

**Science, faith,  
and reason**

|                                           |            |
|-------------------------------------------|------------|
| <b>Religion and science</b>               | <b>148</b> |
| <b>Religious belief and justification</b> | <b>153</b> |
| <b>Summary</b>                            | <b>164</b> |
| <b>Questions for review/discussion</b>    | <b>165</b> |
| <b>Further reading</b>                    | <b>166</b> |
| <b>Websites</b>                           | <b>167</b> |

In a book condemning of religion entitled *The End of Faith*, author Sam Harris begins with an example intended to shock the reader:

The young man boards the bus as it leaves the terminal. He wears an overcoat. Beneath his overcoat, he is wearing a bomb. His pockets are filled with nails, ball bearings, and rat poison.... The young man smiles. With the press of a button he destroys himself, the couple at his side, and twenty others on the bus.... The young man's parents soon learn of his fate. Although saddened to have lost a son, they feel tremendous pride at his accomplishment. They know he has gone to heaven and prepared the way for them to follow. He has also sent his victims to hell for eternity. It is a double victory.<sup>1</sup>

Harris notes that it is the young man's religion, or rather his religious beliefs, that lead him to engage in this kind of horrific and devastating behavior. He goes on to list atrocities and evils enacted by religious adherents from a variety of religions throughout the centuries. The problem, for Harris and a number of others, is that religion (in all its various forms) is both irrational and dangerous. Religion is based on blind faith, and as such it leads one over the ledge of reason and into the abyss of irrationality from which terrorism and violence naturally flow. Religious faith should be eradicated and replaced by reason, Harris maintains, and the domain of reason manifested at its best and highest form is science.<sup>2</sup>

But is this dichotomy between religion and science, with the former based on subjective blind faith and the latter based on objective reason and evidence, correct? Can religious beliefs ever be rationally justified? Should they ever be rationally justified? Furthermore, what is the appropriate relationship between science and religion? Are they in any way compatible? There is oftentimes a clash between faith and reason, between religion and science. But must that be so? These are some of the questions and issues we will explore in this chapter.

## RELIGION AND SCIENCE

Both science and religion play fundamental roles in our world today. In Chapter 1 it was noted that roughly 85 percent of the population of the world affirms some form of religious belief; religion and its effects encompass the globe. Science and the effects of science are also ubiquitous. Whether in downtown London, the hills of southern Afghanistan, or the heart of the Brazilian rainforest, radios, cell-phones, satellite television and other inventions of science are often part of common daily life. It is also the case that many religious people are scientists and that scientific experimentation is sometimes used in religion. For centuries there has been a symbiotic relationship between these two domains. However, science and religion are also often at odds with one another. Galileo's dispute with the Roman Catholic

Church about whether the earth or the sun is stationary is a memorable case in point.<sup>3</sup> How are we to understand the relationship between science and religion?

Before examining this relationship, let's first attempt a brief description of science (a description of religion was offered in Chapter 1): *science involves the exploration, description, explanation, and prediction of occurrences in the natural world which can be checked and supported by empirical evidence.*<sup>4</sup> As it turns out, the claims made by those practicing science are sometimes at odds with religious claims. So how are science and religion to relate to each other? Various options have been proposed, and for our purposes we will narrow them down to three: conflict, independence, and integration.<sup>5</sup>

### Conflict

One way of understanding the relationship between science and religion is to see them in conflict with one another. This conflict has been evident for centuries. Perhaps the most well known of the engagements has been the creation–evolution controversy. This clash was typified in 1860 when Bishop Samuel Wilberforce (1805–1873) asked biologist Thomas Huxley (1825–1895; known as “Darwin’s Bulldog” for his advocacy of the theory of evolution) whether he claimed simian descent by way of his grandfather or grandmother. Huxley’s reply was just as unscrupulous, stating that he would be much happier to have an ape for a grandfather than one who distorted the truth and confused matters.<sup>6</sup>

What led to the conflict is, arguably, a misunderstanding of the roles and legitimate constraints of both science and religion, and the misunderstanding comes from two domains. On the one hand are the scriptural literalists who maintain that the sacred scriptures (in this case it’s the Bible) give a historically accurate account of the creation of the world, from the universe itself to specific plants, animals, and the first human beings. This creation story, they maintain, conflicts with the evolutionary account of the history of flora and fauna. They cannot both be true, and scripture trumps science. On the other hand are the scientific materialists who agree that the scriptural account and the evolutionary account are in conflict; they cannot both be true. They affirm, however, that naturalistic evolution is correct and no further religious story is needed to explain the origin or flourishing of living organisms.

There are numerous challenges to this conflict view. First, scientific materialism (sometimes referred to as *scientism*) – the view that the only viable way of acquiring knowledge is via the scientific method and the only reality is material – is much more a philosophical assumption than a scientific conclusion. How, for example, by following the scientific method, can one come to the conclusion that the scientific method is the only viable way of acquiring knowledge? And how, for example, from following the scientific method, can one know that the only reality is material? Following the dictates of science leads to neither conclusion.

