Can a Darwinian be a Christian?

Gregory W. Dawes

University of Otago

"Can a Darwinian be a Christian?" Let me begin by defining the terms of this question. The first is relatively easy. A "Darwinian" is one who accepts and works within the research tradition initiated by Charles Darwin, which argues for the descent of species from common ancestors, and whose principal (but not sole) mechanism is natural selection. Today it is represented by what is called the "neo-Darwinian synthesis." This combines Darwin's original insights with our modern knowledge of both DNA and population genetics. As one would expect of any scientific theory, there are disputes within the Darwinian camp. But all forms of Darwinian evolutionary theory posit the existence of two mechanisms. The first produces random variations in individual organisms; the second ensures that those variations are inherited. Given these mechanisms, those variant forms that are beneficial to the organism in a particular environment will survive and be inherited. It is this differential survival and inheritance of variant forms that over time gives rise to new species.

So much for Darwinism. What about the other term of the discussion, namely "Christianity"? This is not so easily defined. The problem here is that there are many different sets of beliefs that go by this name. The most familiar

differences are those that gave rise to the divisions between Eastern Orthodox, Roman Catholic, and Protestant Christians. But the doctrinal differences that matter in the present context cut across those historic divides. They have to do with one's conception of God and of God's relation to the world.

From an early date the vast majority of Christian theologians have held to what we might call a "perfect being" conception of God. God is believed to be

> a person without a body (i.e. a spirit), present everywhere, the creator and sustainer of the universe, a free agent, able to do everything (i.e. omnipotent), knowing all things, perfectly good, a source of moral obligation, immutable, eternal, a necessary being, holy, and worthy of worship. (Swinburne 1979: 2)

From about the second century, Christian thinkers have been all but unanimous in affirming that this perfect being created the world *ex nihilo* (from nothing). I shall refer to this set of beliefs as "classical theism." As we shall see, many of the (at least apparent) conflicts between Darwinism and Christianity arise from this traditional conception of God. Not least for this reason, some Christian thinkers have begun to search for an alternative. Of particular interest here is the work of the process theologians, whose conception of God is based on the work of Alfred North Whitehead (1861–1947) and Charles Hartshorne (1897–2000). The slightly different conceptions of God espoused by these two philosophers allow no room for the idea of a creation *ex nihilo* (Viney 2004). And there is a sense in which their God is less than omnipotent (Griffin 2001).

But even outside the camp of what I shall call "process theism," there are Christian thinkers who have adapted their conception of God, by altering their understanding of the divine attributes. One thinks, for instance, of the "open theism" or "free will theism" espoused by philosophers and theologians such as David Basinger and Clark Pinnock. At least some of these non-classical forms of theism might appear, at first sight, to be more consistent with Darwinism. As I hope to show, non-classical conceptions of God have both advantages and disadvantages. Whether the advantages outweigh the disadvantages is not a question I can hope to settle here.

What about the title of this paper? It is a question that is often asked. It is, for instance, the title of a recent book by philosopher Michael Ruse. But it was also asked of Darwin himself. When asked by a correspondent if a person could be a "Theist and an Evolutionist," Darwin replied that he certainly could, citing as instances Asa Gray and Charles Kingsley (Desmond and

Moore 1991, 636). He was, of course, correct. These people were both theists and evolutionists. The problem is that from the philosopher's perspective, it is the wrong question to ask. Even from a historian's perspective, it is an uninteresting question, because an answer can so easily be given. Yes, a Darwinian can be a Christian. How do we know? Because some Darwinians are Christians. End of story.

In saying this, I do not want to understate the degree of Christian opposition to Darwin. In the first fifteen years after the publication of the *Origin of Species* (1859) most American Protestant thinkers, insofar as they responded to Darwin's theory at all, were hostile to it (Gregory 1986, 372–74; Roberts 1988, 20, 31, 40). They saw its proposed mechanism as a serious challenge to the tradition of natural theology, which had allowed them bring forward apparently rational grounds for their faith (Roberts 1988, 76; 1999, 145). Darwinism, argued the Princeton theologian Charles Hodge (1779–1878), is equivalent to atheism, since it denies design in nature, and the "the denial of design … is virtually the denial of God" (Gregory 1986, 377). I shall come back to that suggestion shortly.

