**THE VALUE OF PHILOSOPHY (1)**

Having now come to the end of our brief and very incomplete review of the problems of philosophy, it will be well to consider, in conclusion, what is the value of philosophy and why it ought to be studied. It is the more necessary to consider this question, in view of the fact that many men, under the influence of science or of practical affairs, are inclined to doubt whether philosophy is anything better than innocent but useless trifling, hair-splitting distinctions, and controversies on matters concerning which knowledge is impossible.

This view of philosophy appears to result, partly from a wrong conception of the ends of life, partly from a wrong conception of the kind of goods which philosophy strives to achieve. Physical science, through the medium of inventions, is useful to innumerable people who are wholly ignorant of it; thus the study of physical science is to be recommended, not only, or primarily, because of the effect on the student, but rather because of the effect on mankind in general. This utility does not belong to philosophy. If the study of philosophy has any value at all for others than students of philosophy, it must be only indirectly, through its effects upon the lives of those who study it. It is in these effects, therefore, if anywhere, that the value of philosophy must be primarily sought.

But further, if we are not to fail in our endeavour to determine the value of philosophy, we must first free our minds from the prejudices of what are wrongly called 'practical' men. The 'practical' man, as this word is often used, is one who recognizes only material needs, who realizes that men must have food for the body, but is oblivious of the necessity of providing food for the mind. If all men were well off, if poverty and disease had been reduced to their lowest possible point, there would still remain much to be done to produce a valuable society; and even in the existing world the goods of the mind are at least as important as the goods of the body. It is exclusively among the goods of the mind that the value of philosophy is to be found; and only those who are not indifferent to these goods can be persuaded that the study of philosophy is not a waste of time.

Philosophy, like all other studies, aims primarily at knowledge. The knowledge it aims at is the kind of knowledge which gives unity and system to the body of the sciences, and the kind which results from a critical examination of the grounds of our convictions, prejudices, and beliefs. But it cannot be maintained that philosophy has had any very great measure of success in its attempts to provide definite answers to its questions. If you ask a mathematician, a mineralogist, a historian, or any other man of learning, what definite body of truths has been ascertained by his science, his answer will last as long as you are willing to listen. But if you put the same question to a philosopher, he will, if he is candid, have to confess that his study has not achieved positive results such as have been achieved by other sciences. It is true that this is partly accounted for by the fact that, as soon as definite knowledge concerning any subject becomes possible, this subject ceases to be called philosophy, and becomes a separate science. The whole study of the heavens, which now belongs to astronomy, was once included in philosophy; Newton's great work was called 'the mathematical principles of natural philosophy'. Similarly, the study of the human mind, which was a part of philosophy, has now been separated from philosophy and has become the science of psychology. Thus, to a great extent, the uncertainty of philosophy is more apparent than real: those questions which are already capable of definite answers are placed in the sciences, while those only to which, at present, no definite answer can be given, remain to form the residue which is called philosophy.

This is, however, only a part of the truth concerning the uncertainty of philosophy. There are many questions -- and among them those that are of the profoundest interest to our spiritual life -- which, so far as we can see, must remain insoluble to the human intellect unless its powers become of quite a different order from what they are now. Has the universe any unity of plan or purpose, or is it a fortuitous concourse of atoms? Is consciousness a permanent part of the universe, giving hope of indefinite growth in wisdom, or is it a transitory accident on a small planet on which life must ultimately become impossible? Are good and evil of importance to the universe or only to man? Such questions are asked by philosophy, and variously answered by various philosophers. But it would seem that, whether answers be otherwise discoverable or not, the answers suggested by philosophy are none of them demonstrably true. Yet, however slight may be the hope of discovering an answer, it is part of the business of philosophy to continue the consideration of such questions, to make us aware of their importance, to examine all the approaches to them, and to keep alive that speculative interest in the universe which is apt to be killed by confining ourselves to definitely ascertainable knowledge.

Many philosophers, it is true, have held that philosophy could establish the truth of certain answers to such fundamental questions. They have supposed that what is of most importance in religious beliefs could be proved by strict demonstration to be true. In order to judge of such attempts, it is necessary to take a survey of human knowledge, and to form an opinion as to its methods and its limitations. On such a subject it would be unwise to pronounce dogmatically; but if the investigations of our previous chapters have not led us astray, we shall be compelled to renounce the hope of finding philosophical proofs of religious beliefs. We cannot, therefore, include as part of the value of philosophy any definite set of answers to such questions. Hence, once more, the value of philosophy must not depend upon any supposed body of definitely ascertainable knowledge to be acquired by those who study it.

The value of philosophy is, in fact, to be sought largely in its very uncertainty. The man who has no tincture of philosophy goes through life imprisoned in the prejudices derived from common sense, from the habitual beliefs of his age or his nation, and from convictions which have grown up in his mind without the co-operation or consent of his deliberate reason. To such a man the world tends to become definite, finite, obvious; common objects rouse no questions, and unfamiliar possibilities are contemptuously rejected. As soon as we begin to philosophize, on the contrary, we find, as we saw in our opening chapters, that even the most everyday things lead to problems to which only very incomplete answers can be given. Philosophy, though unable to tell us with certainty what is the true answer to the doubts which it raises, is able to suggest many possibilities which enlarge our thoughts and free them from the tyranny of custom. Thus, while diminishing our feeling of certainty as to what things are, it greatly increases our knowledge as to what they may be; it removes the somewhat arrogant dogmatism of those who have never travelled into the region of liberating doubt, and it keeps alive our sense of wonder by showing familiar things in an unfamiliar aspect.

Apart from its utility in showing unsuspected possibilities, philosophy has a value -- perhaps its chief value -- through the greatness of the objects which it contemplates, and the freedom from narrow and personal aims resulting from this contemplation. The life of the instinctive man is shut up within the circle of his private interests: family and friends may be included, but the outer world is not regarded except as it may help or hinder what comes within the circle of instinctive wishes. In such a life there is something feverish and confined, in comparison with which the philosophic life is calm and free. The private world of instinctive interests is a small one, set in the midst of a great and powerful world which must, sooner or later, lay our private world in ruins. Unless we can so enlarge our interests as to include the whole outer world, we remain like a garrison in a beleagured fortress, knowing that the enemy prevents escape and that ultimate surrender is inevitable. In such a life there is no peace, but a constant strife between the insistence of desire and the powerlessness of will. In one way or another, if our life is to be great and free, we must escape this prison and this strife.

One way of escape is by philosophic contemplation. Philosophic contemplation does not, in its widest survey, divide the universe into two hostile camps -- friends and foes, helpful and hostile, good and bad -- it views the whole impartially. Philosophic contemplation, when it is unalloyed, does not aim at proving that the rest of the universe is akin to man. All acquisition of knowledge is an enlargement of the Self, but this enlargement is best attained when it is not directly sought. It is obtained when the desire for knowledge is alone operative, by a study which does not wish in advance that its objects should have this or that character, but adapts the Self to the characters which it finds in its objects. This enlargement of Self is not obtained when, taking the Self as it is, we try to show that the world is so similar to this Self that knowledge of it is possible without any admission of what seems alien. The desire to prove this is a form of self-assertion and, like all self-assertion, it is an obstacle to the growth of Self which it desires, and of which the Self knows that it is capable. Self-assertion, in philosophic speculation as elsewhere, views the world as a means to its own ends; thus it makes the world of less account than Self, and the Self sets bounds to the greatness of its goods. In contemplation, on the contrary, we start from the not-Self, and through its greatness the boundaries of Self are enlarged; through the infinity of the universe the mind which contemplates it achieves some share in infinity.

For this reason greatness of soul is not fostered by those philosophies which assimilate the universe to Man. Knowledge is a form of union of Self and not-Self; like all union, it is impaired by dominion, and therefore by any attempt to force the universe into conformity with what we find in ourselves. There is a widespread philosophical tendency towards the view which tells us that Man is the measure of all things, that truth is man-made, that space and time and the world of universals are properties of the mind, and that, if there be anything not created by the mind, it is unknowable and of no account for us. This view, if our previous discussions were correct, is untrue; but in addition to being untrue, it has the effect of robbing philosophic contemplation of all that gives it value, since it fetters contemplation to Self. What it calls knowledge is not a union with the not-Self, but a set of prejudices, habits, and desires, making an impenetrable veil between us and the world beyond. The man who finds pleasure in such a theory of knowledge is like the man who never leaves the domestic circle for fear his word might not be law.

The true philosophic contemplation, on the contrary, finds its satisfaction in every enlargement of the not-Self, in everything that magnifies the objects contemplated, and thereby the subject contemplating. Everything, in contemplation, that is personal or private, everything that depends upon habit, self-interest, or desire, distorts the object, and hence impairs the union which the intellect seeks. By thus making a barrier between subject and object, such personal and private things become a prison to the intellect. The free intellect will see as God might see, without a here and now, without hopes and fears, without the trammels of customary beliefs and traditional prejudices, calmly, dispassionately, in the sole and exclusive desire of knowledge -- knowledge as impersonal, as purely contemplative, as it is possible for man to attain. Hence also the free intellect will value more the abstract and universal knowledge into which the accidents of private history do not enter, than the knowledge brought by the senses, and dependent, as such knowledge must be, upon an exclusive and personal point of view and a body whose sense-organs distort as much as they reveal.

The mind which has become accustomed to the freedom and impartiality of philosophic contemplation will preserve something of the same freedom and impartiality in the world of action and emotion. It will view its purposes and desires as parts of the whole, with the absence of insistence that results from seeing them as infinitesimal fragments in a world of which all the rest is unaffected by any one man's deeds. The impartiality which, in contemplation, is the unalloyed desire for truth, is the very same quality of mind which, in action, is justice, and in emotion is that universal love which can be given to all, and not only to those who are judged useful or admirable. Thus contemplation enlarges not only the objects of our thoughts, but also the objects of our actions and our affections: it makes us citizens of the universe, not only of one walled city at war with all the rest. In this citizenship of the universe consists man's true freedom, and his liberation from the thraldom of narrow hopes and fears.

Thus, to sum up our discussion of the value of philosophy; Philosophy is to be studied, not for the sake of any definite answers to its questions since no definite answers can, as a rule, be known to be true, but rather for the sake of the questions themselves; because these questions enlarge our conception of what is possible, enrich our intellectual imagination and diminish the dogmatic assurance which closes the mind against speculation; but above all because, through the greatness of the universe which philosophy contemplates, the mind also is rendered great, and becomes capable of that union with the universe which constitutes its highest good.

**from Bertrand Russell's *The Problems of Philosophy***

**PHILOSOPHY OF RELIGION by Charles Taliaferro (2)**

## 1. The Field and its Significance

The philosophical exploration of religious beliefs and practices is evident in the earliest recorded philosophy, east and west. In the west, throughout Greco-Roman philosophy and the Medieval era, philosophical reflection on God, or gods, reason and faith, the soul, afterlife, and so on were not considered to be a sub-discipline called “philosophy of religion.” The philosophy of God was simply one component among many interwoven philosophical projects. This intermingling of philosophical inquiry with religious themes and the broader enterprises of philosophy (e.g. political theory, epistemology, et al.) is apparent among many early modern philosophers such as Thomas Hobbes, John Locke, and George Berkeley. Only gradually do we find texts devoted exclusively to religious themes. The first use of the term “philosophy of religion” in English occurs in the 17th century work of Ralph Cudworth. Cudworth and his Cambridge University colleague Henry More produced philosophical work with a specific focus on religion and so, if one insisted on dating the beginning of philosophy of religion as a field, there are good reasons for claiming that it began (gradually) in the mid- 17th century (see Taliaferro 2005). Much of the subject matter treated by Cudworth and More is continuous with the current agenda of philosophy of religion (arguments about God's existence, the significance of religious pluralism, the nature of good and evil in relation to God, and so on), and many of the terms that are in current circulation had their origin in Cudworth's and his colleague's work (they coined the terms theism, materialism,consciousness, et al.).

Today philosophy of religion is a robust, intensely active area of philosophy. Almost without exception, any introduction to philosophy text in the Anglophone world includes some philosophy of religion. The importance of philosophy of religion is chiefly due to its subject matter: alternative beliefs about God, Brahman, the sacred, the varieties of religious experience, the interplay between science and religion, the challenge of non-religious philosophies, the nature and scope of good and evil, religious treatments of birth, history, and death, and other substantial terrain. A philosophical exploration of these topics involves fundamental questions about our place in the cosmos and about our relationship to what may transcend the cosmos. Such philosophical work requires an investigation into the nature and limit of human thought. Alongside these complex, ambitious projects, philosophy of religion has at least three factors that contribute to its importance for the overall enterprise of philosophy.

Philosophy of religion addresses embedded social and personal practices. Philosophy of religion is therefore relevant to practical concerns; its subject matter is not all abstract theory. Given the vast percentage of the world population that is either aligned with religion or affected by religion, philosophy of religion has a secure role in addressing people's actual values and commitments. A chief point of reference in much philosophy of religion is the shape and content of living traditions. In this way, philosophy of religion may be informed by the other disciplines that study religious life.

Another reason behind the importance of the field is its breadth. There are few areas of philosophy that are shorn of religious implications. Religious traditions are so comprehensive and all-encompassing in their claims that almost every domain of philosophy may be drawn upon in the philosophical investigation of their coherence, justification, and value.

A third reason is historical. Most philosophers throughout the history of ideas, east and west, have addressed religious topics. One cannot undertake a credible history of philosophy without taking philosophy of religion seriously.

While this field is vital for philosophy, philosophy of religion may also make a pivotal contribution to religious studies and theology. Religious studies often involve important methodological assumptions about history and about the nature and limits of religious experience. These invite philosophical assessment and debate. Theology may also benefit from philosophy of religion in at least two areas. Historically, theology has often drawn upon, or been influenced by, philosophy. Platonism and Aristotelianism have had a major influence on the articulation of classical Christian doctrine, and in the modern era theologians have often drawn on work by philosophers (from Hegel to Heidegger and Derrida). Another benefit lies in philosophy's tasks of clarifying, evaluating, and comparing religious beliefs. The evaluation has at times been highly critical and dismissive, but there are abundant periods in the history of ideas when philosophy has positively contributed to the flourishing of religious life. This constructive interplay is not limited to the west. The role of philosophy in distinctive Buddhist views of knowledge and the self has been of great importance. Just as philosophical ideas have fueled theological work, the great themes of theology involving God's transcendence, the divine attributes, providence, and so on, have made substantial impacts on important philosophical projects. (Hilary Putnam, for example, has linked the philosophy of truth with the concept of a God's-eye point of view.)

At the beginning of the 21st century, a more general rationale for philosophy of religion should be cited: it can enhance cross-cultural dialogue. Philosophers of religion now often seek out common as well as distinguishing features of religious belief and practice. This study can enhance communication between traditions, and between religions and secular institutions.

## 4. The Concept of God

### 4.1 Philosophical Reflection on Divine Attributes

Most philosophy of religion in the west has focused on different versions of theism. Ancient philosophy of religion wrestled with the credibility of monotheism and polytheism in opposition to skepticism and very primitive naturalistic schemes. For example, Plato argued that the view that God is singularly good should be preferred to the portrait of the gods that was articulated in Greek poetic tradition, according to which there are many gods, often imperfect and subject to vice and ignorance. The emergence and development of Judaism, Christianity, and Islam on a global scale secured the centrality of theism for philosophical enquiry, but the relevance of a philosophical exploration of theism is not limited to those interested in these religions and the cultures in which they flourish. While theism has generally flourished in religious traditions amid religious practices, one may be a theist without adopting any religion whatever, and one may find theistic elements (however piecemeal) in Confucianism, Hinduism, some versions of Mahayana Buddhism, as well as in the religions of some smaller scale societies. The debate over theism also has currency for secular humanism and religious forms of atheism as in Theravada Buddhist philosophy. Consider first the philosophical project of articulating theism and then the philosophy of divine attributes.

Terms applied both to God and to any aspect of the world have been classified as either univocal (sharing the same sense), equivocal (used in different senses), or analogical. There is a range of accounts of analogous predication, but the most common—and the one assumed here—is that terms are used analogously when their use in different cases (John limps and the argument limps) is based on what is believed to be a resemblance. It seems clear that many terms used to describe God in theistic traditions are used analogously, as when God is referred to as a father, shepherd, or fountain. More difficult to classify are descriptions of God as good, personal, knowing, omnipresent, and creative. Heated philosophical and theological disputes centre on unpacking the meaning of such descriptions, disputes that are often carried out with the use of thought experiments.

In thought experiments, hypothetical cases are described—cases that may or may not represent the way things are. In these descriptions, terms normally used in one context are employed in expanded settings. Thus, in thinking of God as omniscient, one might begin with a non-controversial case of a person knowing that a proposition is true, taking note of what it means for someone to possess that knowledge and of the ways in which the knowledge is secured. A theistic thought experiment would seek to extend our understanding of knowledge as we think of it in our own case, working toward the conception of a maximum or supreme intellectual excellence befitting the religious believers' understanding of God. Various degrees of refinement would then be in order, as one speculates not only about the extent of a maximum set of propositions known but also about how these might be known. That is, in attributing omniscience to God, would one thereby claim God knows all truths in a way that is analogous to the way we come to know truths about the world? Too close an analogy would produce a peculiar picture of God relying upon, for example, induction, sensory evidence, or the testimony of others. One move in the philosophy of God has been to assert that the claim “God knows something” employs the word “knows” univocally when read as picking out the thesis that God knows something, while it uses the term in only a remotely analogical sense if read as identifying how God knows (Swinburne 1977).

Here a medieval distinction comes into play between the res significata (what is asserted—for instance, that God knows X) and modus significandi (the mode or manner in which what is signified is realized or brought about—for instance, how God knows X). We might have a good grasp of what is meant by the claim that a being is omniscient while having little idea of how a being might be so. Thought experiments aimed at giving some sense to the Divine attribute of omniscience have been advanced by drawing attention to the way we know some things immediately (bodily positions, feelings and intentions), and then by extending this, coaxing us into conceiving a being that knows all things about itself and the cosmos immediately (see Beaty 1991 and Zagzebski 2008 for a constructive view, and Blumenfeld in Morris (ed.) 1987 for criticism).

Utilizing thought experiments and language in this way, philosophical theology has a stake in the soundness and richness of the imagination, picturing the way things might be “in one's mind's eye,” whether or not this relies on any actual imagery. Philosophers are now more cautious about drawing such inferences as we are increasingly aware of how some features of an imagined state of affairs might be misconceived or overlooked. Even so, it has been argued that if a state of affairs appears to one to be possible after careful reflection, checking it against one's background knowledge in other areas, then there is at least some warrant in judging the state of affairs to be a bona fide possibility (Sorensen 1992; see also Taliaferro 2002 and Gendler and Hawthorne 2002).

Work on the divine attributes has been vast. To generate a portrait of the literature on divine attributes, consider the issues that arise in reflection on omniscience, eternity, and goodness.

#### 4.1.1 Omniscience

Imagine there is a God who knows the future free action of human beings. If God does know you will freely do some act X, then it is true that you will indeed do X. But if you are free, would you not be free to avoid doing X? Given that it is foreknown you will do X, it appears you would not be free to refrain from the act.

Initially this paradox seems easy to dispel. If God knows about your free action, then God knows that you will freely do something and that you could have refrained from it. God's foreknowing the act does not make it necessary. Does not the paradox only arise because we confuse the proposition, “Necessarily, if God knows X, then X” with “If God knows X, then necessarily X”? After all, it is necessarily the case that if I know you are reading this entry right now, then it follows that you are reading this entry, but your reading this entry may still be seen as a contingent state of affairs. But the problem is not so easily diffused, however, because if God does infallibly know that some state of affairs obtains then it cannot be that the state of affairs does not obtain. Think of what is sometimes called the necessity of the past. Once a state of affairs has obtained, it is unalterably or necessarily the case that it did occur. If the future is known precisely and comprehensively, isn't the future like the past, necessarily or unalterably the case? If the problem is put in first-person terms and one imagines God foreknows you will freely turn to a different entry in this Encyclopedia (moreover, God knows with unsurpassable precision when you will do so, which entry you will select and what you will think about it), then an easy resolution of the paradox seems elusive. To highlight the nature of this problem imagine God tells you what you will freely do in the next hour. Under such conditions, is it still intelligible to believe you have the ability to do otherwise if it is known by God as well as yourself what you will indeed elect to do? Self-foreknowledge, then, produces an additional related problem because the psychology of choice seems to require prior ignorance about what we will choose.

