

Removing the Unmoved Mover: What, then, of God?

Abstract

The paper examines the consequence for theology if Physics is able to answer the ultimate questions of the origin of the universe. An imaginary universe is constructed that allows us to see that it is at least conceivable that such a development could happen within Physics. It is necessary to see religion and theology as art forms rather than as factual disciplines. If this is accepted, it is proposed that such an answer to creation requires the believer to enlarge their ideas of God rather than abandon them. The enlargement is to see the universe as always subsisting in God rather than the simplistic (Deist) model of a universe that is built and then could be abandoned. Allowing Physics (within its own terms) to have a method of creating the universe is, for the theist, seen to lead to a necessary involvement of God in the universe.

Removing the Unmoved Mover: What, then, of God?

Introduction

This paper is a playful attempt to explore the impact on religion of something that may now be an inevitability – the discovery of a physical mechanism by which the universe was created. Specifically we will be exploring the idea of God as creator and the modifications that need to be made to traditional Christian doctrine if such a mechanism is discovered. The suggestion is that by seeing religion in its proper context, as more akin to an art form than to science, Christian theology can make use of this potential scientific insight to re-work the idea of a Creator God as one necessarily present within the universe. This may sound counter-intuitive because for some it will be the case that a scientific proof equals a religious failure. However, this is to misunderstand the roles of science and religion. Although the details are largely speculative, it is the firm suggestion of this paper that a solution to the problem of the creation of the universe in the context of Physics (and purely Physics) would be a useful thing for Theology as it will force upon us an enlarging of the concept of God.

How? Why? and Creation

This paper arises from a consideration of the infamous god of the gaps. Briefly, to summarise this god: the so-called ‘god of the gaps’ is a term for the sort of theological description of the universe that sees God constantly retreat from the discoveries of science. Once upon a time, God made the Sun rise, now we know that it appears to rise because the Earth goes around the Sun, so God is not needed for that any more. Once upon a time, God created all life, now we know that it evolved, so God is not needed for that any more either. And so on. In other words, god does not exist and is merely a convenient fairy story for tired parents to use as an explanation when they do not know the answer to the question “but why...?” The ultimate “but why...?” question is surely the question of why anything exists at all. Why is the universe here? It is imperative for theology to consider this question in the context of the modern world. For this is a world that often assumes that if the question of how the universe exists can be answered scientifically, then the question of why it exists will be an irrelevance.

Let us unpack this idea somewhat. One of the theoretical options that Barbour suggests for the way in which science and religion are to interact with each other is ‘independence.’ In essence, this means that science gets to ask the “how?” type of questions whilst religion asks the “why?” questions. (Barbour 1997, chapter 4). (Although this is not Barbour’s ideology of choice, it is useful for our present considerations and in any case we will demonstrate through the course of this paper how independence is probably not entirely possible.) In other words, science can be seen as being about the way in which the physical world runs, whereas religion is about the metaphysical meaning of this physical world, be that in terms of morality or in terms of a wider sense of meaning. It should be noted that when an atheist scientist (by no means the only type of scientist) makes a claim about the non-existence of God, this is not a scientific claim any more than the opposite claim by a theist. These claims are in the realm of metaphysics. It may be that one is persuaded one way or the other in terms of whether one believes in something approximating to ‘God’, but whatever evidence one uses for the claim, it never becomes scientific, but is always metaphysical.

There is a sense in which this is a mundanely orthodox and obvious idea, despite the fact that some who hold extreme opinions about religion may be convinced otherwise. However, there is one area in which this is less than obvious and that is the ultimate “but why...?” question. Why anything?

150 years ago, and rather more vehemently about 100 years ago, it was supposed that if the ideas of evolution were correct, the Christianity was incorrect. That Darwin and Wallace had to be wrong became (and still is) a touchstone of an extreme form of Christian thought that. Such extreme thought insists that God created all species separately. This is clearly nonsense. Indeed, today, the vast majority of theists are happy with the ideas of evolution. But if we step back further in time, beyond the generation of life, to the very start of the universe, there is a different story to be told. It is here, at The Start, that the questions of how and why may collide and where attempts at a complete separation of science and religion into separate spheres of influence breaks down.

A Thought Experiment on Creation

Let us begin with a thought experiment. The following is deliberately not a scientific theory as I am not a professional scientist. Rather, it is a set-up for the creation of the universe

plucked from my imagination. It tries to do the same things as real theories of physics in that it offers a physical way that the universe could have come into existence, but without the need for me to explain and be precise about any particular theory, which would take me beyond my professional competencies. Some of this thought experiment may approximate to real physics, but its actual relationship to real physics is of no consequence. It is an allegory for physical theories rather than a record of any of them. So let us proceed to set up the universe, or to be precise, at least two universes.

