The interaction between science and Christianity can be a fruitful place for apologetics. Defence of the faith against wrong views of science is necessary if Christianity is to seem reasonable to non-Christians.

**Can science prove the existence of a creator?**

In the past few decades scientists have been noticing how the universe seems to be finely tuned so that human beings can exist, which they have named the “Anthropic Principle”.

We shall focus¹ on what has been called the Strong Anthropic Principle (SAP) which says “The Universe must have those properties which allow life to develop within it at some stage in its history.”² This is controversial as it says that the universe “must be such that life can exist.”³ It says that the universe is ‘designed’ (whatever this means!) with the goal of producing life⁴, which implies an intelligent designer of the universe. But can science prove the existence of an intelligent designer?

Science is based on logic and rational thought, therefore we can ask this question in a different way. Is it possible to prove⁵ God’s existence through logical argument based on the observable world?

The most famous attempts to prove God’s existence, which are relevant to science and Christianity, are the cosmological argument and the teleological argument:

- **Cosmological Argument**⁶ – Everything has a cause. There can’t be an eternal chain of causation. Therefore there must be a first cause at the end of the chain of causation. That cause is God.
- **Teleological Argument** – This is an argument from design. “There is so much beauty, order, harmony, and precision in the natural world that it must have been designed by a higher being who continues to govern the world.”⁷

Immanuel Kant critiqued these arguments for the existence of God and demolished them. He showed that there is an *a priori* presupposition of God in the arguments.⁸ Let us consider both arguments to show this is true⁹:

¹ Another non-controversial version of the Anthropic Principles is the **Weak Anthropic Principle (WAP)**. This says that “The observed values of all physical and cosmological quantities are not equally probable but they take on values restricted by the requirement that there exist sites where carbon-based life can evolve” (Barrow & Tipler, *The Anthropic Cosmological Principle*, p.16). The WAP basically says that the universe is consistent with our existence. The fact that life exists means that values of certain observable quantities can only be in the range that allows life to exist. This isn’t as controversial concept as the SAP. It just says because we exist the universe must be as such to allow us to exist.

² Barrow & Tipler, *The Anthropic Cosmological Principle*, p.21
³ Barrow & Tipler, *The Anthropic Cosmological Principle*, p.21
⁴ Worthing, *God Creation and Contemporary Physics*, p.44
⁵ By ‘proof’ in this essay I mean showing that something is necessary with no doubt at all.
⁶ Worthing, *God Creation and Contemporary Physics*, p.36
⁷ Worthing, *God Creation and Contemporary Physics*, p.35
• **Cosmological Argument** – This seems to argue from the observable world to the transcendent realm of God. The idea of everything having a cause is not a problem BUT this is only obvious in the observable world. Why should it imply that the cause was someone, like God, who is transcendent to this world? (See Figure 1) Why couldn’t it have been something else? We have smuggled God in by the back door! God being the ultimate cause is an *a priori* presupposition. Also why do we say that it is impossible to have an eternal chain of causes?

• **Teleological Argument** – This argument observes something and says it exists because of God. However Beauty, order, harmony, and precision in the natural world don’t necessarily show the existence of a creator God. At the very most, all they can show is existence of a being who ordered pre-existing matter (a Greek demiurge). If you say it is a creator God you have smuggled this idea in from nowhere. It is an *a priori* presupposition and it not necessary.

![Figure 1](image)

**Figure 1** – God’s transcendent relationship to the physical world is shown by two parallel planes which do not intersect. There is a chain of causation in the physical world. The last step of the chain of causation to God is possible but not necessary, as Kant showed. It depends on your *A Priori* assumptions.

The problem in the teleological and cosmological arguments is that the *a priori* idea of a ‘created world’ is smuggled into the arguments. It is quite possible to remove God from the arguments and not get a contradiction.\(^8\) The arguments give no explanation as to why it is necessary to think of God existing or not existing. God is just an assumption in them.\(^9\)

Kant showed that it is impossible to use causation (cosmological argument) or observations about the world (teleological argument) to prove the existence of God. Things like the anthropic principle therefore don’t prove the existence of a creator God.

\(^8\) Worthing, *God Creation and Contemporary Physics*, p.35  
\(^9\) Worthing, *God Creation and Contemporary Physics*, p.36-37  
\(^10\) Worthing, *God Creation and Contemporary Physics*, p.35  
\(^11\) Worthing, *God Creation and Contemporary Physics*, p.35
Science also cannot disprove God’s existence. God is not something we can experiment on or observe by our senses in the scientific way.\textsuperscript{12} Science cannot transcend this physical world and so it cannot disprove God’s existence either.