Second, many theologians and religious studies scholars have concluded that the sacred scriptures should not be taken as scientific textbooks. It is wrongheaded to understand them as providing, say, geological information (whether the earth is thousands or billions of years old), astronomical information (whether the sun is stationary or mobile), or biological information (whether humans evolved from lower animal forms or not). Along with Galileo, these thinkers maintain that God and God's creation are revealed in both "the book of nature" and "the book of scripture" – books which could not conflict since they are both from God. Perhaps neither science nor religion can provide us with a full and complete map of every domain, for they each have their own separate spheres of reality. This leads to the next option.

### Independence

A second option for understanding the relationship between science and religion is independence; it is to view them as completely independent forms of thought and practice which never come into contact. This view tends to provide a more irenic relationship between science and religion, for since they are totally disparate realms they are never at odds. There are different expressions of independence, but two prominent ones are Protestant neo-orthodoxy and linguistic analysis. We will look briefly at each in turn.

Karl Barth (1886–1968), a central figure in the Protestant neo-orthodox movement in the twentieth century, maintained that God is transcendent and unknowable until God provides a self-disclosure. This disclosure does not occur through scientific investigation and discovery. Rather, it comes about through divine revelation – a revelation which occurs through the initiation of God's Spirit. The scriptures may provide the catalyst for this divine encounter, but this does not mean they are to be interpreted literally. They are fallible human recordings of revelatory events which provide religious insights as the Spirit moves in an individual. Science, for

**Karl Barth** (1886–1968) was a Swiss Reformed theologian and one of the most influential Protestant Christian thinkers of the twentieth century. He developed a "theology of the Word" in which religious knowledge and understanding is conferred by faith – a faith offered only by Christ, under the sovereignty of God. His theology is sometimes referred to as neo-orthodoxy by critics. He was a prolific writer, with his magnum opus being the thirteen-volume *Church Dogmatics*.

Barth, provides helpful information about the empirical world, but it cannot provide religious knowledge. The subject matter of these domains is completely dissimilar, as are their aims and methods of inquiry.

A second way of expressing independence is to interpret science and religion as different languages which provide their own unique set of functions. In the mid-twentieth century a group of scholars, referred to as logical positivists, maintained that for a claim to be true and meaningful it had to be empirically verifiable. Religious ideas, then, were seen to be meaningless. For a number of reasons logical positivism was short-lived, but an emphasis on language analysis was highlighted by a later movement dubbed *linguistic analysis*.<sup>7</sup> For the linguistic analysts, religious language and scientific language have different aims and functions. The function of religious language is to "recommend a way of life, to elicit a set of attitudes, and to encourage allegiance to particular moral principles."<sup>8</sup> The primary function of scientific language, on the other hand, is prediction and control in the natural world. Religion and science each have their own "language game," as some would call it, and the two games can never interact or conflict.

While a clear benefit of the independence option, in both forms described above, is that it avoids the warfare inimical to the conflict option, it comes with a price. Ian Barbour (1923–) describes the cost:

If science and religion were totally independent, the possibility of conflict would be avoided, but the possibility of constructive dialogue would also be ruled out. We do not experience life as neatly divided into separate compartments; we experience it in wholeness and interconnectedness before we develop particular disciplines to study different aspects of it.<sup>9</sup>

Independence assumes that religion has nothing to say about the natural world and that science makes no cognitive claims about the religious domain. But this seems to be false. For example, the three major theistic religions affirm a creation event in which God brought the universe into being, and they describe God as being actively involved in the created order (inducing plagues, healing the sick, parting the sea, etc.). Some of the arguments for God's existence also include empirical facts as the basis for belief in a supernatural creator or designer, as we saw in Chapters 4 and 5. Non-theistic religions also provide claims relevant to the natural, physical universe. Buddhist understandings of the dharma (e.g. truth or ultimate reality), for example, or Buddhist and Hindu notions of karma, are taken to be real aspects of the world which have physical, causal effects within the world. Science and religion do sometimes make claims which conflict.

Furthermore, the independence view bifurcates the world into disparate domains and tends to negate a unified, coherent interpretation of what is actually experienced in the world. Perhaps there is a way of integrating science and religion such that their

unique aims and methods are respected while at the same time providing for a more unified picture of the world. This leads to our final option.

### Integration

A third way of understanding the relationship between science and religion is one in which some form of integration is possible between them.<sup>10</sup> The integration approach takes seriously both the conflicts which occur between religion and science on the one hand and the unique role of each domain on the other. Different versions of integration have been attempted, and two leading views will be sketched below.

One attempt to integrate science and religion is natural theology. Natural theology is the attempt to infer the existence of God from evidences in nature, and we examined several arguments which endeavor to do this very thing in earlier chapters. As was noted there, recent findings in physics and other branches of science are providing fresh material for natural theologians, and from it new arguments for God's existence have emerged in recent decades. Whether such arguments are plausible is not of concern here. Rather, the point is that even though natural theology and natural science have unique aims, goals, and methods, their findings can lead them to the same object. For example, as we saw in Chapter 5, the cosmic constants of the physical universe may point to an intelligent designer of the universe – a designer posited by the theistic religions. Also, Richard Swinburne (1934–) has recently proposed Bayesian (probabilistic) arguments for God's existence and for the resurrection of Jesus.<sup>11</sup>