First, let us consider black holes. For the purposes of our imaginary universe, let us suppose that once matter falls into a black hole, that matter is utterly and irrevocably sealed off from the universe from whence it came. Time in the universe outside has no relationship to time inside the black hole. Space inside the black hole is similarly radically severed from space outside the black hole. Thus, for our thought experiment, this means that the boundaries of the black hole, as viewed from inside, are the edges of the available universe. Let us also allow that the matter that has entered the black hole reaches such high energy levels in its near-infinitely compressed state that at some point it explodes. Because inside and outside the black hole are isolated from one another, such an explosion would have no impact on an observer outside the black hole. However, for the inside of the black hole, utterly separated from the outside, we can imagine that the explosion gives rise to a whole new universe, potentially infinite in space and time, indeed with its own space and its own time unrelated to that of the parent universe that spawned it. So we now have two universes, the first and the second. But even to call them by numerals disguises the fact that they are actually unrelated in terms of the space and time of which they consist. Although this may all sound like science-fiction, and although this is only a thought experiment, it is based on sound scientific argument. Ashtekar, Pawlowski and Singh (2006) suggest that matter cannot be infinitely compressed as by putting together gravity as represented in the theory of Relativity with its Quantum Mechanical representation suggests that gravity will become massively repulsive in highly confined spaces, causing the explosion mentioned here. Also, although he does not so radically sever time, Smolin (1997 and 2009) has suggested that black holes could all contain new universes. Although our thought experiment is not science, it is based on things that are at least possible.

Back to the thought experiment: Let us now imagine another black hole, this time, for what of a better term, in the ‘second’ universe, the daughter universe. This follows the same

rules as before, such that the inside is utterly unrelated in terms of space or time to the outside. It too explodes inside, creating a universe. Maybe we now have three universes, child, parent and grandparent. But not necessarily. Because the space and time in the separate universes are unrelated, maybe we have just two universes, each giving rise to the other. It makes no sense to ask which came ‘first’ because the time that runs in each is unrelated to the other.

We have generated a thought-experiment to show how the universe could have arisen without any need for anyone/ anything to create it. We have generated a system of physics that allows for the creation of the universe in a purely physical way: two universes, each generating the other. The question now is whether there is a place for God in such a system.

Move over, Unmoved Mover!

Aristotle noted how everything that occurred required a cause. He speculated that if we trace all the causes back to their effects, ultimately there would be a final cause, described by Aristotle in his works *Physics* and *Metaphysics* as the “Unmoved Mover.” This is the God of a mechanical universe whereby God sets up the universe and lets it go. This Unmoved Mover is still, more than 2000 years after he was proposed by Aristotle, the God that many people imagine. He is a god who has many possible ancillary purposes, but whose primary purpose is to be the first cause in a great chain of events and a chain of being that has been causing and effecting down the years to the present day and will continue to cause and effect into the future. This god is in his essentials the same as the god of Deism, an Enlightenment phenomenon that suggested that God was the cause of the universe but that having created it he left it to its own devices. Very clearly, such a god is not necessary from the point of view of our thought experiment. The imaginary physics of our thought experiment mean that such a god, one who approximates to Aristotle’s Unmoved Mover, has no place in our imaginary universe. There is no need for such a being as we have postulated a different cause that still comes from outside the universe, but one which is intimately connected to it and is, importantly, a physical rather than a spiritual cause. If all that God were was Aristotle’s Unmoved Mover, then it seems reasonable to suggest that this god does not exist. Moreover, it seems increasingly likely that religion is going to have to deal with this scenario in the near future. Science is not there yet, but religion has to answer the question of what it will think of God if it can be shown that the universe does indeed have a physical cause.

Art and Religion

It may seem like a great departure from our topic, but we now turn our attention to art. It is, naturally, not intended as a new topic but as one way of answering the problem we set ourselves above. We will suggest that art and religion work in similar ways. An appreciation of this will assist us to understand the impetus for insisting, later in this paper, that we can still use the term “creator God” and will assist us in our considerations of a possible answer for how we can use this term with integrity.

In his musings on art, which encompass a wide ranging definition of the concept, Gortais suggests that

Art does not copy reality, and its true function is not to represent it; it does so incidentally in figurative painting, but it can also radically do without it as in 'abstract' painting. The function of a work of art is not to represent reality, and the reference to the real world is not central. Its function is to make the artist's relationship to the world perceptible through symbolic signs that objectify it. (Gortais 2003, 1242).

