Natural Theology and Cosmology

The Nature and Purpose of Natural Theology
Natural theology is the discipline of establishing the rational feasibility of theism, or the existence of God. Rather than assuming a particular religious viewpoint such as Christianity, natural theology seeks to establish that there is a God behind religion. Natural theology is primarily an empirical enterprise, because it seeks to demonstrate God's existence from what can be perceived from sensory observation of nature, rather than what is revealed in a specific person or sacred text. Moreover, natural theology assumes that if the notion "God exists" can be upheld, then one is in a better position to discover something about the nature of God.

Several "proofs" or arguments have been advanced in natural theology. From the apparent order and design in the universe, the teleological argument suggests an intelligent Designer. That the very idea or concept of God implies his existence is the ontological argument. This entails, of course, an a priori assumption (before experience) and was developed most fully by St. Anselm, Rene Descartes, and G. W. Leibniz. Although the atheist, for example, denies the existence of God, he/she must have some idea of what or who it is that is being denied, so goes the ontological argument.

The moral argument states that if there are objective moral laws that are binding upon humans, then there must be a moral Lawgiver. Despite the best efforts of cultural and intellectual relativism that deny the existence of objective moral standards, the moral argument hinges on the fact that objective moral precepts do exist. And moral standards cannot be explained by any other means other than the existence of a moral Lawgiver.

Steven Chan posits the notion that arguments for God's existence are irrelevant to religion, since proofs for "the existence of God provide us with no hint whatever as to which actions God wishes us to perform, or what we ought to do so as to please or obey Him" (Cahn, Contemporary Perspectives on Religious Epistemology, p. 242). He goes on to assert that due to the wide variance in moral standards, one is unable to appeal to God's existence for any light on the subject of ethics. Of course, one may point out that a plurality of moral value systems does not logically entail moral agnosticism. It is logically possible to have absolute standards in a religiously pluralistic culture.

Moreover, a plurality of moral value systems does not necessarily mean God has not made his moral will known; only that not everyone is following it or knows of it. Variant value systems could just as well indicate that what has been revealed by God is now distorted and/or displaced by alternate value systems. Furthermore, variant value systems may not be that variant. There seems to be continuity in values cross-culturally (e.g., taboos such as sex with infants/grandparents is universally unacceptable, fairness and peace are preferred in all societies over favoritism and war). Simply because people and nations don't agree on what is right does not mean that what is right has not been revealed by God at some level and to some degree in the human heart.

Primarily, natural theology is an effort to take seriously the concern that "proof" for the existence of God is not only important, but available to the rational soul. The purpose of natural theology is to offer rational principles upon which one can infer the existence of God. In many respects, natural theology begins with the effects (order and design in the universe, principles of good and justice, the existence of the cosmos) and works backwards to an
ultimate cause. In this sense natural theology is a posteriori. "Proof" in every case of natural theology would be either deductive inference or a high degree of probability (Groothuis, "The Purported Benefits of Natural Theology," p. 7). Natural theology attempts to work with the supposed "givens" of what can be known about the universe and deriving God's existence from them. In so doing, a rational hurdle is overcome and more critical questions can be asked regarding whether or not God has communicated to his creation.

In the spirit of removing such a hurdle, I will offer a modest and brief account of the cosmological argument for the existence of God. Like all the rest of the arguments from natural theology, the cosmological argument is not without its problems, some of which I will engage. Nevertheless, I believe it is one of the most defensible arguments in the armory of natural theology. Taken by itself it has moderate persuasive power. But taken together with the aforementioned arguments, the cosmological argument can provide a sound and reasonable basis for believing in the existence of God opening the possibility to further inquiry into the nature of God and his attributes can follow. Although there are limitations and a plethora of refutations, the arguments remain a perennial concern for most thoughtful people.