A second approach at integration involves those working toward a systematic synthesis of religion and science. Process philosophy, typically associated with the works of American philosophers Alfred North Whitehead (1861–1947) and Charles Hartshorne (1897–2000), is an example of the attempt to merge science and religion into a coherent, comprehensive metaphysical system consonant with advances in modern science (including relativity and evolutionary theories).<sup>12</sup>

For process thinkers, the ancient and medieval views of the static, substantial natures of things are replaced by dynamic events which follow an evolutionary

**Alfred North Whitehead** (1861–1947) was an English mathematician and philosopher and the founder of modern process thought. In 1929 his Gifford Lectures were published as *Process and Reality* – the work which founded process philosophy. Other important works include *Science and the Modern World* and *Religion in the Making*. He also co-authored the *Principia Mathematica* – one of the central works in modern logic – with Bertrand Russell.

trajectory. The primary characterization of process thought is that *everything* which exists is characterized by process. This is consistent with the Buddhist doctrines of interdependent arising and *Anatman* discussed in Chapter 3 in which there are no substantial entities, only interconnected events.

The process view of divinity is one in which God, too, is in process. Process thinkers reject the classical theistic model in which God is immutable, simple, omnipotent, omniscient, beyond space and time, and completely transcendent. Rather, God is dipolar – containing a primordial nature which orders the world and a consequent nature which interacts with the world and continually changes with it.

The integration approach offers exciting prospects for developing new ways of relating science and religion. The two domains do seem to overlap in significant areas, and advancing the dialogue will require recognition of the important role of each domain in human (and non-human) life. It will also require humility for, if history repeats itself, current scientific theories will not remain static but will continue to evolve as humanity grows in knowledge about the vast and splendid world in which we live.

## RELIGIOUS BELIEF AND JUSTIFICATION

Just as there are several ways to express the relationship between science and religion, we can convey the relationship between faith and reason in two broad categories. On the one hand are those who maintain that reason can and should be used to justify or validate religious faith; we can call views of this sort *rational validation views of faith and reason*. Looking for evidences for God's existence, or for reincarnation or life after death, or attempting to justify one's beliefs about the dharma or the *dao*, are all examples of rational validation.

On the other hand are those who deny that reason and evidence should be used to justify or validate religious faith; we can call views of this sort *non-evidential views of faith and reason*. This is not to say that adherents of non-rational views deny that reason is necessary for understanding religious beliefs or practicing religious faith. Rather, they deny that holding religious beliefs is dependent upon having reasons or evidences for those beliefs being objectively true. In previous chapters we have examined different kinds of evidences which have been used by those affirming rational validation to support certain religious beliefs (such as that God exists). In the remainder of this chapter we will examine several different non-evidential views of faith reason.

## Fideism

For fideists (from the Latin word *fides* which means faith), using reason to demonstrate or evaluate religions or religious beliefs is always inappropriate. Faith is not the kind of thing which needs rational justification, fideists maintain, and attempting to prove one's religious faith may even be an indication of a lack of faith.

Perhaps the most well-known fideist was the philosopher Søren Kierkegaard (1813–1855). Kierkegaard lived in a Christian milieu in Denmark in which the philosophical work of G. W. F. Hegel (1770–1831) was culturally influential and widespread. On the Hegelian account, world history unfolds according to divine reason and logic. An often-repeated Hegelian slogan is “the real is the rational, the rational is the real.”<sup>13</sup> For Hegel, the Christian religion is a mythological representation of this divine, rational unfolding and Christianity is religious consciousness in its most developed state.

Kierkegaard saw his society as one in which being a Christian had become, due to Hegelian and other influences, simply being born into “Christendom.” It was no longer an individual experience of choosing to live an inward life of devotion and passion, but rather had become a set of cultural beliefs that one may come to hold through rational arguments and evidences. But for Kierkegaard, true religion is not cold and calculating, regurgitating the right answers to logical, formulaic issues in systematic, impersonal fashion. Rather, it is passionate and obsessive, more akin to an intimate relationship between two young lovers.

He believed there are no solid proofs for religious faith, and that even if there were they would be unhelpful for developing real religious faith, for “certainty... lurks at the door of faith and threatens to devour it.”<sup>14</sup> Furthermore, Christian dogma – such as the belief that an infinite God becoming a finite human being – includes paradoxes that are inimical to reason and logic, while real religious faith entails a “leap.” One philosopher of history sums up Kierkegaard's view on the matter this way:

God is not man, and man is not God. And the gulf between them cannot be bridged by dialectical thinking. It can be bridged only by a leap of faith, by a voluntary act by which man relates himself to God and freely appropriates, as it were, his relation as creature to the Creator, as a finite individual to the transcendent Absolute.<sup>15</sup>

**Georg Wilhelm Friedrich Hegel** (1770–1831) was a German idealist philosopher. He argued that history has a teleology – it is the rational development and production of Mind or Spirit, what he called the Absolute. His works include *Lectures on the Philosophy of Religion*, *Phenomenology of Spirit*, and *Science of Logic*.

**Søren Kierkegaard** (1813–1855) was a Danish philosopher and theologian and the father of existentialism. He often wrote under pseudonyms, such as Johannes Climacus, and argued that one is unwise and mistaken to attempt to base one's religious beliefs on reason and evidence. His major works include *Either/Or*, *Fear and Trembling*, and *Concluding Unscientific Postscript*.