It is interesting to consider the similarities and differences between this observation about the identity and function(s) of art and the identity and function(s) of theology. But first, let us dissect Gortias' statement about art. There seem to be three central ideas. First, it takes for granted that there is something that can be called 'reality.' Such a statement is hardly controversial, but it is worth noting that here we have nothing of the idealism of bishop Berkley. Second, in Gortias' statement, 'reality' does not have a positive or negative image. It is merely that actual reality is never the object of art. Rather than a view of reality as such, it has, in effect, a null view. Reality is not the most important subject of art. Far from it; reality is only incidentally a subject, at most. Third, the principle subject of art is the 'artist's relationship' with that reality. Gortais thus makes an important distinction between reality as such and the perception of that reality in the partial, limited view of the observer, the artist. We may imagine Gortais' description of art as itself an image. Reality is a dense cloud. The artist, seated at some distance, observes the cloud with the sense perception available to him and catches glimpses of what is within the cloud, as interpreted by his sensory perceptions. He then draws his impression of his senses. So there are three filters, that of the available senses, that of the artists' skill in understanding his senses and that of the artist' skill in

recording what he has understood. Thus, although reality is taken to exist, absolutely, it is never perceived (and far less recorded) in its totality. Maybe, and this goes beyond Gortais, art held to be ‘great’ reveals something about the observations of the ultimately real that only infrequently find expression or which startle the viewer of the art into a new awareness of reality. The feeling is that a great artist is able to mediate reality for us by showing us something of our own experiences.

Inevitably, there are other ways of thinking about art and there are complications around what we suggest above and the question of taste and perception on the part of the viewer of art. There is, for example, very little Modern Art that I find remotely appealing or appalling. Most of it leaves me cold, unmoved. Another person, maybe because of their greater perception, may see beauty and truth in pieces I find unmoving. However, this complication does not invalidate what we suggested about art. It merely adds one more filter (or several more) to the series of filters already in place, the filter(s) of the viewer of the art work.

In thinking about what it means for a religion or for a religious person to designate a text as ‘scripture,’ Wilfred Cantwell Smith (1993, 83) points out that language always has at least two meanings, the meaning for the person who writes the sentence and the meaning for the one who reads it. This is much the same as our observations about meaning in art. Smith also notes that for the person who treats a text as scripture “you are constrained by the very fact of your esteeming this as the word of God to recognize as the most cogent among all possible alternatives that interpretation that in your judgement is the closest to universal truth and to universal goodness.” (Smith 1993, 72f). Specific to the Christian instance of scripture, Barr (2002, 53) suggests that the Bible “is more a battle ground than a book of true facts. Holy Scripture has a function in the winning of salvation.” In other words, and in the terms we have already discussed, the use of scripture is an art form. Scripture is, for the religious person and where their own scriptures are concerned, the masterpiece through which ultimate truth can be glimpsed. It does everything that great art does in as much as via scripture the person of faith can find a new, fresh awareness of reality and of their place within it.

Religion as a whole shares this artistic dimension with scripture. It is an art-form that allows the participant to discover and, to a lesser or greater extent, to articulate their deepest and most honest view of reality and their place within it.

In what sense Creator?

If we take seriously the idea that a physical mechanism by which the universe came into being is likely to be discovered, can God be affirmed as the Creator? This is, after all, an article of belief held by the church since its formation. The answer is yes, but not in an easy or straightforward manner. What is written in this section will be merely a partial attempt at an answer. It is written as part of a conversation rather than as a definitive and complete answer. It takes the idea of religion as an art form and couples this with the consequences of our thought experiment.

All the while we think in terms of God creating the world in the traditional sense of this term, we have a clear and necessary separation of the matter of the universe from the spiritual, non-material being of God. God, in this traditional view, sits outside the universe and is not necessarily connected to it. In the model that we have proposed, the difficulty lies simply in the fact that the matter of the universe can take care of itself and has no need for an external entity. Naturally (and were our proposal proper physics rather than a thought experiment), the thorough-going materialist would stop there, having proved that God is an unnecessary hypothesis. But it is possible for the theist to progress beyond this point. Laying aside any personal experiences, the intellectual impetus for such progression comes largely from the value that is seen in religion. It is a huge mistake to imagine that the real value of religion lies in its powers of explanation of various facts. This is the mistake made by the thorough-going materialist who stops this particular train of thought once a self-sufficient universe has been reached. It is also the mistake made by those of extreme religious opinion who insist that, for example, evolution is necessarily incorrect. Both mistake religion as an alternative to science, which it is not. We have already seen that it is far more akin to art. It is about glimpsing, and sometimes seeing, truth, rather than articulating or explaining facts. As soon as that intellectual leap is made, then there is a need to continue the argument. There is a need to discover in what sense we can indeed still use the term “creator” for God in such a universe as we have constructed.