Even at the end of the nineteenth century many conservative Christians—in 1900 perhaps 25% of American Protestant thinkers (Roberts 1999, 148)—continued to reject Darwin's theory outright. And some of those who initially embraced the Darwinian vision eventually turned against it (Numbers 1988; Roberts 1988, 99, 100, 106). A key factor in the late nineteenth-century Christian opposition to Darwin was a desire to be faithful to the biblical account of human origins (Livingstone 1984, 166; Roberts 1988, 103, 213). This opposition grew remarkably in the twentieth century, particularly in the United States. In our own day, some 65% of American evangelicals hold to a view of human origins that is incompatible with Darwinism (Pew 2006, 16).

So there have always been Christians who are opposed to Darwin, just as there have always been Christians who accepted his theory. However, my point is that the interesting philosophical and theological question cannot be answered by counting heads. For the interesting question is not whether a Christian can be a Darwinian; it is whether there exists some kind of conflict between these two sets of beliefs. I shall describe the idea that there is some kind of conflict between Darwinism and Christianity the *philosophical* (as opposed to *historical*) conflict thesis.

In this article, I seek to identify four forms of philosophical conflict thesis. The first holds that Christianity and Darwinism are simply incompatible sets of beliefs. The second holds that even if they are not incompatible, the truth of

one constitutes evidence against the truth of the other. The third holds that even if Darwinism does not offer an evidential challenge to Christianity, it has destroyed one of the arguments that could be used to defend Christianity. And there exists a fourth, broader conflict thesis, according to which Darwinism and Christianity represent conflicting claims to knowledge. Let me spell out each of these four options.

1. The Incompatibility Thesis

The first position is what I shall call the "Incompatibility Thesis" (IT). Here it is.

> IT: The theory of evolution by natural selection is incompatible with the Christian faith.

This is a philosophical and theological thesis, rather than a historical or sociological one. It holds that Darwinism and Christianity represent two sets of beliefs that cannot both be true. If this is correct, then to affirm your belief in Darwin's theory while continuing to be a Christian is equivalent to saying that you believe both *p* and *not-p* (where *p* is some proposition). You are, in fact, contradicting yourself, even if you are not aware of the contradiction.

What can we say about IT? A first point is that it has at least a *prima facie* plausibility. If Genesis 1–3 can no longer be understood more or less literally, then what of the later biblical accounts, such as those of Jesus' resurrection, on which Christianity depends? What happens to the great Christian narrative of fall and redemption? Could a radically contingent and unpredictable process such as natural selection be part of God's plan? On the face of it, biological evolution has no predetermined goal, so why should we consider ourselves its privileged end-point? Given our kinship, psychological as well as physical, with other animals, in what sense are we unique, created in the image of God? For many nineteenth-century Christians, as for many Christians today, "Darwin seemed to annihilate singlehandedly the entire body of Christian doctrine" (Moore 1979, 113).

But is this judgement justified? Once again, this question is not answered by pointing to Christians who are Darwinians. For IT is a thesis about the incompatibility of two sets of beliefs, and even a highly intelligent person can hold what are in fact incompatible beliefs without realising their incompatibility. I may believe, for instance, that a person's actions are caused by factors outside her control, while also believing that she is morally responsible for what she does. But according to at least one view of human

freedom, these two beliefs are incompatible (Pereboom 2001: 54, 126). Whether two sets of beliefs are in fact incompatible is a logical question; it is not a question that the historian or sociologist can adjudicate.

To whom, then, should we look for an answer? If the truth or falsity of IT is a logical question, we should look to the philosopher, for logic has traditionally been what philosophers do best. And as it happens, one of the best known contemporary opponents of IT is a philosopher. In the book I mentioned earlier, Michael Ruse argues that there is *not necessarily* any contradiction between Darwinism and the Christian faith, if the latter is rightly understood. He is supported in this conclusion by a significant number of Christian theologians and scientists. Among the best known are the Georgetown University theologian John Haught and the Brown University biologist Kenneth Miller, both of whom (as it happens) are Roman Catholics.

Have authors such as Ruse, Haught, and Miller defeated the incompatibility thesis? It is impossible to give a straightforward answer to this question. Darwinism and Christianity represent two sets of beliefs. So faced with an apparent conflict, we can always resolve it by altering one or the other. More precisely, we can (a) reinterpret what we mean by "Christianity," (b) narrow the scope of what we understand by "Darwinism," or (c) do both. But this merely raises further questions. How far can you go in reformulating the Christian faith before losing some of its most treasured features? And how far can you go in reformulating Darwin's project before betraying some of its central aims?