**The Cosmological Argument Defined and Explained**

Whereas the ontological argument is an a priori one, the cosmological argument is a posteriori. As such, it entails arguing from the effect of the cosmos to its cause. Therefore, the cosmological argument takes for granted that something exists, and reasons backwards to a First Cause (Craig, *Reasonable Faith*, p. 79). There are two important versions of the argument that need to be made before looking at the argument proper. First, one version presupposes the universe had a beginning in time - a first moment in which it came into existence. This is the temporal version. Another version takes the universe to be chronologically eternal, but still owing its existence to God. This would be akin to the notion of "eternal generation" and is labeled the non-temporal version.

Regardless which version one accepts, they both uphold God as the cause of the universe's existence. In other words, the age of the universe in the temporal or non-temporal version is irrelevant to its cause. Chronology and causality are separate categories. The value of this distinction is seen in the ability to defuse the objection that the universe does not need a cause. In the non-temporal version, the universe would still need a cause, since what is generating the universe is different from how long it is being generated. In the temporal version, a first cause for the existence of the universe is equally necessary. Therefore, one cannot get away from a cause to the existence of the universe. With this in mind, I will argue primarily for the temporal version of the cosmological argument, although occasional reference will be made to both versions.

A clear and concise statement of the argument will be our point of departure. The following is taken, with some modification, from Craig, *Reasonable Faith*, p. 92. The basic tenets are:

1. Whatever begins to exist has an ultimate first cause.
2. The universe and all therein began to exist.
3. Therefore, the universe and all therein has an ultimate first cause.

Although this argument is formally valid, it leaves many complex questions unanswered that need to be addressed in order to make the argument credible. If either of the premises can be
discredited, then the argument fails in its effort to be a sound and reasonable defense for God's existence.

There are three underlying principles in the cosmological argument: contingency, necessity, and causation. First, contingency and necessity are not the same. It is logically possible that the universe is eternally caused (given some form of the non-temporal version). Nevertheless, the universe cannot exist necessarily, without a cause. Therefore, the universe is not necessary but contingent or dependent upon a prior cause.

While it is logically possible that no universe exists, or that the universe ceases to exist at some time in the future, it is not logically possible for a contingent/dependent universe to be self-existent or exist without a cause. Since the temporal version maintains that the universe has a first cause (chronological beginning), and the non-temporal version ultimately holds some notion of a first cause to the universe, it follows that, regardless of the age of the universe, it has a cause.

The first premise can now be looked at more closely. Implicit within this premise is the notion that it is impossible for anything with a beginning to come into existence from nothing. If it can be demonstrated that something in the universe with a beginning doesn't need a cause to explain its existence, then the argument fails. At this point the burden of proof shifts where one is challenged to illustrate just one instance where something in the universe with a beginning did not have a cause. The mathematical probability of this is equal to zero. Therefore, it is highly unlikely (Willard, Contemporary Perspectives on Religious Epistemology, p. 216).

The primary reason for this is because evidence has never shown something in the universe coming into existence without a cause. Whatever exists independently of a cause is self-existent, viz., that which exists in its own right, without a cause, necessarily has no beginning. Simply because one can imagine the possibility that something in the universe might come into existence without a cause, doesn't entail that it is a real possibility (all implications from the ontological argument aside for the moment). It is far more reasonable to imagine that the universe and everything therein was produced out of nothing, rather than by nothing.

The second premise states that the universe began to exist. The presumption here is that the universe is finite and not infinite. Some may argue that the universe is actually infinite in time and, therefore, did not begin to exist. The burden of proof here lies with demonstrating that an actual infinite series of events in time is possible in the real physical world - an actual infinite defined as "an aggregate of an infinite number of finite parts" or a beginningless series of events in time that exist in the universe (Craig, Reasonable Faith, p. 186).