Various replies to the freedom-foreknowledge debate have been given. Some adopt compatibilism, affirming the compatibility of free will and determinism, and conclude that foreknowledge is no more threatening to freedom than determinism. While some prominent philosophical theists in the past have taken this route (most dramatically Jonathan Edwards in the eighteenth century), this seems to be the minority position in philosophy of religion today (exceptions include Paul Helm and Lynne Baker). A second position adheres to the libertarian outlook, which insists that freedom involves a radical, indeterminist exercise of power, and concludes that God cannot know future free action. What prevents such philosophers from denying that God is omniscient is that they contend there are no truths about future free actions, or that while there are truths about the future, God freely decides not to know them in order to preserve free choice. On the first view, prior to someone's doing a free action, there is no fact of the matter that he or she will do a given act. This is in keeping with a traditional, but controversial, interpretation of Aristotle's philosophy of time and truth. Aristotle may have thought it was neither true nor false prior to a given sea battle whether a given side would win it. Some theists, such as Richard Swinburne, adopt this line today, holding that the future cannot be known. If it cannot be known for metaphysical reasons, then omniscience can be analyzed as knowing all that it is possible to know. That God cannot know future free action is no more of a mark against God's being omniscient than God's inability to make square circles is a mark against God's being omnipotent. Other philosophers deny the original paradox. They insist that God's foreknowledge is compatible with libertarian freedom and seek to resolve the quandary by claiming that God is not bound in time (God does not so much foreknow the future as God knows what for us is the future from an eternal viewpoint) and by arguing that the unique vantage point of an omniscient God prevents any impingement on freedom. God can simply know the future without this having to be grounded on an established, determinate future. But this only works if there is no necessity of eternity analogous to the necessity of the past. Why think that we have any more control over God's timeless belief than over God's past belief? If not, then there is an exactly parallel dilemma of timeless knowledge. For outstanding current analysis of freedom and foreknowledge, see the work of Linda Zagzebski.

#### 4.1.2 Eternity

Could there be a being that is outside time? In the great monotheistic traditions, God is thought of as without any kind of beginning or end. God will never, indeed, can never, cease to be. Some philosophical theists hold that God's temporality is very much like ours in the sense that there is a before, during, and an after for God, or a past, present, and future for God. This view is sometimes referred to as the thesis that God is everlasting. Those adopting a more radical stance claim that God is independent of temporality, arguing either that God is not in time at all, or that God is “simultaneously” at or in all times. This is sometimes called the view that God is eternal as opposed to everlasting.

Why adopt the more radical stance? One reason, already noted, is that if God is not temporally bound, there may be a resolution to the earlier problem of reconciling freedom and foreknowledge. As Augustine put it: “For He does not pass from this to that by transition of thought, but beholds all things with absolute unchangeableness; so that of those things which emerge in time, the future, indeed, are not yet, and the present are now, and the past no longer are; but all of these are by Him comprehended in His stable and eternal presence” (The City of God, 1972, XI, 21). If God is outside time, there may also be a secure foundation explaining God's immutability (changelessness), incorruptibility, and immortality. Furthermore, there may be an opportunity to use God's standing outside of time to launch an argument that God is the creator of time.

Those affirming God to be unbounded by temporal sequences face several puzzles which I note without trying to settle. If God is somehow at or in all times, is God simultaneously at or in each? If so, there is the following problem. If God is simultaneous with the event of Rome burning in 410, and also simultaneous with your reading this entry, then it seems that Rome must be burning at the same time you are reading this entry. (This problem was advanced by Nelson Pike; Stump and Kretzmann have replied that the simultaneity involved in God's eternal knowledge is not transitive). A different problem arises with respect to eternity and omniscience. If God is outside of time, can God know what time it is now? Arguably, there is a fact of the matter that it is now, say, midnight on 1 July 2010. A God outside of time might know that at midnight on 1 July 2010 certain things occur, but could God know when it isnow that time? The problem is that the more emphasis we place on the claim that God's supreme existence is independent of time, the more we seem to jeopardize taking seriously time as we know it. Finally, while the great monotheistic traditions provide a portrait of the Divine as supremely different from the creation, there is also an insistence on God's proximity or immanence. For some theists, describing God as a person or person-like (God loves, acts, knows) is not to equivocate. But it is not clear that an eternal God could be personal. For recent work on God's relation to time, see work by Katherin Rogers (Rogers 2007, 2008).

#### 4.1.3 The goodness of God

All known world religions address the nature of good and evil and commend ways of achieving human well-being, whether this be thought of in terms of salvation, liberation, deliverance, enlightenment, tranquility, or an egoless state of Nirvana. Notwithstanding important differences, there is a substantial overlap between many of these conceptions of the good as witnessed by the commending of the Golden Rule (“Do unto others as you would have them do unto you”) in many religions. Some religions construe the Divine as in some respect beyond our human notions of good and evil. In some forms of Hinduism, for example, Brahman has been extolled as possessing a sort of moral transcendence, and some Christian theologians and philosophers have likewise insisted that God is only a moral agent in a highly qualified sense, if at all (Davies 1993). To call God good is, for them, very different from calling a human being good.

Here I note only some of the ways in which philosophers have articulated what it means to call God good. In treating the matter, there has been a tendency either to explain God's goodness in terms of standards that are not God's creation and thus, in some measure, independent of God's will, or in terms of God's will and the standards God has created. The latter view has been termed theistic voluntarism. A common version of theistic voluntarism is the claim that for something to be good or right simply means that it is willed by God and for something to be evil or wrong means that it is forbidden by God.

Theistic voluntarists face several difficulties: moral language seems intelligible without having to be explained in terms of the Divine will. Indeed, many people make what they take to be objective moral judgments without making any reference to God. If they are using moral language intelligibly, how could it be that the very meaning of such moral language should be analyzed in terms of Divine volitions? New work in the philosophy of language may be of use to theistic voluntarists. According to a causal theory of reference, “water” necessarily designates H2O. It is not a contingent fact that water is H2O notwithstanding the fact that many people can use the term “water” without knowing its composition. Similarly, could it not be the case that “good” may refer to that which is willed by God even though many people are not aware of (or even deny) the existence of God? Another difficulty for voluntarism lies in accounting for the apparent meaningful content of claims like “God is good.” It appears that in calling God “good” the religious believer is saying more than “God wills what God wills.” If so, must not the very notion of goodness have some meaning independent of God's will? Also at issue is the worry that if voluntarism is accepted, the theist has threatened the normative objectivity of moral judgments. Could God make it the case that moral judgments were turned upside down? For example, could God make cruelty good? Arguably, the moral universe is not so malleable. In reply, some voluntarists have sought to understand the stability of the moral laws in light of God's immutably fixed, necessary nature.

By understanding God's goodness in terms of God's being (as opposed to God's will alone), we come close to the non-voluntarist stand. Aquinas and others hold that God is essentially good in virtue of God's very being. All such positions are non-voluntarist in so far as they do not claim that what it means for something to be good is that God wills it to be so. The goodness of God may be articulated in various ways, either by arguing that God's perfection requires God being good as an agent or by arguing that God's goodness can be articulated in terms of other Divine attributes such as those outlined above. For example, because knowledge is in itself good, omniscience is a supreme good. God has also been considered good in so far as God has created and conserves in existence a good cosmos. Debates over the problem of evil (if God is indeed omnipotent and perfectly good, why is there evil?) have poignancy precisely because they challenge this chief judgment over God's goodness. (The debate over the problem of evil is taken up in section 4.2.)

The choice between voluntarism and seeing God's very being as good is rarely strict. Some theists who oppose a full-scale voluntarism allow for partial voluntarist elements. According to one such moderate stance, while God cannot make cruelty good, God can make some actions morally required or morally forbidden which otherwise would be morally neutral. Arguments for this have been based on the thesis that the cosmos and all its contents are God's creation. According to some theories of property, an agent making something good gains entitlements over the property. The crucial moves in arguments that the cosmos and its contents belong to their Creator have been to guard against the idea that human parents would then “own” their children (they do not, because parents are not radical creators like God), and the idea that Divine ownership would permit anything, thus construing our duties owed to God as the duties of a slave to a master (a view to which not all theists have objected). Theories spelling out why and how the cosmos belongs to God have been prominent in all three monotheistic traditions. Plato defended the notion, as did Aquinas and Locke. (See Brody 1974 for a defense.)

A new development in theorizing about God's goodness has been advanced in Zagzebski 2004. Zagzebski contends that being an exemplary virtuous person consists in having good motives. Motives have an internal, affective or emotive structure. An emotion is “an affective perception of the world” (Zagzebski 2004, xvi) that “initiates and directs action” (Ibid., 1). The ultimate grounding of what makes human motives good is if they are in accord with the motives of God. Zagzebski's theory is perhaps the most ambitious virtue theory in print, offering an account of human virtues of God. Not all theists resonate with her bold claim that God is a person who has emotions, but many allow that (at least in some analogical sense) God may be see as personal and having affective states.

One other effort worth noting to link judgments of good and evil with judgments about God relies upon the ideal observer theory of ethics. According to this theory, moral judgments can be analyzed in terms of how an ideal observer would judge matters. To say an act is right entails a commitment to holding that if there were an ideal observer, it would approve of the act; to claim an act is wrong entails the thesis that if there were an ideal observer, it would disapprove of it. The theory can be found in works by Hume, Adam Smith, and Hare and Firth (1970). The ideal observer is variously described, but typically is thought of as an impartial omniscient regarding non-moral facts (facts that can be grasped without already knowing the moral status or implications of the fact—for instance, “He did something bad” is a moral fact; “He hit Smith” is not), and as omnipercipient (Firth's term for adopting a position of universal affective appreciation of the points of view of all involved parties). The theory receives some support from the fact that most moral disputes can be analyzed in terms of different parties challenging each other to be impartial, to get their empirical facts straight, and to be more sensitive—for example, by realizing what it feels like to be disadvantaged. The theory has formidable critics and defenders. If true, it does not follow that there is an ideal observer, but if it is true and moral judgments are coherent, then the idea of an ideal observer is coherent. Given certain conceptions of God in the three great monotheistic traditions, God fits the ideal observer description (and more besides, of course). Should an ideal observer theory be cogent, a theist would have some reason for claiming that atheists committed to normative, ethical judgments are also committed to the idea of a God or a God-like being. (For a defense of a theistic form of the ideal observer theory, see Taliaferro 2005; for criticism see Anderson, 2005.)

### 4.2 God's Existence

In some introductory philosophy textbooks and anthologies, the arguments for God's existence are presented as ostensible proofs which are then shown to be fallible. For example, an argument from the apparent order and purposive nature of the cosmos will be criticized on the grounds that, at best, the argument would establish there is a purposive, designing intelligence at work in the cosmos. This falls far short of establishing that there is a God who is omnipotent, omniscient, benevolent, and so on. But two comments need to be made: First, that “meager” conclusion alone would be enough to disturb a scientific naturalist who wishes to rule out all such transcendent intelligence. Second, few philosophers today advance a single argument as a proof. Customarily, a design argument might be advanced alongside an argument from religious experience, and the other arguments to be considered below. True to Hempel's advice (cited earlier) about comprehensive inquiry, it is increasingly common to see philosophies—scientific naturalism or theism—advanced with cumulative arguments, a whole range of considerations, and not with a supposed knock-down, single proof.

One reason why the case for and against major, comprehensive philosophies are mostly cumulative is because of discontent in what is often called foundationalism. In one classical form of foundationalism, one secures first and foremost a basis of beliefs which one may see to be true with certainty. The base may be cast as indubitable or infallible. One then slowly builds up the justification for one's other, more extensive beliefs about oneself and the world. Many (but not all) philosophers now see justification as more complex and interwoven; the proper object of philosophical inquiry is overall coherence, not a series of distinguishable building operations beginning with a foundation.

One way of carrying out philosophy of religion along non-foundationalist lines has been to build a case for the comparative rationality of a religious view of the world. It has been argued that the intellectual integrity of a religious world view can be secured if it can be shown to be no less rational than the available alternatives. It need only achieve intellectual parity. John Hick and others emphasize the integrity of religious ways of seeing the world that are holistic, internally coherent, and open to criticism along various external lines (see Hick 2004, 2006). On the latter front, if a religious way of conceiving the world is at complete odds with contemporary science, that would count as grounds for revising the religious outlook. The case for religion need not, however, be scientific or even analogous to science. If Hick is right, religious ways of seeing the world are not incompatible with science, but complementary. Independent of Hick but in the same spirit, Plantinga has proposed that belief in God's existence may be taken as properly basic and fully warranted without having to be justified in relation to standard arguments for God from design, miracles, and so on. Plantinga argues that the tendency to believe in God follows natural tendencies of the human mind. This stance comprises what is commonly referred to as Reformed Epistemology because of its connection to the work of the Reformed theologian John Calvin (1509–1564) who maintained that we have a sense of God (sensus divinitatis) leading us to see God in the world around us. Plantinga has thereby couched the question of justification within the larger arena of metaphysics. By advancing an intricate, comprehensive picture of how beliefs can be warranted when they function as God designed them, he has provided what some believe to be a combined metaphysical and epistemic case for the rationality of religious convictions (see Beilby (ed.) 2002).

Who has the burden of proof in a debate between a theist and an atheist? Antony Flew (1984) thinks it is the theist. By his lights, the theist and atheist can agree on a whole base line of truths (such as the findings of the physical sciences). The question then becomes, Why go any further? Flew wields a version of Ockham's razor, arguing that if one has no reason to go further, one has reason not to go further. (As it happens, Flew has subsequently claimed that there are good reasons for going beyond the natural world, and he is currently a theist; see Flew 2008.) His challenge has been met on various fronts, with some critics claiming that Flew's burden of proof argument is wedded to an outmoded foundationalism, that any burden of proof is shared equally by atheists and theists, or that the theist has an array of arguments to help shoulder a greater burden of proof. The position of fideism is a further option. Fideism is the view that religious belief does not require evidence and that religious faith is self-vindicating. Karl Barth (1886–1968) advocated a fideistic philosophy. (For a critical assessment of fideism, see Moser 2010, chapter 2.) Hick and Plantinga need not be considered fideists because of the high role each gives to experience, coherence, and reflection.

To sketch some of the main lines of argument in this literature, consider the ontological, cosmological, and teleological arguments, arguments from the problem of evil, and the argument over the cognitive status of religious experience.

#### 4.2.1 Ontological arguments

There is a host of arguments under this title; all of them are based principally on conceptual, a priori grounds which do not involve a posteriori empirical investigation. If a version of the argument works, then it can be deployed using only the concept of God and some modal principles of inference, that is, principles concerning possibility and necessity. The argument need not resist all empirical support, however, as I shall indicate.

The focus of the argument is the thesis that, if there is a God, then God's existence is necessary. God's existence is not contingent—God is not the sort of being that just happens to exist. That this is a plausible picture of what is meant by God may be shown by appealing to the way God is conceived in Jewish, Christian, and Islamic traditions. This would involve some a posteriori, empirical research into the way God is thought of in these traditions. Alternatively, a defender of the ontological argument might hope to convince others that the concept of God is the concept of a being that exists necessarily by beginning with the idea of a maximally excellent being. If there were a maximally excellent being what would it be like? It has been argued that among its array of great-making qualities (omniscience and omnipotence) would be necessary existence. Once fully articulated, it can be argued that a maximally excellent being which existed necessarily could be called “God.”

The ontological argument goes back to St. Anselm (1033/34–1109), but I shall explore a current version relying heavily on the principle that if something is possibly necessarily the case, then it is necessarily the case (or, to put it redundantly, it is necessarily necessary). The principle can be illustrated in the case of propositions. That six is the smallest perfect number (that number which is equal to the sum of its divisors including one but not including itself) does not seem to be the sort of thing that might just happen to be true. Rather, either it is necessarily true or necessarily false. If the latter, it is not possible, if the former, it is possible. If one knows that it is possible that six is the smallest perfect number then one has good reason to believe that. Do we have reason to think it is possible that God exists necessarily? In support of this, one can also appeal to a posteriori matters, noting the extant religious traditions that uphold such a notion. The fact that the concept of God as a necessarily existing reality seems to be coherently conceived widely across time and cultures is some evidence that the concept is coherent (it is possible there is a God), for God's existence has plausibility, thus can also contribute to believing it is possible God exists. There is an old philosophical precept that from the fact that something exists, it follows that it is possible (ab esse ad posse valet consequentia). A related principle is that evidence that something exists is evidence that it is possible that such a thing exists. There does not appear to be anything amiss in their thinking of God as necessarily existing; if the belief that God exists is incoherent this is not obvious. Indeed, a number of atheists think God might exist, but conclude God does not. If we are successful in establishing the possibility that God necessarily exists, the conclusion follows that it is necessarily the case that God exists.

There have been hundreds of objections and replies to this argument. Perhaps the most ambitious objection is that the argument can be used with one minor alteration to argue that God cannot exist. Assume all the argument above is correct, but also that it is possible that God does not exist. Atheists can point out that many theists who believe there is a God at least allow for the bare possibility that they could be wrong and there is no God. If it is possible that there is no God, then it would necessarily follow that there is no God. Replies to this objection emphasize the difficulty of conceiving of the non-existence of God. The battle over whether God is necessary or impossible is often fought over the coherence of the various divine attributes discussed in section 3. If you think these attributes are compossible, involve no contradictions, and violate no known metaphysical truths, then you may well have good grounds for concluding that God is possible and therefore necessary. However, if you see a contradiction, say, in describing a being who is at once omniscient and omnipotent, you may well have good grounds for concluding that God's existence is impossible.

Another objection is that it makes no sense to think of a being existing necessarily; propositions may be necessarily true or false, but objects cannot be necessary or contingent. Some philosophers reply that it makes no less sense to think of an individual (God) existing necessarily than it does to think of propositions being necessarily true.

A further objection is that the ontological argument cannot get off the ground because of the question-begging nature of its premise that if there is a God, then God exists necessarily. Does admitting this premise concede that there is some individual thing such that if it exists, it exists necessarily? Replies have claimed that the argument only requires one to consider an ostensible state of affairs, without having to concede initially whether the state of affairs is possible or impossible. To consider what is involved in positing the existence of God is no more hazardous than considering what is involved in positing the existence of unicorns. One can entertain the existence of unicorns and their necessary features (that necessarily if there were unicorns, there would exist single-horned beasts) without believing that there are unicorns.

Finally, consider the objection that, if successful in providing reasons to believe that God exists, the ontological argument could be used to establish the existence of a whole array of other items, like perfect islands. Replies to this sort of objection have typically questioned whether it makes sense to think of an island (a physical thing) as existing necessarily or as having maximal excellence on a par with God. Does the imagined island have excellences like omniscience, omnipotence (a power which would include the power to make indefinitely many islands), and so on?

Classical, alternative versions of the ontological argument are propounded by Anselm, Spinoza, and Descartes, with current versions by Alvin Plantinga, Charles Hartshorne, Norman Malcolm, and C. Dore; classical critics include Gaunilo and Kant, and current critics are many, including William Rowe, J. Barnes, G. Oppy, and J. L. Mackie. The latest book-length treatment of the ontological argument is a vigorous defense: Rethinking the Ontological Argument by Daniel Dombrowski (2006).

#### 4.2.2 Cosmological arguments

Arguments in this vein are more firmly planted in empirical, a posteriori reflection, but some versions employ a priori reasons as well. There are various versions. Some argue that the cosmos had an initial cause outside it, a First Cause in time. Others argue that the cosmos has a necessary, sustaining cause from instant to instant. The two versions are not mutually exclusive, for it is possible both that the cosmos had a First Cause and that it currently has a sustaining cause.

The cosmological argument relies on the intelligibility of the notion of something which is not itself caused to exist by anything else. This could be either the all-out necessity of supreme pre-eminence across all possible worlds used in versions of the ontological argument, or a more local, limited notion of a being that is uncaused in the actual world. If successful, the argument would provide reason for thinking there is at least one such being of extraordinary power responsible for the existence of the cosmos. At best, it may not justify a full picture of the God of religion (a First Cause would be powerful, but not necessarily omnipotent), but it would nonetheless challenge naturalistic alternatives and bring one closer to theism.

Both versions of the argument ask us to consider the cosmos in its present state. Is the world as we know it something that necessarily exists? At least with respect to ourselves, the planet, the solar system and the galaxy, it appears not. With respect to these items in the cosmos, it makes sense to ask why they exist rather than not. In relation to scientific accounts of the natural world, such enquiries into causes make abundant sense and are perhaps even essential presuppositions of the natural sciences. Some proponents of the argument contend that we know a priori that if something exists there is a reason for its existence. So, why does the cosmos exist? If we explain the contingent existence of the cosmos (or states of the cosmos) only in terms of other contingent things (earlier states of the cosmos, say), then a full cosmic explanation will never be attained. At this point the two versions of the argument divide.

Arguments to a First Cause in time contend that a continuous temporal regress from one contingent existence to another would never account for the existence of the cosmos, and they conclude that it is more reasonable to accept there was a First Cause than to accept either a regress or the claim that the cosmos just came into being from nothing. Arguments to a sustaining cause of the cosmos claim that explanations of why something exists now cannot be adequate without assuming a present, contemporaneous sustaining cause. The arguments have been based on the denial of all actual infinities or on the acceptance of some infinities (for instance, the coherence of supposing there to be infinitely many stars) combined with the rejection of an infinite regress of explanations solely involving contingent states of affairs. The latter has been described as a vicious regress as opposed to one that is benign. There are plausible examples of vicious infinite regresses that do not generate explanations: for instance, imagine that I explain my possession of a book by reporting that I got it from A who got it from B, and so on to infinity. This would not explain how I got the book. Alternatively, imagine a mirror with light reflected in it. Would the presence of light be successfully explained if one claimed that the light was a reflection of light from another mirror, and the light in that mirror came from yet another mirror, and so on to infinity? Consider a final case. You come across a word you do not understand; let it be “ongggt”. You ask its meaning and are given another word which is unintelligible to you, and so on, forming an infinite regress. Would you ever know the meaning of the first term? The force of these cases is to show how similar they are to the regress of contingent explanations.

