# **Does Science Oppose God?**

If you are sold the idea that religion and science are at odds with another, then you are in effect forced to believe in one and deny the other. The new atheist has sold this idea with plenty of advertisement. In making this argument, the new atheist often refers to the Age of Enlightenment, an intellectual and philosophical movement that dominated the world of ideas in Europe throughout the 17th to 19th centuries. It was a movement which stressed the importance of reason, logic and freedom of thought and is given credit for empowering scientific development. The atheist often claims that 'The Enlightenment' was inspired by early atheistic views and that science required the defeat of religion to progress, but this could not be further from the truth. It was Christian convictions, rather than secular or pagan ideas, that drove much, and might I say *most* of Enlightenment thought.

When addressing the details of history, 'The Enlightenment' could be more accurately described as a religious process, and this often comes as a surprise to those who have been misled on the matter. Science is not natural to humanity. Although glimmerings of science appeared among the ancient Greeks, modern science is the child of historical European civilisation. It was a Christian world which finally gave birth in a clear, articulate fashion to the experimental method of science. It was precisely because many early enlightenment scientists were Christians that they expected to find order in the world. Their Christianity led them to believe that the world could be rationally understood precisely because it is the product of a transcendent Creator who designed and brought it into being. Thus, the world is a rational place which is open to exploration and discovery.

So it's a false idea that God's existence and science are in opposition to each other. Peter van Inwagen, one of the world's foremost philosophers, said: "No discovery of science so far has the least tendency to show there is no God." Francis Collins, who directed the Human Genome project, saw no conflict between faith and his scientific theory. Palaeontologist and evolutionary biologist Stephen Jay Gould, recognised as one of the most influential writers of popular science, stated that science and religion constitute no-overlapping authority. One of the greatest scientists to have ever lived, Georges Lemaitre, founder of the Big Bang Theory, said: "There is absolutely no conflict between religion and science." The very premise of science is that it is a way of thinking about the natural world. It is associated with making observations, looking for explanations and doing experiments in order to understand the natural world. It's a progressive human endeavour and so is founded upon the faith that knowledge; the certain understanding of what is true, is attainable.

One of the themes of Christianity is that the universe was built according to intelligent, rational design, that the laws of nature reflect the influence of a divine lawgiver. It was C.S Lewis who famously said: "Men became scientific because they expected law in nature, and they expected law in nature because they believed in a Legislator." The very fact that laws of nature can be mathematically formulated, that there are rules to this universe leading to the possibility of prediction, was for Albert Einstein a constant source of amazement which pointed him beyond the natural to even the supernatural, God.

The very pioneers of modern science – Robert Boyle the founder of modern chemistry, James Clerk Maxwell who completely transformed the realm of scientific discovery with his work on electromagnetic radiation, Gregor Mendel known as the founder of the modern science of genetics, James Joule whose study led to the development of the first law of thermodynamics, Galileo known as one of the fathers of observational astronomy and the scientific method, and even the greats like of Kepler, Pascal, Newton, Faraday – were all firm believers in God. They held in common a deep desire for science because of an understanding that there is a God who authored nature. Far from

hindering the rise of modern science, faith in God was one of the motors that drove it. If you look at the 16th and 17th century, where reasoned science most rapidly grew, this conviction was one of the key driving forces. I think many have forgotten that. Between 1901 and 2000, over 60% of Nobel Laureates were Christians. Christianity has traditionally taught that we have a responsibility to earnestly seek knowledge, to understand the world around us, yet more importantly, the God behind it. There is no conflict between God and science; there is a conflict between theism and atheism. In fact, atheism as a worldview has no foundation to objectively justify the pursuit of science at all, whereas belief in a rational Creator provides the first and best foundation for scientific enterprise.