If the universe contains the entire set of events that have occurred over all time, then for every event in the past, there has been an event before it. But, if the universe has existed forever (read "infinitely"), then it already contains all the events that have occurred in time, and all those events are completed. It would seem to follow then, that this present moment could never be arrived at, since it has already come to exist in the past. Likewise, at no point in the present could I find myself starting an activity, since every activity in the universe has already been completed in time. How, then, could I have completed what was never started? Clearly, it follows that an actual infinite series of finite events in time is an absurdity, and therefore the universe is not actually infinite but rather actually finite.
It could be argued that for there to be an actual infinite number of contingent causes is merely to beg the question of the ultimate cause. In other words, to explain the existence of a cause with another cause is to explain nothing in any ultimate sense. While one contingent cause may explain another, until the entire series of causes is accounted for, this objection does not adequately handle the temporal version of the cosmological argument. To borrow an example, if we ask where a certain star came from, call it S6, the answer might be an implosion from a previously existing star such as S5. If we then ask where S5 came from, our answer would be from a previously existing star, say S4, ad infinitum. But even if this entire series of stars were actually infinite in number with each star existing contingently and not necessarily (assuming stars go out of existence over time), then the entire set of actually infinite, contingently existing stars would still have no ultimate origin. Even a non-temporal version of the cosmological argument cannot avoid a first or primal cause to the existence of the universe.

If the universe is not actually infinite in time but finite, then it had a beginning. According to our first principle, whatever begins to exist has an ultimate first cause. And if this is true, then the universe did not pop into being from absolutely nothing. It is possible that other non-physical things could exist without a cause. A libertarian view of human freedom, defined as "absolute power to contrary," could be one candidate (Willard, Contemporary Perspectives on Religious Epistemology, p. 215). For human freedom to be genuinely free as it were, there can be no causes by any act outside of itself. Another possible definition of this kind of freedom would be "independent spontaneity." Despite all the problems attached to this notion of freedom, it is hardly a candidate for the cause of the universe and should not be considered a serious rival, except that God, as a genuinely free agent, created by divine fiat. Whether humans have this kind of freedom is arguable.

Other bases for substantiating the cosmological argument have been put forth. One is philosophical in nature. Given the physical nature of the universe, the real existence of time, and the principle of causality (every contingent effect, e.g., the heat of the sun, has at least one efficient condition, e.g., the atmosphere is cooler than the sun's heat, that gives rise to its existence), it is entirely reasonable to believe that every physical state has a necessary non-physical condition or cause that immediately precedes it in time and existence. In other words, "no physical state is ontically or temporally prior to itself" (Willard, Contemporary Perspectives on Religious Epistemology, p. 213). There is at least one non-physical state that does not derive its existence from anything else and is, therefore, the ultimate cause of every physical state.

This line of reasoning underscores the distinction between contingency and necessity. If the universe consists, though not entirely, of physical states, and those physical states do not ultimately derive their existence from other physical states, then the final explanation for the existence of all physical states cannot be another physical state. It follows, therefore, that some non-physical state is the source behind everything physical. Moreover, the necessary condition(s) for the existence of the universe is fully existent prior to the universe coming into being (Willard, Contemporary Perspectives on Religious Epistemology, p. 213). No more conditions are necessary, causally and ontologically necessary, at the point in which the physical universe comes into existence.

Consequently there is at least one fully realized, ontologically necessary Condition or First Cause of all subsequent causes and conditions. Therefore, the dependent nature of the physical universe is demonstrated, as well as the necessity of at least one non-physical entity that is
self-existent and responsible for the existence of the physical universe. Thus, an infinite causal regress of physical states is impossible.

Another basis for substantiating the cosmological argument comes from science. The second law of thermodynamics suggests that unless energy is constantly being pumped into a closed universe, then that universe will eventually run down and quit. Now if the universe has existed eternally, and there is a fixed amount of energy to sustain the universe, then it logically follows that the universe would already have come to a state of non-existence. If the universe has not wound down like an alarm clock, or run down like a battery, then there must be something or someone to explain the existence of the energy in the universe. A quote from Fred Hoyle is pertinent here and should provoke acute concern on behalf of the atheist:

If the universe were infinitely old, there would be no hydrogen left in it, since hydrogen is steadily converted to helium throughout the universe, and this conversion is a one-way process. But in fact the universe consists almost entirely of hydrogen. Thus the universe must have had a definite beginning (Weston, A Rulebook for Arguments, p. 50).