Versions of the argument that reject all actual infinities face the embarrassment of explaining what is to be made of the First Cause, especially since it might have some features that are actually infinite. In reply, Craig and others have contended that they have no objection to potential infinities (although the First Cause will never cease to be, it will never become an actual infinity). They further accept that prior to the creation, the First Cause was not in time, a position relying on the theory that time is relational rather than absolute. The current scientific popularity of the relational view may offer support to defenders of the argument.

It has been objected that both versions of the cosmological argument set out an inflated picture of what explanations are reasonable. Why should the cosmos as a whole need an explanation? If everything in the cosmos can be explained, albeit through infinite, regressive accounts, what is left to explain? One may reply either by denying that infinite regresses actually do satisfactorily explain, or by charging that the failure to seek an explanation for the whole is arbitrary. The question, “Why is there a cosmos?” seems a perfectly intelligible one. If there are accounts for things in the cosmos, why not for the whole? The argument is not built on the fallacy of treating every whole as having all the properties of its parts. But if everything in the cosmos is contingent, it seems just as reasonable to believe that the whole cosmos is contingent as it is to believe that if everything in the cosmos were invisible, the cosmos as a whole would be invisible.

Another objection is that rather than explaining the contingent cosmos, the cosmological argument introduces a mysterious entity of which we can make very little philosophical or scientific sense. How can positing at least one First Cause provide a better account of the cosmos than simply concluding that the cosmos lacks an ultimate account? In the end, the theist seems bound to admit that why the First Cause created at all was a contingent matter. If, on the contrary, the theist has to claim that the First Cause had to do what it did, would not the cosmos be necessary rather than contingent?

Some theists come close to concluding that it was indeed essential that God created the cosmos. If God is supremely good, there had to be some overflowing of goodness in the form of a cosmos (see Kretzmann and Stump in Morris 1987, on the ideas of Dionysius the Areopagite; see Rowe 2004 for arguments that God is not free). But theists typically reserve some role for the freedom of God and thus seek to retain the idea that the cosmos is contingent. Defenders of the cosmological argument still contend that its account of the cosmos has a comprehensive simplicity lacking in alternative views. God's choices may be contingent, but not God's existence and the Divine choice of creating the cosmos can be understood to be profoundly simple in its supreme, overriding endeavor, namely to create something good. Swinburne has argued that accounting for natural laws in terms of God's will provides for a simple, overarching framework within which to comprehend the order and purposive character of the cosmos (see also Foster 2004). At this point we move from the cosmological to the teleological arguments.

Defenders of the cosmological argument include Swinburne, Richard Taylor, Hugo Meynell, Timothy O'Connor, Bruce Reichenbach, Robert Koons, and William Rowe; prominent opponents include Antony Flew, Michael Martin, Howard Sobel, Nicholas Everitt, and J. L Mackie.

#### 4.2.3 Teleological arguments

These arguments focus on characteristics of the cosmos that seem to reflect the design or intentionality of God or, more modestly, of one or more powerful, intelligent God-like agents. Part of the argument may be formulated as providing evidence that the cosmos is the sort of reality that would be produced by an intelligent being, and then arguing that positing this source is more reasonable than agnosticism or denying it. As in the case of the cosmological argument, the defender of the teleological argument may want to claim only to be giving us some reason for thinking there is a God. Note the way the various arguments might then be brought to bear on each other. If successful, the teleological argument may provide some reason for thinking that the First Cause of the cosmological argument is purposive, while the ontological argument provides some reason for thinking that it makes sense to posit a being that has Divine attributes and necessarily exists. Behind all of them an argument from religious experience may provide some initial reasons to seek further support for a religious conception of the cosmos and to question the adequacy of naturalism.

One version of the teleological argument will depend on the intelligibility of purposive explanation. In our own human case it appears that intentional, purposive explanations are legitimate and can truly account for the nature and occurrence of events. In thinking about an explanation for the ultimate character of the cosmos, is it more likely for the cosmos to be accounted for in terms of a powerful, intelligent agent or in terms of a naturalistic scheme of final laws with no intelligence behind them? Theists employing the teleological argument will draw attention to the order and stability of the cosmos, the emergence of vegetative and animal life, the existence of consciousness, morality, rational agents and the like, in an effort to identify what might plausibly be seen as purposively explicable features of the cosmos. Naturalistic explanations, whether in biology or physics, are then cast as being comparatively local in application when held up against the broader schema of a theistic metaphysics. Darwinian accounts of biological evolution will not necessarily assist us in thinking through why there are either any such laws or any organisms to begin with. Arguments supporting and opposing the teleological argument will then resemble arguments about the cosmological argument, with the negative side contending that there is no need to move beyond a naturalistic account, and the positive side aiming to establish that failing to go beyond naturalism is unreasonable.

In assessing the teleological argument, we can begin with the objection from uniqueness. We cannot compare our cosmos with others to determine which have been designed and which have not. If we could, then we might be able to find support for the argument. If we could compare our cosmos with those we knew to be designed and if the comparison were closer than with those we knew not to be designed, then the argument might be plausible. Without such comparisons, however, the argument fails. Replies to this line of attack have contended that were we to insist that inferences in unique cases were out of order, then we would have to rule out otherwise perfectly respectable scientific accounts of the origin of the cosmos. Besides, while it is not possible to compare the layout of different cosmic histories, it is in principle possible to envisage worlds that seem chaotic, random, or based on laws that cripple the emergence of life. Now we can envisage an intelligent being creating such worlds, but, through considering their features, we can articulate some marks of purposive design to help us judge whether the cosmos was designed rather than created at random. Some critics appeal to the possibility that the cosmos has an infinite history to bolster and re-introduce the uniqueness objection. Given infinite time and chance, it seems likely that something like our world will come into existence, with all its appearance of design. If so, why should we take it to be so shocking that our world has its apparent design, and why should explaining the world require positing one or more intelligent designers? Replies repeat the earlier move of insisting that if the objection were to be decisive, then many seemingly respectable accounts would also have to fall by the wayside. It is often conceded that the teleological argument does not demonstrate that one or more designers are required; it seeks rather to establish that positing such purposive intelligence is reasonable and preferable to naturalism. Recent defenders of the argument this century include George Schlesinger, Robin Collins, and Richard Swinburne. It is rejected by J. L. Mackie, Michael Martin, Nicholas Everitt, and others.

One feature of the teleological argument currently receiving increased attention focuses on epistemology. It has been contended that if we do rely on our cognitive faculties, it is reasonable to believe that these are not brought about by naturalistic forces—forces that are entirely driven by chance or are the outcome of processes not formed by an overriding intelligence. An illustration may help to understand the argument. Imagine coming across what appears to be a sign reporting some information about your current altitude (some rocks in a configuration giving you your current location and precise height above sea-level in meters). If you had reason to believe that this “sign” was totally the result of chance configurations, would it still be reasonable to trust it? Some theists argue that it would not be reasonable, and that trusting our cognitive faculties requires us to accept that they were formed by an overarching, good, creative agent. This rekindles Descartes' point about relying on the goodness of God to ensure that our cognitive faculties are in good working order. Objections to this argument center on naturalistic explanations, especially those friendly to evolution. In evolutionary epistemology, one tries to account for the reliability of cognitive faculties in terms of trial and error leading to survival. A rejoinder by theists is that survival alone is not necessarily linked to true beliefs. It could, in principle, be false beliefs that enhance survival. In fact, some atheists think that believing in God has been crucial to people's survival, though the belief is radically false. Martin and Mackie, among others, object to the epistemic teleological argument; Plantinga, Richard Creel and Richard Taylor defend it.

Two recent developments in teleological argumentation have involved the intelligent design hypothesis and fine tuning arguments.

The first is an argument that there are orders of biological complexity emerging in evolution that are highly unlikely if accounted for by random mutation and natural selection or any other means in the absence of a purposive, intentional force (Behe 2007). Debate on the intelligent design (ID) proposal includes questions of whether it is properly scientific, about the biochemistry involved, and whether (if the ID hypothesis is superior to non-ID accounts) the ID hypothesis can inform us about the nature of the intelligent, designing forces. While the ID hypothesis has been defended as an allegedly scientific account—it is not based on an appeal to Genesis (as Creationism is)—many scientists argue that ID is not a scientific theory because it is neither testable nor falsifiable. Some also argue that ID goes beyond the available evidence and that it systematically underestimates the ability of non-intelligent, natural causes (plus chance) to account for the relevant biological complexity. Critics like Kenneth Miller contend that Behe does not take into sufficient account the adaptive value of very minor changes in evolution (such as the sensitivity to light found in algae and bacteria) that gradually lead to complex organs such as the eye (Miller 1999).

Fine tuning arguments contend that the existence of our cosmos with its suns, planets, life, et al. would not have come about or continued in existence without the constancy of multiple factors. Even minor changes to the nuclear weak force would not have allowed for stars, nor would stars have endured if the ratio of electromagnetism to gravity had been different. John Leslie observes: “Alterations by less than one part in a billion to the expansion speed early in the Big Bang would have led to runaway expansion, everything quickly becoming so dilute that no stars could have formed, or else to gravitational collapse inside under a second” (Leslie 2007, 76). Robin Collins and others have argued that theism better accounts for the fine tuning than naturalism (see Collins 2003; for criticism of the argument, see Craig & Smith 1993).

A more sustained objection against virtually all versions of the teleological argument takes issue with the assumption that the cosmos is good or that it is the sort of thing that would be brought about by an intelligent, completely benevolent being. This leads us directly to the next central concern of the philosophy of God.

#### 4.2.4 Problems of evil

If there is a God who is omnipotent, omniscient, and completely good, why is there evil? The problem of evil is the most widely considered objection to theism in both western and eastern philosophy. There are two general versions of the problem: the deductive or logical version, which asserts that the existence of any evil at all (regardless of its role in producing good) is incompatible with God's existence; and the probabilistic version, which asserts that given the quantity and severity of evil that actually exists, it is unlikely that God exists. The deductive problem is currently less commonly debated because it is widely acknowledged that a thoroughly good being might allow or inflict some harm under certain morally compelling conditions (such as causing a child pain when removing a splinter). More intense debate concerns the likelihood (or even possibility) that there is a completely good God given the vast amount of evil in the cosmos. Consider human and animal suffering caused by death, predation, birth defects, ravaging diseases, virtually unchecked human wickedness, torture, rape, oppression, and “natural disasters.” Consider how often those who suffer are innocent. Why should there be so much gratuitous, apparently pointless evil?

In the face of the problem of evil, some philosophers and theologians deny that God is all-powerful and all-knowing. John Stuart Mill took this line, and panentheist theologians today also question the traditional treatments of Divine power. According to panentheism, God is immanent in the world, suffering with the oppressed and working to bring good out of evil, although in spite of God's efforts, evil will invariably mar the created order. Another response is to think of God as being very different from a moral agent. Brian Davies and others have contended that what it means for God to be good is different from what it means for an agent to be morally good (Davies 2006). A more desperate strategy is to deny the existence of evil, but it is difficult to reconcile traditional monotheism with moral skepticism. Also, insofar as we believe there to be a God worthy of worship and a fitting object of human love, the appeal to moral skepticism will carry little weight. The idea that evil is a privation or twisting of the good may have some currency in thinking through the problem of evil, but it is difficult to see how it alone could go very far to vindicate belief in God's goodness. Searing pain and endless suffering seem altogether real even if they are analyzed as being philosophically parasitic on something valuable. The three great monotheistic traditions, with their ample insistence on the reality of evil, offer little reason to try to defuse the problem of evil by this route. Indeed, classical Judaism, Christianity and Islam are so committed to the existence of evil that a reason to reject evil would be a reason to reject these religious traditions. What would be the point of the Judaic teaching about the Exodus (God liberating the people of Israel from slavery), or the Christian teaching about the incarnation (Christ revealing God as love and releasing a Divine power that will, in the end, conquer death), or the Islamic teaching of Mohammed (the holy prophet of Allah who is all-just and all-merciful) if slavery, hate, death, and injustice did not exist?

In part, the magnitude of the difficulty one takes the problem of evil to pose for theism will depend upon one's commitments in other areas of philosophy, especially ethics, epistemology, and metaphysics. If in ethics you hold that there should be no preventable suffering for any reason, regardless of the cause or consequence, then the problem of evil will conflict with your acceptance of traditional theism. Moreover, if you hold that any solution to the problem of evil should be evident to all persons, then again traditional theism is in jeopardy, for clearly the “solution” is not evident to all. Debate has largely centered on the legitimacy of adopting some middle position: a theory of values that would preserve a clear assessment of the profound evil in the cosmos as well as some understanding of how this might be compatible with the existence of an all powerful, completely good Creator. Could there be reasons why God would permit cosmic ills? If we do not know what those reasons might be, are we in a position to conclude that there are none or that there could not be any? Exploring different possibilities will be shaped by one's metaphysics. For example, if you do not believe there is free will, then you will not be moved by any appeal to the positive value of free will and its role in bringing about good as offsetting its role in bringing about evil.

Theistic responses to the problem of evil distinguish between a defense and a theodicy. A defense seeks to establish that rational belief that God exists is still possible (when the defense is employed against the logical version of the problem of evil) and that the existence of evil does not make it improbable that God exists (when used against the probabilistic version). Some have adopted the defense strategy while arguing that we are in a position to have rational belief in the existence of evil and in a completely good God who hates this evil, even though we may be unable to see how these two beliefs are compatible. A theodicy is more ambitious and is typically part of a broader project, arguing that it is reasonable to believe that God exists on the basis of the good as well as the evident evil of the cosmos. In a theodicy, the project is not to account for each and every evil, but to provide an overarching framework within which to understand at least roughly how the evil that occurs is part of some overall good—for instance, the overcoming of evil is itself a great good. In practice, a defense and a theodicy often appeal to similar factors, the first and foremost being what many call the Greater Good Defense.

#### 4.2.5 Evil and the Greater Good

In the Greater Good Defense, it is contended that evil can be understood as either a necessary accompaniment to bringing about greater goods or an integral part of these goods. Thus, in a version often called the Free Will Defense, it is proposed that free creatures who are able to care for each other and whose welfare depends on each other's freely chosen action constitute a good. For this good to be realized, it is argued, there must be the bona fide possibility of persons harming each other. The free will defense is sometimes used narrowly only to cover evil that occurs as a result, direct or indirect, of human action. But it has been speculatively extended by those proposing a defense rather than a theodicy to cover other evils which might be brought about by supernatural agents other than God. According to the Greater Good case, evil provides an opportunity to realize great values, such as the virtues of courage and the pursuit of justice. Reichenbach (1982), Tennant (1930), Swinburne (1979), and van Inwagen (2006) have also underscored the good of a stable world of natural laws in which animals and humans learn about the cosmos and develop autonomously, independent of the certainty that God exists. Some atheists accord value to the good of living in a world without God, and these views have been used by theists to back up the claim that God might have had reason to create a cosmos in which Divine existence is not overwhelmingly obvious to us. If God's existence were overwhelmingly obvious, then motivations to virtue might be clouded by self-interest and by the bare fear of offending an omnipotent being. Further, there may even be some good to acting virtuously even if circumstances guarantee a tragic outcome. John Hick (1978) so argued and has developed what he construes to be an Irenaean approach to the problem of evil (named after St. Irenaeus of the second century). On this approach, it is deemed good that humanity develops the life of virtue gradually, evolving to a life of grace, maturity, and love. This contrasts with a theodicy associated with St. Augustine, according to which God made us perfect and then allowed us to fall into perdition, only to be redeemed later by Christ. Hick thinks the Augustinian model fails whereas the Irenaean one is credible.

Some have based an argument from the problem of evil on the charge that this is not the best possible world. If there were a supreme, maximally excellent God, surely God would bring about the best possible creation. Because this is not the best possible creation, there is no supreme, maximally excellent God. Following Adams (1987), many now reply that the whole notion of a best possible world, like the highest possible number, is incoherent. For any world that can be imagined with such and such happiness, goodness, virtue and so on, a higher one can be imagined. If the notion of a best possible world is incoherent, would this count against belief that there could be a supreme, maximally excellent being? It has been argued on the contrary that Divine excellences admit of upper limits or maxima that are not quantifiable in a serial fashion (for example, Divine omnipotence involves being able to do anything logically or metaphysically possible, but does not require actually doing the greatest number of acts or a series of acts of which there can be no more).

Those concerned with the problem of evil clash over the question of how one assesses the likelihood of Divine existence. Someone who reports seeing no point to the existence of evil or no justification for God to allow it seems to imply that if there were a point they would see it. Note the difference between seeing no point and not seeing a point. In the cosmic case, is it clear that if there were a reason justifying the existence of evil, we would see it? William Rowe thinks some plausible understanding of God's justificatory reason for allowing the evil should be detectable, but that there are cases of evil that are altogether gratuitous. Defenders like William Hasker and Stephen Wykstra reply that these cases are not decisive counter-examples to the claim that there is a good God. These philosophers hold that we can recognize evil and grasp our duty to do all in our power to prevent or alleviate it. But we should not take our failure to see what reason God might have for allowing evil to count as grounds for thinking that there is no reason. This later move has led to a position commonly calledskeptical theism. Michael Bergmann, Michael Rea, and others have argued that we have good reason to be skeptical about whether we can assess whether ostensibly gratuitous evils may or may not be permitted by an all good God (Bergmann 2001; Bergmann and Rea 2005; for criticism see Almeida and Oppy 2003).

Some portraits of an afterlife seem to have little bearing on our response to the magnitude of evil here and now. Does it help to understand why God allows evil if all victims will receive happiness later? But it is difficult to treat the possibility of an afterlife as entirely irrelevant. Is death the annihilation of persons or an event involving a transfiguration to a higher state? If you do not think that it matters whether persons continue to exist after death, then such speculation is of little consequence. But suppose that the afterlife is understood as being morally intertwined with this life, with opportunity for moral and spiritual reformation, transfiguration of the wicked, rejuvenation and occasions for new life, perhaps even reconciliation and communion between oppressors seeking forgiveness and their victims. Then these considerations might help to defend against arguments based on the existence of evil. Insofar as one cannot rule out the possibility of an afterlife morally tied to our life, one cannot rule out the possibility that God brings some good out of cosmic ills.

The most recent work on the afterlife in philosophy of religion has focused on the compatibility of an individual afterlife with some forms of physicalism. Arguably, a dualist treatment of human persons is more promising. If you are not metaphysically identical with your body, then perhaps the annihilation of your body is not the annihilation of you. Today, a range of philosophers have argued that even if physicalism is true, an afterlife is still possible (Peter van Inwagen, Lynne Baker, Trenton Merricks, Kevin Cocoran). The import of this work for the problem of evil is that the possible redemptive value of an afterlife should not be ruled out (without argument) if one assumes physicalism to be true. (For an extraordinary, rich resource on the relevant literature, see The Oxford Handbook of Eschatology, ed. by J. Walls.)

#### 4.2.6 Religious Experience

Perhaps the justification most widely offered for religious belief concerns the occurrence of religious experience or the cumulative weight of testimony of those claiming to have had religious experiences. Putting the latter case in theistic terms, the argument appeals to the fact that many people have testified that they have felt God's presence. Does such testimony provide evidence that God exists? That it is evidence has been argued by Jerome Gellman, Keith Yandell, William Alston, Caroline Davis, Gary Gutting, Kai-Man Kwan, Richard Swinburne and others. That it is not (or that its evidential force is trivial) is argued by Michael Martin, J. L. Mackie, Kai Nielson, Matthew Bagger, John Schellenberg, William Rowe, and others. In an effort to stimulate further investigation, I shall briefly sketch some of the moves and countermoves in the debate.

Objection: Religious experience cannot be experience of God for experience is only sensory and if God is non-physical, God cannot be sensed.

Reply: The thesis that experience is only sensory can be challenged. Yandell marks out some experiences (as when one has “a feeling” someone is present but without having any accompanying sensations) that might provide grounds for questioning a narrow sensory notion of experience.

Objection: Testimony to have experienced God is only testimony that one thinks one has experienced God; it is only testimony of a conviction, not evidence.

Reply: The literature on religious experience testifies to the existence of experience of some Divine being on the basis of which the subject comes to think the experience is of God. If read charitably, the testimony is not testimony to a conviction, but to experiences that form the grounds for the conviction. (See Bagger 1999 for a vigorous articulation of this objection, and note the reply by Kai-man Kwam 2003).

Objection: Because religious experience is unique, how could one ever determine whether it is reliable? We simply lack the ability to examine the object of religious experience in order to test whether the reported experiences are indeed reliable.

Reply: As we learned from Descartes, all our experiences of external objects face a problem of uniqueness. It is possible in principle that all our senses are mistaken and we do not have the public, embodied life we think we lead. We cannot step out of our own subjectivity to vindicate our ordinary perceptual beliefs any more than in the religious case. (See the debate between William Alston and Evan Fales 2004).

Objection: Reports of religious experience differ radically and the testimony of one religious party neutralizes the testimony of others. The testimony of Hindus cancels out the testimony of Christians. The testimony of atheists to experience God's absence cancels out the testimony of “believers.”

