

Atheism and the Assumptions of Science and Religion

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*“There's this thing called being so open-minded your brains drop out.”*¹ I have to credit Richard Dawkins for having some sense of humor because I find the remark to be rather funny. But I think Dawkins should also know that there's this thing called being so close-minded that your brain drops dead. Dawkins is among the many atheists out there who advocates scientific “fundamentalism,” arguing for people to embrace science and shed their religious beliefs because they are not only “dangerous” but also irrational.² According to him, religious people are too open-minded because they believe in something that isn't provable. What Dawkins and many others fail to realize is that scientific discoveries that have been “proven” to be “true” are all founded on at least six assumptions that are not rationally supported (compared to the zero assumptions that theists who don't claim to know the nature of God make); therefore, science largely depends on faith and should not be considered as more-- and perhaps should be considered as less--credible than religion.

Since science starts out with at least three assumptions that aren't provable, it may be more rational to take science less seriously than religion, which starts out with zero.³ Before scientists perform any kind of experiments, they start out with these basic assumptions: (1) that the experimental procedures will be performed adequately without any intentional or unintentional mistakes that will impact the results (2) that the experimenters won't be considerably biased by their preconceptions of what will happen (3) that the random sample is representative of the entire population and that any random sampling that isn't won't significantly impact the results (4) that nature has regularity; most if not

¹ Quotation taken from Richard Dawkins' official website:
<<http://www.simonyi.ox.ac.uk/dawkins/WorldOfDawkins-archive/Catalano/quotes.shtml>>.

² From *The God Delusion* by Dawkins.

³ The term “scientists” only refers to those scientists who believe that science is about finding the truth concerning the way the world works and not those who believe that science is merely useful (but not necessarily true.) Also, “religion” in this case is defined as the belief in any kind of God or gods, excluding all the stories associated with it.

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all things in nature must have at least a natural cause⁴ (5) that there is such a thing called Objective Reality (6) and that science at least partly corresponds to that Objective Reality. Therefore, when we think about it more deeply, the foundation of science is actually faith, a term usually used to describe religion, not science. In comparison, theists who claim that God exists and don't claim to know anything else about God base their belief on one currently true fact: that not everything can be explained by natural means.⁵ Because scientists make at least six assumptions and theists make none, it is actually (and ironically) more rational to believe in God than in science.

The first counterargument to this point is that the foundation of science is *not* faith because it is based on *reasonable* assumptions. Many people assume that faith and reason must be mutually exclusive. But the basis of this counterargument depends on how "faith" is defined. If one defines faith as "belief in spite of, even perhaps because of, the lack of evidence" like how Richard Dawkins defines it, then yes, science is not based on faith.⁶ If one defines faith as "belief in something without certainty," then science *is* based on faith. But no matter how one defines faith, we can all agree that at the heart of science is *uncertainty*. We are uncertain that the assumptions that we make are right. We are also uncertain that the results that we obtain are right. Even

⁴ The term "nature" refers to anything that is not supernatural.

⁵ Attempting to define God is difficult because people's notion of God vastly differs from one another. God in this paper is defined as a being that we know nothing about because he hasn't been explained by natural means, so we at least know that God is not a human, or an animal, or anything that we *do* know about. The purpose here is not to justify any assumptions that people tend to make about the nature of God (i.e. God is good, God is immaterial, God is material, God is supernatural, God is immanent, etc). The reason is that no one truly knows what God is like, and if it is found that God is actually immanent as opposed to supernatural like he is traditionally depicted, that does not mean he suddenly ceases to exist. We as fallible people would just need to adjust our notion of what God is like, but God would still be there. Also, the term "theist" merely refers to a person who believes in God and not someone who also has an opinion concerning whether God actually influences our lives.

⁶ Quotation taken from Richard Dawkins' official website.

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scientists (or at least reasonable scientists) admit that their discipline, science, is subjected to error.

Granted, science is based on uncertainty, but according to the proponents of the second counterargument, science is also self-correcting and self-validating. We replicate an experiment to gain certainty that the results we have obtained are correct. If we replicate an experiment many times and discover that our results are not consistent with the original finding, then we can be fairly confident that the original finding is wrong. If we replicate the experiment many times and discover that the results *are* consistent with the original finding, this means that we can be fairly confident that the original finding is validated or correct. The problem with this counterargument is that even though science may be self-correcting, the only way to correct the mistakes that we make now is by doing more experiments, meaning the same assumptions must be made each time the additional experiments are performed. Also, the self-validating counterargument is flawed, and the following example can expose this flaw. Let us say an experiment was conducted 1,000 times, and we get the same result 990 times. The counterargument says that we can then rationally conclude (although we can never know with absolute certainty) that the result is right. This is similar to saying: if we toss a coin 1,000 times, and we get heads 990 times, we can rationally conclude that there is more than 50% chance of getting heads. *But this is not true.* According to statistics, if we toss a coin for an infinite number of times, we'd find that there is actually only 50% chance of getting heads. What matters is the *long run*. Therefore, we have to toss a coin or conduct an experiment infinite number of times in order to rationally conclude that we've obtained the right result. This is an impossible task. Therefore, it is impossible for us to accurately determine whether the results that we've obtained are right no matter how many times we actually replicate the experiment.

