DOES GRATUITOUS EVIL EXIST? IF SO, DOES THIS DENY THE EXISTENCE OF AN OMNIPOTENT, OMNISCIENT, BENEVOLENT GOD?

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This writing will examine two articles and one book with opposing viewpoints on the problem of evil. The format will include for each article a description, an interpretation, a criticism, and an integration of the academic and the personal discussion of each.

In 1979, William L. Rowe published an article entitled “The Problem of Evil and Some Varieties of Atheism.”¹ Rowe offered an argument for atheism based upon human and animal suffering in the world.

Taking up the challenge of defending theism, Michael Peterson published a book in 1982 entitled Evil and the Christian God.² Peterson addressed the problem of evil and sharpened the understanding of evil by discussing gratuitous evil. In doing so, Peterson offered an argument for theism admitting evil’s existence and explaining why it is allowed by a God who exists.

In 1988, Rowe refined the argument introduced in 1979, by publishing an article entitled “The Evidential Argument from Evil: A Second Look”.³ In this article, Rowe focused upon the same claim to atheism but offered new, more focused reasoning and evidence based upon the existence of gratuitous evil.

Rowe, in the 1979 article, offers an evidential problem of evil that incorporates two premises and a conclusion regarding intense suffering, God’s omnipotence, and God’s non-existence. Rowe’s argument is worded as follows:⁴

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⁴ Rowe, 2.
1. There exist instances of intense suffering which an omnipotent, omniscient being could have prevented without thereby losing some greater good or permitting some evil equally bad or worse.
2. An omniscient, wholly good being would prevent the occurrence of any intense suffering it could, unless it could not do so without thereby losing some greater good or permitting some evil equally bad or worse.
3. There does not exist an omnipotent, omniscient, wholly good being.

Rowe’s argument is that the claim that God would prevent any intense suffering is inconsistent with the reality that intense suffering exists and surely God, if He existed, would have prevented it. Therefore, God must not exist at all.

The method Rowe is relying upon in his argument is evidential inductive reasoning. The statements in the premises are therefore claimed to be both rational and probable but not certain.

Rowe continues by describing these responses a theist might make to argue for theism. In doing this, Rowe utilizes the G.E. Moore shift to restate the two premises and reverse the conclusion to the theist’s position. Rowe’s restatement of the theists’ position is as follows.\(^5\)

There exists an omnipotent, omniscient, wholly good being. An omniscient, wholly good being would prevent the occurrence of any intense suffering it could, unless it could not do so without thereby losing some greater good or permitting some evil equally bad or worse. Therefore, it is not the case that there exist instances of intense suffering which an omnipotent, omniscient being could have prevented without thereby losing some greater good or permitting some evil equally bad or worse.

Michael Peterson, in his 1982 book, addresses the evidential problem of evil by rejecting the claims imbedded within Rowe’s two premises and thereby also rejecting Rowe’s conclusion that (probably) God does not exist. Peterson first presents three criticisms concerning Rowe’s assumptions as fallacious. Next, Peterson offers four

\(^5\) Ibid., 7.
criticisms of the atheist’s methods. Peterson then describes “meticulous providence” and proceeds to reject the concept outright. Finally, Peterson offers two propositions that bases his argument upon accepting the premise that God allows some gratuitous evil which then allows him to argue that God exists.  

“First, accepting the existence of some gratuitous evil is more consonant with our common experience than is the position which denies gratuitous evil a priori. Second, rejecting the principle of meticulous providence opens the way for a deeper and more profound apprehension of God than that widely accepted principle allows.”

Rowe, in his 1988 article, once again addresses the evidential problem of evil. In this article, Rowe clarifies the earlier argument by introducing two incidents of seemingly gratuitous evil. The first, entitled E1, regards a fawn burned to death in agony in a forest. This is a clear hypothetical case of natural evil. The second, entitled E2, regards a young girl, Sue, who was raped, beaten, and murdered. This represents an actual incident of a moral evil. The argument is postulated as follows:

“P. No good we know of justifies an omnipotent, omniscient, perfectly good being in permitting E1 and E2; therefore, Q. no good at all justifies an omnipotent, omniscient, perfectly good being in permitting E1 and E2; therefore, not-G: there is no omnipotent, omniscient, perfectly good being.”