### Science has limits

It is also equally important to note that not all knowledge is limited to science. If all reason and rationality were, we would have to erase every other subject of thought which would be absurd. You would be wiping out half of education. Science is one domain of, or approach to, knowledge, but it cannot contain every possible truth. We would be wise not to forget this, as many have. Nobel-Prizewinning chemist Harry Kroto said, "Science is the only construct we have to determine truth with any degree of reliability." The technical term for Harry's idea is scientism, the view that science can answer any and all questions, that it can quite literally encompass the whole of reality. Stephen Hawking shared this view, claiming that "Philosophy is dead... Scientists have become the bearers of the torch of discovery in our quest for knowledge." As great as these scientists are, the view that science can explain everything is itself a philosophical standpoint, so even great thinkers speak nonsense every now and then. Let me list a few subjects of knowledge outside the realm of science (as raised by J. P. Moreland):

#### The laws of logic and mathematics

Science appeals to the laws of logic and mathematics and thus presupposes them, it cannot justify them. Why? For one thing, logic and mathematics are a priori fields, that is, the relevant laws are warranted by direct rational awareness without any appeal whatsoever to sensory experience. The sciences justify their laws and theories by appeal to empirical observations. But the laws of logic and of basic mathematics are known in an a priori manner to science, by direct rational intuition or awareness, without appealing to sensed experience to justify them.

# The origin of the fundamental laws of nature

There must be, as widely agreed, fundamental or foundational laws of nature. But the existence and precise nature of these laws cannot be explained by science, since all scientific explanations presuppose them. As far as scientific explanations are concerned, these foundational laws are simply brute givens to be used to explain other things scientifically, but which themselves cannot be explained scientifically. Scientific experiments can be carried out to identify these laws but can't explain their existence since science is reliant upon them.

### The laws of human nature (ethics, love, human value, rationality)

If you reduce human life to the mere physical: particles and quarks, and so on, then where do objective moral values, duties and values come from? Most people acknowledge the existence of objective true laws of morality and rationality. If you violate one of the moral laws, like rape, you have done something immoral by disregarding someone's intrinsic value, regardless of what you or anyone else may think. If you violate one of the laws of rationality, like trading a Ferrari for an old Ford, you have done something irrational. Now these laws are not explained by science, rather science is descriptive, not prescriptive. Science attempts to describe what is the case, but it cannot

prescribe what ought to be the case. Thus, science must remain silent when it comes to normative laws and principles.

To emphasize this point consider human value. Your value is not derived from your chemical constituents, your abilities or what you produce. If we go down that route then sooner or later we're all in trouble. Rather, most of us would understand that human beings have inherent/intrinsic value, yet, no matter how much "science" you do, you won't derive that answer for the simple reason that science is silent regarding *values*, which by the way, it relies on. What do I mean by this? Well, science stands on foundational ideas about the value of knowledge. It relies on the belief that the pursuit of knowledge is a *valuable* thing. But if we're just a purposeless collection of chemicals, moving around in our protoplasmic sacks, fizzing away, doomed to our inevitable oblivion when the useful energy of this universe eventually runs out, then what is it about science, progression, and the pursuit of knowledge that is so darn special? This is not a question that science can answer.

If the entire history of the universe is a story of how strictly physical things interacted according to the laws of nature to form other strictly physical things, with strictly physical properties (all explained within the realm of natural sciences), then there is no need or room for intrinsic, normative value properties – whether moral or rational. For example, a scientist may carry out an experiment, do observations, measurements, create tests and repeat the test, draw a conclusion, but science can't tell the scientist if he or she should be honest about their findings. That has to do with morals, integrity, and so invokes meaning and purpose. Science is built on the ethic that telling the truth and reporting your results accurately are good things. Science does not tell you why it is wrong to lie about your results. Ethics is taken very seriously in science and without it, science becomes untrustworthy, even dangerous.

As a purely physical world is incompatible with the existence of objective moral values, then if objective moral values do indeed exist, this refutes naturalism. There must be more to reality. Even if someone didn't agree that rape and murder are objectively wrong, as science presupposes truths that cannot be explained by science, naturalism can't stand on its own, and so naturalism falls down.

However, if there is a virtuous, good God, then the moral, rational duties he imposes on us are objectively true and real whether one believes in them or not. Besides rules and principles, there are also intrinsically good, valuable states of affairs and things in the world. Each person has deep, intrinsic value, and all people have equal value and rights as human beings. Science can say nothing of objective human value because it transcends the material and so is not a subject of natural science. This is what caused Einstein, the man responsible for developing one of the pillars of modern physics, to say, "Science is a fine thing; religion a fine thing too."