Reply: Several replies might be offered here. Testimony to experience the absence of God might be better understood as testimony not to experience God. Failing to experience God might be justification for believing that there is no God only to the extent that we have reason to believe that if God exists God would be experienced by all. Theists might even appeal to the claim by many atheists that it can be virtuous to live ethically with atheist beliefs. Perhaps if there is a God, God does not think this is altogether bad, and actually desires religious belief to be fashioned under conditions of trust and faith rather than knowledge. The diversity of religious experiences has caused some defenders of the argument from religious experience to mute their conclusion. Thus, Gutting (1982) contends that the argument is not strong enough to fully vindicate a specific religious tradition, but that it is strong enough to overturn an anti-religious naturalism. Other defenders use their specific tradition to deal with ostensibly competing claims based on different sorts of religious experiences. Theists have proposed that more impersonal experiences of the Divine represent only one aspect of God. God is a person or is person-like, but God can also be experienced, for example, as sheer luminous unity. Hindus have claimed the experience of God as personal is only one stage in the overall journey of the soul to truth, the highest truth being that Brahman transcends personhood. (For a discussion of these objections and replies and references, see Taliaferro 1998.)

How one settles the argument will depend on one's overall convictions in many areas of philosophy. The holistic, interwoven nature of both theistic and atheistic arguments can be readily illustrated. If you diminish the implications of religious experience and have a high standard regarding the burden of proof for any sort of religious outlook, then it is highly likely that the classical arguments for God's existence will not be persuasive. Moreover, if one thinks that theism can be shown to be intellectually confused from the start, then theistic arguments from religious experience will carry little weight. Testimony to have experienced God will have no more weight than testimony to have experienced a round square, and non-religious explanations of religious experience—like those of Freud (a result of wish-fulfillment), Marx (a reflection of the economic base) or Durkheim (a product of social forces)—will increase their appeal. If, on the other hand, you think the theistic picture is coherent and that the testimony of religious experience provides some evidence for theism, then your assessment of the classical theistic arguments might be more favorable, for they would serve to corroborate and further support what you already have some reason to believe. From such a vantage point, appeal to wish-fulfillment, economics, and social forces might have a role, but the role is to explain why some parties do not have experiences of God and to counter the charge that failure to have such experiences provides evidence that there is no religious reality. For an excellent collection of recent work on explaining the emergence and continuation of religious experience, see Schloss and Murray (eds.) 2009.

There is not space to cover the many other arguments for and against the existence of God, but several additional arguments are briefly noted. The argument from miracles starts from specific extraordinary events, arguing that they provide reasons for believing there to be a supernatural agent or, more modestly, reasons for skepticism about the sufficiency of a naturalistic world view. The argument has attracted much philosophical attention, especially since David Hume's rejection of miracles. The debate has turned mainly on how one defines a miracle, understands the laws of nature, and specifies the principles of evidence that govern the explanation of highly unusual historical occurrences. There is considerable debate over whether Hume's case against miracles simply begs the question against “believers.” Detailed exposition is impossible in this short entry, but I argue elsewhere that Hume's case against miracles is most charitably seen as part of his overall case for naturalism (Taliaferro 2005).

There are various arguments that are advanced to motivate religious belief. One of the most interesting and popular is a wager argument often associated with Pascal (1623–1662). It is designed to offer practical reasons to cultivate a belief in God. Imagine that you are unsure whether there is or is not a God. You have it within your power to live on either assumption and perhaps, through various practices, to get yourself to believe one or the other. There would be good consequences of believing in God even if your belief were false, and if the belief were true you would receive even greater good. There would also be good consequences of believing that there is no God, but in this case the consequences would not alter if you were correct. If, however, you believe that there is no God and you are wrong, then you would risk losing the many goods which follow from the belief that God exists and from actual Divine existence. On this basis, it may seem reasonable to believe there is a God.

In different forms the argument may be given a rough edge (for example, imagine that if you do not believe in God and there is a God, hell is waiting). It may be put as an appeal to individual self-interest (you will be better off) or more generally (believers whose lives are bound together can realize some of the goods comprising a mature religious life). Objectors worry about whether one ever is able to bring choices down to just such a narrow selection—for example, to choose either theism or naturalism. Some think the argument is too thoroughly egotistic and thus offensive to religion. Many of these objections have generated some plausible replies (Rescher 1985). For a thoroughgoing exploration of the relevant arguments, see the collection of essays edited by Jeffrey Jordan (1994).

Recent work on Pascalian wagering has a bearing on work on the nature of faith (is it voluntary or involuntary?), its value (when, if ever, is it a virtue?), and relation to evidence (insofar as faith involves belief, is it possible to have faith without evidence?). For an excellent overview and promising analysis, see Chappell (1996), Swinburne (1979), and Schellenberg (2005). A promising feature of such new work is that it is often accompanied by a rich understanding of revelation that is not limited to a sacred scripture, but sees a revelatory role in scripture plus the history of its interpretation, the use of creeds, icons, and so on (see the work of William Abraham).

Two interesting new, rather different developments in debate over the evidence for God's existence need to be observed. John Schellenberg has developed what may be called the “hiddenness of God objection.” Schellenberg argues that perfect love necessarily belongs to any personal Divine being, and that such perfect love entails openness to a personal relationship with the Divine being, a relationship that would require creatures to know or at least be aware of the Divine being. Schellenberg then contends that the fact that there are many nonbelievers in this God of love who would not resist God's disclosure (whether through religious experience or argument) is evidence against the existence of a personal Divine being. The Divine being or God would have been more evident (see Shellenberg 2007; for a reply, see Taliaferro 2009).

In a private communication, Schellenberg has pointed out that his target is not only the God of Christianity but “any personal Divine being.” Making the above adjustment about “any personal Divine being” and Schellenberg's point about “perfect love” and its entailments will make clearer the scope of Schellenberg's project. Taking a very different approach to theism, Paul Moser has recently criticized what he refers to as the preoccupation in philosophy of religion with what he calls “spectator evidence for God,” evidence that can be assessed without involving any interior change that would transform a person morally and religiously. Eschewing fideism, Moser holds that when one seeks God and willingly allows oneself to be transformed by God's perfect love, one's very life can become evidence of the reality of God (see Moser 2008, 2010). While this proposal may worry secular philosophers of religion, Moser is not out of keeping with the pre-Christian Platonic tradition that maintained that inquiry into the good, the true, and the beautiful involved inquiry in which the inquirer needed to endeavor to be good, true, and beautiful.

Another burgeoning question in recent years is whether the cognitive science of religion (CSR) has significance for the truth or rationality of religious commitment. According to CSR, belief in supernatural agents appears to be cognitively natural (Barrett 2004, Keleman 2004, Dennett 2006, De Cruz, H., & De Smedt, J. 2010) and easy to spread (Boyer 2001). The naturalness of religion thesis has led some, including Alvin Plantinga it seems (2011: 60), to imply that we have scientific evidence for Calvin's *sensus divinitatis*. But others have argued that CSR can intensify the problem of divine hiddenness, since diverse religious concepts are cognitively natural and early humans seem to have lacked anything like a theistic concept (Marsh 2013). There are many other questions being investigated about CSR, such as whether it provides a debunking challenge to religion (Murray and Schloss 2009), whether it poses a cultural challenge for religious outlooks like Schellenberg's Ultimism (Marsh forthcoming), and whether it challenges human dignity (Audi 2013). Needless to say, at the present time, anyhow, there is nothing like a clear consensus on whether CSR should be seen as worrisome, welcome, or neither, by religious believers.

## 5. Religious Pluralism

In the midst of the new work on religious traditions, there has been a steady, growing representation of non-monotheistic traditions. An early proponent of this expanded format was Ninian Smart, who, through many publications, scholarly as well as popular, secured philosophies of Hinduism and Buddhism as components in the standard canon of English-speaking philosophy of religion.

Smart championed the thesis that there are genuine differences between religious traditions. He therefore resisted seeing some core experience as capturing the essential identity of being religious. Under Smart's tutelage, there has been considerable growth in cross-cultural philosophy of religion. Wilfred Cantwell Smith also did a great deal to improve the representation of non-Western religions and reflection.

The explanation of philosophy of religion has involved fresh translations of philosophical and religious texts from India, China, Southeast Asia, and Africa. Exceptional figures from non-Western traditions have an increased role in cross-cultural philosophy of religion and religious dialogue. The late Bimal Krishna Matilal made salient contributions to enrich Western exposure to Indian philosophy of religion. Among the mid-twentieth-century Asian philosophers, two who stand out for special note are T.R.V. Murti (1955) and S.N. Dasgupta (1922). Both brought high philosophical standards along with the essential philology to educate Western thinkers. As evidence of non-Western productivity in the Anglophone world, see Arvind Sharma 1990 and 1995. There are now extensive treatments of pantheism and student-friendly guides to diverse religious conceptions of the cosmos.

The expanded interest in religious pluralism has led to extensive reflection on the compatibility and possible synthesis of religions. John Hick is the preeminent synthesizer of religious traditions. In an important book, Hick (1974) advanced a complex picture of the afterlife involving components from diverse traditions. Over many publications and many years, Hick has moved from a broadly based theistic view of God to what Hick calls “the Real,” a noumenal sacred reality. Hick claims that different religions provide us with a glimpse or partial access to the Real. In an influential article, “The New Map of the Universe of Faiths,” Hick raised the possibility that many of the great world religions are revelatory of the Real.

Seen in [an] historical context these movements of faith—the Judaic-Christian, the Buddhist, the Hindu, the Muslim—are not essentially rivals. They began at different times and in different places, and each expanded outwards into the surrounding world of primitive natural religion until most of the world was drawn up into one or the other of the great revealed faiths. And once this global pattern had become established it has ever since remained fairly stable... Then in Persia the great prophet Zoroaster appeared; China produced Lao-tzu and then the Buddha lived, the Mahavira, the founder of the Jain religion and, probably about the end of this period, the writing of the Bhagavad Gita; and Greece produced Pythagoras and then, ending this golden age, Socrates and Plato. Then after the gap of some three hundred years came Jesus of Nazareth and the emergence of Christianity; and after another gap the prophet Mohammed and the rise of Islam. *The suggestion that we must consider is that these were all movements of the divine revelation.* [emphasis added] (Hick 1989, 136)

Hick sees these traditions, and others as well, as different meeting points in which a person might be in relation to the same reality or the Real: “The great world faiths embody different perceptions and conceptions of, and correspondingly different responses to, the Real from within the major variant ways of being human; and that within each of them the transformation of human existence from self-centeredness to Reality-centeredness is taking place” (Ibid., 240). Hick uses Kant to develop his central thesis.

Kant distinguishes between noumenon and phenomenon, or between a Ding an sich [the thing itself] and the thing as it appears to human consciousness…. In this strand of Kant's thought—not the only strand, but the one which I am seeking to press into service in the epistemology of religion—the noumenal world exists independently of our perception of it and the phenomenal world is that same world as it appears to our human consciousness…. I want to say that the noumenal Real is experienced and thought by different human mentalities, forming and formed by different religious traditions, as the range of gods and absolutes which the phenomenology of religion reports. (Ibid., 241–242)

One advantage of Hick's position is that it undermines a rationale for religious conflict. If successful, this approach would offer a way to accommodate diverse communities and undermine what has been a source of grave conflict in the past.

Hick's work since the early 1980's provided an impetus for not taking what appears to be religious conflict as outright contradictions. He advanced a philosophy of religion that paid careful attention to the historical and social context. By doing so, Hick thought the apparent conflict between seeing the Real as the personal or the impersonal reality could be reconciled (see Hick 2004, 2006).

The response to Hick's proposal has been mixed. Some contend that the very concept of “the Real” is incoherent (Plantinga) or not religiously adequate. Indeed, articulating the nature of the real is no easy task. Hick writes that the Real “cannot be said to be one thing or many, person or thing, substance or process, good or bad, purposive or non-purposive. None of the concrete descriptions that apply within the realm of human experience can apply literally to the unexperienceable ground of that realm…. We cannot even speak of this as a thing or an entity” (Ibid., 246). It has been argued that Hick has secured not the equal acceptability of diverse religions but rather their unacceptability. In their classical forms, Judaism, Islam, and Christianity diverge. If, say, the Incarnation of God in Christ did not occur, isn't Christianity false? In reply, Hick has sought to interpret specific claims about the Incarnation in ways that do not commit Christians to the “literal truth” of God becoming enfleshed. The “truth” of the Incarnation has been interpreted in such terms as these: in Jesus Christ (or in the narratives about Christ) God is disclosed. Or: Jesus Christ was so united with God's will that his actions were and are the functional display of God's character. Perhaps as a result of Hick's challenge, philosophical work on the incarnation and other beliefs and practice specific to religious traditions have received renewed attention (see, for example, Taliaferro and Meister 2010). Hick has been a leading, widely appreciated force in the expansion of philosophy of religion in the late twentieth century.

In addition to the expansion of philosophy of religion to take into account a wider set of religions, the field has also seen an expansion in terms of methodology. Philosophers of religion have re-discovered medieval philosophy—the new translations and commentaries of medieval Christian, Jewish, and Islamic texts have blossomed. There is now a self-conscious, deliberate effort to combine work on the concepts in religious belief alongside a critical understanding of their social and political roots (the work of Foucault has been influential on this point), feminist philosophy of religion has been especially important in re-thinking what may be called the ethics of methodology and, as this is in some respects the most current debate in the field, it is a fitting point to end this entry by highlighting the work of Pamela Sue Anderson and others.

Anderson (1997 and 2012) seeks to question respects in which gender enters into traditional conceptions of God and in their moral and political repercussions. She also advances a concept of method which delimits justice and human flourishing. A mark of legitimation of philosophy should be the extent to which it contributes to human welfare. In a sense, this is a venerable thesis in some ancient, specifically Platonic philosophy which envisaged the goal and method of philosophy in terms of virtue and the good. Feminist philosophy today is not exclusively a critical undertaking, critiquing “patriarchy.” For a constructive, subtle treatment of religious contemplation and practice, see Coakley (2002). Another key movement that is developing has come to be called Continental Philosophy of Religion. A major advocate of this new turn is John Caputo. This movement approaches the themes of this entry (the concept of God, pluralism, religious experience, metaphysics and epistemology) in light of Heidegger, Derrida, and other continental philosophers. For a good representation of this movement, see Caputo 2001.

# COSMOLOGICAL ARGUMENT by Bruce Reichenbach (3)

The cosmological argument is less a particular argument than an argument type. It uses a general pattern of argumentation (logos) that makes an inference from certain alleged facts about the world (cosmos) to the existence of a unique being, generally identified with or referred to as God. Among these initial facts are that certain beings or events in the world are causally dependent or contingent, that the universe (as the totality of contingent things) is contingent in that it could have been other than it is, that the Big Conjunctive Contingent Fact possibly has an explanation, or that the universe came into being. From these facts philosophers infer deductively, inductively, or abductively by inference to the best explanation that a first or sustaining cause, a necessary being, an unmoved mover, or a personal being (God) exists that caused and/or sustains the universe. The cosmological argument is part of classical natural theology, whose goal has been to provide evidence for the claim that God exists.

On the one hand, the argument arises from human curiosity as to why there is something rather than nothing or than something else. It invokes a concern for some full, complete, ultimate, or best explanation of what exists contingently. On the other hand, it raises intrinsically important philosophical questions about contingency and necessity, causation and explanation, part/whole relationships (mereology), infinity, sets, and the nature and origin of the universe. In what follows we will first sketch out a very brief history of the argument, note the two fundamental types of deductive cosmological arguments, and then provide a careful analysis of each, first the argument from contingency, then the argument from the impossibility of an infinite temporal regress of causes. In the end we will consider an inductive version of the cosmological argument.

## 1. Historical Overview

Although in Western philosophy the earliest formation of a version of the cosmological argument is found in Plato's Laws, 893–96, the classical argument is firmly rooted in Aristotle'sPhysics (VIII, 4–6) and Metaphysics (XII, 1–6). Islamic philosophy enriches the tradition, developing two types of arguments. The Arabic philosophers (falasifa) developed the atemporal argument from contingency, which is taken up by [Thomas Aquinas](http://plato.stanford.edu/entries/aquinas/) (1225–74) in his Summa Theologica (I,q.2,a.3) and his Summa Contra Gentiles (I, 13). The mutakallimūm, theologians who used reason and argumentation to support their revealed Islamic beliefs, developed the temporal version of the argument from the impossibility of an infinite regress, known as thekalām argument. For example, al-Ghāzāli (1058-1111) argued that everything that begins to exist requires a cause of its beginning. The world is composed of temporal phenomena preceded by other temporally ordered phenomena. Since such a series of temporal phenomena cannot continue to infinity, the world must have had a beginning and a cause of its existence, namely, God (Craig 1979, part 1). This version of the argument enters the Christian tradition through[Bonaventure](http://plato.stanford.edu/entries/bonaventure/) (1221–74) in his Sentences (II Sent. D.1,p.1,a.1,q.2).

During the Enlightenment, writers such as [Georg Wilhelm Leibniz](http://plato.stanford.edu/entries/leibniz/) and [Samuel Clarke](http://plato.stanford.edu/entries/clarke/) reaffirmed the cosmological argument. Leibniz (1646–1716) appealed to a strengthened principle of sufficient reason, according to which “no fact can be real or existing and no statement true without a sufficient reason for its being so and not otherwise” (Monadology, §32). Leibniz uses the principle to argue that the sufficient reason for the “series of things comprehended in the universe of creatures” (§36) must exist outside this series of contingencies and is found in a necessary being that we call God. The principle of sufficient reason is likewise employed by Samuel Clark in his cosmological argument (Rowe 1975, chap. 2).

Although the cosmological argument does not figure prominently in Asian philosophy, a very abbreviated version of it, proceeding from dependence, can be found in Udayana'sNyāyakusumāñjali I,4. In general philosophers in the Nyāya tradition argue that since the universe has parts that come into existence at one occasion and not another, it must have a cause. We could admit an infinite regress of causes if we had evidence for such, but lacking such evidence, God must exist as the non-dependent cause. Many of the objections to the argument contend that God is an inappropriate cause because of God's nature. For example, since God is immobile and has no body, he cannot properly be said to cause anything. The Naiyāyikas reply that God could assume a body at certain times, and in any case, God need not create in the same way humans do (Potter, 100–7).

The cosmological argument came under serious assault in the 18th century, first by David Hume and then by Immanuel Kant. [Hume](http://plato.stanford.edu/entries/hume/) (1993) attacks both the view of causation presupposed in the argument (that causation is an objective, productive, necessary relation experienced as power that holds between two things) and the Causal Principle—every contingent being has a cause of its being—that lies at the heart of the argument. [Kant](http://plato.stanford.edu/entries/kant/) contends that the cosmological argument, in identifying the necessary being, relies on the ontological argument, which in turn is suspect. We will return to these criticisms below.

Both theists and nontheists in the last part of the 20th century and the first past of the 21st century generally have shown a healthy skepticism about the argument. Alvin Plantinga (1967, chap. 1) concludes “that this piece of natural theology is ineffective.” Richard Gale contends, in Kantian fashion, that since the conclusion of all versions of the cosmological argument invokes an impossibility, no cosmological arguments can provide examples of sound reasoning (1991, chap. 7). (However, Gale seems to have changed his mind and in recent writings proposed his own version of the cosmological argument that leads to a finite God, which we will consider below.) Similarly, Michael Martin (1990, chap. 4), as do John Mackie (chap. 5), Quentin Smith (Craig and Smith, 1993), Bede Rundle, and Graham Oppy (2006, chap. 3), reasons that no current version of the cosmological argument is sound (1990, chap. 4). Yet dissenting voices can be heard. Robert Koons employs mereology and modal and nonmonotonic logic in taking a “new look” at the argument from contingency, William Lane Craig marshals multidisciplinary evidence for thekalām argument, Richard Gale and Alexander Pruss propose a new version based on a so-called weak principle of sufficient reason, and Richard Swinburne, though rejecting deductive versions of the cosmological argument, proposes an inductive argument that is part of a larger cumulative case for God's existence. “There is quite a chance that if there is a God he will make something of the finitude and complexity of a universe. It is very unlikely that a universe would exist uncaused, but rather more likely that God would exist uncaused. The existence of the universe…can be made comprehensible if we suppose that it is brought about by God” (1979, 131–2). In short, contemporary philosophers continue to contribute increasingly detailed and complex arguments on both sides of the debate.

## 2. Typology of Cosmological Arguments

Craig distinguishes three types of cosmological arguments. The first, advocated by Aquinas, is based on the impossibility of an essentially ordered infinite regress. The second, which Craig terms the kalām argument, holds that an infinite temporal regress is impossible because an actual infinite is impossible. The third, espoused by Leibniz and Clarke, is overtly founded on the Principle of Sufficient Reason (Craig 1980, 282). Another way of distinguishing between versions of the argument is in terms of the relevance of time. In Aquinas's version, consideration of the essential ordering of the causes or reasons proceeds independent of temporal concerns. The relationship between cause and effect is treated as real but not temporal, so that the first cause is not a first cause in time but a sustaining cause. In the kalām version, however, the temporal ordering of the causal sequence is central. The distinction between these types of argument is important because the objections raised against one version may be irrelevant to the other versions. So, for example, a critique of a particular version of the Principle of Sufficient Reason (PSR), which one finds developed by William Rowe or Richard Gale, might not be telling against the Thomistic or kalām versions of the argument.

## 3. Argument for a First Sustaining Cause

Thomas Aquinas held that among the things whose existence needs explanation are contingent beings that depend for their existence upon other beings. Richard Taylor (1992, 99–108) discusses the argument in terms of the universe (meaning everything that ever existed) being contingent and thus needing explanation. Arguing that the term “universe” refers to an abstract entity or set, William Rowe rephrases the issue,“Why does that set (the universe) have the members that it does rather than some other members or none at all?” (Rowe 1975, 136). Or, why is there anything at all? (Smart, in Haldane and Smart, 35; Rundle). The response of the cosmological argument is that what is contingent exists because of the action of a necessary being.

