by majority vote. Nevertheless, as an informal heuristic, we generally recognize that the consensus of experts can be very helpful. When four out of five

Eugene Curry holds a Master of Divinity degree from the Golden Gate Baptist Theological Seminary. He is pursuing a doctorate from Beeson Divinity School and pastoring Park Hill Baptist Church in Kansas City, MO, where he resides with his wife Gianne and three daughters.

Article

Do the Polls Show That Science Leads to Atheism?

dentists recommend a certain toothpaste, one can reasonably assume that the toothpaste in question is good and not bad. Taken in this spirit, when someone considering the question of God first encounters statistics like those cited by Rosenberg, the information can be rather dispiriting. Is atheism really this common among our best scientists? And, if so, does this really mean that a scientifically informed case for theism is doomed, that science actually supports atheism instead?

First, some clarification is needed. It is not entirely accurate to say that 95% of scientists in the National Academy of Sciences (NAS) are atheists. Rather, the 1998 study that Rosenberg cited (along with Harris, Dawkins, and countless others) indicated that about 72% of the members of the NAS do not believe in a personal God while 21% are agnostics and 7% are believers. Even this is a little misleading, though, because the survey asked specifically about "a God in intellectual and affective communication with humankind." So presumably a number of members of the NAS who believe in God, but think that God does not communicate with humanity (e.g., E.O. Wilson and Freeman Dyson), are being unhelpfully lumped together with the genuine atheists here as unbelievers. How much are these problems with the survey influencing the results? It is hard to say. Nevertheless, the problems are significant enough that Eugenie Scott of the National Center for Science Education concluded that the study is ultimately based on elements "not well designed for investigating the religious views of scientists," and thus the study does not present us with "reliable data."6

If we wanted to find more recent, more in-depth, and less problematic survey information on this topic, we could turn to the work of Elaine Ecklund, a sociologist at Rice University. In her book *Science vs. Religion: What Scientists Really Think*, she presents the results of a massive study involving both surveys and follow-up interviews with hundreds of professors of the various sciences at America's elite universities. Her findings take up many pages, but the bottom line is this: 34% of America's top scientists are genuine atheists, 30% are agnostics, 8% believe in some sort of vague "higher power," and 28% believe in God with varying degrees of confidence. This is hardly a blowout for any one perspective; in fact, it is almost a three-way tie with belief

in God, disbelief in God, and confessed ignorance on the matter all enjoying the support of about one third of the respondents. Thus, things are not quite as bad as the NAS survey seemed to imply.

Still, 34% atheist is quite high, much higher than the rate of incidence of atheism in the general population. What is more, it seems that the percentage is growing. Let us look back at the NAS survey: for all its problems, the questions asked of the NAS members in 1998 are identical to the questions asked of scientists in 1933 and 1914. Therefore, while the findings may be skewed, they would presumably be skewed in a consistent fashion, allowing us to identify trends. Well, what trends emerge from the data? According to the survey, disbelief in a God in communication with humanity grew from about 53% in 1914 to about 72% in 1998. That is noteworthy.

Given the above, we might reasonably wonder if, despite his sins against statistics, Rosenberg and his co-irreligionists are onto something; perhaps the findings of science really do support atheism, and the progress of science in the twentieth century led to an increase in the already very high rate of atheism among scientists. But before we draw that conclusion, consider this: what specific scientific findings emerged between 1914 and 1998 that supported atheism and would thus explain the growth in that perspective? Frankly, nothing comes to mind.

While a Darwinian understanding of biological evolution remains controversial among the American public at large, by 1914 it had already won the day among elite scientists, dismantling Paley's design arguments rooted in the functional complexity of living things.⁸ So Darwin's discoveries cannot be responsible for any post-1914 uptick in atheism among scientists. Further, the mainstream understandings of both general and special relativity seem largely neutral to the question of God. The same goes for quantum mechanics. And the discovery of DNA was, at worst, another theologically neutral development.