Rowe then undertakes to explain Premise P “no good we know of justifies God in permitting E1 and E2.” This introduces the issue of reliability of the premises and the conclusion. Rowe argues that in Premise P, there is good reason to believe it is true. In Premise Q, Rowe argues that theists and atheists alike believe it to be true. Therefore, it is reliably true that in Conclusion non-G, there is good reason to believe it is true. The

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6 Peterson, 89.
7 Rowe, 263.
inductive argument for P is that it is difficult to believe there is any good we know of for God to allow intense gratuitous evil. The deductive argument is probably then there is no good reason at all.

Rowe next addresses various arguments with other authors which are outside the scope of this critical analysis between Rowe’s arguments and Peterson’s arguments. These are Wykstra’s parent-child analogy, Alston’s free-will theodicy, and Wykstra’s probability analysis.

An interpretation of Rowe’s 1979 article will help to determine important propositions, assumptions, and support for the author’s views leading to his conclusions.

Rowe believes the evidential problem of evil is the atheists’ strongest argument. He elaborates on gratuitous evil to make the argument stronger by plentitude. By assuming that too much quantity of evil, too much intensity of evil, and the suffering of innocent animals; he seeks to strengthen his argument. This frequency and intensity moves some evils to the gratuitous category.

Rowe alters his argument between human (moral evil) and animal (natural evil) suffering which tends to confuse the original argument. This results in a shifting from an evidential problem to a religious problem of evil which are separate issues. Rowe also argues for the concept “goods we know of.” This leaves out any goods we do not know of but nevertheless may exist and in due course justify God in allowing gratuitous evil. When Rowe says “apparent” this is the weakest of arguments in that it excludes what is not apparent yet still existent and true. Rowe argues that what we know makes it more likely that his argument is true.
An interpretation of Peterson’s book reveals his propositions, assumptions, and views leading to his conclusions.

Peterson proposes to state all these propositions which are evidence against the proposition that “(G) An omnipotent, omniscient, wholly good God exists”; as follows:

E1 Evil exists;
E2 Large amounts, extreme kinds, and perplexing distributions of evil exist;
E3 Gratuitous or pointless evil exists.8

This is prima facie evidence against the “God exists” proposition. Peterson notes that the atheists’ arguments are based upon additional underlying propositions that a theist may not accept as follows:9

1) God is an independent being;
2) God can perform any logically possible action, including the elimination of evil;
3) God knows everything, including how to eliminate evil;
4) God always seeks to promote good and eliminate evil;
5) Evil is not logically necessary.

Peterson formulates three criticisms against the atheist’s proposition. First, Peterson points out that adding propositions that a theist is not committed to is begging the question. Second, Peterson argues that the theist should refuse to fix a limit on what evils God might allow. Finally, Peterson states that the theist should refuse to accept the notion that God would not allow gratuitous evil to exist.

Peterson offers four criticisms of the atheist’s argument which undermine the strength of the latter argument. First, Peterson points out that relying upon

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8 Peterson, 66-67.
9 Ibid, 51.
probabilities in philosophy is not a good method to prove an hypothesis. It is better suited for mathematics, science, and business propositions. Second, Peterson indicates that one featured claim which is based upon evidence may be misinterpreted. Evidence is based upon observation which may be misleading, an insufficient number, biased, or non-random. Third, Peterson states that a conclusion is not confirmed by absolute certainty. The inductive observation method includes deductive reasoning to confirm the truth of a proposition based not upon absolute truth, but on apparent truth. Finally, Peterson claims that additional assumptions made by the atheist may be in error. If these assumptions are subject to probable truth, then the atheist has built a house of cards based upon unproven probable assumptions to rely upon as proof of the hypothesis.

Peterson describes the principle of meticulous providence expressed as follows:10

(MP) An omnipotent, omniscient, wholly good God would prevent or eliminate the existence of gratuitous or pointless evils.

This principle was accepted as truth by Aristotle, Aquinas, and Leibnitz. However, Peterson rejects this principle as unnecessary to the theist’s position. This puts Rowe on the defensive in his argument because there is now no argument on this premise in the propositions between theist and atheist.

Finally, Peterson offers two propositions which base his argument upon the premise that God allows some gratuitous evil which strengthens his conclusion that God exists.

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10 Ibid, 76.
First, Peterson argues that successive instances of gratuitous evils do not increase the argument’s likelihood.\textsuperscript{11}

“There is no such thing as a sum of suffering, for no one suffers it. When we have reached the maximum that a single person can suffer, we have, no doubt, reached something very horrible, but we have reached all the suffering there ever can be in the universe. The addition of a million fellow-sufferers adds no more pain.”