Let me begin with the first strategy, that of reinterpreting those Christian doctrines that appear to be incompatible with Darwinism. Ruse, Haught, and Miller are anxious to engage in this process, as were their nineteenth-century predecessors. Ruse suggests, for instance, that we abandon the traditional understanding of original sin and understand Genesis 1–3 as simply a metaphorical expression of the human predicament (Ruse 2001, 209). Miller avoids conflict between Darwinism and Christianity by abandoning a traditional belief in divine omniscience. He suggests that since the evolutionary process is radically contingent, not even God could be certain when beings like us would evolve (Miller 1999, 274). John Haught abandons a traditional belief in divine providence, arguing that God has deliberately withdrawn himself from the world in order to leave room for creaturely freedom (Haught 2000, 40).

As these examples make clear, one *can* always reconcile Christianity and Darwinism by reinterpreting the former. The problem is that this strategy

involves certain costs, since it entails the surrender of some treasured Christian beliefs. If, as Haught suggests, God has deliberately hidden himself, then we can hardly expect him to answer our prayers. We cannot expect him to be a very present help in time of trouble, if in fact he has chosen to leave us on our own, at the mercy of whatever accidents may befall us. And while a metaphorical interpretation of the story of Adam and Eve, such as Ruse urges, might *illustrate* the human predicament, it does not in any sense *explain* it.

Why should this matter? It matters because a more or less literal reading of Genesis 1–3 formed the basis of a widespread and ancient Christian theodicy. The world created by God, pre-modern Christians believed, was "very good"; suffering and death entered the world as a result of human sin. One might argue, with John Hick (1966, 281–89), that this was never a satisfactory theodicy, but it is one to which the Christian Darwinian cannot appeal. Ruse argues that evolutionary psychology can offer the Christian a new understanding of original sin, a new explanation of why it is that we suffer from an inherited tendency to evil (Ruse 2001, 209–10). But by removing any human agency from the process—there was no first couple who ate a forbidden fruit—Ruse merely exacerbates the problem of evil.

A second way to defeat the incompatibility thesis is to adopt a narrow interpretation of Darwinism. If we take the parameters of the Darwinian research tradition from Darwin's own work, it is clear that it is a very broad programme indeed. We will fail to appreciate its true scope if all we read is the *Origin of Species* (1859). More revealing is Darwin's later work *The Descent of Man* (1871). Here Darwin discusses the origin not merely of our physical constitution, but also of our "intellectual and moral faculties." He argues that both our human powers of reasoning and our moral sense can be explained without reference to supernatural agency. Even belief in God falls within the scope of Darwin's speculations. While such belief is apparently unique to human beings, Darwin argues that it is the product of mental faculties that are found in other animals (Darwin 2005: 678–80).

Those Christians who claim to accept Darwin's theory are generally reluctant to go this far. They insist that at least our human moral and spiritual faculties are the result of a special divine intervention. Christian defenders of Darwin often cite Pope John Paul II's statement that evolution is "more than a hypothesis." But in fact the only human evolution the Pope was prepared to accept is that of the human body. The human soul, the Pope affirms, is "immediately created by God" (1997: 383). This is no "merely spiritual" claim, which the scientist could ignore. For in traditional Roman Catholic thought,

the soul is responsible for precisely those powers that Darwin believed his theory could explain.

So, is the incompatibility thesis (IT) false? Well, it can be made false, by a careful reinterpretation of each of its key terms. But Darwin himself would have been very unhappy with the restricted Darwinism that emerges from this process. And those who want to reconcile Darwinism and Christianity should be aware of how much of their faith they may have to surrender.

2. The Evidential Thesis

A second possible interpretation of the conflict thesis is closely related to, but not identical with, the second. I shall name it the "Evidential Thesis" (ET), after what philosophers call the "evidential" argument from evil (Draper 1989), of which it is an expression.

> ET: While the truth of Darwinism may be compatible with the truth of Christianity, the former constitutes evidence against the latter.

This is also a philosophical and theological thesis, but a more subtle one. Let me illustrate what it entails by way of an analogy. I believe that my friend has been, and still is, on holiday in England. But I then receive a letter from my friend, making no reference to her location, but which is postmarked "Paris." My belief that my friend is in England could still be correct. She may, for instance, have entrusted the letter to someone else to post, who posted it from Paris. But the Paris postmark might make me reconsider my initial belief, since it constitutes at least *prima facie* evidence against it. By analogy, even if one can show that Darwinism and Christianity are not incompatible, the truth of Darwinism might constitute *prima facie* evidence against the truth of traditional Christianity. Since this evidential thesis is not often discussed in the literature (it is often confused with the incompatibility thesis) let me try to spell it out.