Of course, some might rejoin that the universe oscillates back and forth from all eternity and never reaches its threshold of destruction. The existence, however, of thermodynamic properties must still exist in an expanding and contracting model of the universe and cannot explain the beginning of a first oscillation or cycle (cf., Craig, Reasonable Faith, pp. 103-116 for further scientific support). Unless it were part of the original created order, it is impossible to explain the existence of this fixed amount of energy in the universe.

Criticisms of the Cosmological Argument
Since the cosmological argument begins with the experience of the universe, there have been not a few critics who have picked up on this a posteriori methodology, David Hume being among the foremost. He held that it is impossible to establish a necessary cause and effect relationship in a sequence of seemingly related events (Dialogues Concerning Natural Religion, Part IX). That is, the conclusion which the cosmological argument reaches depends upon this relationship of cause and effect. We may know that the sun rises, for example, after it sets, but not because it sets. Hence, causation is a human category projected upon the realm of experience and not logically required from it. To put forth the notion, therefore, that the universe had a first cause is a post hoc fallacy and can only be known by experience, not by logical necessity.

In fact, this so-called proof from causation is not altogether a posteriori. Hume asserted that the cosmological argument is really a priori in that it rests upon the bare fact that "anything exists which is not manifestly uncaused and self-explanatory" (Edwards, The Existence of God, p. 94). This "bare fact" is merely demonstrable from experience but is not logically necessary, except by a priori assertion. Put differently, matters of fact and matters of experience may not be one in the same. Also, Hume charged that only a finite cause need be inferred from finite effects. That is, if the universe (effect) is finite, then the necessary condition(s) for the existence of the universe (cause) need only be finite as well. It should be apparent that this is question-begging of the first order and does not get at why there is something rather than nothing.

Similarly, Kant (Critique of Pure Reason) argued that one cannot move from the effect in the realm of experience (phenomenal realm) to a cause in the realm of transcendent (noumenal
realm). The category of causality is merely in the mind as it is imposed upon our experience of the cosmos, but is not part of the cosmos-in-itself. Furthermore, necessity is a category applied to propositions, not persons. "The word 'necessary' . . . can only be applied significantly to propositions. And, in fact, only to such as are analytic - that is to say - such as it is self-contradictory to deny" (Russell, *Existence*, p. 169). According to Kant and many others after him, it is not self-contradictory to deny God's existence; therefore God does not necessarily exist.

It is not possible to engage each of these criticisms here. They are mentioned here to demonstrate the depth and breadth of the cosmological argument.

**Limitations and Value of the Cosmological Argument**

Although numerous criticisms have been leveled against the cosmological argument and most have been adequately addressed in other works (see especially *The Kalam Cosmological Argument*, Craig), there are limitations to its value and scope. Nevertheless if the universe began to exist, then it had a cause. This Cause, of necessity, must be eternal and uncaused. But is this all the cosmological argument can affirm? Is God merely the uncaused Cause as in Aristotle? The major monotheistic religions (Christianity, Judaism, and Islam) say much more than this. Yet the cosmological argument fails to help us decide between these religions. The fact that the universe had a cause will do little in helping one ascertain whether or not Islam is superior to Christianity, or that the Bible is historically reliable regarding Jesus of Nazareth.

Still, the cosmological argument cannot help determine if God is personal or impersonal, personality being a characteristic of God in the three monotheistic religions. That there is a creation that exists suggests there was a choice to make (to create or not to create) and impersonal forces do not "choose." The ability to relate to or communicate with creation would seem impossible if the uncaused Cause were impersonal. Broadening the cosmological argument to include these traits of the uncaused Cause creates too wide a gap and compromises the integrity and purity of the argument in se. Some Buddhist notion of sunyata (literally, "no-thing") could be in view as an impersonal impetus behind the existence of the universe. But this begs the question of how a "no-thing" (read "emptiness") can create something. At best the cosmological argument can uphold God as an inference from reason; a proposition and not a person as Kant intimated. The cosmological God is not a person to trust for answered prayer or the hope of a better existence after death.