Choosing faith involves suspending reason; it is affirming something higher than reason and making a life commitment. This affirmation and commitment comes about through the existential choices an individual must make on a regular, perhaps even constant, basis. In a frequently quoted passage, Kierkegaard puts the point concisely:

Faith is precisely the contradiction between the infinite passion of the individual's inwardness and the objective uncertainty. If I am capable of grasping God objectively, I do not believe, but precisely because I cannot do this I must believe. If I wish to preserve myself in faith I must constantly be intent upon holding fast to the objective uncertainty, so as to remain out upon the deep, over seventy thousand fathoms of water, still preserving my faith.<sup>16</sup>

Kierkegaard was living and writing within the Christian tradition, but fideists can be found in all the major religious traditions. For example, the term *Sradda* in Theravada and Mahayana Buddhism is the acceptance of the Buddha's teachings which comes prior to one's right understanding or right thought. Entering the Eightfold Path involves a faith step – an acquiescence (without rational argumentation or evidence) to the teachings of the Buddha.<sup>17</sup>

One criticism of fideism is that, in a religiously pluralistic culture, how is one to decide which religion (or set of religious beliefs) one should commit to? This may not be an issue in a culture in which there is only one religiously live option. But what about in a religiously pluralistic culture in which there are multiple live options? How is one to choose? Fideists offer various replies. One is that the evidences offered for any particular religious tradition are subjective and difficult, if not impossible, to assess from the “outside.” So the choice must come from within.<sup>18</sup> Another reply (this one offered by Kierkegaard himself) is that reason provides only approximate conclusions at best, while faith offers personal passion and subjective certainty.<sup>19</sup> This passionate certainty, rather than cool, calculated reasoning, more accurately captures the essence of religious faith. When it comes to faith, one must make a choice: commit to believe or not, irrespective of the evidence.

### William James and the will to believe

Another view of faith and reason which is, in certain respects, similar to Kierkegaard's fideism, is that of the early twentieth-century philosopher and psychologist William James (1842–1910). In a famous essay entitled "The Will to Believe," James argued that (contrary to the title's possible suggestion that one should affirm beliefs by mere fiat of will) there are occasions in which we are forced to make a decision to believe even if solid evidence is lacking, and that in appropriate circumstances this decision to believe is better than not believing. In order to set the stage for James's view, it will be helpful to first sketch the position to which he was responding – a position set forth by the British mathematician and philosopher, W. K. Clifford (1845–1879).

In an important paper entitled "The Ethics of Belief," Clifford argued that a person shouldn't believe something unless he or she has good evidence for the belief. He begins the essay with an example. Suppose a ship owner realizes that his ship might need some repair before setting sail, but he convinces himself otherwise. He remembers that the ship had many successful voyages, and that he believes in Providence and the providential care of human persons. After further contemplation, he is able to remove any distrust he might have about those involved in the original construction of the ship, and he comforts himself with the thought that they surely built his vessel well. Tragically, soon after its voyage begins, the ship sinks and all perish.

Clifford argues that the ship owner is morally responsible for this catastrophe because his beliefs were not based on evidence. Wishful thinking or hope is not enough; solid evidence is necessary for belief. Clifford then offers the following principle: "It is wrong always, everywhere, and for anyone, to believe anything upon insufficient evidence."<sup>20</sup> Thus on Clifford's account, sometimes referred to as *evidentialism*, believing has moral implications: it is *immoral* to believe without sufficient evidence. Clearly this principle has ramifications for all beliefs, not the least of which are religious ones.

James argues against Clifford's position and for the view that there are occasions when having beliefs in the absence of evidence is fully justified. He argues that there are times in life when we all need to choose to believe even when there is little, if any, evidence available on which to base our decisions. Consider the following example.

Suppose ... that I am climbing in the Alps, and have had the ill-luck to work myself into a position from which the only escape is by a terrible leap. Being without similar experience, I have no evidence of my ability to perform it successfully; but hope and confidence in myself make me sure I shall not miss my aim, and nerve my feet to execute what without those subjective emotions would perhaps have been impossible. But suppose that, on the contrary, the emotions of fear and mistrust preponderate; or suppose that, having just read

the *Ethics of Belief*, I feel it would be sinful to act upon an assumption unverified by previous experience, – why, then I shall hesitate so long that at last, exhausted and trembling, and launching myself in a moment of despair, I miss my foothold and roll into the abyss. In this case (and it is one of an immense class) the part of wisdom clearly is to believe what one desires; for the belief is one of the indispensable preliminary conditions of the realization of its object. There are then cases where faith creates its own verification. Believe, and you shall be right, for you shall save yourself; doubt, and you shall again be right, for you shall perish. The only difference is that to believe is greatly to your advantage.<sup>21</sup>

For James, there are practical or pragmatic consequences to our beliefs. And as the example above indicates, sometimes it is beneficial to act even where evidence is lacking.