Science cannot prove or disprove a link between the created realm and God. The link is obvious to Christians because of our worldview, but we cannot logically and rationally, using science, prove this link to people who don’t have our worldview. This does not mean this link doesn’t exist, it just means it can’t be proved.

So what are the implications for apologetics? Can science be of any use in defending our faith? The idea of a creator or intelligent designer of the universe is a faith step. You cannot prove it by rational argument and so it must be a belief. The physical evidence for the fine tuning, the beauty and the order of the universe are all what Alister McGrath would say are “points of contact”. They are a “God-given footholds for divine self-revelation”\textsuperscript{13}. They are places where God can reveal himself. They do not prove God’s existence but are consistent with Christianity.\textsuperscript{14} Science can show that the claims of Christianity are reasonable. Science can support what Christianity says about the world and God but it cannot prove it. Points of contact are essentially the furthest we can reach out towards knowing God by ourselves. We then have to rely on God revealing himself at these points of contact. Ultimately belief in a creator God is a step of faith. Science and Christianity complement each other as explanations of the world.

The fact that science cannot prove or disprove the existence of God has two important implications:

1. **Science can only answer the “how?” and not “why?” questions**

Due to the fact that science is an enterprise that goes on in the sensible realm and can’t go beyond this it cannot answer any of the ultimate questions about where we came from. At best science only enables us to answer “how?” questions, science cannot answer the “why?” questions eg. For a birthday cake scientists could examine it and explain the baking process, but they can’t explain why it was baked (for someone’s birthday)\textsuperscript{15}. Science can answer how the universe and we came into being but it cannot answer why we or the universe exists at all.

2. **The age of the earth does not prove God’s existence.**

Young Earth Creationist’s seek to prove the existence of a creator God is necessary by trying to show that the age of the earth is young, which corresponds to a literal reading of Genesis 1. However we have to remember that science cannot prove the existence of God. Even if we could show that a 6000yr old earth is the best fit to the scientific evidence, this doesn’t prove conclusively that God is necessary. There still

\textsuperscript{12} Worthing, *God Creation and Contemporary Physics*, p.70-71
\textsuperscript{13} McGrath, *Bridge Building*, p.19
\textsuperscript{14} McGrath, *Bridge Building*, p.65
\textsuperscript{15} Gumbel, *Searching Issues*, p.102-103
has to be a faith step. The best young earth creationists can do, if they can show the earth is young, is show that belief in a literal Genesis 1 is reasonable, not necessary.

Scientific Knowledge and Faith

People tend to see science as fact based and Christianity as faith based, so science is better than Christianity. However science and Christianity are not as far apart as people think.

The common perception of science (called Inductivism) is that we begin with single observations, which lead to general theories and these theories allow us to make predictions.

![Figure 2 – The process of Inductivism (from Chalmers, What is this thing called science?, p.6)](http://www.talkorigins.org/faqs/hovind/howgood.html)

It is considered that from a long list of many facts we find the scientific laws. However this leaves us with many questions about the proof of the “laws”:¹⁸

- How many facts do we need to convince ourselves that the law is correct?
- We really need to check the “laws” under different circumstances, but how many of the infinite possibilities do we check before it becomes scientific fact?
- What happens if we discount possibilities that would have shown our “law” to be wrong how will we know?

We have to say that there are too many problems to say that we can prove an ‘ought’ (physical law) from an ‘is’ (observation). This leads us to a conclusion that scientists have long since known:

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¹⁶ I say ‘if’ because it does seem as if a good proportion of “young earth” creationism is bad science. Dave E. Marston in the introduction (called ‘Dear Reader’) to his website showing the flaws in the young earth creationist arguments (http://www.talkorigins.org/faqs/hovind/howgood.html) says: “The scandalous truth, which is unknown to much of the public, is that the arguments of "scientific" creationism are not only bad but shockingly bad. Some of their most popular arguments have rested solely upon obsolete data! Misrepresentation of the data are commonplace. Discrepant data are routinely ignored! In short, there is a wholesale lack of professional scientific integrity among the "scientific" creationists. (It is usually a case of creationists copying from each other or indulging in wishful thinking rather than outright dishonesty.)”

¹⁷ See Chalmers, What is this thing called science?, Chap. 1 (diagram from p.6)

¹⁸ See Chalmers, What is this thing called science?, Chap. 2
“Any Physical theory is always provisional, in the sense that it is only hypothesis: You can never prove it. No matter how many times the results of experiments agree with some theory, you can never be sure that the next time the result will not contradict the theory. On the other hand, you can disprove a theory by finding even a single observation that disagrees with the predictions of the theory.”