This tends to turn the argument to emotional and anecdotal evidence being offered in place of reasoning.

Second, Peterson reasons that one should accept the existence of some gratuitous evil because this is the common-sense experience of theist and atheist alike and which both can agree upon. This position allows Peterson to accept and offer up both the soul-making theodicy and the free-will defense by other authors (Hick and Plantinga). An interpretation of Rowe’s 1988 article shows that Rowe has clarified the argument of the evidential problem of evil offered in his 1979 article. Rowe believes that intense suffering is always intrinsically evil but that it may be intrinsically good, bad, or neutral. Scripture sheds light on this as follows:

“And ye have forgotten the exhortation which speaketh unto you as unto sons, my son, despise not thou the chastening of the Lord, nor faint when thou art rebuked of him;” Hebrews 12:5. “I know, O Lord, that thy judgments are right, and that thou in faithfulness hast afflicted me.” Psalms 119:75.

Rowe poses four questions which seek to frame the debate over the problem of evil. His questions are as follows:

1. Why is there evil at all?
2. Why are there the kinds and types of evils that there are?

3. Why is there the amount of evil that there is?
4. Why are there the particular evils that there are?

With these questions, Rowe then proceeds to propose and describe two extreme cases of evil: E1 the fawn and E2 Sue as follows:

1. There exists instances of intense suffering which an omniscient, omnipotent being could have prevented without thereby preventing the occurrence of any greater good.
2. An omnipotent, wholly good being would prevent the occurrence of any intense suffering it could unless it could not do so without thereby preventing the occurrence of some greater good.
3. There does not exist an omnipotent, wholly good being.

Rowe explains that we have good reason to believe that there are evils like E1 and E2 that could have been prevented without having to lose some greater good. Second, an omnipotent, benevolent being would prevent any evil without losing some greater good. Therefore, the theistic God does not exist since we have a good reason to believe Premises 1 and 2 then Conclusion 3 should also be believed.

Rowe next argues that it is difficult to believe that there is any good we know of that would justify God in permitting E1 and E2 to occur. Then probably there is no good at all that would justify God in permitting E1 and E2.

In critiquing Rowe’s 1979 article, the reader is struck by the sincerity and non-confrontational dialogue of Rowe. The overall presentation is somewhat disjointed. First, it is not crucial to the argument for the evidential problem of evil to include a portion (article III) discussing the three different types of atheism. The subject is interesting but not directly supportive of the critical portion of the article. Second, the illustration of evil is described as a fawn in the forest which is suffering. This example lacks clarity and is only an example of natural evil. The argument should have included
an example of moral evil. Third, there are only limited citations. Only Plantinga and Moore are cited directly while only Dostoyevsky and Chisholm are referred to indirectly.

Rowe uses a particular example of the fawn to justify and support his general claim which is not sufficient to make the argument. Second, Rowe proceeds to make an argument from a negative out of ignorance. This is the case because we don’t know all the possible goods that may justify gratuitous evil which are beyond our finite comprehension. Third, Rowe’s argument is dependent upon an all claim. He moves from “no goods we know of” to “know good at all” which is not merited and unproven. Finally, the theist does not need to employ the G.E. Moore shift to refute the existence of gratuitous evil as Rowe suggests. Peterson will argue differently.

In critiquing Peterson’s 1982 book, the reader is treated to an understandable and well written book. Peterson covers appropriate directly linked background, definition, and explanation of the problem of evil in six chapters which is in total pertinent to his theistic position.

First, Peterson rightly diminishes the Rowe argument of the amount, type, and distribution of gratuitous evil. However, he does not adequately address the particular example of the fawn by disputing or explaining Rowe’s example. Second, Peterson argues for rejecting the principle of meticulous providence. All he is doing is expounding the free will defense to cover gratuitous evil. Therefore, he is not explaining this special circumstance of evil which is pointless and without purpose which Rowe offered. This appears to be an instance of begging the question. Third, if Peterson wants to use the free will defense, then he should apply it to an example of moral evil. Rowe offered an example of natural evil for which the human free will defense does not apply.
Fourth, Peterson does not provide a definition or examples of what constitutes gratuitous evil. Without this, his explanations are vague when arguing against meticulous providence when faced with gratuitous evil. Fifth, Peterson accepts the factual premise offered by Rowe that gratuitous evil exists because it is evident in one’s experiences. However, Peterson does not provide an argument for “apparent” gratuitous evil and “seemingly” no goods are produced that we know of, premises of Rowe’s argument so that reasons known only by God are suggested.

