



Has Science disproved God?

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In January 2005, two remarkable events occurred. The first was that Oxford atheist and Darwinian scientist, Richard Dawkins, was publicly asked what he believed to be true but could not prove. This was an interesting question because he is on record as saying that you should not believe anything without evidence. Now he concedes, *"I believe, but I cannot prove, that all life, all intelligence, all creativity and all design anywhere in the universe is the direct or indirect product of Darwinian natural selection."* He continued, *"Design cannot precede evolution and therefore cannot underlie the universe."* In other words, he admits that much of what he believes, including his fundamental assumptions about the universe, are a blind leap of faith, unsupported by evidence.

The other extraordinary event was that the international doyen of philosophical atheism, Prof. Anthony Flew, now aged 81, publicly announced that he has abandoned his atheism, and had done so on the basis of scientific arguments, which now persuade him that there is a God.

So two of the most prominent atheists in their fields have made startling confessions. The scientist admits that much of his belief cannot be supported by scientific evidence, while the philosopher abandons the very atheism that made him famous, precisely because of the scientific evidence. How much intellectual fun is that?

What Dawkins cannot verify concerns the creation of the universe. What persuades Flew that there is a God is the current scientific evidence about the origins of the universe.

So let us begin at the beginning! This is the Cosmological argument.

First premise is this: **What ever begins to exist has a cause.**

Philosopher William Lane Craig says it is foolish to try to prove this statement because it is obvious. He quotes Aristotle who said you should never try to prove the obvious with arguments which are themselves less obvious. Does anyone want to deny this obvious premise? Speak now or forever hold your peace, for the logic is simple and compelling:

**Whatever begins to exist has a cause
The universe began to exist
Therefore the universe has a cause.**

The major scientific evidence that the universe began to exist first appeared in 1929 when the astronomer Hubble was studying distant galaxies and observed the Red Shift. This was a Doppler effect of light. Let me explain briefly the Doppler Effect. We are all familiar with the phenomenon of a car or plane coming in our direction emitting a sound at one pitch which then drops to a lower note as it passes. The reason for this is that the wavelength of the sound it emits appears higher than it is, because the vehicle moving towards us is effectively shortening the wavelength of the sound and increasing its frequency by its movement. Having passed us, it lengthens the wavelength and decreases the frequency by moving away. Longer wavelengths have lower frequencies and therefore lower notes, so the tone drops.

In the same way as different notes have different wavelengths of sound, so different colours have different wavelengths of light. By demonstrating a shift towards red instead of blue, Hubble was able to show that the light from distant galaxies showed they are moving away and not getting nearer, and the further the galaxy the faster it is moving away. Hence the conclusion that the universe is not static, as everyone including Einstein had previously thought, but is in fact expanding. (Stephen Hawking, *A Brief History of Time*, p.39)

Further evidence was discovered in 1965. If the universe was static, as many scientists such as

Fred Hoyle still believed at that time, there would be no background energy observable in the universe. The discovery of background radiation, existing in the same intensity in every direction, confirmed the view that energy released from an initial explosion causing the universe to expand, was still observable in the system.

On the basis of this evidence, few scientists today dispute the fact that the universe is expanding. By extrapolating backwards into the past, the universe is understood to have originated from an immensely dense 'singularity', some unimaginably small, compressed, dense speck which originally exploded to yield everything that there is in the universe.

If you have read Stephen Hawking's famous book, *A Brief History of Time* (aBHoT), you will have had your brains teased, not only with black holes, but the fact that not only did all matter and energy originate from this singularity, but so did space and time itself. Hence the title of the book. So we cannot think of this singularity existing somewhere in space – because there was no space. Nor can we ask what happened before the Big Bang, because there was no previous time either.

In other words, it is today generally held amongst scientists that the universe and everything in it actually began to exist at a point of origin estimated now at 13.7 billion years ago and that all matter, energy, space and time originated out of nothing! The philosopher points out that what ever begins to exist has a cause. The scientist points out that the cause of the universe must exist outside of our space-time world and, of course, be unbelievably powerful.

The theological implications, as Charlie Brown might say, are staggering. Desperate theories have been devised to avoid the obvious conclusions. These include for instance the theory that the universe is only expanding at this point in time, but this is just a moment in its history, where the universe oscillates from expansion to contraction to expansion indefinitely. Well, this is an interesting theory but it must be said, it has absolutely no evidence in physics or astrophysics to support it. There are a series of other models proposed, such as string theory with its 10 dimensions, branes and p-branes, which all suffer

the same lack of data. The available data only suggests that the universe is expanding from an initial point at the beginning of time, some 13.7 billion yrs ago.

I was recently in debate with some Humanists. One of them made the point that either there had always been a God, or there had always been a universe, and that it was no more obvious to believe in the one than the other. That is no longer considered to be the case. The scientific evidence says the universe has not always existed. It began.

Can we therefore say that God has always existed? Is it meaningful to ask how he came into existence? The answer to both questions is 'No', if by such questions we suppose that God has always existed in endless time. We cannot speak about time before time existed. God, if he created the universe, must live outside of space and time. Neither is this a theologically novel idea. The New Testament seems to have alluded to it by saying that with the Lord one day is as a thousand years and a thousand years as a day. It was anyway put forward by Augustine in around AD 400. Questions therefore about God's origin or location are outside our capacity for knowledge & comprehension. Similarly our understanding of eternity can only be grasped in metaphors, whether a banquet on the one hand or a smouldering rubbish dump on the other. This should stop us from imaging Heaven as a space-time world or crudely caricaturing hell as a place of torment in endless time.