Indeed, it seems that the only post-1914 scientific discoveries to have had any meaningful bearing on the question of God were the discovery of the anthropic fine-tuning of physics and the triumph of Big Bang cosmology. But how do these discoveries

bear on the question of God? Well, very nicely from a theistic perspective. As Robert Jastrow of NASA and then Dartmouth College declared concerning fine-tuning, it is "the most theistic result ever to come out of science." And when it comes to the Big Bang, it has become a veritable hallmark of theistic apologetics, breathing new life into Al-Ghazali's Kalam argument and leading Paul Draper, an agnostic professor of philosophy at Purdue University, to grant that "on the whole ... twentieth century cosmology supports theism over naturalism."

Now this leaves us with a rather baffling situation: while the only post-1914 scientific discoveries to bear clearly on the question of God were strongly supportive of theism and, conversely, seriously undermined the warrant for atheism, nevertheless scientists as a group became *more* atheistic during this same period! It is almost as if our scientists' atheism does not really flow from their science.

Actually, that is not "almost" the case, it is exactly the case. As Dr. Ecklund writes,

For the majority of scientists I interviewed, it is not the engagement with science itself that leads them away from religion. Rather, their reasons for unbelief mirror the circumstances in which other Americans find themselves: they were not raised in a religious home; they have had bad experiences with religion; they disapprove of God or see God as too changeable.¹¹

So atheistic scientists have not been pushed toward atheism by science; they have been pushed toward it because as children they were busy playing soccer on Sundays rather than attending church services, or because they had a nasty run-in with an off-putting minister.

Add to that the possibility that a number of selection effects are at play and the 34% atheism rate becomes even more unremarkable. Consider that people who disbelieve in transcendence, who think that the material world is all there is, and incline philosophically toward scientism (whether consciously or not) will plausibly gravitate toward those fields of inquiry that study the material world and do so in a scientific fashion. Conversely, certain statistically significant groups of theists (e.g., Christian fundamentalists) regard mainstream science with suspicion—not because science conflicts with theism

per se, but because it conflicts with their biblical literalism. These groups, feeling that "we must shut up one of God's books [i.e., nature] if we want to read the other one [i.e., the Bible]," implicitly discourage their members from pursuing careers in science. This dynamic thus reinforces the relative paucity of theists and the corresponding abundance of atheists operating in the sciences.¹²

Finally, Denis Alexander has speculated that perhaps the high rates of atheism among *very* accomplished scientists (like the prestigious group who teach in America's top universities, or the even more prestigious members of the NAS) has more to do with their being very accomplished than with their being scientists. As with any profession, those who reach the highest echelons of achievement in science must invest huge amounts of time in their work to do so. As a result, those scientists who do not divide their time between their work and religiously informed priorities (as many theists do and most atheists do not) are more likely to reach those highest echelons and to therefore find themselves included in the polls we are discussing.¹³

The upshot of all this is that disproportionately many people who embrace atheism for nonscientific reasons (generally in their youth) subsequently enter scientific fields of study and therefore atheism comes to be statistically overrepresented in the sciences.¹⁴ These young atheists build careers in those fields, harden in their commitment to their worldview as they age (as people generally do), and then view their scientific findings through the lens of their "prior commitment ... to materialism," as Richard Lewontin so famously confessed – even when those findings are strongly suggestive of theism. 15 In summary, far from being pushed to atheism by science, atheistic scientists generally arrive at their atheism for reasons unrelated to their science, and then persist in their atheism *despite* their science.

It is important to note that none of this is to cast aspersions on the acuity of either scientists as a whole or atheistic scientists in particular; scientists are intelligent individuals, often engaged in vitally important work. But what we have seen here nevertheless calls to mind the sober and rather humble words of Lawrence Krauss: "Scientists are people, and they're as full of delusions about every aspect of

Article

Do the Polls Show That Science Leads to Atheism?

their life as everyone else."¹⁶ Of course, considering his own views, Krauss intended his words to explain why any scientists at all believe in God, but his admission is a knife that cuts both ways.