In critiquing Rowe’s 1988 article, it is obvious that Rowe has succinctly clarified his argument regarding the evidential problem of evil by providing two examples E1 fawn and E2 Sue which graphically “tell the story” of gratuitous evil. Also, the two examples offered are of natural evil E’ fawn and human moral evil E2 Sue.

First, Rowe bases his argument on the non-existence of God upon the likely probability of “no good we know of for an omnipotent, benevolent God to permit E1 and E2” being true. There is no factual agreement that this is true. Also, the application of probability to prove a philosophical argument is dubious. Second, Rowe’s argument is based upon partial evidence whereas it should be based upon total evidence. In the world of possible goods, we don’t know of are those that human beings have not yet discovered and those which God has not yet revealed.

Nearly everyone agrees that evil exists in the world. However, unified agreement has not been achieved on the origin, nature, and consequences of evil. The most accepted theistic view of the origin of evil derives from the biblical account of pride, rebellion, and disobedience resulting in the Fall of the rebellious angels, human creation, and the corruption of the Earth. The cause of the Fall is the freedom of choice exercised by
rebellious angelic beings and a disobedient pair of first persons created as human beings. The effect was separation from God, pain, suffering, and death.

An alternate atheistic view of the origin of evil leaves out any concept of divinity and encompasses humanity and nature. Humanity is capable of exercising free will in thoughts and action. Based upon sensory perceptions, survival instincts, and environmental conditioning; the human creature will choose to seek pleasure and preservation while avoiding pain and suffering. The effect will be to promote self-interest based upon the human creatures’ abilities of reason, will, and emotion. Robert Louis Stevenson describes this in The Strange Case of Dr. Jekyll and Mr. Hyde: \(^\text{12}\)

“\text{If each, I told myself, could be housed in separate identities, life would be relieved of all that was unbearable; the unjust might go his way, delivered from the aspirations and remorse of his more upright twin; and the just could walk steadfastly and securely on his upward path, doing the good things in which he found his pleasure, and no longer exposed to disgrace and penitence by the hands of this extraneous evil. It was the curse of mankind that these incongruous faggots were thus bound together—that in the agonized womb of consciousness, these polar twins should be continuously struggling. How, then, were they dissociated?}”

The nature of evil is understood first by the kinds of evil that exist. These include moral evil and natural evil. Moral evil is the wrongful choices and actions of a moral being in utilizing that person’s freedom. Natural evil is the occurrence of harmful events in nature which cause pain and misery to sensory moral beings.

There are classes or categories to which all examples and experiences of evil may be grouped. Gratuitous evil may be found in both moral evil and natural evil. Gratuitous evil is a wrongful action or event which appears not to have a purpose which inflicts

severe pain and harm upon a moral being or an animal. Gratuitous evil is often discussed in terms of intensity, quantity, and distribution. Each of these cases attempt to provide further clarification regarding evil experiences which may then be classified as gratuitous.

The intensity of a gratuitous evil is typically measured by comparison to some standard of good. This comparison begs the question regarding the origin of the standard of good. For the theist, the standard of good is based on moral precepts in the Bible. For the atheist, the standard of good is based upon principles derived from naturalism and humanism.

“A belief that the universe is run by totally naturalistic processes so that there is no ultimate purpose to life and no future purposes for the various experiences we have each day; everything happens as a result of the coincidental, accidental co-location of atoms.”  

The quantity of gratuitous evil is an attempt to measure the number and frequency of events and activities as too many. This measure is debatable. First, there is no agreeable guideline to place a limit on the number of evils God could allow in a theistic worldview. Second, there may be reasons for God to allow more or fewer evils in order to accomplish some purpose.

The distribution of gratuitous evil implies that bad things happen to good people. There is a sense of justification in a person’s mind when evil happens to an apparently bad person. However, when evil happens to a seemingly innocent good person, most persons naturally question the fairness of the evil calamity upon that person. This state of mind is judgmental at its basic level. Other persons cannot actually know the person’s

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innocence nor whether the person is “good” according to some standard of goodness. Is the standard of goodness the Bible or is it based upon ethics derived over 2500 years of philosophical development within Western civilization? These two sets of standards for defining goodness and evil are very different. Scripture declares evils’ existence:

“There was a man in the land of Uz, whose name was Job; and that man was perfect and upright, and one that feared God, and shunned evil.” Job 1:1. And the children of Israel did evil ion the sight of the Lord, and served Balaam.” Judges 2:11.