There are also times when there are competing hypotheses from which to choose. How do we decide in cases like that? James calls deciding between hypotheses an "option," and he delineates several kinds:

- 1 **Living or dead:** a live option is one in which both hypotheses have some emotional (but not rational) appeal to the one making the choice; a dead option lacks such appeal. For example, for many Europeans and North Americans in the nineteenth century, the option, "be a Hindu or a Buddhist," was not a live one, whereas "be a Christian or an agnostic" was a live option.
- 2 **Forced or avoidable:** a forced option is one in which both hypotheses are mutually exclusive and there is no third possibility. For example, the option to "read this book or don't read it" is forced. An avoidable option is one in which the two hypotheses do not involve such a logical disjunction or dilemma; for example, if asked which of the two American political parties one supports, there is no forced option here. One may hold to a third party, or simply be ambivalent about either of them.
- 3 **Momentous or trivial:** a momentous option is one in which much hangs on deciding about the hypotheses. For example, if you were given the opportunity to join the next crew of the space shuttle as they travel into outer space, your option would be momentous; it is a unique and significant opportunity. On the other hand, being offered the choice of drinking coffee rather than tea is trivial (on some occasions, at least!).

A *genuine option* is one that is living, forced, and momentous. Religion, James maintains, is a genuine option for some people. When confronted with a genuine option, even given a lack of evidence, taking a step of faith may be the best decision. Since evidence is lacking in these "forced" decision-making situations, he maintains, in making this choice we must use our non-intellectual or "passional" nature. James puts it this way:

The heart has reasons of its own which the mind knows nothing of.

Pascal<sup>30</sup>

Obviously not everyone will be convinced by the wager argument. Suppose, Pascal muses, someone is in a state of unbelief and maintains that he cannot be moved to belief, even when presented with the wager, and that evidences and proofs are also insufficient for moving him to a state of belief. What is such a person to do?

I would have you understand your incapacity to believe. Labor to convince yourself, not by more "proofs" of God's existence, but by disciplining your passions and wayward emotions. You would arrive at faith, but know not the way. You would heal yourself of unbelief, yet know not the remedies. I answer you: learn of those who have been bound as you are. These are they who know the way you would follow, who have been cured of a disease you would be cured of. Follow the way by which they began, by acting as if you believe, taking holy water, having masses said, and so forth. Even this will naturally make you believe.<sup>31</sup>

Various criticisms have been raised against Pascal's wager. First, it can be argued that we cannot choose to believe much, if anything, directly, let alone belief in God. Beliefs just don't usually seem to be within our direct control. For example, suppose you were offered a large sum of money to believe that a pink elephant is right now sitting beside you. Can you do it? Of course you could lie and say so even if you had no such belief. But can you really choose to believe it? It doesn't seem so. The same follows for virtually all beliefs.<sup>32</sup>

A second objection is similar to the one raised earlier with fideism. Namely, how is one to decide which religion, among the plethora of religions, one should wager on? Why wager on the Christian God, as Pascal proposed? Why not bet on Krishna, or Allah, or the *dao*, or *nirvana*, or all of the above? Given the many different and unique religious options which exist, how are we to wager? Pascal provides little criteria for making an informed bet given the pluralistic milieu which now encompasses much of the globe.

Third, even if one could come to religious faith through such a calculating wager, is this an appropriate method for acquiring authentic religious faith? It seems a rather unfitting way to enter into the trusting relationship in God informed by the Christian tradition in which Pascal was ensconced. Perhaps the same could be said of the other great faith traditions as well. Furthermore, the wager seems to assume that the universe is structured along utilitarian or decision theoretic lines, and has the added imperfection of only being appealing to those who are psychologically inclined to pleasure happiness and avoid pain – a strange appeal if losing and gaining one's life is at the core of the Christian call to discipleship.<sup>33</sup>

### Alvin Plantinga and Reformed epistemology

A more recent approach to faith and reason is called "Reformed epistemology" (the term "Reformed" refers to the Christian, Calvinist Reformation theological tradition). Three of its primary proponents are Alvin Plantinga (1932–), Nicholas Wolterstorff (1932–) and William Alston (1921–). Reformed epistemology is non-evidentialist as it asserts that evidence is not needed in order for one's faith to be justified. But unlike fideism its adherents maintain that belief in God can be a *rational* endeavor despite a complete lack of evidence. This is obviously contrary to the evidentialist approach in which it is *irrational* to believe a claim without evidence. It is also unlike evidentialism in that its adherents are generally opposed to a view called classical foundationalism.

*Foundationalism* is the view that a belief is rationally justified if it is based on proper foundations. *Classical foundationalism* is the view that all justified beliefs must either be properly basic or derivative of properly basic beliefs. For the classical foundationalist, properly basic beliefs are those which are:

- **Incorrigible:** beliefs relevant to one's own experience about which it is virtually impossible to be in error, such as the belief that one is in pain or that one seems to be seeing something as blue, for example, or
- **self-evident:** beliefs involving simple logical or mathematical truths which, when understood, are taken immediately to be true, such as the law of non-contradiction or  $2 + 2 = 4$ , or
- **evident to the senses:** beliefs directly involving one or more of the five senses, such as the belief that one is seeing green grass or smelling a fresh rose.