This rebuttal to the second counterargument is not foolproof. It should be pointed out that statisticians are making an assumption when they claim that there is only 50% chance of getting heads. The claim has never been proven.

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We have never tossed a coin for an infinite number of times to demonstrate the validity of the claim, so admittedly it is only an assumption. However, even though they are making an assumption in this case, they are only making one reasonable assumption compared to the six assumptions that scientists make before doing any sort of experiment. Thus, the point that science makes more assumptions and perhaps should be considered less valid still stands.

The third counterargument addresses the issue that maybe scientists don't make as many assumptions as it is claimed here. We don't assume that the experimenters will perform the experiments flawlessly nor do we expect them to have no biases. We also don't assume that the random sample will always be representative of the population, and we realize that a random sample that isn't can change the conclusions that we draw from the experiment. Science allows for mistakes. But the only way that we can rectify those mistakes or validate the results that we've obtained is by doing more experiments. This point has already been addressed by counterargument two, specifically with the heads and tails example. Thus, our mistakes will never be completely rectified unless we do an experiment infinite number of times. And yet, people still believe in science. This suggests that those people still assume that the experimenters' mistakes and the occasional unrepresentative random sampling won't significantly affect the results, assumptions that are huge and unwarranted.

Finally, the last counterargument points out that the quality of the assumptions may be more important than the quantity. We intuitively know that there are certain assumptions that seem to be more warranted than others. For example, the assumption that the sun will rise tomorrow is more reasonable than the assumption that tooth fairies exist. Thus, the assumption that God exists may only be one assumption, but since it's a pretty big assumption, it may be more rational to believe in science, which makes a few "reasonable" ones. To examine this point a little closer, we should look into the assumptions that both scientists and theists make. A theist (again, one who doesn't claim to know the nature of God) makes no assumptions but bases his or her belief on the fact that

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not everything right now can be explained by natural means; this belief is so far true because not everything has been explained by natural means. Although many people like to put the burden of proof on theists by saying that it is the job of the theist to prove that there is God, the burden of proof is actually on science to show that the currently true fact that theists start out with is false. The only way to demonstrate this is to prove that everything in the natural world has a natural explanation, something that scientists so far have been unable to prove this. Instead, they only *assume* that everything can be explained by natural means, and this assumption is so far not true. Other assumptions such as the belief that there is Objective Reality and that science corresponds to that Objective Reality have not been shown to be true either. Moreover, the more reasonable assumptions that scientists make don't always hold true. We know that there are experimenters who make mistakes and who are biased by what they perceive will be the likely outcome of their experiment, and these mistakes and biases can influence the results. We also know that random samples that aren't representative of the overall population can negatively affect the outcome. Thus, even based on the quality of the assumptions, it may be more rational to believe in God than to believe in science at least for right now. Granted, it may not be rational to assume that the assumptions will hold in the future; perhaps, we really will find out that everything has at least a natural cause later on. But for right now at least, why not believe in God in addition to science?

Opponents of this rebuttal may contend that it is fallacious to assume that there is a supernatural explanation just because we have not been able to explain everything by natural means.⁷ It is possible that there are other explanations (presumably natural) – we just don't know them yet. Thus, we should make a more modest claim: that God *could* exist, but to say that he actually does is too strong of a position. I'll concede to this argument but would like to add that it is just as fallacious to take the law of gravity for granted. First, the law was founded on a set of assumptions that we know (1) to have

⁷ The fallacy is commonly known as the argument from ignorance.

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been false in the past⁸ (2) to currently not be true.⁹ In comparison, belief in God is based on a fact. Second, there may be other explanations besides gravity (either natural or supernatural) that account for why things fall – we just don't know them yet. Therefore, gravity *could* exist, but to say that it actually does is too strong of a position. Thus, those who doubt the existence of God should doubt the existence of gravity too (as well as all the other laws in science that most of us take for granted). The problem is: a lot of people doubt the former and not the latter.

There are those that may argue that theists are making unfair demands on atheists to scientifically prove or disprove the existence of God in a way that one wouldn't on the alleged theist. However, it is impossible for a theist (or anyone as a matter of fact) to directly prove the existence of something or someone. For instance, one can argue that I should believe that my family members exist because I can see them, but the counterargument is that sometimes, one sees things that aren't really there. This example shows that any attempt to prove one's existence will always be met with skepticism, and thus, any theist who is demanded by skeptics to soundly prove the existence of God is given an impossible task. It is actually up to scientists who are atheists to include the existence of God as a scientific inquiry and to use the deductive falsification model to question the existence of such a being. If they set the hypothesis to "not everything can be explained by natural means", and they successfully showed that everything could be explained naturally, then there would be no need to believe in God anymore. Of course, even if the hypothesis was falsified, it would not mean that God definitely does not exist; it would only mean that a rational basis for believing in God no longer exists. That would be a good enough reason to be in denial of God's existence – but only if it is clearly demonstrated that everything in the natural world can be explained by natural means.