### 3.1 The Deductive Argument from Contingency

The cosmological argument begins with a fact about experience, namely, that something contingent exists. We might sketch out the argument as follows.

1. A contingent being (a being such that if it exists it could have not-existed or could cease to) exists.
2. This contingent being has a cause of or explanation for its existence.
3. The cause of or explanation for its existence is something other than the contingent being itself.
4. What causes or explains the existence of this contingent being must either be solely other contingent beings or include a non-contingent (necessary) being.
5. Contingent beings alone cannot provide an adequate causal account or explanation for the existence of a contingent being.
6. Therefore, what causes or explains the existence of this contingent being must include a non-contingent (necessary) being.
7. Therefore, a necessary being (a being such that if it exists cannot not-exist) exists.

Over the centuries philosophers have suggested various instantiations for the contingent being noted in premise 1. In his Summa Theologica I, q. 2, a 3, Aquinas argued that we need a causal explanation for things in motion, things that are caused, and contingent beings.[[2](http://plato.stanford.edu/entries/cosmological-argument/notes.html%22%20%5Cl%20%222)] Others, such as Richard Taylor and Richard Swinburne (1979), propose that the contingent being referred to in premise 1 is the universe. The connection between the two is supplied by John [Duns Scotus](http://plato.stanford.edu/entries/duns-scotus/), who argued that even if the essentially ordered causes were infinite, “the whole series of effects would be dependent upon some prior cause” (Scotus, 46). Whereas the contingency of particular existents is generally undisputed, the contingency of the universe deserves some defense (see 3.2). Premise 2 invokes a version of the Principle of Causation or the Principle of Sufficient Reason; if something is contingent, there must be a cause of its existence or a reason or explanation why it exists rather than not exists. The point of 3 is simply that something cannot cause its own existence, for this would require it to already be (in a logical if not a temporal sense). Premise 4 is true by virtue of the Principle of Excluded Middle: what explains the existence of the contingent being either are solely other contingent beings or includes a non-contingent (necessary) being. Conclusions 6 and 7 follow validly from the respective premises.

For many critics, premise 5 holds the key to the argument's success or failure. Whether 5 is true depends upon the requirements for an adequate explanation. According to the Principle of Sufficient Reason (PSR), what is required is an account in terms of sufficient conditions that provides an explanation why the cause had the effect it did, or alternatively, why this particular effect and not another arose. Swinburne (1979, 72–77), and Alexander Pruss (2006, 16–18) after him, note diverse kinds of explanations. A full explanation provides the cause together with the reason that necessitated the effect or what happened; it is “a set of factors that together are sufficient for the occurrence of an event” (Swinburne 1979, 24, 73). “It does not allow a puzzling aspect of the explanandum to disappear: anything puzzling in the explanandum is either also found in the explanans or else explained by the explanans” (Pruss 2006, 17). In a complete explanation, every aspect of the explanandum and explanans at the time the occurrence is accounted for; nothing puzzling remains. Pruss and Swinburne argue that the kind of explanation required by the PSR is a complete explanation.

Quinn argues that an adequate explanation need not provide a complete explanation (584–85); a partial explanation might do just as well, depending on the context. Among these adequate explanations of why this actual world obtains rather than another possible world (including one with no contingent beings) is that the universe is an inexplicable brute fact and that God strongly actualized the world (although not everything in it). He refuses to take sides on the debate between explanations, except to say that science cannot provide an adequate explanation if the explanatory chain is infinite, for the chain of causes is itself contingent or it ends in an initial contingency not scientifically accountable. However, not only does Quinn not clarify what constitutes an adequate explanation, but as Pruss contends, the PSR “is not compatible with an infinite chain of explanations that has no ultimate explanans,” for in an infinite chain something puzzling remains to be explained, with the result that the PSR would again be invoked to explain what is puzzling. More than a scientific explanation is required to provide the complete explanation required by the PSR.

One worry with understanding the PSR is that it may lead to a deterministic account that not only bodes ill for the success of the argument but on a libertarian account may be incompatible with the contention that God created freely. Pruss, however, envisions no such difficulty. “What gives sufficiency to explanation is that mystery is taken away, for example, through the citing of relevant reasons, not that probability is increased” (Pruss, 2006, 157). Giving reasons neither makes the event deterministic nor removes freedom. “Once we have said that x freely chose A forR, then the only thing left that is unexplained is why x existed and was both free and attracted byR” (158).

Finally, it should be noted in 7 that if the contingent being identified in 1 is the universe, the necessary being cannot provide a natural explanation for it, for we know of no natural, non-contingent causes and laws or principles from which the existence of the universe follows. What is required is a personal explanation in terms of the intentional acts of some eternal supernatural being. Since the argument proceeds independent of temporal considerations, the argument does not propose a first cause in time, but rather a first or primary sustaining cause of the universe. As Aquinas noted, the philosophical arguments for God's existence as first cause are compatible with the eternity of the universe (On the Eternity of the World).

The question whether the necessary being to which the argument concludes is God is debated. Some hold that the assertion that the first sustaining cause is God is not part of the cosmological argument per se; such defenders of the argument sometimes create additional arguments to identify the first cause. Others, however, contend that from the concept of a necessary being other properties appropriate to a divine being flow. O'Connor (2005) argues that being a necessary being cannot be a derivative emergent property, otherwise the being would be contingent. Likewise the connection between the essential properties must be necessary. Hence, the universe cannot be the necessary being since it is mereologically complex. Similarly, the myriad elementary particles cannot be necessary beings either, for their distinguishing distributions are externally caused and hence contingent. Rather, he contends that a more viable account of the necessary being is as a purposive agent with desires, intentions, and beliefs, whose activity is guided but not determined by its goals, a view consistent with identifying the necessary being as God. Koons also is willing to identify the necessary being as God, constructing corollaries regarding God's nature that follow from his construction of the cosmological argument. Oppy (1999), on the other hand, expresses skepticism about the possibility of such a deductive move.

Critics have objected to most of the premises in the argument. We will consider the most important objections and responses.

### 3.2 Objection 1: The Universe Just Is

Interpreting the contingent being in premise 1 as the universe, [Bertrand Russell](http://plato.stanford.edu/entries/russell/) denies that the universe needs an explanation; it just is. Russell, following Hume (1980), contends that since we derive the concept of cause from our observation of particular things, we cannot ask about the cause of something like the universe that we cannot experience. The universe is “just there, and that's all” (Russell, 175).

But we don't need to experience every possible referent of the class of contingent things to be able to conclude that a contingent thing needs a cause. “To know that a rubber ball dropped on a Tuesday in Waggener Hall by a redheaded tuba player will fall to the ground,” I don't need a sample that includes tuba players dropping rubber balls at this location (Koons 1997, 202). Similarly, one does not need to experience a contingent cosmos to know it is caused.

But why should we think that the cosmos is contingent? Defenders of the argument contend that if the components of the universe are contingent, the universe itself is contingent. Russell replies that the move from the contingency of the components of the universe to the contingency of the universe commits the Fallacy of Composition, which mistakenly concludes that since the parts have a certain property, the whole likewise has that property. Hence, whereas we can ask for the cause of particular things, we cannot ask for the cause of the universe or the set of all contingent beings.

Russell correctly notes that arguments of the part-whole type can commit the Fallacy of Composition. For example, the argument that since all the bricks in the wall are small, the wall is small, is fallacious. Yet it is an informal fallacy of content, not a formal fallacy. Sometimes the totality has the same quality as the parts because of the nature of the parts invoked—the wall is brick because it is built of bricks. The universe's contingency, theists argue, resembles the second case. If all the contingent things in the universe, including matter and energy, ceased to exist simultaneously, the universe itself, as the totality of these things, would cease to exist. But if the universe can cease to exist, it is contingent and requires an explanation for its existence (Reichenbach, chap. 5).

Some reply that this argument for the contingency of the universe still is fallacious, for even if every contingent being were to fail to exist in some possible world, it may be the case that there is no possible world that lacks a contingent being. That is, though no being would exist in every possible world, every world would possess at least one contingent being. Rowe gives the example of a horse race. “We know that although no horse in a given horse race necessarily will be the winner, it is, nevertheless, necessary that some horse in the race will be the winner” (1975, 164).

Rowe's example, however, fails, for it is possible that all the horses break a leg and none finishes the race. That is, the necessity that some horse will win follows only if there is some reason to think that some horse must finish the race. Similarly, his objection to the universe's contingency will hold only if there is some reason to think that the existence of something is necessary. One argument given in defense of this thesis is that the existence of one contingent being may be necessary for the nonexistence of some other contingent being. But though the fact that something's existence is necessary for the existence of something else holds for certain properties (for example, the existence of children is necessary for someone to be a parent), it is doubtful that something's existence is necessary for something else's nonexistence per se, which is what is needed to support the argument that denies the contingency of the universe. Hence, given the contingency of everything in the universe, it remains that there is a possible world without any contingent beings.

Whether this argument for the contingency of the universe is similar to that advanced by Aquinas in the Third Way depends on how one interprets Aquinas's argument. Aquinas holds that “if everything can not be, then at one time there was nothing in existence.” Plantinga, among others, points out that this may commit a quantifier mistake, for the reason noted above (Plantinga, 6; Kenny, 56–66). However, Haldane (Smart and Haldane, 132) defends the cogency of Aquinas's reasoning on the grounds that Aquinas's argument is fallacious only on a temporal reading, but Aquinas's argument employs an atemporal ordering of contingent beings. That is, Aquinas does not hold that over time there would be nothing, but that in the per se ordering of causes, if every contingent thing in that order did not exist, there would be nothing.

To avoid any hint of the Fallacy of Composition and to avoid these complications, Koons (198–99) formulates the argument for the contingency of the universe as a mereological argument. If something is contingent, it contains a contingent part. The whole and part overlap and, by virtue of overlapping, have a common part. Since the part in virtue of which they overlap is wholly contingent, the whole likewise must be contingent.

Rowe (1975, 166) develops a different argument to support the thesis that the universe must be contingent. He argues that it is necessary that if God exists, then it is possible that no dependent beings exist. Since it is possible that God exists, it is possible that it is possible that no dependent beings exist. (This conclusion is licensed by the following modal principle: If it is necessary that if p then q, then if it is possible that p, it is possible that q.) Hence, it is possible that there are no dependent beings; that is, that the universe is contingent. Rowe takes the conditional as necessarily true in virtue of the classical concept of God, according to which God is free to decide whether or not to create dependent beings.

### 3.3 Objection 2: Explaining the Individual Constituents Is Sufficient

Whereas Russell argued that the universe just is, David Hume held that when the parts are explained the whole is explained.

But the whole, you say, wants a cause. I answer that the uniting of these parts into a whole… is performed merely by an arbitrary act of the mind, and has no influence on the nature of things. Did I show you the particular causes of each individual in a collection of twenty particles of matter, I should think it very unreasonable should you afterwards ask me what was the cause of the whole twenty. This is sufficiently explained in explaining the parts. (Hume 1980, part 9)

Pruss (1999) takes what Rowe (1975) calls the Hume-Edwards principle to task. An explanation of the parts may provide a partial but not a complete explanation. The explanation in terms of parts may fail to explain why these parts exist rather than others, why they exist rather than not, or why the parts are arranged as they are. Each member or part will be explained either in terms of itself or in terms of something else that is contingent. The former would make them necessary, not contingent, beings. If they are explained in terms of something else, they still remain unaccounted for, since the explanation would invoke either an infinite regress of causes or a circular explanation. Pruss employs the chicken/egg sequence: chickens account for eggs, which account for chickens, and so on where the two are paired. But appealing to an infinite chicken/egg regress or else arguing in a circle explains neither any given chicken nor egg.

Furthermore, as Rowe notes:

When the existence of each member of a collection is explained by reference to some other member of that very same collection then it does not follow that the collection itself has an explanation. For it is one thing for there to be an explanation of the existence of each dependent being and quite another thing for there to be an explanation of why there are dependent beings at all (Rowe 1975, 264).

But what if the parts are themselves necessary beings? Will not that suffice to explain the whole? Rundle argues that contrary to Aquinas, persistence in existence is not change and hence there is no reason to ask for a sustaining cause of what persists. Hence, the question of why there is something rather than nothing makes no sense, for it already presumes there is something (112–17).

Rundle does not reject the notion of necessary existence. What has necessary existence is causally independent. Matter has necessary existence, for though it undergoes change, the given volume of matter found in the universe persists, and as persisting matter does not have or need a cause. This accords with the Principle of Conservation of Mass-Energy, according to which matter and energy are never lost but rather transmute into each other. As indestructible, then, matter is the necessary being (147). Hence, though the material components of the universe are contingent vis-à-vis their form, they are necessary vis-à-vis their existence. On this reading, there is not one but many necessary beings, all internal to the universe.

Interestingly enough, this approach was anticipated by Aquinas in his third way in his Summa Theologica (I,q.2,a.3). Once Aquinas concludes that necessary beings exist, he then goes on to ask whether these beings have their existence from themselves or from another. If from another, then we have an unsatisfactory infinite regress of explanations. Hence, there must be something whose necessity is uncaused. As Kenny points out, Aquinas understands this necessity in terms of being unable to cease to exist (Kenny, 48). Although Aquinas understands the uncaused necessary being to be God, Rundle takes this to be matter-energy itself. Since Rundle's objection introduces the notion of causation in time, it is more appropriate to the kalām argument. We will return to this issue in section 5, when we consider that argument.

Finally, Richard Swinburne asks how far any explanation must go. Whereas traditional cosmological arguments contend that we need to explain the existence of every relevant contingent causal condition in order to explain another's existence (Scotus's ordering of per secauses), Swinburne terms this requirement the completist fallacy (1979, 73). Swinburne notes that an explanation is complete when “any attempt to go beyond the factors which we have would result in no gain of explanatory power or prior probability” (1979, 86). But explaining why something exists rather than something else or than nothing and why it is as it is gives additional explanatory power in explaining why a universe exists at all. Gale (1991, 257–8) concludes from this that if we are to explain the parts of the universe and their particular concatenation, we must appeal to something other than those parts.

### 3.4 Objection 3: The Causal Principle is Suspect

Critics of the argument contend that the Causal Principle or, where applicable, the PSR, that underlies versions of the argument is suspect. As Hume argued, there is no reason for thinking that the Causal Principle is true a priori, for we can conceive of effects without conceiving of their being caused and what is conceivable is possible in reality (1993, IV). Neither can an argument for the application of the Causal Principle to the universe be drawn from inductive experience. Even if the Causal Principle applies to events in the world, we cannot extrapolate from the way the world works to the world as a whole (Mackie, 85).

Several replies are in order. First, Hume's conceivability to possibility argument is unsound. For one thing, whose conceivability is being appealed to here? Someone who fails to understand a necessarily true proposition might conceive of it being false, but from this it does not follow that it possibly is false. For another, in the phenomenology of conceivability, what is really conceivable is difficult if not impossible to differentiate from what some might think is conceivable. And even if something is conceivable, say in a logical sense, it does not follow that it is metaphysically or factually possible. Hence, the argument based on conceivability is suspect.

Second, there is reason to think that these principles are true. Some suggest a pragmatic-type of argument: the principles are necessary to make the universe intelligible (Taylor). Critics reply that the principles then only have methodological or practical and not ontological justification. As Mackie argues, we have no right to assume that the universe complies with our intellectual preferences for causal order. We can simply work with brute facts. Perhaps so, but without such principles, science itself would be undercut; as Pruss (2006, 255) points out, “Claiming to be a brute fact should be a last resort. It would undercut the practice of science.” Utilization of the principles best accounts for the success of science, and indeed, for any investigatory endeavor (Koons). The best explanation of the success of science and other such rational endeavors is that the principles are really indicative of how reality operates.

Some have gone further to suggest that the PSR in particular is “self-evident, obvious, intuitively clear, in no need of argumentative support” (Pruss 2006, 189). For example, Pruss holds the principle to be self-evident in the sense that anyone who understands it correctly understands that it is true. They might not know it to be self-evidently true, but they do understand it to be true. This is consistent with persons denying it is self-evident, for those who deny it might misunderstand the principle in various ways. They might experience a conceptual blindness to the nature of contingency or they might be “talked out of” understanding the principle because of its controversial implications (e.g., the existence of a necessary being).

The problem with self-evidence is that, in contrast to analyticity, it is in relation to the knowers themselves, and here diversity of intuitions varies, perhaps according to philosophical or other types of perspectives. But if the principles truly are self-evident, it would be strange to respond to skeptics by attempting to give reasons to support that contention, and were such demanded, the request would itself invoke the very principles in question.

Clearly, the soundness of the deductive version of the cosmological argument hinges on whether principles such as that of Causation or Sufficient Reason are more than methodologically true and on the extent to which these principles can be applied. Critics of the argument will be skeptical, seeing what such acceptance will commit themselves to. Defenders of the argument will contend that judging the principles by the outcome of their application begs the question against them and, indeed, to require a sufficient reason to establish their truth begs the question at hand.

### 3.5 Objection 4: Problems with the Concept of a Necessary Being

Immanuel Kant objected to the use of “necessary being” throughout the cosmological argument, and hence to the conclusion that a necessary being exists. Kant held that the cosmological argument, in concluding to the existence of an absolutely necessary being, attempts to prove the existence of a being whose nonexistence “is impossible,” is “absolutely inconceivable” (B621). Kant indicates that what he has in mind by an “absolutely necessary being” is a being whose existence is logically necessary, where to deny its existence is contradictory. The only being that meets this condition is the most real or maximally excellent being — a being with all perfections, including existence. This concept lies at the heart of the [ontological argument](http://plato.stanford.edu/entries/ontological-arguments/). Although in the ontological argument the perfect being is determined to exist through its own concept, in fact nothing can be determined to exist in this manner; one has to begin with existence. In short, the cosmological argument presupposes the cogency of the ontological argument. But since the ontological argument is defective for the above (and other) reason, the cosmological argument that depends on or invokes it likewise must be defective (Kant, B634).

Kant's contention that the necessity found in “necessary being” was logical necessity was common up through the 1960s. J.J.C. Smart wrote,

And by “a necessary being” the cosmological argument means “a logically necessary being,” i.e. “a being whose non-existence is inconceivable in the sort of way that a triangle's having four sides is inconceivable”....Now since “necessary” is a word which applies primarily to propositions, we shall have to interpret “God is a necessary being” as “The proposition ‘God exists’ is logically necessary” (in Flew and MacIntyre, eds., New Essays in Philosophical Theology, 37).

(In a later work Smart (41–47) broadened his notion of necessity.) One still finds remnants of this in the contention that speaking about necessary beings does not differ from speaking of the necessity of propositions (see the Gale-Pruss argument below).

Many recent discussions of the cosmological argument, both supporting and critiquing it, interpret the notion of a necessary being as a being that cannot not exist. It is a being that exists in all possible worlds. As such, as Plantinga notes, if a necessary being is possible, it exists (God, Freedom and Evil, 110). The only question that remains is whether God's existence is possible. This notion is similar to, if not a modernization of, Aquinas's contention that God's essence is to exist. Aquinas attempts to avoid the accusation that this invokes the ontological argument on the grounds that we do not have an adequate concept of God's essence. However, if we understand “necessary being” in this sense, we can dispose of the cosmological argument as irrelevant; what is needed rather is an argument to establish that God's existence is possible, for if it is possible that it is necessary that God exists, then God exists (by Axiom S5).

But this need not be the sense in which “necessary being” is understood in the cosmological argument. A more adequate notion of necessary being is that the necessity is metaphysical or factual. A necessary being is one that if it exists, it neither came into existence nor can cease to exist, and correspondingly, if it does not exist, it cannot come into existence (Reichenbach, 117–20). If it exists, it eternally maintains its own existence; it is self-sufficient and self-sustaining. So understood, the cosmological argument does not rely on notions central to the ontological argument. Rather, instead of being superfluous, the cosmological argument gives us reason to think that the necessary being exists rather than not.

Mackie replies that if God has metaphysical necessity, God's existence is contingent, such that some reason is required for God's own existence (Mackie, 84). That is, if God necessarily exists in the sense that if he exists, he exists in all possible worlds, it remains logically possible that God does not exist in any (and all) possible worlds. Hence, God is a logically contingent being and so could have not-existed. Why, then, does God exist? The PSR can be applied to the necessary being.

The theist responds that the PSR does not address logical contingency, but metaphysical contingency. One is not required to find a reason for what is not metaphysically contingent. It is not that the necessary being is self-explanatory; rather, a demand for explaining its existence is inappropriate. Hence, the theist concludes, Hawking's question “Who created God?” (Hawking, 174) is out of place (Davis).

## 4. The Gale-Pruss Argument

Recently Richard Gale and Alexander Pruss (1999) advanced a modal version of the cosmological argument that rests on the weak PSR (for every true contingent proposition, it possible that there is an explanation for that proposition) and Modal Axiom S5 (if it is possible that it is necessary that p, then it is necessary that p). They phrase the argument in terms of contingent and necessary propositions. A contingent proposition is one that is both possibly true and possibly false (i.e., true in some worlds and false in others); a necessarily true proposition is true in every possible world. In its simplest form, the argument is (1) if it is possible that it is necessary that a supernatural being of some sort exists, then it is necessary that a supernatural being of that sort exists. Since (2) it is possible that it is necessary that a supernatural being of some sort exists, (3) it is necessary that this being exists. The being Gale has in mind is a very powerful and intelligent designer-creator, not the all perfect God of Anselm, for this perfect God who would exist in all possible worlds would be incompatible with the existence of gratuitous and horrendous evils to be found in some of those possible worlds.