Given a traditional belief in God as creator (the classical theism to which I made reference earlier), the Christian Darwinian must believe that natural selection was the means by which God created complex biological organisms. But is this a plausible claim? It may not entail any contradiction (IT may be false), but is it likely to be true? (I am assuming here, *pace* Alvin Plantinga, that Christian faith must answer this kind of challenge.) Already in the eighteenth century, David Hume spelled out the question that must be asked in this context. "Is the world considered in general, and as it appears to us in this life, different from what a man or such a limited being would,

beforehand, expect from a very powerful, wise, and benevolent Deity?" (Hume 1993, 107). If the world we observe is not the kind of world we would expect God to create, this fact constitutes evidence against his existence.

One possible response is that we cannot answer Hume's question, since we cannot, in fact, predict how God would act (Sober 2003, 40–41). When put forward by believers, this view is often described as "sceptical theism" (Wykstra 1990; van Inwagen 1991). It is true that a moderate scepticism in this regard has a certain plausibility. It could claim some support from Hume, who once wrote, in a similar context, that "our line is too short to fathom such immense abysses" (Hume 1902, 72). Indeed, it could claim support from Darwin himself, who once wrote that "the whole subject is too profound for the human intellect. A dog might as well speculate on the mind of Newton" (Greene 1959, 720).

But sceptical theism comes at a cost. For if the theist denies that we can predict how God would act, he cannot argue that the existence and action of God constitutes a potential explanation, let alone the best explanation, of some fact about the world. (If we cannot predict how God would act, such a proposed explanation would have no empirical content.) So let's assume for the moment that we can answer Hume's question. Is natural selection the kind of mechanism that we would expect God to choose in creating living creatures?

There are at least two problems here. The first has to do with natural selection itself, the process that ruthlessly favours those who are better adapted in the struggle for scarce resources, eliminating their rivals. According to Darwin, "the war of nature, ... famine and death" is not an accidental feature of the living world; it is essential to the process by which living beings emerged (Darwin 2005, 601). How likely is it that a "wise and beneficent Creator" would choose such a process (Moore 1979, 113)? A second, less discussed problem has to do with the animal behaviour that natural selection favours. We may not regard non-human animals as moral agents, but we can still regard the way they act as morally repugnant (Williams 1988, 385). "Mother nature," in George Williams's memorable phrase, "is a wicked old witch," producing countless instances of infanticide, cannibalism, rape, and senseless killing (Williams 1993, 217). Is this "what a man ... would, *beforehand*, expect from a very powerful, wise, and benevolent Deity?"

Such reflections can form the basis of a powerful argument not merely against the Christian faith, but against any form of classical theism. The most persuasive form of this argument is that offered by Paul Draper, who sets up

an alternative hypothesis to that offered by believers, which he calls the "hypothesis of indifference" (HI).

> HI: Neither the nature nor the condition of sentient beings on earth is the result of benevolent or malevolent actions performed by non-human persons. (Draper 1989, 332)

Adopting Draper's argument and applying it to the case in hand, we can ask which hypothesis—the theistic hypothesis or the hypothesis of indifference—would better explain the existence of a process such as natural selection. In other words, on the basis of which of these hypotheses is the process of natural selection *less surprising*? An atheist might argue that natural selection is much less surprising given the hypothesis of indifference, which is incompatible with classical theism. This conclusion would not *by itself* show classical theism to be false, since there is other evidence that needs to be taken into account. But it could lend support to atheism.

How could the classical theist respond to this argument? He could respond by arguing that if God wanted to create beings like us, he had no choice. Only something like natural selection could give rise to the adaptive complexity of the natural world (Ruse 2001, 137). So if the process comes at a cost, it is a cost that not even God could have avoided. But this is a puzzling argument, even if it was put forward by no less a thinker than Asa Gray (Roberts 1988, 134). For it assumes that God can or would use only natural mechanisms in creating the world. But given a traditional conception of God, the deity could have created the world, with living organisms already fully formed, merely by willing it. (The authors of Genesis 1 had sound theological instincts.) So God, if he exists, *would* have a choice. The question then becomes which of these possible courses of action is more consistent with the existence of an omnipotent and benevolent creator.