The process of science is a lot more complicated than simply observing and drawing out “laws” from facts. Various philosophies have been put forward to describe the nature of science each with their advantages and disadvantages. However all describe science as ultimately being based on theory. Scientists propose theories about the world and these are then checked to see if they agree with observation. It is also important to note that even observations are not pure facts; they have a theory content in them. We observe our world based on past experience (See Figure 3). A scientists experience and theoretical understanding of the world (including the existence or non-existence of God) impacts what they observe.

![Figure 3 – What do you see? Stairs? Someone who has no experience of three dimensional drawings however would only see a set of lines (from Chalmers, What is this thing called science?, p.24-25)](image)

Theory is the central structure of science. Any theory is always just that, a theory that seeks to explain the physical evidence. It may give an accurate representation of reality or it may not. Even though it may give an explanation that fits the observable evidence it is still only a theory. Science can never conclusively prove anything.

Science is just as much based on belief as Christianity is. Scientists believe that the theories fit the observable evidence and explain the world, but they can’t give a conclusive proof it. This doesn’t mean that there doesn’t exist some objective reality out there, it just acknowledges the fact that we can’t prove scientific theories correspond exactly to reality.

Scientific knowledge ultimately has to come down to a belief system just as Christianity does. We can see therefore the science is not all about fact and Christianity all about faith. There is some overlap in the ways that they explain the world. A form of belief is fundamental to both of them. This view of scientific knowledge has a couple of important consequences:

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19 Hawking, *A brief history of time*, p11
20 See Chalmers, *What is this thing called science?*, Chap. 3
1. Scientists are not necessarily objective

Personal worldviews and presuppositions do impact on scientists theorising about the world. Scientific data can be interpreted to include a belief in God or not to include a belief in God, depending on the scientist’s presuppositions. Scientists are never totally objective and they are never totally subjective either. They are always somewhere in between!

2. Scientific laws are not unbreakable

The fact that scientific knowledge is a form of belief based on theories has implications for the way see scientific “laws”. People see them as unbreakable facts and therefore miracles couldn’t have happened BUT scientific laws are simply the best theories we have for explaining the world. This means they could be broken and miracles can happen!

The “conflict” between science and Christianity

It is a common perception that science and Christianity are continually in conflict with each other about their different beliefs. While it is true that individual scientists have been in conflict with the church, due to their dogmatic views, it is not true that Christians have always been in opposition to science. In fact a case can be made that the Christian world view helped to prepare the ground for the rise of modern science. Due to the fact that Christians believe the world is not God, God being transcendent to the world, Christians therefore believed that it was not irreverent for humans to explore the world.

In regard to the appearance of evolution, which is usually thought of as the biggest area of conflict, Claude Welch writes that in the 19th century:

“Reactions to the Origin of Species among the theologians, especially protestant but also Romans Catholic, were in fact just about as varied as among scientists, as Thomas F. Glick has amply demonstrated.”

Therefore any negative reaction to evolution was not just due to certain portions of Christianity, but also came from scientists as well!! Science itself does not move forward as a whole movement without conflict, but different scientists have different views on the various scientific theories and new “discoveries”.

There have been over the years many scientists who are Christians (See Table 1). These people have managed to look at science positively through their Christian beliefs to see that it is a valuable enterprise in which to be involved.

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21 Jeeves, *The scientific enterprise and Christian faith*, Chap. 1
Conflict can be generated from the scientific community if they have a view of Scientific Imperialism. Scientific Imperialism is the idea that there is only one way to know anything and this is through science. Science gives the best (or possibly the only) route to true knowledge about reality. It is the scientists who then mediate this knowledge as the high priests of science. Any other source of knowledge is seen as inferior or flawed. The source of the conflict is then from scientists who do not know or refuse to acknowledge the limitations of scientific knowledge. As we have seen above, all scientific knowledge essentially comes down to belief and is not better than any other source of knowledge. Scientific Imperialism is unjustified.

**Conclusion**

We have given indications about how it is possible science and Christianity to co-exist together without conflict. Both science and Christianity can give complementary and compatible explanations for the world if the limitations of science are accepted.
Bibliography


Chalmers, A. F., *What is this thing called science?*, (Milton Keynes: Open University Press, 2nd ed. 1982)


McGrath, A. E., *Bridge Building*, (Leicester: IVP, 1992)


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