If one grants Axiom S5, the critical premise in the argument is the second, and Gale and Pruss proceed to defend it. They begin with the notion of a Big Conjunctive Fact (BCF), which is the totality of propositions that would be true of any possible world, were it actualized. Since all possible worlds would have the same necessary propositions, they are differentiated by their Big Conjunctive Contingent Fact (BCCF), which would contain different contingent propositions. In place of what Gale terms the strong PSR, which affirms that the actual world's BCCF has an explanation, Gale suggests a weaker PSR that he thinks would be acceptable to a critic of the cosmological argument — applied here, that it is possible that any BCCF has an explanation, that is, that there is some proposition q that explains the BCCF. So there is a possible world that contains p (the BCCF of the actual world), among whose propositions are q and the proposition that q explains p. Since this possible world ultimately is the actual world, the actual world contains p, q, and the proposition that q explains p. The explanation of the BCCF cannot be scientific, for such would be in terms of law-like propositions and statements about the actual world at a given time, which would be contingent and hence part of the BCCF. Hence, q provides a personal explanation of the BCCF in terms of the intentional action of some agent. The explanation cannot be that of a contingent being, for it would be part of the BCCF. Hence, the explanation is the intentional action (which would be contingent) of a necessary being who freely brings it about that the world exists. Gale concludes that though this necessary being exists in every possible world, this tells little about its power, goodness, and other qualities. To make this being palatable to theists, he offers that the argument be supplemented by other arguments, such as the teleological arguments, to suggest that the necessary being is the kind of being that satisfies theistic requirements.

Graham Oppy (2000) argues that suppose p1 is the BCF of some possible world, and p1 has no explanation. Then, given r (namely, that p1 has no explanation) there is a conjunctive fact p1 and r. Since by hypothesis the conjunctive fact p1 and r is true in some world, on Gale's account it is true in the actual world. Then by the weak PSR there is a world in which this conjunction of p1 andr possibly has an explanation. If there is an explanation for the conjunction of p1 and r, there is an explanation for p1. Thus, we have the contradiction that p1 both has and does not have an explanation, which is absurd. Hence, no world exists where the BCCF lacks an explanation, which is the strong principle of sufficient reason that Gale allegedly circumvented. Since accepting the weak PSR would commit the nontheist to the strong PSR and ultimately to a necessary being, the nontheist has no motivation to accept the weak PSR.

Gale and Pruss (2002) subsequently concede that their weak PSR does entail the strong PSR, but they contend that there still is no reason not to proceed with the weak PSR, which they think the nontheist would accept. The only grounds for rejecting it, they claim, is that it leads to a theistic conclusion, which is not an independent reason for rejecting it. Oppy, however, maintains that there is a modus tolens reason to reject it, since there are other grounds for thinking that theism is false.

Jerome Gellman has argued that the Gale/Pruss conclusion to a being that is not necessarily omnipotent also fails; this being is essentially omnipotent and, if omnipotence entails omniscience, is essentially omniscient. This too Gale and Pruss concede, which means that the necessary being they conclude to is not significantly different from that arrived at by the traditional cosmological argument that appeals to the PSR.

Finally, there is doubt that Gale's rejection of the traditional cosmological argument on the grounds that the necessary being could not be necessarily good is well grounded. Gale argues that since there are possible worlds with gratuitous or horrendous evils, and since God as necessary would exist in these worlds, God cannot be necessarily good. The problem here is that if indeed there is this incompatibility between a perfectly good necessary being (God) and gratuitous evils or even absolutely horrendous evils, then it would follow that such worlds would not be possible worlds, for they would contain a contradiction. In all possible worlds where a perfectly good God as a necessary being would exist, there would be a justificatory morally sufficient reason for the evils that would exist, or at least, given the existence of gratuitous evils, for the possibility of the existence of such evils (Reichenbach, Evil and a Good God, 38–39).

## 5. The Kalām Cosmological Argument

A second type of cosmological argument, contending for a first or beginning cause of the universe, has a venerable history, especially in the Islamic tradition. Although it had numerous defenders through the centuries, it received new life in the recent voluminous writings of William Lane Craig. Craig formulates the kalām cosmological argument this way (in Craig and Smith 1993, chap. 1):

1. Everything that begins to exist has a cause of its existence.
2. The universe began to exist.
3. Therefore, the universe has a cause of its existence.
4. Since no scientific explanation (in terms of physical laws) can provide a causal account of the origin of the universe, the cause must be personal (explanation is given in terms of a personal agent).

This argument has been the subject of much recent debate, some of which we will summarize here. (For greater detail, see Craig 2009.)

### 5.1 The Causal Principle and Quantum Physics

The basis for the argument's first premise is the Causal Principle that undergirds cosmological arguments. Craig holds that this premise is intuitively obvious; no one, he says, seriously denies it (Craig, in Craig and Smith 1993, 57). Although at times Craig suggests that one might treat the principle as an empirical generalization based on our ordinary and scientific experiences (which might not be strong enough for the argument to succeed in a strong sense, although it might be supplemented by an inference to the best explanation argument that what best explains the success of science is that reality operates according to the causal principle), ultimately, he argues, the truth of the Causal Principle rests “upon the metaphysical intuition that something cannot come out of nothing” (Craig, in Craig and Smith 1993, 147).

The Causal Principle has been the subject of extended criticism. We addressed objections to the Causal Principle (or PSR) from a philosophical perspective earlier in 3.4. Some critics of the argument deny that they share Craig's intuitions about the Causal Principle (Oppy 2002a). Others raise objections based on quantum physics (Davies, 1984, 200). On the quantum level, the connection between cause and effect, if not entirely broken, is to some extent loosened. For example, it appears that electrons can pass out of existence at one point and come back into existence elsewhere. One can neither trace their intermediate existence nor determine what causes them to come into existence at one point rather than another. Neither can one precisely determine or predict where they will reappear; their subsequent location is only statistically probable given what we know about their antecedent states. Hence, “quantum-mechanical considerations show that the causal proposition is limited in its application, if applicable at all, and consequently that a probabilistic argument for a cause of the Big Bang cannot go through” (Smith, in Craig and Smith, 1993, 121–23, 182).

Craig responds that appeals to quantum phenomena do not affect the kalām argument. For one thing, quantum events are not completely devoid of causal conditions. Even if one grants that the causal conditions are not jointly sufficient to determine the event, at least some necessary conditions are involved in the quantum event. But when one considers the beginning of the universe, he notes, there are no prior necessary causal conditions; simply nothing exists (Craig, in Craig and Smith, 1993, 146; see Koons, 203). Pruss (2006, 169) contends that in quantum phenomena causal indeterminacy is compatible with the causal principle in that the causes indeterministically bring about the effect.

For another, a difference exists between predictability and causality. It is true that, given Heisenberg's principle of uncertainty, we cannot precisely predict individual subatomic events. What is debated is whether this inability to predict is due to the absence of sufficient causal conditions, or whether it is merely a result of the fact that any attempt to precisely measure these events alters their status. The very introduction of the observer into the arena so affects what is observed that it gives the appearance that effects occur without sufficient or determinative causes. But we have no way of knowing what is happening without introducing observers into the situation and the changes they bring. In the above example, we simply are unable to discern the intermediate states of the electron's existence. When Heisenberg's indeterminacy is understood not as describing the events themselves but rather our knowledge of the events, the Causal Principle still holds and can still be applied to the initial singularity, although we cannot expect to achieve any kind of determinative predictability about what occurs given the cause.

At the same time, it should be recognized that showing that indeterminacy is a real feature of the world at the quantum level would have significant negative implications for the more general Causal Principle that underlies the deductive cosmological argument. The more this indeterminacy has ontological significance, the weaker is the Causal Principle. The more this indeterminacy has merely epistemic significance, the less it affects the Causal Principle. Quantum accounts allow for additional speculation regarding origins and structures of universes. In effect, whether Craig's response to the quantum objection succeeds depends upon deeper issues, in particular, the epistemic and ontological status of quantum indeterminacy, the nature of the Big Bang as a quantum phenomenon, and the nature and role of indeterminate causation. Quantum physics is murky, as evidenced by Bell's gedanken experiments as described by Mermin.

### 5.2 Is an Actual Infinite Possible?

In defense of premise 2, Craig develops both a priori and a posteriori arguments. His primary a priori argument is

1. An actual infinite cannot exist.
2. A beginningless temporal series of events is an actual infinite.
3. Therefore, a beginningless temporal series of events cannot exist.

Since (7) follows validly, if (5) and (6) are true, the argument is sound. In defense of premise (5), Craig argues that if actual infinites that neither increase nor decrease in the number of members they contain were to exist, we would have rather absurd consequences. For example, imagine a library with an actually infinite number of books. Suppose that the library also contains an infinite number of red and an infinite number of black books, so that for every red book there is a black book, and vice versa. It follows that the library contains as many red books as the total books in its collection, and as many red books as black books, and as many red books as red and black books combined. But this is absurd; in reality the subset cannot be equivalent to the entire set. Hence, actual infinites cannot exist in reality.

Craig's point is this. Two sets A and B are the same size just in case they can be put into one-to-one correspondence, that is, if and only if every member of A can be correlated with exactly one member of B in such a way that no member of B is left out. It is well known that in the case of infinite sets, this notion of ‘same size’ yields results like the following: the set of all natural numbers (let this be ‘A’) is the same size as the set of squares of natural numbers (‘B’), since every member of A can be correlated with exactly one member of B in a way that leaves out no member of B (correlate 0↔0, 1↔1, 2↔4, 3↔9, 4↔16,…). So this is a case — recognized in fact as early as Galileo (Dialogues Concerning Two New Sciences)— where two infinite sets have the same size but, intuitively, one of them appears to be smaller than the other; one set consists of only some of the members of another, but you nonetheless never run out of either when you pair off their members.

Craig uses a similar, intuitive notion of “smaller than” in his argument concerning the library. It appears that the set B of red books in the library is smaller than the set A of all the books in the library, even though both have the same (infinite) size. Craig concludes that it is absurd to suppose that such a library is possible *in actuality*, since the set of red books would simultaneously have to be smaller than the set of all books and yet equal in size.

Critics fail to be convinced by these paradoxes of infinity. When the intuitive notion of “smaller than” is replaced by a precise definition, finite sets and infinite sets behave somewhat differently. Cantor, and all subsequent set theorists, define a set B to be smaller than set A (i.e., has fewer members) just in case B is the same size as a subset of A, but A is not the same size as any subset of B. The application of this definition to finite and infinite sets yields results that Craig finds counter-intuitive but which mathematicians see as our best understanding for comparing the size of sets. They see the fact that an infinite set can be put into one-to-one correspondence with one of its own proper subsets as one of the defining characteristics of an infinite set, not an absurdity. Say that set C is a proper subset of A just in case every element of C is an element of Awhile A has some element that is not an element of C. In finite sets, but not necessarily in infinite sets, when set B is a proper subset of A, B is smaller than A. But this doesn't hold for infinite sets — we've seen this above where B is the set of squares of natural numbers and A is the set of all natural numbers.

Cantorian mathematicians argue that these results apply to any infinite set, whether in pure mathematics, imaginary libraries, or the real world series of concrete events. Thus, Smith argues that Craig begs the question by wrongly presuming that an intuitive relationship holds between finite sets and their proper subsets—that a set has more members than its proper subsets—must hold even in the case of infinite sets (Smith, in Craig and Smith 1993, 85). So while Craig thinks that Cantor's set theoretic definitions yield absurdities when applied to the world of concrete objects, set theorists see no problem so long as the definitions are maintained. Further discussion is in Oppy 2006, 137–54.

Why should one think premise (6) is true—that a beginningless series, such as the universe up to this point, is an actual rather than a potential infinite? For Craig, an actual infinite is a determinate totality or a completed unity, whereas the potential infinite is not. Since the past events of a beginningless series can be conceptually collected together and numbered, the series is a determinate totality. And since the past is beginningless, it has no starting point and is infinite. If the universe had a starting point, so that events were added to or subtracted from this point, we would have a potential infinite that increased through time by adding new members. The fact that the events do not occur simultaneously is irrelevant.

Craig is well aware of the fact that he is using actual and potential infinite in a way that differs from the traditional usage in Aristotle and Aquinas. For Aristotle all the elements in an actual finite exist simultaneously, whereas a potential infinite is realized over time by addition or division. Hence, the temporal series of events, as formed by successively adding new events, was a potential, not an actual, infinite (Aristotle, Physics, III, 6). For Craig, however, an actual infinite is a timeless totality that cannot be added to or reduced. “Since past events, as determinate parts of reality, are definite and distinct and can be numbered, they can be conceptually collected into a totality” (Craig, in Craig and Smith 1993, 25). Hence, a further critical issue in the kalāmargument is whether, as Craig suggests, completeness (in terms of being a determinate totality) characterizes an actual infinite, or whether an infinite formed by successive synthesis is a potential infinite (as Rundle holds, chap. 8).

### 5.3 The Big Bang Theory of Cosmic Origins

Craig's a posteriori argument for premise 2 invokes recent cosmology and the Big Bang theory of cosmic origins. Since the universe is expanding as the galaxies recede from each other, if we reverse the direction of our view and look back in time, the farther we look, the smaller the universe becomes. If we push backwards far enough, we find that the universe reaches a state of compression where the density and gravitational force are infinite. This unique singularity constitutes the beginning of the universe—of matter, energy, space, time, and all physical laws. It is not that the universe arose out of some prior state, for there was no prior state. Since time too comes to be, one cannot ask what happened before the initial event. Neither should one think that the universe expanded from some initial ‘point’ into space. Since the Big Bang initiates the very laws of physics, one cannot expect any physical explanation of this singularity; physical laws used to explain the expansion of the universe no longer hold at any time before t>0.

One picture, then, is of the universe beginning in a singular, non-temporal event roughly 13–14 billion years ago. Something, perhaps a quantum vacuum, came into existence. Its tremendous energy caused it, in the first fractions of a second, to expand and explode, creating the four-dimensional space-time universe that we experience today. How this all happened in the first 10−35 seconds and subsequently is a matter of serious debate; what advocates of premise 2 maintain is that since the universe and all its material elements originate in the Big Bang, the universe is temporally finite and thus had a beginning.

### 5.4 The Big Bang Is Not An Event

The response to this argument from the Big Bang is that, given the Grand Theory of Relativity, the Big Bang is not an event at all. An event takes place within a space-time context. But the Big Bang has no space-time context; there is neither time prior to the Big Bang nor a space in which the Big Bang occurs. Hence, the Big Bang cannot be considered as a physical event occurring at a moment of time. As Hawking notes, the finite universe has no space-time boundaries and hence lacks singularity and a beginning (Hawking 116, 136). Time might be multi-dimensional or imaginary, in which case one asymptotically approaches a beginning singularity but never reaches it. And without a beginning the universe requires no cause. The best one can say is that the universe is finite with respect to the past, not that it was an event with a beginning.

Given this understanding of event, we could reconceive the kalām argument.

1. If something has a finite past, its existence has a cause.
2. The universe has a finite past.
3. Therefore, the universe has a cause of its existence.
4. Since space-time originated with the universe and therefore similarly has a finite past, the cause of the universe's existence must transcend space-time (must have existed aspatially and, when there was no universe, atemporally).
5. If the cause of the universe's existence transcends space-time, no scientific explanation (in terms of physical laws) can provide a causal account of the origin of the universe.
6. If no scientific explanation can provide a causal account of the origin of the universe, the cause must be personal (explanation is given in terms of a personal agent).

Critics see a problem with this formulation in premise 8. Whereas behind premise 1 lies the ancient Parmenidean contention that out of nothing nothing comes, it is alleged that no principle directly connects finitude with causation. They contend that we have no reason to think that just because something is finite it must have a cause of its coming into existence. But this objection has merit only if the critic denies the PSR or that it applies to events like the Big Bang. But, the critics contend, the Big Bang is not an event at all.

Grünbaum argues that events can only result from other events. “ Since the Big Bang singularity is technically a non-event, and t=0 is not a bona fide time of its occurrence, the singularity cannot be the effect of any cause in the case of either event-causation or agent causation alike…. The singularity t=0 cannot have a cause” (Grünbaum 1994).

One response to Grünbaum's objection is to opt for broader notions of “event” and “cause.” We might broaden the notion of “event” by removing the requirement that it must be relational, taking place in a space-time context. In the Big Bang the space-time universe commences and then continues to exist in time measurable subsequent to the initiating singularity (Silk 2001, 456). Thus, one might consider the Big Bang as either the event of the commencing of the universe or else a state in which “any two points in the observable universe were arbitrarily close together” (Silk 2001, 63). As such, one might inquire why there was this initial state of the universe in the finite past. Likewise, one need not require that causation embody the Humean condition of temporal priority, but may treat causation conditionally, or perhaps even, as traditionally, a relation of production. Any causal statement about the universe would have to be expressed atemporally, but for the theist this presents no problem provided that God is conceived atemporally and sense can be made of atemporal causation.

Furthermore, suppose that the Big Bang singularity is not an event. Then, by this same reasoning that events only arise from other events, subsequent so-called events cannot be the effect of that singularity. If they were, they would not be events either. This result that there are no events is absurd.

Rundle defends this view of events by arguing that coming into and going out of existence are symmetrical and both are in time. Ontologically applying infinity to future events does not differ from applying it to past events. Beginning from today one can always add another day to the past or future, since an infinity of past days exists in the same way as an infinity of future days. Thus, just as a day in the future is only finitely distant from today, so any day in the past is finitely distant from today. The past, like the future, is only potentially infinite. In the former case, though the universe is finite, there was no initial event or beginning of material existence; for any given event there is a possible precedent event finitely distant from us in time. Similarly, in the future at any finite point in time, there is a possible subsequent event, so that though the future is finite, it does not require an end to the universe (180). But then either there is a possible prior and posterior stage to any event so that the material universe is actually infinite (which he rejects) or else matter is uncaused, with no beginning or end. He accepts the latter; matter-energy is neither caused nor indestructible.

Rundle's argument is suspect in that it assumes that going from the present to the past does not differ from moving from the past to the present; both involve actually finite though potentially infinite series. But although to count events from present to the past always means the event is a finite time-distance from the present, to get to the present from the beginningless past one would have to traverse an actual infinite without a starting point. The two movements are quite disparate, and as Craig (1979) argues, one cannot traverse an infinite. For one thing, Rundle's argument that the past is finite from the perspective of the present, in that any event is a finite temporal distance from the present, is irrelevant; the point concerns how the whole infinite series with no beginning in an initial event can be formed. For another, where there is an indefinite past there is no reason that one has arrived at today rather than yesterday or tomorrow. [Craig defends his case using the example, derived from Bertrand Russell, of Tristram Shandy, who takes a year to write in his diary one day's events; he will only get progressively behind and never catch up. This example has generated a literature of its own (Eells, Oderberg, Oppy 2002b)]. In short, there seems to be no reason not to think of the Big Bang as an event.

### 5.5 A Non-finite Universe

Some have suggested that since we cannot “exclude the possibility of a prior phase of existence” (Silk 2001, 63), it is possible that the universe has cycled through oscillations, perhaps infinitely, so that Big Bangs occurred not once but an infinite number of times in the past and will do so in the future. The current universe is a “reboot” of previous universes that have expanded and then contracted (Musser 2004).

The idea of an oscillating universe faces significant problems. For one, no set of physical laws accounts for a series of cyclical universe-collapses and re-explosions. That the universe once exploded into existence provides no evidence that the event could reoccur once, if not an infinite number of times, should the universe collapse. Even an oscillating universe seems to be finite (Smith, in Craig and Smith 1993, 113). Further, the cycle of collapses and expansions would not, as was pictured, be periodic (of even duration). Rather, entropy would rise from cycle to cycle, so that even were a series of universe-oscillations possible, they would become progressively longer (Davies 1992, 52). If the universe were without beginning, by now that cycle would be infinite in duration, without any hope of contraction. Third, though each recollapse would destroy the components of the universe, the radiation would remain, so that each successive cycle would add to the total. “The radiation ends up as blackbody radiation. Because we measure a specific amount of cosmic blackbody radiation in the background radiation, we infer that a closed (oscillating) universe can have undergone only a finite number of repeated bounces” or cycles, no more than 100 and certainly not the infinite number required for a beginningless series. “We reluctantly conclude that a future singularity is inevitable in a closed universe; hypothetical observers cannot pass through it, and so the universe probably cannot be cyclical” (Silk 2001, 380, 399).