In our simple thought experiment, we had two universes imagined as a self-contained system. Just because a system is self-contained and potentially a closed loop of self-creation, does not mean that it cannot be embedded within a larger system. For God to have any creative relevance to this process, these universe(s) need to be considered as one part of the mind of God; they are a thought and once thought, they are a thing to be cared for, for the

thoughts of God are precious¹. If this is the case, we may suppose that God's thought causes the whole system to be, without any need for there to be a beginning visible from within the system itself. The question is one of perspective; the following two metaphors may help explain this. For those familiar with computing, it is a little like a 'virtual machine', a virtual computer that exists 'inside' another computer. From inside the virtual machine, programmes are unaware that they subsist within the greater reality of the physical computer. For those of a more earthy bent, it may help to think of a parasite. From the point of view of the parasite, its host is the entire universe, but of course, it actually subsists within the rest of the world, and, indeed the universe. (Horwitz and Wilcox 2005). Physics is constrained to operate within the universe(s) rather than being able to see a picture that is any larger. On the other hand, the theist will insist that there is something more, a metaphysical insistence rather than one that comes from Physics. On the other hand, it has to be admitted that if we can capture the whole creative process demanded by Physics within a physical model, it does change the theological assessment of the place of God in relation to the universe(s). It is not that God is the creator who sits outside the universe and holds it as if it were a football. Rather, God is the creator within whom the universe(s) exist. It/they only exist because it/they are thought of (whatever this may mean when applied to God). This means that God is far more necessarily present within the universe(s) than might sometimes be supposed, for they are a part of the 'mind' of God. Such universes can be both part of the mind of God and also physics can still have a complete picture, from its own perspective, without contradiction.

Just because we can postulate a physical cause for the ultimate phenomenon of physics, the existence of the universe, does not mean that there is no place for God. Rather, it shows that the religious are called upon to enlarge their concept of God and to ennoble the universe with the presence of God by necessity rather than by divine whim. In other words, God's presence is necessary to the existence of the universe. Unlike the idea of God holding a football-type universe, creating it and then being able to be absent from it, if we hold that there is a physics-only solution to the creation of the universe, then (to the theist) it seems all the more compelling that God should suffuse the universe rather than be absent from it or simply cease to have relevance, which would itself be a metaphysical position to take, rather than a factual, scientific one. This suggestion too, of course, is artistic rather than factual. But that is the nature of religion.

Conclusion

Towards the start of this paper we mentioned Barbour's designation of "independence" for one approach to science and religion. Although Barbour saw "independence" as better than "conflict," he also suggested that moving towards dialogue and then integration was a desirable approach. It is to be hoped that the ideas we have discussed in this paper assist in a small way with that ideal. It is not that science can answer religion's questions nor that religion can answer the questions of science. However, if each takes the other seriously then it is possible that a better overall answer may be found. This paper is too brief to be thought of as the final word on anything. However, we have managed to outline the bones of an idea. We have seen how it is possible to view science and religion as both having value, especially when their differences are properly understood and when religion is not seen as a substitute for science or vice versa. We have constructed a thought experiment to show how the universe could be created in terms of physics without any recourse to God. We have also seen how such a possibility, for the theist, enlarges rather than reduces their concept of God. The universe becomes inseparable from the mind of God in such a system of Physics.

References

- Ashtekar, Abhay, Tomasz Pawlowski and Parampreet Singh, "Quantum Nature of the Big Bang," in *Physics Review Letters* 96, 141301, 12 April 2006
- Barbour, Ian, *Religion and Science: Historical and Contemporary Issues* (San Francisco: HarperCollins, 1997)
- Barr, James, *The Scope and Authority of the Bible* (London: SCM, 2002)
- Gortais, Bernard, 'Abstraction and Art,' in *Philosophical Transactions: Biological Sciences*, 358: 1435, (2003), 1241-124
- Horwitz, Pierre and Bruce A. Wilcox, 'Parasites, Ecosystems and Sustainability: An Ecological and Complex Systems Perspective,' in the *International Journal of Parasitology*, 35 (2005), 725-32
- Smith, Wilfred Cantwell, *What is Scripture? A Comparative Approach* (Minneapolis: Fortress Press, 1993)
- Smolin, Lee, *The Life of the Cosmos* (New York: OUP, 1997)
- _____, "The Unique universe," in *Physics World*, June 2009, online at <http://physicsworld.com/cws/article/print/2009/jun/02/the-unique-universe>.

Endnote:

¹This does not necessarily lead to pantheism, for the thoughts of God are not God-in-himself, but generated by God. A full exploration of this belongs in a separate paper.