Classical foundationalists include Thomas Aquinas (1225–1274), René Descartes (1596–1650), John Locke (1632–1704), and David Hume (1711–1776). While they may differ on its precise meaning, those affirming classical foundationalism agree that properly basic beliefs must include at least two of the three elements noted above.

As Plantinga and others have demonstrated, there are serious problems with classical foundationalism.<sup>34</sup> Perhaps the most serious objection is that it seems to be self-refuting. Consider its criteria for a belief's being rational and justified only if the belief is incorrigible or self-evident or evident to the senses. Is this claim itself incorrigible, self-evident or evident to the senses? It seems not. So it doesn't even meet its own criteria for rational justification: if one affirms the view, one cannot rationally do so.<sup>35</sup>

Plantinga has argued that while classical foundationalism should be rejected, the foundationalist position that rationally justified beliefs must be ultimately based on properly basic beliefs is generally correct.<sup>36</sup> The foundationalism he defends

**Alvin Plantinga** (1932–) is John A. O'Brien Professor of Philosophy at the University of Notre Dame. He is widely known for his work in epistemology, metaphysics, and philosophy of religion (most especially his free will defense, his reformulation of the ontological argument, and Reformed epistemology). He has written many important books, including *God, Freedom, and Evil*, *The Nature of Necessity*, and *Warranted Christian Belief*. In 2004–2005 he gave the prestigious Gifford Lectures at St. Andrews University entitled *Science and Religion: Conflict or Concord?*

is grounded in a Reformed theology which circumvents the need for evidence for fundamental religious beliefs. Certain religious beliefs, he argues, such as belief in God, are “properly basic.” Now it is important to note that what Plantinga and other Reformed epistemologists mean by a properly basic belief is different from the classical understanding. While on the classical view properly basic beliefs are beliefs which are incorrigible, self-evident and evident to the senses, on the Reformed epistemology view they are beliefs which are reasonably and appropriately held even without evidence. Examples include mental beliefs, memory beliefs, and ascribing mental states to others: (1) I see a computer, (2) I skipped breakfast this morning, and (3) my wife is in pain. Beliefs such as these are basic and properly so, argues Plantinga, for even though they are not based on other beliefs, they are not groundless.

Although beliefs of this sort are typically taken as basic, it would be a mistake to describe them as *groundless*. Upon having experience of a certain sort, I believe that I am perceiving a tree. In the typical case I do not hold this belief on the basis of other beliefs; it is nonetheless not groundless. My having that characteristic sort of experience ... plays a crucial role in the formation of that belief. It also plays a crucial role in its justification.

Furthermore, beliefs like these above can be fully justified:

Let us say that a belief is *justified* for a person at a time if (a) he is violating no epistemic duties and is within his epistemic rights in accepting it then and (b) his noetic structure [that is, the sum total of a person's beliefs and the way those beliefs are related] is not defective by virtue of his then accepting it. Then my being appeared to in this characteristic way (together with other circumstances) is what confers on me the right to hold the belief in question; this is what justifies me in accepting it. We could say, if we wish, that this experience is what justifies me in holding it; this is the ground of my justification, and, by extension, the ground of the belief itself.<sup>37</sup>

Plantinga's next move is to claim that belief in God is similar to the beliefs that I see a computer or that I skipped breakfast or that one is in pain – it too is a properly basic belief. Consistent with Reformed thinkers such as John Calvin (1509–1564), Abraham Kuyper (1837–1920), and Karl Barth (1886–1968), Plantinga argues that within every rational human mind there is a natural awareness of divinity. All people everywhere, he maintains, no matter how barbarous, have a deep-seated conviction that God exists and is their Maker.<sup>38</sup> While sin (and perhaps bad education) may affect one's ability to hold the belief that God exists, for many people – especially many Jews, Christians, Muslims, and theistic Hindus – the belief in God is a properly basic one.

Plantinga's proposal has been challenged on a number of fronts. First, if belief in the Christian God can be properly basic, why can't just about any belief be at the ground of one's noetic foundation? This is known as the “Great Pumpkin Objection,” based on the *Peanuts* comic strip in which Linus believes in the Great Pumpkin who allegedly shows up in a pumpkin patch to sincere believers every Halloween. On Plantinga's construal, what's to keep belief in the Great Pumpkin from being properly basic? His reply is that there is a relevant difference between belief in God and belief in the Great Pumpkin. The Reformed epistemologist maintains that there is a natural tendency in us to have the former but not the latter belief. So, one is within one's epistemic rights to include belief in God as properly basic, but from this it doesn't follow that “bizarre” beliefs, such as belief in the Great Pumpkin, cannot be excluded.

This leads to a second criticism. Even if belief in God is properly basic for some people (Reformed epistemologists, say), this is no guarantee that the belief is, in fact, true. Plantinga grants as much.<sup>39</sup> Nevertheless, this is no reason to reject the Reformed epistemologist's construal of properly basic beliefs, for while there is no certainty that such a belief is true, there is certainty that if a belief is properly basic, one is rational in holding it.