One might object that what we read of in Genesis 1 involves a series of miraculous divine acts. And so it does. But why should this make it less likely, as a mode of divine action? There can be no creation *ex nihilo* without a miraculous divine act, at least at the start of the process. And a Christian who believes that Jesus was born of a virgin, as Ken Miller does (1999, 239–40), can have no objection, in principle, to miracles. Both Michael Ruse and Ernan McMullin suggest that while the redemption of human beings would require a miracle, their creation would not (Ruse 2001, 98; McMullin 1993, 324). This may be true. But it remains true that a miraculous creation may have been a better way for God to create, "better" in the relatively uncontroversial sense of entailing less suffering. Writing against the advocates of intelligent design

Miller asks, "Why did this magician [God], in order to produce the contemporary world, find it necessary to create and destroy creatures, habitats, and ecosystems millions of times over?" (Miller 1999, 128). But he fails to notice that this question can also be asked of the Christian Darwinian (Crews 2001).

So is the Evidential Thesis false? Well, perhaps it is. Once again, the theist may be able to escape the objection by altering his concept of God, although even the God of process theism seems vulnerable to such arguments. (See the exchange between William Hasker and David Ray Griffin following Hasker 2000). In any case, no amount of historical evidence can show ET thesis to be false, and even Michael Ruse has admitted it is difficult to defeat (1988, 413–14).

3. The Replacement Thesis

A third possible interpretation of the conflict thesis is what I shall call the "Replacement Thesis" (RT). One expression of this claim runs as follows.

> RT: Darwin's theory destroys the argument from design by replacing a theological explanation of the complexity and adaptation of living organisms with a secular one.

This seems to be what Richard Dawkins means when he says that it was only after Darwin that one could be an "intellectually fulfilled atheist" (Dawkins 1988, 6). This thesis is quite distinct from the previous ones. Once again, it is not defeated, as David Livingstone apparently believes, by showing that many Christians accepted Darwin's theory (Livingstone 2003, 183).

Is this thesis correct? In one sense it is. Darwin's work was a decisive step towards what has become known as the "methodological naturalism" of the modern sciences (Numbers 2003, 265, 279). The sciences are methodologically naturalistic insofar as they exclude any reference to divine action. They investigate the world *etsi Deus non daretur* (as if there were no God). Darwin contributed to the formation of this entirely naturalistic science by setting his theory in opposition to that of special creation (Darwin 2005, 600). It is true that amongst Darwin's educated colleagues a belief in special creation rarely if ever entailed a literal interpretation of Genesis 1–3 (Knight 2004, 41). But it did entail that species were produced by some kind of divine action, in ways that were inaccessible to scientific understanding (Gillespie 1979, 29–30). This claim had its theological implications. For even if there was little one could say about the *means* of creation, some kind of divine

action seemed necessary in order to explain the facts of biology. It followed that those facts could support an argument from design of the kind that had been offered by William Paley (1743–1805), whose rooms Darwin apparently occupied at Cambridge (Browne 1995, 93).

As a young man, Darwin was impressed by his study of Paley's works, arguing that they were the only valuable part of his university education (Darwin 1958, 59). But he also realised that "the old argument of design in nature … fails, now that the law of natural selection has been discovered" (Darwin 1958, 87). After Darwin, we have a natural explanation of what previously seemed to require immediate divine action. As we have seen, it was a fear of such an outcome that seems to have motivated many of Darwin's earliest Christian opponents (Roberts 1988, 100). A world without design is, in effect, a world without evidence of God, or at least without the kind of evidence that eighteenth and nineteenth-century Christians had found most persuasive. And not only eighteenth and nineteenth-century Christians: the argument from design remains influential, being one of the primary reasons that people cite for believing in God (Shermer 2000, 84).

One could respond to RT by arguing that Darwin's theory merely weakens the argument from design; it does not eliminate it. This would be true if there exist other design-like features in the natural world that cannot be explained by reference to any natural process. And from an early point in the history of Christian responses to Darwin, there has been a tendency to push the design argument backwards (as it were), finding design not in organisms themselves, but in the laws that give organisms the ability to evolve (Numbers 2003, 275–76). We find this as a fall-back position in the work of the nineteenth-century evangelical Robert Dabney (1820–98), who was an opponent of Darwinism (Livingstone 1984, 125), and we find it in the work of Richard Swinburne (2004, 171–72) and advocates of the "fine-tuning" argument today (Collins 2003). An examination of their arguments would take us too far afield. Suffice to say that there are forms of the design argument that may not yet have been defeated. But insofar as Darwin dealt a fatal blow to the most common form of that argument, the replacement thesis must be taken seriously.

4. The Faith and Reason Thesis

A fourth possible interpretation of the conflict thesis relates to science and religion in general. I mention it here because if there is a conflict between Darwinism and Christianity, it is rooted in this deeper conflict, having to do

with the sources of our knowledge. I shall call this broader conflict thesis the "Faith and Reason Thesis" (FRT).