⁸ Assumptions (1), (2), and (3) of science.

⁹ Assumptions (4), (5), and (6) of science.

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In addition, these opponents may argue that we are only limited beings and that we don't know everything right now; therefore, it is better and simpler to assume for now that we are not omniscient than to assume that God exists. This counterargument can be summarized succinctly here: the rationality of one's belief in science \leq the rationality of one's belief in God $<$ the rationality of the position that we don't know everything. Although the last position may be the most rational, one would be forced to be skeptical of everything, including things that most of us take for granted. Additionally, the point that belief in God is at least as rational as belief in science still stands because the rationality of one's belief in science is still \leq the rationality of one's belief in God. Therefore, those who don't believe in God should not believe in science because otherwise, that belief would make no sense.

The point here is not to prove the existence of God nor is it to deny the credibility of science. Thus, trying to invalidate belief in God without addressing the issue of science or trying to bolster the credibility of science without addressing the issue of God will not refute my claim that belief in science and belief in God are on equal standing. This is what allows the argument so flexible. If a counterargument is made against God, I can easily turn it around and use the same counterargument against science. Belief in God and belief in science would still be on equal standing – equally fallacious perhaps but still on equal standing. If one tries to argue that we should accept science, that's perfectly fine because I'm not trying to deny the credibility of science – I would just add that we should accept God as well. The only way to avoid this problem is to provide a counterargument against God that cannot be used against science. Doing so is very difficult (if not impossible) given the uncertainties of the world we live in and of science itself.

Despite the uncertainties in science, we still have this underlying instinct to trust science over God because science is within our immediate experience, and God is not. But this instinct is not necessarily right. Often, we have instincts that mislead us. For example, most of us instinctively believe that the more times we gamble the more chances we have of earning money.

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Statistics shows us that the more times we gamble, the more money we actually lose. Thus, just because we have the instinct to trust science over God does not make this instinct justified, and upon deeper and more rational evaluation, the instinct falls apart because of all the reasons indicated in the previous paragraphs.

Although science makes more unjustifiable assumptions than religion does, one may still argue that it is more rational to believe in science over religion because there is more evidence supporting the claims made in science than there is for religion. This point was raised by Antony Flew, who asserts that theists will believe in God even in the face of overwhelming evidence for his nonexistence. To illustrate his point, Flew describes a parable in which one person (the Believer) claims that there must be a gardener taking care of the cultivated garden while the other person (the Skeptic) denies the existence of such a gardener. They decide to wait for this gardener to show up, but he never does. They then build a fence around the garden, a fence that is capable of electrocuting and detecting even the presence of an invisible gardener, but still, there are no screams of pain from the invisible gardener that indicate that he is ever in the vicinity. Despite the lack of verification, the Believer still insists that an invisible gardener exists. Flew's point is that a theist is similar to the Believer because both the theist and the Believer will keep on believing without any regard to the number of evidence supporting belief or disbelief. He concludes by asking the theist, "What would have to occur or to have occurred to constitute for you a disproof of the love of, or of the existence of, God?"¹⁰

I would like to turn the question around and ask Flew, "What would have to occur or to have occurred to constitute for you a proof of the love of, or of the existence of, God?" Of course, the question would no longer apply to Flew, who has converted from atheism to deism, but the question would still apply to those who are still atheists. The problem is that most atheists demand incontrovertible evidence when it comes to the existence of God, but when it

¹⁰ Flew, Antony, and Alasdair MacIntyre, eds. *New Essays in Philosophical Theology*. New York: Macmillan, 1964.

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comes to science (or any discipline related to science), they accept it so blindly. Upon examination, however, belief in God is at least as rational as belief in science because a theist actually makes fewer assumptions than a scientist and because both beliefs are equally fallacious (both a theist and a scientist are guilty of committing the fallacy known as the argument from ignorance). Thus, those who are skeptical of God's existence must also be *equally skeptical* of the claims made in science. It is not rationally acceptable for a person to be really skeptical of the existence of God but only a little skeptical of the discoveries made in science.

It is time to recognize either the rationality of religion and science or the fallibility of both. The fact is that science is not as sound as most atheists would have people believe, and those promoting scientific "fundamentalism" are no different from religious fundamentalists indoctrinating others with their radical beliefs. As should be mentioned again, scientists make at least six assumptions (three of which aren't always true and the rest currently not true) while theists base their belief on only one currently true fact, a point that suggests that believing in God may be more rational than believing in science. Other arguments such as the one that states that the law of gravity (as well as other laws in science) and belief in God are both equally fallacious suggest that belief in God and belief in science are only equally credible. Therefore, upon deeper inspection, religion (excluding its support for the "God is good" argument and its stories) is at least as sound as science, if not more so.¹¹

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