A final point about gratuitous evil should be made. Gratuitous evil is intrinsic. It is in fact evil. Further, it is the opposite of good. Examples of intrinsic evils are: pain, misery, bad intentions, vice, evil character, and hatred. From a theistic worldview, intrinsic evil is anything which is contrary to God’s purpose to glorify Himself and to have a personal relationship with human creation. From an atheistic worldview, intrinsic evil is anything that causes pain and suffering to a sensory being.

Rowe includes gratuitous evil in his premise accepting that it exists. Peterson argues to accept the existence of gratuitous evil. There is no argument between these authors on the question: Does gratuitous evil exist?

Before moving on to the second question, a few thoughts are offered by the writer. First, it must be understood that “gratuitous evil” as a concept is not definable by all persons alike. Second, “gratuitous evil” must be described based upon either motive or consequences. Third, the description of “intense suffering” which is part of the meaning of gratuitous evil is relative to the individual and the circumstances. Fourth, the framework of belief and understanding biases each person’s understanding of “gratuitous
evil”. Finally, the concept of “without losing some greater good” introduces another element to the premise which is relative and subjective to different persons.

The writer’s position is based upon agreement that there exists intense suffering some of which has no moral cause that we know of or that we can understand. The Biblical basis for this personal interpretation is based upon the following:

“And God saw the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually.” Genesis 6:5. “That be far from thee to do after this manner, to slay the righteous with the wicked: and that the righteous should be as the wicked, that be far from thee. Shall not the Judge of all the earth do right?” Genesis 18:25. “In all this Job sinned not, nor charged God with folly.” Job 1:22.

The practical basis of the writer’s position is based upon history, experience, and common sense. First, the question of evil and its gratuitousness (unexplainable cause and nature, pointless) has been around for at least 2500 years for discussion and as yet has not been resolved to everyone’s satisfaction. Second, experience cautions not to accept a limited, finite worldview based only on limited understanding of this world and incomplete knowledge about other worlds and afterworlds.14

“And what completes our incapability of knowing things is the fact that they are simple and that we are composed of two opposite natures, different in kind, soul, and body. For it is impossible that our rational part should be other than spiritual; and if any one maintain that we are simply corporeal, this would far more exclude us from the knowledge of things, there being nothing so inconceivable as to say that matter knows itself. It is impossible to imagine how it should know itself.”

Finally, common sense advises that “gratuitous evil” exists because “I know it when I see it.”

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Since the assumption is now stated that gratuitous evil exists, the question then becomes does this deny the existence of an omnipotent, omniscient, benevolent God? Obviously, the theist would claim that God with these capabilities does exist whereas the atheist would assert just the opposite. For at least 4500 years, civilizations have claimed the existence of some type of god. This is a characteristic of all civilizations but not of all doctrines (Marxism, Darwinism).

For the theist, the Bible is the source of belief in God. In Genesis 1:1, we read “In the beginning God created the heaven and the earth.” In Hosea 11:9, it states “…I am God and not man…” His characteristics are revealed in: 1) I John 4:8 “He that loveth not knoweth not God; for God is love” (benevolence), 2) Psalm 139:23 “Search me, O God, and know my heart; try me and know my thoughts;” (omniscience), 3) Proverbs 15:3 “The eyes of the Lord are in every place, beholding the evil and the good” (omnipresence), and 4) Romans 1:20 “For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead, so that they are without excuse” (omnipotence).

Scripture then provides testimony to God’s existence in Romans as follows:

1) In the creation of nature—Romans 1:19-20
2) In the conscience of morals—Romans 2:15
3) In the giving of the Law—Romans 4:14-15

The Christian era authors offer a range of apologists who defend the existence of God with Augustine, Aquinas, Anselm, and Abelard before the modern Christian period.

Aquinas (1225-1274 A.D.) links Aristotle’s philosophy with Christian doctrine thereby synthesizing the two. Aquinas provides three key reasons in his theology which
are still central to the Roman Catholic church today. These arguments are causal and teleological.