The second line of argument that has persuaded Anthony Flew concerns the fine tuning of the Universe, known as the Anthropic Principle. The Anthropic Principle says that the universe has to be more or less as we see it, because if it were different, there wouldn't be anyone here to observe it.

There are two issues here, which must not be confused. The human observer should rightly regard it as probable that he will find the basic conditions of the universe are finely-tuned for his existence or he would not be there to observe it. However, he should not infer that it is therefore highly probable that such a finely tuned universe should exist. That is a separate matter entirely.

For the universe to exist as it does and allow us to live within it and reflect upon it, requires an astonishing series of coincidences to have occurred, which are quite sufficient in the mind of Anthony Flew to indicate the existence of an intelligent designer.

Stephen Hawking suggested (aBHoT p.123) that it is like a hoard of monkeys hammering away on typewriters and by pure chance eventually producing one of Shakespeare's sonnets. Let's face it, it just isn't going to happen.

It is estimated that there are some 50 fundamental numbers or physical constants present at the moment of the Big Bang that must be precisely fine-tuned in the way they were for human life to become possible.

Hawking wrote: *"It seems clear that there are relatively few ranges of values for the (fundamental) numbers that would allow the development of any form of intelligent life. Most sets of values would give rise to universes that, although they might be very beautiful, would contain no one able to wonder at their beauty."* (aBHoT p.125)

Physicist Paul Davies calculated that in order for planets to exist, the relevant initial conditions had to be fine tuned to a precision of one part in 10 followed by a thousand billion billion zeroes at least. For electromagnetism, he estimated a change of only one part in 10 to the power of 40 would have spelled disaster for stars, like our sun, thereby precluding the existence of planets.

Gravitational force must be what it is, for planets to have stable orbits around the sun. Otherwise if they had a greater force they would fall into the sun and burn up or if weaker, they would escape from their orbit into a very cold, outer darkness. It is estimated that a change in gravity by only one part in 10 to the power of 100 would have prevented a life permitting universe.

If the electric charge on an electron were only slightly different, stars would be unable to burn hydrogen and helium. and produce the chemical elements such as carbon and oxygen that make up our bodies. Similarly, the orbit of electrons in atoms would not be stable, so matter as we know it would not exist.

Stephen Hawking wrote, *"If the rate of expansion one second after the big bang had been smaller by even one part in a hundred thousand million million, the universe would have re-collapsed before it ever reached its present size."* (aBHoT p.122)

Not only must each of these quantities be exquisitely fine tuned but their ratios to each other must be finely tuned. As William Craig writes: *"Improbability is added to improbability until our minds are reeling in incomprehensible numbers."*

Now there are only four possibilities put forward for explaining the fine-tuning of the universe: Multiple Universes, Natural Law, Chance or Design.

The theory of Multiple Universes supposes there are a vast number of quite different universes, allowing the statistical chance that one of them would produce human life. Without a jot of evidence to support it, it is a desperate attempt to deny the existence of God. Ockam's Razor states that the simpler assumption is always to be preferred.

Natural law implies a physical inevitability that the universe is the way it is; that it would not be possible for the universe not to produce human life. Yet if the universe had expanded just a little more slowly, if entropy were slightly greater or any of these constants been just slightly different, life would not have occurred. As Paul Davies put it, *"The physical universe does not have to be the way it is; it could have been otherwise."*

And the chances of the world being as it is, are incomprehensibly small. Which is why Anthony Flew concludes there must be a Designer.

The universe is of course vast. Our own galaxy, the Milky Way, is 100,000 light yrs in diameter and contains 100 billion stars. *"Ours is one of about a million million galaxies in the observable universe"* (aBHoT p.126). Well might the Psalmist have wondered, *"When I look at your heavens, the work of your fingers, the moon and the stars, which you have set in place, what is man that you are mindful of him, or the son of man that you care for him?"* (Psalm 8) In such a universe, we seem terrifyingly minute and insignificant. But this

view can be turned on its head.

As Barrow & Tipler argued, *“for there to be enough time to construct the constituents of living beings, the Universe must be at least 10 billion years old and therefore as a consequence of its expansion, at least ten billion light years in extent.”* In other words, in order for God to create mankind, the most complex creature and crowning glory of his creation, he had to make a universe as wonderful as ours. So when we look at the stars, we should not think how insignificant we are but consider how very seriously God takes us, how valuable we are in his sight and what great lengths he went to, in order to make us.

Furthermore, this evidence itself suggests a special relationship between the Creator and human beings. There is not only a Mind behind the creation, but the rational creator has created rational beings, who can reflect upon and understand the mind of the creator. We are told in Genesis that we are made in his Image. As Kepler put it, we are capable of thinking God's thoughts after him. No other living thing is capable of doing that. Let alone your aspidistra, try telling your cat about this. It is completely beyond his grasp.

Conclusion

I have unpacked just two arguments from science which seem to strongly support belief in a divine creator.

Firstly the evidence that the universe began and the logic that everything that begins has a cause. Secondly we have seen how astonishing it is that the Big Bang should have been so finely-tuned as to be capable of creating a universe supporting human life.

I have touched a third argument, that of Rationality itself. And if I had time, I would explain how mind and consciousness totally confounds modern science and remains the greatest mystery in the planet.

We have considered God's power and intelligence. But none of this tells us much about the character of God. The Prologue of John's Gospel concludes: *“No-one has ever seen God. He who is at the Father's side, he has made him*

known.” There is no other claim in the universe like that. No other religion offers anything like it – the sublime claim that the creator of the universe has entered his own creation. The universe tells us that God exists, but Jesus has made him known.