Often, people make the mistake that acknowledging science is limited is anti-science. I am not anti-science. I am simply arguing for "science and" – science and the humanities; science and theology; science and philosophy; science and art; science and history... Those who confine reason to science alone are like toddlers who are terrified of stepping outside the confines of the nursery into the garden, preferring to play inside where it's safe and familiar. They are shutting down the academic arena to a size they are comfortable with. Why can't we embrace a world of knowledge that is vastly bigger and more glorious than just the physical sciences?

Science has helped develop medicine, sustain development and advance technology. Religion justifies objective morals and an absolute value of life. Science explains the 'what' and 'how' – how the universe works, how life develops etc. It deals with physical reality. Religion explains the 'why'. Is there any purpose? Is man of value or are we just a lump of particles? Is there a standard for life which is ethically and objectively right or are all ways of living merely a matter of debatable opinion? Is there a real point of reference for the definition of love, and is there an absolute need to obey it? It

deals with the spiritual reality, a reality of meaning and responsibility. The 'what' and the 'why' are two very different questions.

One can still be a committed scientist at the highest level, while simultaneously recognising that science cannot answer every kind of question about reality, including the deepest questions humans ask. For example, and as already mentioned, science cannot form a base for morality. Nobel prizewinning physicist Richard Feynman confirmed bluntly that "ethical values lie outside the scientific realm." Ethics, love and human value are not subjects of science. It would be ignorant to deny all the questions and subjects outside the study of the physical world. That would be to reject potential knowledge, which ironically would be anti-scientific. In fact, the statement that only science can lead to the truth, that philosophy and religion have nothing to offer, is self-defeating, because this very statement itself is not deduced from science. It's a philosophical statement about science, contradictorily arguing against philosophical statements, and it cannot by itself be tested by science. Simply looking to other sources of truth alongside science is not abandoning reasoning, rationality and evidence at all. There are simply certain questions outside of those that can be answered by science, for which we need another source of information - maybe a revelation from God. The bible is not primarily a book of scientific processes, just as science is not a theory on the meaning of life. Therefore science and religion can be pursued together because observation has always demanded a reason.

The atheist forgets that understanding how something works doesn't refute the existence of a creative intelligence behind that process. For example, if we were asked to explain a car, shall we mention the inventor or shall we dismiss any personal agency and say the car arises naturally from physical law. Or likewise consider this silly example, science can explain the physical properties of a cake and the chemical reactions involved in its baking, but a description of the physical process doesn't touch on the fact that it was made by my grandma who cares for me and is trying to make me fat.

It's obvious we need both levels of explanation, the science explaining how the car works or how the cake came about, and a personal agency explaining why the car or cake was created, in order to give a complete description. It would be a category mistake to ask us to choose between God (personal agency) and physics (physical law). Both explanations are necessary: they do not conflict, but complement one another. As Lennox said, "When Sir Isaac Newton discovered the law of gravitation he did not say, 'Now I have understood gravity, I don't need God.' In fact, Newton wrote in the Principia Mathematica, the most famous book in the history of science, that it would 'persuade the thinking man' to believe in God." Stephen Hawking ends one of his bestselling books 'A brief history of time' by attempting to explain the what, and even the how of this universe with the words, "now if we only understood why, we would have the mind of God." The inescapable implication is that the answer to that final question would have to come from a mind that transcends our material universe.

Science, the 'what', gives us the stuff of existence; it is the 'why' that provides the glue to all we live for and the broader interpretation of why we are here in the first place. It's the inescapable cry of purpose which defines, drives and explains our reason for being. It is only when the 'why' is answered, that the 'what' truly becomes defined. This is where religion gives such a powerful push for science. I fail to see how it opposes it.

# The basis of science

So to conclude, science itself relies on a whole raft of truths that are themselves unprovable by science. To exclude other sources of knowledge such as truths from philosophy, theology or pure rationality from our pursuit of truth is to kaibosh science itself. Science cannot be trusted if the

assumptions it relies on aren't allowed to have their own grounding outside of science.