This leads to yet a third criticism. For the Reformed epistemologist, a belief which is properly basic for one individual may not be properly basic for another individual. Belief in God may be properly basic for a Christian; belief in *nirvana* may be properly basic for a Buddhist; belief in the *dao* may be properly basic for a Taoist; belief in Krishna may be properly basic for a Hindu; belief in magic spells may even be properly basic for adherents of voodoo; and so on. There is no universal set of properly basic beliefs; indeed, there is no universal rationality either. So are we not trapped within a particular system of beliefs, forever unable to adjudicate between systems? In rejecting evidentialism, there are no evidences available by which to make evaluative judgments about beliefs or belief systems – religious or otherwise.

Plantinga's reply is twofold. First, he concurs that using his method for determining properly basic beliefs may lead different people to different conclusions. But that's simply the way things are in philosophical discourse. For philosophers to come to agreement on fundamental issues – on any issue! – may be too much to ask. As the First Law of Philosophy states, for every philosopher, there exists an equal

and opposite philosopher. So this isn't a problem for his method any more than for any method in philosophy.<sup>40</sup> Second, in his most recent works, Plantinga does begin to spell out criteria (not evidence) for determining properly basic beliefs and for deciding whether a belief is warranted. Getting into that discussion, however, is beyond the scope of this book.<sup>41</sup> Much more could be said about faith and reason within Reformed epistemology, but this must suffice for now.

## SUMMARY

In this chapter we examined various relationships between science and religion, and faith and reason. We first noted three basic options for relating science and religion: conflict, independence, and integration. For centuries science and religion have been at odds, and those affirming the conflict view see this as unavoidable. For those holding the independence view, however, science and religion never actually conflict because they are about completely different realms which never commingle: religion is about heavenly matters; science is about earthly ones. But this view demands a division of reality into separate and incongruent spheres and so seems to exclude a cohesive interpretation of the world. A third approach attempts to bridge the divide by respecting the unique roles offered by science and religion while also recognizing the potential conflicts which seem to occur between them. It recognizes that scientific practice sometimes has implications for religious faith, and religious belief isn't necessarily devoid of scientific reasoning.

We next examined several basic options for relating faith and reason. We first saw that there are two very different approaches: rational validation and non-evidential views. Rational validation sees reason and evidence as significant components of religious faith. On this view, arguments for God's existence, for example, can play an important role in establishing or strengthening religious faith. Non-evidential views, on the other hand, deny that evidence is significant for belief. We examined four basic categories: fideism, James's will to believe, Pascal's wager, and Reformed epistemology.

The fideist maintains that using reason for evaluating religious faith is never appropriate. Religious faith needs no rational justification; reason can even run counter to such faith. In response to those who disagree with this view (called evidentialists), William James argues that there are occasions where believing without evidence is pragmatically useful. For some people, taking a step of faith into religion is their best option. Blaise Pascal goes even one step further in his pragmatism: our best bet, he argues, is to believe in God. We have much to gain from so believing, and much to lose if we choose to disbelieve. Reformed epistemologists agree with fideism that religious faith does not depend on evidence, but they are not anti-rationalists for they also agree that religious faith can be a reasonable enterprise. They argue that belief in God is properly basic for some people – that believing in God, for example, is just as rational for some as the belief that they had breakfast on some given morning.

Beliefs are profuse and ubiquitous. Some are advantageous, some – as we saw at the opening of the chapter – are dangerous. So how do we choose what and when to believe? Perhaps Joseph Runzo sums it up best:

When all is said and done, the only final justification for any faith commitment we have is our deepest sense of what is valuable tempered by experience and a rational understanding of the real consequences of adhering to those values.<sup>42</sup>

## QUESTIONS FOR REVIEW/DISCUSSION

1. Which of the three views of the relationship between religion and science do you find to be most accurate given the ways religion and science are generally understood and practiced today? First characterize the view and then explain why you believe it to be so.
2. Evolution and creationism are often considered to be diametrically opposed beliefs about the existence and development of flora and fauna. Do you believe they can be reconciled? If so, how? If not, why not?
3. Should reason be used to justify or validate faith? Why or why not?
4. In the Old Testament (Hebrew Bible) the story is told of Abraham being willing to offer his son Isaac on a sacrificial altar in response to God's request (Genesis, Chapter 22). Abraham is championed as a great man of faith because of his willingness to sacrifice his son. Recently a woman in the USA was arrested for drowning her children in her bathtub. She said that God told her to take her children's lives. What might be some reasons that Abraham is heralded as a giant of religious faith while this woman is castigated by many as an insane murderer? What are similarities and differences between these examples?
5. According to non-evidential views of faith and reason, there are times when we need to choose to believe even if there is insufficient evidence for the belief. But can we simply choose to believe anything directly? Note again the pink elephant example. If we cannot choose beliefs directly, how might we end up having beliefs – in particular religious ones?
6. If one did come to believe in God based on Pascal's wager, does this provide real faith in God – the kind of faith described in the religious tradition of which Pascal was a part? Or does it provide a kind of self-interested belief unfitting for religious faith? Explain your thoughts on the matter.
7. What is evidentialism? Explain why you agree or disagree with Clifford's evidentialist account as described in the text.
8. What is foundationalism? Are you a foundationalist? Explain.
9. An evidentialist objector may claim that since there is insufficient evidence for belief in God, it is irrational to believe that God exists. How would a Reformed epistemologist respond? How would you assess this response?
10. Are faith and reason mutually exclusive concepts? Can you have faith in something or someone while also having reasons for what you have faith in? Explain.