The central thesis of the oscillating theory has been countered by recent discoveries that the expansion of the universe is actually speeding up. Observations of distant supernova show that they appear to be fainter than they should be were the universe expanding at a steady rate. “Relative dimness of the supernovae showed that they were 10% to 15% farther out than expected, … indicating that the expansion has accelerated over billions of years” (Glanz, 2157). The hypothesis that these variations in intensity are caused by light being absorbed when passing through cosmic dust is no longer considered a viable explanation because the most distant supernova yet discovered is brighter than it should be if dust were the responsible factor (Sincell). Some force in the universe not only counteracts gravity but pushes the galaxies in the universe apart ever faster. This increased speed appears to be due to dark energy, a mysterious type of energy, characterized by a negative pressure, composing as much as 70% of the universe. Dark matter, it seems, is overmatched by dark energy.[[3](http://plato.stanford.edu/entries/cosmological-argument/notes.html%22%20%5Cl%20%223)]

### 5.6 Personal Explanation

Finally, something needs to be said about statement 4, which asserts that the cause of the universe is personal. Defenders of the cosmological argument suggest two possible kinds of explanation.Natural explanation is provided in terms of precedent events, causal laws, or necessary conditions that invoke natural existents. Personal explanation is given “in terms of the intentional action of a rational agent” (Swinburne, 1979, 20). We have seen that one cannot provide a natural causal explanation for the initial event, for there are no precedent events or natural existents to which the laws of physics apply. The line of scientific explanation runs out at the initial singularity, and perhaps even before we arrive at the singularity (at 10−35 seconds). If no scientific explanation (in terms of physical laws) can provide a causal account of the origin of the universe, the explanation must be personal, that is, in terms of the intentional action of an intelligent, supernatural agent.

One might wonder, as Rundle does, how a supernatural agent could bring about the universe. He contends that a personal agent (God) cannot be the cause because intentional agency needs a body and actions occur within space-time. But acceptance of the cosmological argument does not depend on an explanation of the manner of causation by a necessary being. When we explain that the girl raised her hand because she wanted to ask a question, we can accept that she was the cause of the raised hand without understanding how her wanting to ask a question brought about her raising it. As Swinburne notes, an event is “fully explained when we have cited the agent, his intention that the event occur, and his basic powers” that include the ability to bring about events of that sort (1979, 33). Similarly, theists argue, we may never know why and how creation took place. Nevertheless, we may accept it as an explanation in the sense that we can say that God created that initial event, that he had the intention to do so, and that such an event lies within the power of an omniscient and omnipotent being; not having a body is irrelevant.

Paul Davies argues that one need not appeal to God to account for the Big Bang. Its cause, he suggests, is found within the cosmic system itself. Originally a vacuum lacking space-time dimensions, the universe “found itself in an excited vacuum state,” a “ferment of quantum activity, teeming with virtual particles and full of complex interactions” (Davies 1984, 191–2), which, subject to a cosmic repulsive force, resulted in an immense increase in energy. Subsequent explosions from this collapsing vacuum released the energy in this vacuum, reinvigorating the cosmic inflation and setting the scenario for the subsequent expansion of the universe. But what is the origin of this increase in energy that eventually made the Big Bang possible? Davies's response is that the law of conservation of energy (that the total quantity of energy in the universe remains fixed despite transfer from one form to another), which now applies to our universe, did not apply to the initial expansion. Cosmic repulsion in the vacuum caused the energy to increase from zero to an enormous amount. This great explosion released energy, from which all matter emerged. Consequently, he contends, since the conclusion of the kalām argument is false, one of the premises of the argument—in all likelihood the first—is false.

Craig responds that several problems face this scenario. For one thing, how can empty space explode without there being matter or energy? Since space is a function of matter, if no matter existed, neither could space, let alone empty space, exist. Further, if the vacuum has energy, the question arises concerning the origin of the vacuum and its energy. In short, merely pushing the question of the beginning of the universe back to some primordial quantum vacuum does not escape the question of what brought this vacuum laden with energy into existence. A quantum vacuum is not nothing (as in Newtonian physics) but “a sea of continually forming and dissolving particles that borrow energy from the vacuum for their brief existence” (Craig 1993, 143). Hence, he concludes, the appeal to a vacuum as the initial state is misleading. Defenders of the argument affirm that only a personal explanation can provide the sufficient reason for the existence of the universe.

The issues raised by the kalām argument concern not only the nature of explanation and when an explanation is necessary, but even whether an explanation of the universe is possible (given the above discussion). Whereas all agree that it makes no sense to ask about what occurs before the Big Bang (since there was no prior time) or about something coming out of nothing, the dispute rests on whether there needs to be a cause of the first natural existent, whether something like the universe can be finite and yet not have a beginning, and the nature of infinities and their connection with reality.

## 6. An Inductive Cosmological Argument

Richard Swinburne contends that the cosmological argument is not deductively valid; if it were so, “it would be incoherent to assert that a complex physical universe exists and that God does not” (1979, 119). Rather, he develops an inductive cosmological argument that appeals to the inference to the best explanation. Swinburne distinguishes between two varieties of inductive arguments: those that show that the conclusion is more probable than not (what he terms a correct P-inductive argument) and those that further increase the probability of the conclusion (what he terms a correct C-inductive argument). In The Existence of God he presents a cosmological argument that he claims falls in the category of C-inductive arguments. However, this argument is part of a larger, cumulative case for a P-inductive argument for God's existence.

Swinburne notes that if only scientific explanations are allowed, the universe would be a brute fact. If the universe is finite, the first moment would be a brute fact because no scientific causal account could be given for it. If the universe is infinite, each state would be a brute fact, for though each state would be explained by the causal conditions found in prior states plus the relevant physical laws, there is no reason why any particular state holds true rather than another, since the laws of physics are compatible with diverse states. That is, although the features F of the universe at time t are explained by F at time t1 plus the relevant physical laws L, and F at t1 is explained by F and L at t2, given an infinite regress there is no reason why F or L at tn might not have been different than they were. Since F and L at tn are brute facts, the same holds for any Fexplained by F and L at tn. Hence, regardless of whether the universe is infinite or finite, if only scientific evidence is allowed, the existence of the universe and its individual states is merely a brute fact, devoid of explanation.

The universe, however, is complex, whereas God is simple. But if something is to occur that is not explained, it is more likely that what occurs will be simple rather than complex. Hence, though the prior likelihood of neither God nor the universe is particularly high, the prior probability of a simple God exceeds that of a complex universe. Hence, if anything is to occur unexplained, it would be God, not the universe. On the other hand, it is reasonable to appeal to God as an explanation for the existence of a complex universe, since there are good reasons why God would make such a complex universe “as a theatre for finite agents to develop and make of it what they will” (Swinburne 1979, 131). Consequently, if we are to explain the universe, we must appeal to a personal explanation “in terms of a person who is not part of the universe acting from without. This can be done if we suppose that such a person (God) brings it about at each instant of time, that L operates” (Swinburne 1979, 126). Although for Swinburne this argument does not make the existence of God more probable than not (it is not a P-inductive argument), it does increase the probability of God's existence (is a C-inductive argument) because it provides a more reasonable explanation for the universe than merely attributing it to brute fact.

Swinburne's point is that to find the best explanation, one selects among the possible theories the theory that provides the best explanation. In light of the complexity of the universe, which of the overarching theories of materialism, humanism, or theism provides the best explanation? Swinburne notes four criteria to be used to determine the best explanation: an explanation is justified insofar as it provides predictability, is simple, fits with our background knowledge, and explains the phenomena better than any other theory (1996, 26). He suggests that fit with background knowledge does not apply in the case of the cause of the universe, for there are no “neighbouring fields of enquiry” where we investigate the cause of the universe. Indeed, he suggests, this criterion reduces to simplicity, which for him is the key to the inductive cosmological argument (1996, chap. 3). Appeals to God's intentions and actions, although not leading to specific predictions about what the world will look like, better explain specific phenomena than materialism, which leaves the universe as a brute fact. Swinburne concludes that “Theism does not make [certain phenomena] very probable; but nothing else makes their occurrence in the least probable, and they cry out for explanation. A priori, theism is perhaps very unlikely, but it is far more likely than any rival supposition. Hence our phenomena are substantial evidence for the truth of theism” (Swinburne 1976, 290).

Why does Swinburne hold that God provide the best or ultimate explanation of the universe? Part of the answer is that the Principle of Causation does not apply to God or a necessary being. On the one hand, there can be no scientific explanation of God's existence, for there are neither antecedent beings nor scientific principles from which God's existence follows. On the other hand, the Principle of Causation applies only to contingent and not to necessary beings. Explanation is required only of what is contingent. It is not that God's existence is logically necessary, but that if God exists, he cannot not exist. That God is eternal and not dependent on anything for his existence are not reasons for his existence but his properties. (See 3.5 above for Mackie's discussion of this argument and replies.)

A second reason for Swinburne is that explanation can be reasonably thought to have achieved finality or completeness when one gives a personal explanation that appeals to the intentions of a conscious agent. One may attempt to provide a scientific account of why someone has particular intentions, but there is no requirement that such an account be supplied, let alone be possible. We may not achieve any better explanation by trying to explain physically why persons intended to act as they did. However, when we claim that something happened because persons intended it and acted on their intentions, we can achieve a complete explanation of why that thing happened.

Third, appeal to God as an intentional agent leads us to have certain expectations about the universe: that it manifests order, is comprehensible, and favors the existence of beings that can comprehend it. For Swinburne, who in his works often discusses this antecedent probability, this accords with his predictability criterion. Finally, Swinburne introduces a fourth feature, namely, the simplicity of God that, by its very nature, makes further explanation either impossible or makes theism the best explanation.[[4](http://plato.stanford.edu/entries/cosmological-argument/notes.html%22%20%5Cl%20%224)] This consideration leads to discussion of God's properties and the nature of simplicity.

Still, Mackie notes, raising the probability of God's existence is not of great assistance, for “the hypothesis of divine creation is very unlikely.” (Mackie, 100). Indeed, it is very unlikely that a God possessing the traditional theistic properties exists. Hence, increasing the probability of something very unlikely initially leaves us with the unlikely. Swinburne's response is that although theism is perhaps very unlikely, it is far more likely than any supposition that things just happen to be. So we return to what constitutes the best explanation of the existence of the universe. Swinburne and his critics leave us with the difficulties of determining what counts as an adequate explanation, of defining simplicity, and of determining prior probabilities.

Finally, even if the cosmological argument is sound or cogent, the difficult task remains to show that the necessary being to which the cosmological argument concludes is the God of religion, and if so, of which religion. Rowe suggests that the cosmological argument has two parts, one to establish the existence of a first cause or necessary being, the other that this necessary being is God (1975, 6). It is unclear, however, whether the second contention is an essential part of the cosmological argument. Although Aquinas was quick to make the identification between God and the first mover or first cause, such identification seems to go beyond the causal reasoning that informs the argument. Some (Rasmussen, O'Connor, Koons) have plowed ahead in developing this stage 2 process by showing how and what properties — simplicity, unity, omnipotence, omniscience, goodness, and so on — might follow from the concept of a necessary being. Others have proposed a method of correlation, where to give any religious substance to the concept of a necessary being lengthy discussion of the supreme beings found in the diverse religions and careful correlation of the properties of a necessary being with those of a religious being is conducted, to discern compatibilities and incompatibilities (Attfield). Which ever method is chosen, while defenders of the cosmological argument point to the relevance and importance of connecting the necessary being with the being of religion, critics find themselves freed from such endeavors.

**ETHICS by James Fieser (4)**

The field of ethics (or moral philosophy) involves systematizing, defending, and recommending concepts of right and wrong behavior. Philosophers today usually divide ethical theories into three general subject areas: metaethics, normative ethics, and applied ethics. Metaethics investigates where our ethical principles come from, and what they mean. Are they merely social inventions? Do they involve more than expressions of our individual emotions? Metaethical answers to these questions focus on the issues of universal truths, the will of God, the role of reason in ethical judgments, and the meaning of ethical terms themselves. Normative ethics takes on a more practical task, which is to arrive at moral standards that regulate right and wrong conduct. This may involve articulating the good habits that we should acquire, the duties that we should follow, or the consequences of our behavior on others. Finally, applied ethics involves examining specific controversial issues, such as [abortion](http://www.iep.utm.edu/abortion), infanticide, [animal rights](http://www.iep.utm.edu/anim-eth),[environmental concerns](http://www.iep.utm.edu/envi-eth), [homosexuality](http://www.iep.utm.edu/sexualit), [capital punishment](http://www.iep.utm.edu/punishme), or nuclear [war](http://www.iep.utm.edu/war).

# By using the conceptual tools of metaethics and normative ethics, discussions in applied ethics try to resolve these controversial issues. The lines of distinction between metaethics, normative ethics, and applied ethics are often blurry. For example, the issue of abortion is an applied ethical topic since it involves a specific type of controversial behavior. But it also depends on more general normative principles, such as the right of self-rule and the right to life, which are litmus tests for determining the morality of that procedure. The issue also rests on metaethical issues such as, “where do [rights](http://www.iep.utm.edu/hum-rts/) come from?” and “what kind of beings have rights?”

## 1. Metaethics

The term “meta” means after or beyond, and, consequently, the notion of metaethics involves a removed, or bird’s eye view of the entire project of ethics. We may define metaethics as the study of the origin and meaning of ethical concepts. When compared to normative ethics and applied ethics, the field of metaethics is the least precisely defined area of moral philosophy. It covers issues from moral semantics to [moral epistemology](http://www.iep.utm.edu/mor-epis). Two issues, though, are prominent: (1) metaphysical issues concerning whether morality exists independently of humans, and (2) psychological issues concerning the underlying mental basis of our moral judgments and conduct.

### a. Metaphysical Issues: Objectivism and Relativism

Metaphysics is the study of the kinds of things that exist in the universe. Some things in the universe are made of physical stuff, such as rocks; and perhaps other things are nonphysical in nature, such as thoughts, spirits, and gods. The metaphysical component of metaethics involves discovering specifically whether moral values are eternal truths that exist in a spirit-like realm, or simply human conventions. There are two general directions that discussions of this topic take, one other-worldly and one this-worldly.

Proponents of the other-worldly view typically hold that moral values are [objective](http://www.iep.utm.edu/objectiv) in the sense that they exist in a spirit-like realm beyond subjective human conventions. They also hold that they are absolute, or eternal, in that they never change, and also that they are universal insofar as they apply to all rational creatures around the world and throughout [time](http://www.iep.utm.edu/time). The most dramatic example of this view is [Plato](http://www.iep.utm.edu/plato), who was inspired by the field of mathematics. When we look at numbers and mathematical relations, such as 1+1=2, they seem to be timeless concepts that never change, and apply everywhere in the universe. Humans do not invent numbers, and humans cannot alter them. Plato explained the eternal character of mathematics by stating that they are abstract entities that exist in a spirit-like realm. He noted that moral values also are absolute truths and thus are also abstract, spirit-like entities. In this sense, for Plato, moral values are spiritual objects. Medieval philosophers commonly grouped all moral principles together under the heading of “eternal law” which were also frequently seen as spirit-like objects. 17thcentury British philosopher Samuel Clarke described them as spirit-like relationships rather than spirit-like objects. In either case, though, they exist in a spirit-like realm. A different other-worldly approach to the metaphysical status of morality is divine commands issuing from God’s will. Sometimes calledvoluntarism(or [divine command theory](http://www.iep.utm.edu/divine-c)), this view was inspired by the notion of an all-powerful [God](http://www.iep.utm.edu/god-west) who is in control of everything. God simply wills things, and they become reality. He wills the physical world into existence, he wills human life into existence and, similarly, he wills all moral values into existence. Proponents of this view, such as medieval philosopher [William of Ockham](http://www.iep.utm.edu/ockham), believe that God wills moral principles, such as “murder is wrong,” and these exist in God’s mind as commands. God informs humans of these commands by implanting us with moral intuitions or revealing these commands in scripture.

The second and more this-worldly approach to the metaphysical status of morality follows in the skeptical philosophical tradition, such as that articulated by Greek philosopher Sextus Empiricus, and denies the objective status of moral values. Technically, skeptics did not reject moral values themselves, but only denied that values exist as spirit-like objects, or as divine commands in the mind of God. Moral values, they argued, are strictly human inventions, a position that has since been called moral[*relativism*](http://www.iep.utm.edu/relativi). There are two distinct forms of moral relativism. The first is individual relativism, which holds that individual people create their own moral standards. Friedrich Nietzsche, for example, argued that the superhuman creates his or her morality distinct from and in reaction to the slave-like value system of the masses. The second is cultural relativism which maintains that morality is grounded in the approval of one’s society – and not simply in the preferences of individual people. This view was advocated by Sextus, and in more recent centuries by Michel Montaigne and William Graham Sumner. In addition to espousing skepticism and relativism, this-worldly approaches to the metaphysical status of morality deny the absolute and universal nature of morality and hold instead that moral values in fact change from society to society throughout time and throughout the world. They frequently attempt to defend their position by citing examples of values that differ dramatically from one culture to another, such as attitudes about polygamy, homosexuality and human sacrifice.

### b. Psychological Issues in Metaethics

A second area of metaethics involves the psychological basis of our moral judgments and conduct, particularly understanding what motivates us to be moral. We might explore this subject by asking the simple question, “Why be moral?” Even if I am aware of basic moral standards, such as don’t kill and don’t steal, this does not necessarily mean that I will be psychologically compelled to act on them. Some answers to the question “Why be moral?” are to avoid punishment, to gain [praise](http://www.iep.utm.edu/praise), to attain happiness, to be dignified, or to fit in with society.

#### i. Egoism and Altruism

One important area of moral psychology concerns the inherent selfishness of humans. 17th century British philosopher [Thomas Hobbes](http://www.iep.utm.edu/hobmoral) held that many, if not all, of our actions are prompted by selfish desires. Even if an action seems selfless, such as donating to charity, there are still selfish causes for this, such as experiencing power over other people. This view is called[*psychological egoism*](http://www.iep.utm.edu/psychego/) and maintains that self-oriented interests ultimately motivate all human actions. Closely related to psychological egoism is a view called psychological hedonism which is the view that pleasure is the specific driving force behind all of our actions. 18th century British philosopher [Joseph Butler](http://www.iep.utm.edu/butler) agreed that instinctive selfishness and pleasure prompt much of our conduct. However, Butler argued that we also have an inherent psychological capacity to show benevolence to others. This view is called psychological altruism and maintains that at least some of our actions are motivated by instinctive benevolence.

#### ii. Emotion and Reason

A second area of moral psychology involves a dispute concerning the role of reason in motivating moral actions. If, for example, I make the statement “abortion is morally wrong,” am I making a rational assessment or only expressing my feelings? On the one side of the dispute, 18th century British philosopher [David Hume](http://www.iep.utm.edu/humemora) argued that moral assessments involve our emotions, and not our reason. We can amass all the reasons we want, but that alone will not constitute a moral assessment. We need a distinctly emotional reaction in order to make a moral pronouncement. Reason might be of service in giving us the relevant data, but, in Hume’s words, “reason is, and ought to be, the slave of the passions.” Inspired by Hume’s anti-rationalist views, some 20th century philosophers, most notably A.J. Ayer, similarly denied that moral assessments are factual descriptions. For example, although the statement “it is good to donate to charity” may on the surface look as though it is a factual description about charity, it is not. Instead, a moral utterance like this involves two things. First, I (the speaker) I am expressing my personal feelings of approval about charitable donations and I am in essence saying “Hooray for charity!” This is called the emotive element insofar as I am expressing my emotions about some specific behavior. Second, I (the speaker) am trying to get you to donate to charity and am essentially giving the command, “Donate to charity!” This is called the prescriptive element in the sense that I am prescribing some specific behavior.

From Hume’s day forward, more rationally-minded philosophers have opposed these emotive theories of ethics (see [non-cognitivism in ethics](http://www.iep.utm.edu/non-cogn)) and instead argued that moral assessments are indeed acts of reason. 18th century German philosopher [Immanuel Kant](http://www.iep.utm.edu/kantmeta) is a case in point. Although emotional factors often do influence our conduct, he argued, we should nevertheless resist that kind of sway. Instead, true moral action is motivated only by reason when it is free from emotions and desires. A recent rationalist approach, offered by Kurt Baier (1958), was proposed in direct opposition to the emotivist and prescriptivist theories of Ayer and others. Baier focuses more broadly on the reasoning and argumentation process that takes place when making moral choices. All of our moral choices are, or at least can be, backed by some reason or justification. If I claim that it is wrong to steal someone’s car, then I should be able to justify my claim with some kind of argument. For example, I could argue that stealing Smith’s car is wrong since this would upset her, violate her ownership rights, or put the thief at risk of getting caught. According to Baier, then, proper moral decision making involves giving the best reasons in support of one course of action versus another.

#### iii. Male and Female Morality

A third area of moral psychology focuses on whether there is a distinctly female approach to ethics that is grounded in the psychological differences between men and women. Discussions of this issue focus on two claims: (1) traditional morality is male-centered, and (2) there is a unique female perspective of the world which can be shaped into a value theory. According to many feminist philosophers, traditional morality is male-centered since it is modeled after practices that have been traditionally male-dominated, such as acquiring property, engaging in business contracts, and governing societies. The rigid systems of rules required for trade and government were then taken as models for the creation of equally rigid systems of moral rules, such as lists of rights and duties. Women, by contrast, have traditionally had a nurturing role by raising children and overseeing domestic life. These tasks require less rule following, and more spontaneous and creative action. Using the woman’s experience as a model for moral theory, then, the basis of morality would be spontaneously caring for others as would be appropriate in each unique circumstance. On this model, the agent becomes part of the situation and acts caringly within that context. This stands in contrast with male-modeled morality where the agent is a mechanical actor who performs his required duty, but can remain distanced from and unaffected by the situation. A care-based approach to morality, as it is sometimes called, is offered by feminist ethicists as either a replacement for or a supplement to traditional male-modeled moral systems.