> FRT: Science recognises only publicly-testable forms of evidence, while the Christian faith rests on a presumed divine revelation whose authority can be recognised only by faith.

On the face of it, this might seem to represent nothing more than a distinction between two alleged sources of knowledge: religious faith and secular reason. Could the two not co-exist peacefully? Why speak of a conflict in this context?

There are two issues here, which need to be kept distinct. The first has to do with epistemology, the theory of knowledge. It is characteristic of the modern sciences, in the broadest sense of that term, to recognise only publicly testable forms of knowledge. Indeed this is probably the best way of understanding the "objectivity" of the sciences. Their claims are objective in the sense that they can be *inter-subjectively tested* (Popper 2002, 22). While the means of testing knowledge-claims may vary from one science to the next, the sciences admit only those claims that appeal to forms of evidence that are, in principle, accessible to all.

What about religious faith? There are, of course, different conceptions of faith (Helm 1973), some of which all but eliminate the distinction between faith and reason (Locke 1846, 510). But there also exists a theological tradition that regards religious faith as a source of knowledge that is independent of reason. Combined with the idea that faith is a divine gift, this entails that religious claims may not be publicly testable. For it is possible that God may not give the gift of faith to everyone, but merely to his elect. If one is not among God's elect, one can have no share in the alleged "knowledge" that faith offers. From the point of view of the modern sciences, such a claim to knowledge is deeply problematic.

I have reflected on these matters elsewhere (Dawes 2003), and shall not dwell on them here. What I shall focus on here is the fact that these rival conceptions of knowledge can, at times, give rise to rival substantive claims, conflicts regarding *what* is believed. These are not necessary conflicts (they could be avoided), but the possibility of such conflicts cannot, in principle, be excluded. In the present context, they represent conflicts between the deliverances of faith and those of science. This is a form of the broader conflict thesis to which I alluded earlier; it goes far beyond the boundaries of the Darwinian controversies.

There might seem to be good theological reasons why conflicts between religion and science should never arise. 1For, it might be argued, God is the

author of nature as well as scripture; he is the creator of reason as well as the giver of revelation. And God cannot contradict himself. The astronomer and philosopher of science John Herschel (1792–1871) made precisely this point in correspondence with Charles Lyell regarding the antiquity of the earth. "Time! Time! Time!—we must not impugn the Scripture Chronology, but we *must* interpret it in accordance with *whatever* shall appear on fair enquiry to be the *truth* for there cannot be two truths" (Cannon 1961, 308). But while there cannot be (at least in classical logic) two contradictory truths, there can be two contradictory *apparent* truths. The Christian can, at times, be forced to choose between what her faith tells her and what reason *appears* to be saying. And if religious faith represents a route to knowledge that is distinct from reason, she might feel compelled to reject the apparent deliverances of reason (in this case, science) in favour of the assured deliverances of revelation.

Opponents of this broader conflict thesis often appeal to the hermeneutical principles of St Augustine (354–430 CE), to suggest that a conflict between science and sacred scripture can always be avoided. But let's look at what St Augustine actually says. What he argues is that a literal interpretation of scripture ought not to be invoked against the *demonstrated* results of rational enquiry. In these cases, a figurative interpretation must be adopted. Ernan McMullin refers to this as the

> *Principle of Priority of Demonstration (PPD)*: Where there is a conflict between a proven truth about nature and a particular reading of Scripture, an alternative reading of Scripture must be sought. (McMullin 1998, 294)

But in cases where rational enquiry leads to something less than certainty, the authority of the literal sense of scripture is to be preferred. McMullin refers to this as the

> *Principle of Priority of Scripture (PPS)*: Where there is an apparent conflict between a Scripture passage and an assertion about the natural world grounded on sense or reason, the literal reading of the Scripture passage should prevail as long as the latter assertion lacks demonstration. (McMullin 1998, 295)

The Christian who adheres to these Augustinian principles may well prefer a literal reading of scripture to at least the more speculative findings of modern science, as even Michael Ruse admits (2001, 65). Indeed on a strict reading of Augustine, what is regarded as an assured divine revelation would take priority over *any* of the results of scientific enquiry, which can never enjoy the same level of assurance (McMullin 1993, 311). So given the traditional

understanding of religious faith, it is always possible for a believer to reject science in the name of scripture (Dawes 2002). In this sense, the broadest expression of the conflict thesis also seems well founded.

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