## FURTHER READING

- Barbour, Ian (1990) *Religion in an Age of Science: The Gifford Lectures*. Vol. 1. San Francisco, CA: Harper & Row. (A highly influential and insightful work on the integration of science and religion.)
- Cobb, John B., Jr. and David Ray Griffin (1976) *Process Theology: An Introductory Exposition*. Philadelphia, PA: Westminster Press. (A helpful introduction to process theology by two leading process thinkers.)
- Conee, Earl and Richard Feldman (2004) *Evidentialism: Essays in Epistemology*. Oxford: Clarendon Press. (A recent development and defense of evidentialism.)
- Evans, C. Stephen (1998) *Faith Beyond Reason: A Kierkegaardian Account*. Grand Rapids, MI: Eerdmans. (Explains and defends a Kierkegaardian view of fideism.)
- Golding, Joshua L. (2007) "The Wager Argument," in Chad Meister and Paul Copan, eds., *The Routledge Companion to Philosophy of Religion*. London: Routledge. (A concise overview of Pascal's wager.)
- Harris, Sam (2004) *The End of Faith: Religion, Terror, and the Future of Reason*. New York: W. W. Norton and Company. (Argues that religious faith is based on irrational thinking, is dangerous and harmful, and that a rational, scientific view should replace a religious one.)
- Hick, John (1966) *Faith and Knowledge*, 2nd edition. Ithaca, NY: Cornell University Press. (A precursor to analytic, non-evidentialist epistemology which was highly influential on Reformed epistemologists, although Hick has taken his epistemological ideas in a different direction than they have.)
- James, William ([1902] 1961) *The Varieties of Religious Experience*. New York: Collier Books; repr. London: Collier Macmillan Publishers. (One of James's most influential works; includes insightful analyses of various types of religious experience.)
- Kuhn, Thomas (1970) *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press. (Often hailed as one of the most influential books of the twentieth century; presents an understanding of scientific progress as consisting of various paradigm shifts which include social and psychological factors.)
- McGrath, Alister (1998) *The Foundations of Dialogue in Science and Religion*. Oxford: Blackwell. (Explores the relation between science and faith at the level of method; utilizes Christianity as a case study)
- Murphy, Nancy (1990) *Theology in the Age of Scientific Reasoning*. Ithaca, NY: Cornell University Press. (Argues for the rationality of religious (Christian) belief by demonstrating that theological reasoning is similar to scientific reasoning of a certain kind.)
- Pascal, Blaise ([1670] 1995) *Pensées*. Rev. edition. Trans. A. J. Krailsheimer. New York: Penguin. (A masterful work of French prose in which Pascal analyzes several philosophical paradoxes, including faith and reason.)
- Peacocke, Arthur (1984) *Intimations of Reality: Critical Realism in Science and Religion*. Notre Dame, IN: University of Notre Dame Press. (A renowned biochemist and theologian argues for a critical realist approach to understanding the relation between science and religion.)
- Plantinga, Alvin and Nicholas Wolterstorff, eds. (1983) *Faith and Rationality*. Notre Dame, IN: University of Notre Dame Press. (A collection of important essays on faith and reason by seven leading Reformed epistemologists.)
- Polkinghorne, John (2000) *Faith, Science and Understanding*. New Haven, CT: Yale University Press. (Explores the interaction of science and religion and focuses on what science can say about the processes of a universe in which God is active.)

- Swinburne, Richard (2005) *Faith and Reason*. 2nd edition. Oxford: Clarendon Press. (Argues that one should practice that religion which has the best goals and is more probably true; proposes criteria for analyzing the probabilities of different religious creeds being true.)
- Taliaferro, Charles (2005) *Evidence and Faith: Philosophy and Religion since the Seventeenth Century*. Cambridge: Cambridge University Press. (An excellent and accessible overview of philosophy of religion from the modern period to the present; focuses on developing views of faith and evidence.)
- Trigg, Roger (1998) *Rationality and Religion: Does Faith Need Reason?* Oxford: Blackwell. (Examines the question of whether religious faith needs reason; considers the question in a pluralistic society.)
- Ward, Keith (2006) *Is Religion Dangerous?* Grand Rapids, MI: Eerdmans. (Explores such questions as "Does religion lead to terrorism and violence?" and "Are religious beliefs irrational and immoral?")

## WEBSITES

- <http://www.pbs.org/faithandreason>  
Web pages from PBS documentary entitled *Faith and Reason*, hosted by Margaret Wertheim.
- <http://plato.stanford.edu/entries/process-philosophy/>  
*Stanford Encyclopedia of Philosophy* entry on process philosophy by Nicholas Rescher, a leading process thinker.
- <http://www.science-spirit.org/>  
A website whose mission is to explore the integration of the scientific and spiritual aspects of our culture in a way that is accessible and relevant to everyday living.
- <http://www.columbia.edu/cu/cssr/>  
Website for The Center for the Study of Science and Religion, an interdisciplinary, collaborative forum for the examination of issues lying at the boundary of the scientific and religious ways of comprehending the world and our place in it.