The existentialist who finds (or rather defines) contentment in the moment will have no use for the cosmological argument about causes or conditions of the universe. The more probing questions of contingency and necessity will be thoroughly dissatisfying when moving beyond self. The nihilist who insists upon no ultimate meaning to life will find the cosmological argument a complete waste of time and tirelessly boring. Even if rationally convinced of God's existence, the cosmological argument would not provide meaningful meaning. Those who rely upon subjective, mystical experiences or some type of esoteric knowledge for understanding ultimate causes won't see much usefulness in the cosmological argument due to its rigorous rational inquiry. After all, God is not found in nature or reason, but in the opaque experiences of some transcendental state that exceeds cognitive faculties.

Quite honestly, the cosmological argument cannot establish much about the character of God. Assuming that existence is an attribute, this does not assert much. Nor is it claiming much about God to say he is a causally necessary being who himself is uncaused. Or is it? Presumably
he has power to create given creation ex nihilo (there are no prior substances out of which God created the universe). And perhaps there was some knowledge involved in knowing what to create (this not that). But perhaps the cosmological God knew just enough to create but did not know the outcome of his creation, given a strong libertarian view of human freedom. This model would make the future open not only to humans but to God. Problems with this are innumerable and the academic landscape has only just begun to wrestle with implications of "open theism."

The cosmological argument cannot inspire a desire to know more about him nor give sufficient reasons for encouraging others to do so. One might say, "Okay, so God is the creator...So what?" There are no ethical imperatives with the cosmological God, no indication of life after death, and no reason to suppose any transcendent meaning exists other than what human reason can fashion. Moreover, there is no standard for truth or error, right or wrong, good or evil. This kind of leverage cannot obtain from the cosmological argument alone.

While the monotheistic religions utilize a natural theology as a necessary condition for their respective beliefs, natural theology in se is not sufficient for those beliefs. One could very well establish the basic theistic beliefs of Islam or Judaism as well as Christianity from natural theology. Therefore, special or additional revelation beyond natural theology is necessary to make tenable a respective religious tradition. Such are some of the limitations of the cosmological argument.

What has been affirmed in this present work is, if every premise in the cosmological argument as stated here is reasonable, then the conclusion is reasonable. That is, if it is true that

1. Whatever begins to exist has an ultimate first cause.
2. The universe and all therein began to exist.

Then it follows that the universe had a cause. Given the existence of the physical universe, its contingent/dependent nature, it follows that a non-physical, self-existent Being is responsible for the universe's existence. While falling short of sufficiently describing what this Being is like as found in the major monotheistic religions, the cosmological argument is consonant with them. If one accepts the conclusion of the argument, then it would seem likely that further investigation is warranted.

The cosmological argument is an excellent means of entertaining related questions such as, "Do absolute values exist?" or "Is God personal or impersonal?" or "Has God chosen to communicate and if so, how?" A perennial concern is the relationship between science and religion. Once the existence of God is shown to be a reasonable belief, one can begin an entire new quest into the possibility of God and evolutionary theories.

Even more valuable the cosmological argument can help one discover the search for meaning in life. It seems that without the existence of God, life can have no ultimate purpose or meaning other than what humans can generate for the moment. In the spirit of Nietzsche, death simply provides more food for the worms! On the other hand, if God does exist, and if he has chosen to communicate the significance of his creative acts to humans, then life is potentially quite meaningful. To prefer meaninglessness, futility, and despair over meaningfulness, purpose, and hope is surely the less reasonable choice. The cosmological argument, then, is an initial starting point or means to an end whereby one can discover and
embrace life’s ultimate purpose and goal. After Pascal, the atheist has nothing to lose in the quest and possibly much to gain, if the cosmological argument obtains.