First, Aquinas offers the experience based argument of motion stating that everything moves and is set in motion by a mover. This occurs in a series of motions with a series of movers ultimately ending in a prime mover. Aquinas says “So there must be a first mover, moved by no other; and this everyone understands to be God.”\(^ {15}\)

Second, Aquinas offers a second experience-based argument of efficient cause where he explains that every action has a cause and no action is the cause of itself. Aquinas explains “There is no case known (neither is it indeed, possible) in which a thing is found to be the efficient cause of itself; for so it would be prior to itself, which is impossible.”\(^ {16}\)

Third, Aquinas offers an argument of design whereby he postulates that nature operates with a set of purposes, goals, plans, and ends. Therefore, he concludes, there must be an intelligent designer.\(^ {17}\)

Finally, Aquinas sums up by stating how truth is known. His response is both 1) through divine revelation and faith, and 2) through nature by the experience and reason of human beings

For the atheist, the Bible is not a source of evidence that can be agreed to as truth and proof of God’s existence. Therefore, one needs to turn to some who deny the existence of God to examine their arguments. To begin then, David Hume (1711-1776)


\(^{16}\) Ibid., 101.

\(^{17}\) Ibid., 101-102.
offers an Enlightenment era argument denying the existence of God. In his work *Dialogues Concerning Natural Religion*, Hume uses the dialogue method between characters (Cleanthes, Philo, and Demea). Hume uses Philo to show distrust to theistic belief, disbelief that finite effect proves an infinite cause, and conjectures may prove a consistency but do not lay foundation to an influence.

Hume then asks the questions posed by Epicurus as follows:

“Is he willing to prevent evil, but not able: Then he is impotent. Is he able, but not willing? Then he is malevolent. Is he both able and willing? Whence then is evil?”

Hume then poses four circumstances of natural evil which are offered to deny the existence of God. These are as follows:

1. Animals suffer pain in survival—God could have acted instead to diminish pleasure.
2. The world is conducted by natural laws. God could have intervened to prohibit any disaster from occurring.
3. Abilities and defenses are distributed unequally and in a limited way. God could have dispensed more abilities and defenses to all creatures.
4. Nature is imperfect and inaccurate. God could control the forces of nature to calm in lieu of violence.

Neil de Grasse Tyson in his book, *Death by Black Hole*, finds no basis of compatibility between science and religion. He says, “The claims of science rely upon experimental verification, while the claims of religions rely on faith. These are irreconcilable approaches to knowing, which ensures an eternity of debate wherever and

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19 Ibid., 69-73.
whenever the two camps meet.”\textsuperscript{20} And then Tyson denies the god of “intelligent design” as follows:

“There may be a limit to what the human mind can figure out about our universe. But how presumptuous it would be for me to claim that if I can’t solve a problem, neither can any other person who has ever lived or who will ever be born. Science is a philosophy of discovery. Intelligent design is a philosophy of ignorance.”\textsuperscript{21}

This is the exact opposite of Aquinas’ position.

One may conclude that gratuitous evil exists as long as it is admitted that the reasons for this existence are knowable in part only. As Paul said “For now we see in a mirror darkly; but then face to face; now I know in part, but then shall I know even as also I am known” I Corinthians 13:12.

The conclusion of the writer is based upon a pre-existing experiential commitment to Christianity. In addition, the logic and reason of a theistic worldview aligns with the discoveries of science. As G.K. Chesterton said “The Christian ideal has not been tried and found wanting. It has been found difficult; and left untried.”\textsuperscript{22} Albert Einstein has said regarding science and religion the following:

“Now, even though the realms of religion and science themselves are clearly marked off from each other, nevertheless there exist between the two strong reciprocal relationships and dependencies. Though religion may be that which determines the goal, it has, nevertheless, learned from science in the broadest sense, what means will contribute to attainment of the goals it has set up. But science can only be created by those who are thoroughly imbued with the aspiration towards truth and understanding. This source of feeling, however, springs from the sphere of religion. To this there also belongs the faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason. I cannot conceive of a genuine scientist without that

\textsuperscript{20} Neil de Grasse Tyson, Death by Black Hole (New York: W.W. Norton, 2007), 347.
\textsuperscript{21} Ibid., 361.
\textsuperscript{22} G.K. Chesterton, Orthodoxy (New York: Doubleday, 2001), xx.
profound faith. The situation may be expressed by an image: Science without religion is lame, religion with science is blind.”

Finally, the Bible warns of those who would deny the existence of God that “The fool hath said in his heart, there is no God.” Psalm 14:1a.

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Bibliography