## 2. Normative Ethics

Normative ethics involves arriving at moral standards that regulate right and wrong conduct. In a sense, it is a search for an ideal litmus test of proper behavior. The Golden Rule is a classic example of a normative principle: We should do to others what we would want others to do to us. Since I do not want my neighbor to steal my car, then it is wrong for me to steal her car. Since I would want people to feed me if I was starving, then I should help feed starving people. Using this same reasoning, I can theoretically determine whether any possible action is right or wrong. So, based on the Golden Rule, it would also be wrong for me to lie to, harass, victimize, assault, or kill others. The Golden Rule is an example of a normative theory that establishes a single principle against which we judge all actions. Other normative theories focus on a set of foundational principles, or a set of good character traits.

The key assumption in normative ethics is that there is only one ultimate criterion of moral conduct, whether it is a single rule or a set of principles. Three strategies will be noted here: (1) virtue theories, (2) duty theories, and (3) consequentialist theories.

### a. Virtue Theories

Many philosophers believe that morality consists of following precisely defined rules of conduct, such as “don’t kill,” or “don’t steal.” Presumably, I must learn these rules, and then make sure each of my actions live up to the rules. [Virtue ethics](http://www.iep.utm.edu/virtue), however, places less emphasis on learning rules, and instead stresses the importance of developing good habits of character, such as benevolence (see [moral character](http://www.iep.utm.edu/moral-ch)). Once I’ve acquired benevolence, for example, I will then habitually act in a benevolent manner. Historically, virtue theory is one of the oldest normative traditions in Western philosophy, having its roots in ancient Greek civilization. Plato emphasized four virtues in particular, which were later called cardinal virtues: wisdom, courage, temperance and justice. Other important virtues are fortitude, generosity, self-respect, good temper, and sincerity. In addition to advocating good habits of character, virtue theorists hold that we should avoid acquiring bad character traits, or vices, such as cowardice, insensibility, injustice, and vanity. Virtue theory emphasizes moral education since virtuous character traits are developed in one’s youth. Adults, therefore, are responsible for instilling virtues in the young.

[Aristotle](http://www.iep.utm.edu/aris-eth) argued that virtues are good habits that we acquire, which regulate our emotions. For example, in response to my natural feelings of fear, I should develop the virtue of courage which allows me to be firm when facing danger. Analyzing 11 specific virtues, Aristotle argued that most virtues fall at a mean between more extreme character traits. With courage, for example, if I do not have enough courage, I develop the disposition of cowardice, which is a vice. If I have too much courage I develop the disposition of rashness which is also a vice. According to Aristotle, it is not an easy task to find the perfect mean between extreme character traits. In fact, we need assistance from our reason to do this. After Aristotle, medieval theologians supplemented Greek lists of virtues with three Christian ones, ortheological virtues: faith, hope, and charity. Interest in virtue theory continued through the middle ages and declined in the 19th century with the rise of alternative moral theories below. In the mid 20thcentury virtue theory received special attention from philosophers who believed that more recent ethical theories were misguided for focusing too heavily on rules and actions, rather than on virtuous character traits. Alasdaire MacIntyre (1984) defended the central role of virtues in moral theory and argued that virtues are grounded in and emerge from within social traditions.

### b. Duty Theories

Many of us feel that there are clear obligations we have as human beings, such as to care for our children, and to not commit murder. Duty theories base morality on specific, foundational principles of obligation. These theories are sometimes called deontological, from the Greek word deon, or duty, in view of the foundational nature of our duty or obligation. They are also sometimes called nonconsequentialist since these principles are obligatory, irrespective of the consequences that might follow from our actions. For example, it is wrong to not care for our children even if it results in some great benefit, such as financial savings. There are four central duty theories.

The first is that championed by 17th century German philosopher Samuel Pufendorf, who classified dozens of duties under three headings: duties to God, duties to oneself, and duties to others. Concerning our duties towards God, he argued that there are two kinds:

1. a theoretical duty to know the existence and nature of God, and
2. a practical duty to both inwardly and outwardly worship God.

Concerning our duties towards oneself, these are also of two sorts:

1. duties of the soul, which involve developing one’s skills and talents, and
2. duties of the body, which involve not harming our bodies, as we might through gluttony or drunkenness, and not killing oneself.

Concerning our duties towards others, Pufendorf divides these between absolute duties, which are universally binding on people, and conditional duties, which are the result of contracts between people. Absolute duties are of three sorts:

1. avoid wronging others,
2. treat people as equals, and
3. promote the good of others.

Conditional duties involve various types of agreements, the principal one of which is the duty is to keep one’s promises.

A second duty-based approach to ethics is rights theory. Most generally, a “right” is a justified claim against another person’s behavior – such as my right to not be harmed by you (see also [human rights](http://www.iep.utm.edu/hum-rts)). Rights and duties are related in such a way that the rights of one person implies the duties of another person. For example, if I have a right to payment of $10 by Smith, then Smith has a duty to pay me $10. This is called the correlativity of rights and duties. The most influential early account of rights theory is that of 17th century British philosopher [John Locke](http://www.iep.utm.edu/locke), who argued that the laws of nature mandate that we should not harm anyone’s life, health, liberty or possessions. For Locke, these are our natural rights, given to us by God. Following Locke, the United States Declaration of Independence authored by Thomas Jefferson recognizes three foundational rights: life, liberty, and the pursuit of happiness. Jefferson and others rights theorists maintained that we deduce other more specific rights from these, including the rights of property, movement, speech, and religious expression. There are four features traditionally associated with moral rights. First, rights are natural insofar as they are not invented or created by governments. Second, they are universal insofar as they do not change from country to country. Third, they are equal in the sense that rights are the same for all people, irrespective of gender, race, or handicap. Fourth, they are inalienable which means that I cannot hand over my rights to another person, such as by selling myself into slavery.

A third duty-based theory is that by Kant, which emphasizes a single principle of duty. Influenced by Pufendorf, Kant agreed that we have moral duties to oneself and others, such as developing one’s talents, and keeping our promises to others. However, Kant argued that there is a more foundational principle of duty that encompasses our particular duties. It is a single, self-evident principle of reason that he calls the “categorical imperative.” A categorical imperative, he argued, is fundamentally different from hypothetical imperatives that hinge on some personal desire that we have, for example, “If you want to get a good job, then you ought to go to college.” By contrast, a categorical imperative simply mandates an action, irrespective of one’s personal desires, such as “You ought to do X.” Kant gives at least four versions of the categorical imperative, but one is especially direct: Treat people as an end, and never as a means to an end. That is, we should always treat people with dignity, and never use them as mere instruments. For Kant, we treat people as an end whenever our actions toward someone reflect the inherent value of that person. Donating to charity, for example, is morally correct since this acknowledges the inherent value of the recipient. By contrast, we treat someone as a means to an end whenever we treat that person as a tool to achieve something else. It is wrong, for example, to steal my neighbor’s car since I would be treating her as a means to my own happiness. The categorical imperative also regulates the morality of actions that affect us individually. Suicide, for example, would be wrong since I would be treating my life as a means to the alleviation of my misery. Kant believes that the morality of all actions can be determined by appealing to this single principle of duty.

A fourth and more recent duty-based theory is that by British philosopher W.D. Ross, which emphasizesprima facie duties. Like his 17th and 18th century counterparts, Ross argues that our duties are “part of the fundamental nature of the universe.” However, Ross’s list of duties is much shorter, which he believes reflects our actual moral convictions:

* Fidelity: the duty to keep promises
* Reparation: the duty to compensate others when we harm them
* Gratitude: the duty to thank those who help us
* Justice: the duty to recognize merit
* Beneficence: the duty to improve the conditions of others
* Self-improvement: the duty to improve our virtue and intelligence
* Nonmaleficence: the duty to not injure others

Ross recognizes that situations will arise when we must choose between two conflicting duties. In a classic example, suppose I borrow my neighbor’s gun and promise to return it when he asks for it. One day, in a fit of rage, my neighbor pounds on my door and asks for the gun so that he can take vengeance on someone. On the one hand, the duty of fidelity obligates me to return the gun; on the other hand, the duty of nonmaleficence obligates me to avoid injuring others and thus not return the gun. According to Ross, I will intuitively know which of these duties is my actual duty, and which is my apparent or prima facieduty. In this case, my duty of nonmaleficence emerges as my actual duty and I should not return the gun.

### c. Consequentialist Theories

It is common for us to determine our moral responsibility by weighing the consequences of our actions. According to [consequentialism](http://www.iep.utm.edu/conseque), correct moral conduct is determined solely by a cost-benefit analysis of an action’s consequences:

Consequentialism:An action is morally right if the consequences of that action are more favorable than unfavorable.

Consequentialist normative principles require that we first tally both the good and bad consequences of an action. Second, we then determine whether the total good consequences outweigh the total bad consequences. If the good consequences are greater, then the action is morally proper. If the bad consequences are greater, then the action is morally improper. Consequentialist theories are sometimes called teleological theories, from the Greek word telos, or end, since the end result of the action is the sole determining factor of its morality.

Consequentialist theories became popular in the 18th century by philosophers who wanted a quick way to morally assess an action by appealing to experience, rather than by appealing to gut intuitions or long lists of questionable duties. In fact, the most attractive feature of consequentialism is that it appeals to publicly observable consequences of actions. Most versions of consequentialism are more precisely formulated than the general principle above. In particular, competing consequentialist theories specify which consequences for affected groups of people are relevant. Three subdivisions of consequentialism emerge:

* Ethical Egoism: an action is morally right if the consequences of that action are more favorable than unfavorable only to the agent performing the action.
* Ethical Altruism: an action is morally right if the consequences of that action are more favorable than unfavorable to everyone except the agent.
* Utilitarianism: an action is morally right if the consequences of that action are more favorable than unfavorable to everyone.

All three of these theories focus on the consequences of actions for different groups of people. But, like all normative theories, the above three theories are rivals of each other. They also yield different conclusions. Consider the following example. A woman was traveling through a developing country when she witnessed a car in front of her run off the road and roll over several times. She asked the hired driver to pull over to assist, but, to her surprise, the driver accelerated nervously past the scene. A few miles down the road the driver explained that in his country if someone assists an accident victim, then the police often hold the assisting person responsible for the accident itself. If the victim dies, then the assisting person could be held responsible for the death. The driver continued explaining that road accident victims are therefore usually left unattended and often die from exposure to the country’s harsh desert conditions. On the principle of [ethical egoism](http://www.iep.utm.edu/egoism), the woman in this illustration would only be concerned with the consequences of her attempted assistance as she would be affected. Clearly, the decision to drive on would be the morally proper choice. On the principle of ethical altruism, she would be concerned only with the consequences of her action as others are affected, particularly the accident victim. Tallying only those consequences reveals that assisting the victim would be the morally correct choice, irrespective of the negative consequences that result for her. On the principle of utilitarianism, she must consider the consequences for both herself and the victim. The outcome here is less clear, and the woman would need to precisely calculate the overall benefit versus disbenefit of her action.

#### i. Types of Utilitarianism

[Jeremy Bentham](http://www.iep.utm.edu/bentham) presented one of the earliest fully developed systems of utilitarianism. Two features of his theory are noteworty. First, Bentham proposed that we tally the consequences of each action we perform and thereby determine on a case by case basis whether an action is morally right or wrong. This aspect of Bentham’s theory is known as act-utilitiarianism. Second, Bentham also proposed that we tally the pleasure and pain which results from our actions. For Bentham, pleasure and pain are the only consequences that matter in determining whether our conduct is moral. This aspect of Bentham’s theory is known as hedonistic utilitarianism. Critics point out limitations in both of these aspects.

First, according to act-utilitarianism, it would be morally wrong to waste time on leisure activities such as watching television, since our time could be spent in ways that produced a greater social benefit, such as charity work. But prohibiting leisure activities doesn’t seem reasonable. More significantly, according to act-utilitarianism, specific acts of torture or slavery would be morally permissible if the social benefit of these actions outweighed the disbenefit. A revised version of utilitarianism called rule-utilitarianismaddresses these problems. According to rule-utilitarianism, a behavioral code or rule is morally right if the consequences of adopting that rule are more favorable than unfavorable to everyone. Unlike act utilitarianism, which weighs the consequences of each particular action, rule-utilitarianism offers a litmus test only for the morality of moral rules, such as “stealing is wrong.” Adopting a rule against theft clearly has more favorable consequences than unfavorable consequences for everyone. The same is true for moral rules against lying or murdering. Rule-utilitarianism, then, offers a three-tiered method for judging conduct. A particular action, such as stealing my neighbor’s car, is judged wrong since it violates a moral rule against theft. In turn, the rule against theft is morally binding because adopting this rule produces favorable consequences for everyone. John Stuart Mill’s version of utilitarianism is rule-oriented.

Second, according to hedonistic utilitarianism, pleasurable consequences are the only factors that matter, morally speaking. This, though, seems too restrictive since it ignores other morally significant consequences that are not necessarily pleasing or painful. For example, acts which foster loyalty and friendship are valued, yet they are not always pleasing. In response to this problem, [G.E. Moore](http://www.iep.utm.edu/moore)proposedideal utilitarianism, which involves tallying any consequence that we intuitively recognize as good or bad (and not simply as pleasurable or painful). Also, R.M. Hare proposed preference utilitarianism, which involves tallying any consequence that fulfills our preferences.

#### ii. Ethical Egoism and Social Contract Theory

We have seen (in [Section 1.b.i](http://www.iep.utm.edu/ethics/#SSH1b.i)) that Hobbes was an advocate of the methaethical theory of psychological egoism—the view that all of our actions are selfishly motivated. Upon that foundation, Hobbes developed a normative theory known as [social contract theory](http://www.iep.utm.edu/soc-cont), which is a type of rule-ethical-egoism. According to Hobbes, for purely selfish reasons, the agent is better off living in a world with moral rules than one without moral rules. For without moral rules, we are subject to the whims of other people’s selfish interests. Our property, our families, and even our lives are at continual risk. Selfishness alone will therefore motivate each agent to adopt a basic set of rules which will allow for a civilized community. Not surprisingly, these rules would include prohibitions against lying, stealing and killing. However, these rules will ensure safety for each agent only if the rules are enforced. As selfish creatures, each of us would plunder our neighbors’ property once their guards were down. Each agent would then be at risk from his neighbor. Therefore, for selfish reasons alone, we devise a means of enforcing these rules: we create a policing agency which punishes us if we violate these rules.

## 3. Applied Ethics

Applied ethics is the branch of ethics which consists of the analysis of specific, controversial moral issues such as abortion, animal rights, or euthanasia. In recent years applied ethical issues have been subdivided into convenient groups such as medical ethics, business ethics, [environmental ethics](http://www.iep.utm.edu/envi-eth), and [sexual ethics](http://www.iep.utm.edu/sexualit). Generally speaking, two features are necessary for an issue to be considered an “applied ethical issue.” First, the issue needs to be controversial in the sense that there are significant groups of people both for and against the issue at hand. The issue of drive-by shooting, for example, is not an applied ethical issue, since everyone agrees that this practice is grossly immoral. By contrast, the issue of gun control would be an applied ethical issue since there are significant groups of people both for and against gun control.

The second requirement for an issue to be an applied ethical issue is that it must be a distinctly moral issue. On any given day, the media presents us with an array of sensitive issues such as affirmative action policies, gays in the military, involuntary commitment of the mentally impaired, capitalistic versus socialistic business practices, public versus private health care systems, or energy conservation. Although all of these issues are controversial and have an important impact on society, they are not all moral issues. Some are only issues of social policy. The aim of social policy is to help make a given society run efficiently by devising conventions, such as traffic laws, tax laws, and zoning codes. Moral issues, by contrast, concern more universally obligatory practices, such as our duty to avoid lying, and are not confined to individual societies. Frequently, issues of social policy and morality overlap, as with murder which is both socially prohibited and immoral. However, the two groups of issues are often distinct. For example, many people would argue that sexual promiscuity is immoral, but may not feel that there should be social policies regulating sexual conduct, or laws punishing us for promiscuity. Similarly, some social policies forbid residents in certain neighborhoods from having yard sales. But, so long as the neighbors are not offended, there is nothing immoral in itself about a resident having a yard sale in one of these neighborhoods. Thus, to qualify as an applied ethical issue, the issue must be more than one of mere social policy: it must be morally relevant as well.

In theory, resolving particular applied ethical issues should be easy. With the issue of abortion, for example, we would simply determine its morality by consulting our normative principle of choice, such as act-utilitarianism. If a given abortion produces greater benefit than disbenefit, then, according to act-utilitarianism, it would be morally acceptable to have the abortion. Unfortunately, there are perhaps hundreds of rival normative principles from which to choose, many of which yield opposite conclusions. Thus, the stalemate in normative ethics between conflicting theories prevents us from using a single decisive procedure for determining the morality of a specific issue. The usual solution today to this stalemate is to consult several representative normative principles on a given issue and see where the weight of the evidence lies.

### a. Normative Principles in Applied Ethics

Arriving at a short list of representative normative principles is itself a challenging task. The principles selected must not be too narrowly focused, such as a version of act-egoism that might focus only on an action’s short-term benefit. The principles must also be seen as having merit by people on both sides of an applied ethical issue. For this reason, principles that appeal to duty to God are not usually cited since this would have no impact on a nonbeliever engaged in the debate. The following principles are the ones most commonly appealed to in applied ethical discussions:

* Personal benefit:acknowledge the extent to which an action produces beneficial consequences for the individual in question.
* Social benefit: acknowledge the extent to which an action produces beneficial consequences for society.
* Principle of benevolence: help those in need.
* Principle of paternalism:assist others in pursuing their best interests when they cannot do so themselves.
* Principle of harm:do not harm others.
* Principle of honesty:do not deceive others.
* Principle of lawfulness: do not violate the law.
* Principle of autonomy:acknowledge a person’s freedom over his/her actions or physical body.
* Principle of justice:acknowledge a person’s right to due process, fair compensation for harm done, and fair distribution of benefits.
* Rights:acknowledge a person’s rights to life, information, privacy, free expression, and safety.

The above principles represent a spectrum of traditional normative principles and are derived from both consequentialist and duty-based approaches. The first two principles, personal benefit and social benefit, are consequentialist since they appeal to the consequences of an action as it affects the individual or society. The remaining principles are duty-based. The principles of benevolence, paternalism, harm, honesty, and lawfulness are based on duties we have toward others. The principles of autonomy, justice, and the various rights are based on moral rights.

An example will help illustrate the function of these principles in an applied ethical discussion. In 1982, a couple from Bloomington, Indiana gave birth to a baby with severe mental and physical disabilities. Among other complications, the infant, known as Baby Doe, had its stomach disconnected from its throat and was thus unable to receive nourishment. Although this stomach deformity was correctable through surgery, the couple did not want to raise a severely disabled child and therefore chose to deny surgery, food, and water for the infant. Local courts supported the parents’ decision, and six days later Baby Doe died. Should corrective surgery have been performed for Baby Doe? Arguments in favor of corrective surgery derive from the infant’s right to life and the principle of paternalism which stipulates that we should pursue the best interests of others when they are incapable of doing so themselves. Arguments against corrective surgery derive from the personal and social disbenefit which would result from such surgery. If Baby Doe survived, its quality of life would have been poor and in any case it probably would have died at an early age. Also, from the parent’s perspective, Baby Doe’s survival would have been a significant emotional and financial burden. When examining both sides of the issue, the parents and the courts concluded that the arguments against surgery were stronger than the arguments for surgery. First, foregoing surgery appeared to be in the best interests of the infant, given the poor quality of life it would endure. Second, the status of Baby Doe’s right to life was not clear given the severity of the infant’s mental impairment. For, to possess moral rights, it takes more than merely having a human body: certain cognitive functions must also be present. The issue here involves what is often referred to as moral personhood, and is central to many applied ethical discussions.

### b. Issues in Applied Ethics

As noted, there are many controversial issues discussed by ethicists today, some of which will be briefly mentioned here.

Biomedical ethics focuses on a range of issues which arise in clinical settings. Health care workers are in an unusual position of continually dealing with life and death situations. It is not surprising, then, that medical ethics issues are more extreme and diverse than other areas of applied ethics. Prenatal issues arise about the morality of surrogate mothering, genetic manipulation of fetuses, the status of unused frozen embryos, and abortion. Other issues arise about patient rights and physician’s responsibilities, such as the confidentiality of the patient’s records and the physician’s responsibility to tell the truth to dying patients. The AIDS crisis has raised the specific issues of the mandatory screening of all patients for AIDS, and whether physicians can refuse to treat AIDS patients. Additional issues concern medical experimentation on humans, the morality of involuntary commitment, and the rights of the mentally disabled. Finally, end of life issues arise about the morality of suicide, the justifiability of suicide intervention, physician assisted suicide, and euthanasia.

The field of business ethics examines moral controversies relating to the social responsibilities of capitalist business practices, the moral status of corporate entities, deceptive advertising, insider trading, basic employee rights, job discrimination, affirmative action, drug testing, and whistle blowing.

Issues in environmental ethics often overlaps with business and medical issues. These include the rights of animals, the morality of animal experimentation, preserving endangered species, pollution control, management of environmental resources, whether eco-systems are entitled to direct moral consideration, and our obligation to future generations.

Controversial issues of sexual morality include monogamy versus polygamy, sexual relations without love, homosexual relations, and extramarital affairs.

Finally, there are issues of social morality which examine capital punishment, nuclear war, gun control, the recreational use of drugs, welfare rights, and racism.