Given the above, we need not take vague appeals to the prevalence of atheism among scientists particularly seriously—at least no more seriously than we would take similar appeals to the prevailing religious beliefs of accountants or pastry chefs. Nor, clearly, do such appeals serve as an effective debunking of the soundness and usefulness of scientifically grounded apologetics. When a scientist speaks on matters clearly within his or her own specialty (e.g., the mere existence or not of finetuning), we ought to be very interested and receptive. But when that same scientist steps outside his or her narrow area of scientific expertise and waxes eloquent on the philosophical significance of, say, fine-tuning, we would do well recall what Einstein said about scientists often making for poor

MA in Biomedicine
Prepare to serve and lead
in the biomedical field.

MA in biomedical science

MA in biomedical teaching

MA in biomedical leadership
Apply now to begin fall 2013.

EASTERN
MENNONITE
UNIVERSITY
Harrisonburg, Va.

emu.edu/ma-biomed
ma-biomed@emu.edu

philosophers and respectfully ask to see the actual argument.¹⁷ And when that happens, the arguments either stand or fall on their own merits, without reference to opinion polls about who believes what.

 \mathbb{H}

Notes

¹Edward J. Larson and Larry Witham, "Leading Scientists Still Reject God," *Nature* 394, no. 6691 (1998): 313.

²Sam Harris, "10 Myths—and 10 Truths—about Atheism," Edge: The Third Culture, posted December 25, 2006, http://www.edge.org/3rd_culture/harris06/harris06 index.html.

³Richard Dawkins, *The God Delusion* (New York: Houghton Mifflin, 2006), 100.

⁴Alex Rosenberg, *The Atheist's Guide to Reality: Enjoying Life without Illusions* (New York: W. W. Norton, 2011), viii.

5"Is Faith in God Reasonable? Full Debate with William Lane Craig and Alex Rosenberg," Biola University's YouTube channel, Flash Video file, 42:20, https://www.youtube.com/watch?v=bhfkhq-CM84.

⁶Eugenie C. Scott, "Do Scientists Really Reject God?: New Poll Contradicts Earlier Ones," *Reports of the National Center for Science Education* 18, no. 2 (1998): 25.

⁷Elaine Howard Ecklund, *Science vs. Religion: What Scientists Really Think* (New York: Oxford University Press, 2010), 16.

⁸Karl W. Giberson and Francis S. Collins, *The Language of Collins of Collins and President Collins and President*

Science and Faith: Straight Answers to Genuine Questions (Downers Grove, IL: InterVarsity Press, 2011), 157.

⁹Roy Abraham Varghese, ed., *The Intellectuals Speak Out about God: A Handbook for the Christian Student in a Secular Society* (Chicago: Regnery Gateway, 1984), 22.

¹⁰Paul Draper, "Seeking but Not Believing: Confessions of a Practicing Agnostic," in *Divine Hiddenness: New Essays*, ed. Daniel Howard-Snyder and Paul K. Moser (New York: Cambridge University Press, 2002), 200.

¹¹Ecklund, *Science vs. Religion*, 16.

¹²Mark A. Noll, *The Scandal of the Evangelical Mind* (Grand Rapids, MI: William B. Eerdmans, 1994), 199.

¹³Denis Alexander, *Rebuilding the Matrix: Science and Faith in the 21st Century* (Grand Rapids, MI: Zondervan, 2001), 61.

¹⁴Benjamin Beit-Hallahmi, "Atheists: A Psychological Profile," in *The Cambridge Companion to Atheism*, ed. Michael Martin (New York: Cambridge University Press, 2007), 309. ¹⁵Richard C. Lewontin, "Billions and Billions of Demons," *The New York Review of Books* 44, no. 1 (1997): 31.

¹⁶"Beyond Belief: Science, Reason, Religion & Survival, Session 2," The Science Network, Flash Video file, 42:22, http://thesciencenetwork.org/programs/beyond-belief-science-religion-reason-and-survival/session-2-4.

¹⁷Albert Einstein, *Out of My Later Years: The Scientist, Philosopher, and Man Portrayed through His Own Words* (New York: Open Road Integrated Media, 2011), 62.

ASA Members: Submit comments and questions on this article at www.asa3.org \rightarrow FORUMS \rightarrow PSCF DISCUSSION.