# Science vs. Religion: The Debate Ends

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Abstract: Science and religion seem to have been at odds with each other throughout history. This has affected the course of humanity and how society has prejudice towards either science or religion. Atheist scientists believe in what they know because they believe in reason and think that theists are unreasonable. The paper brings the problems facing humanity today between science, religion, and secularism within societies. The followers of each could be fanatics of their own group. The paper tries to reconcile the debate between atheists and theists, under the microscope of science. This study makes an analogy of G-d and gravity. It shows that the power of reason used by scientists to deduce gravity is the exact same reasoning that theists use to believe in G-d. The study goes beyond philosophical arguments and travels deep into the core principles of the human intellect of scientists and theologians to understand what they believe. It unravels the truth behind the reasoning of why different humans believe in what appears to be completely different things. The study uses elements of modern science and its cosmological worldview, such as singularity, spacetime, black holes, and quantum physics. It shows parallelism of modern scientific theories with various world Scriptures, such as Hindu and Islamic texts. This study does not argue the truth of any specific religion, but rather argues the existence of G-d from a broader perspective, using the exact same principles scientists use to formulate their worldview of the universe. This study shows the rationality and irrationality in the argumentative battle between science and religion. It attempts to end the debate and dispute between science and religion by understanding the truths behind them. It concludes that anyone who believes that the other is wrong is irrational, and that in reality science and religion complement one another. A theologian must also be a scientist, and a scientist must also be a theologian.

Keywords: Astrophysics, Atheism, Black Holes, Cosmology, Divinity, Existence of God, Gravity, Physics, Quantum Physics, Religion, Secular, Singularity, Spacetime, Spirituality, Theism, Universe, Worldview

# Introduction

**CIENCE AND RELIGION** seem to have traveled on different paths. Many scientists in the modern age find themselves at odds with religion and to some extent, at odds with G-d.

Freud (1927) diagnosed religion as neurosis, illusion, poison, intoxicant, and childishness to be overcome. Some scientists believe that it is self-evident that religion is a sort of mind control with psychopathological premises (La Barre 1972). It is described that no informed rational person would choose to join a religious group, and those who do must have been coerced, hypnotized, or otherwise without reason.

Many physicists were religious, such as Einstein. However, as physics explains the physical world, it sometimes finds itself at a roadblock, when it comes to religion, which explains the spiritual world. Science has inspired atheists to reason with their senses.

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The European age of enlightenment has ushered an era, where science started to advance. In the atomic era, the role of science started to rise high, while religion seems to have declined. Under the microscope of science, religion has been found to be superfluous with the irrationality of a primitive mind (Drees 1994).

Galileo stated that natural sciences and Scriptures are subject to re-interpretation, dependent on which interpretation is with certitude and which is based on theoretical conjecture (Drees 1994). He also argued neutrality of Scriptures on matters of cosmology and vice-versa. Such an argument is based on the understanding that sciences describe the physical world, while religion describes the spiritual, and therefore, are not providing competing world views.

This study attempts to end the debate between atheist scientists and theists. It tries to show it in very simple terms that even a scientist would understand.

This study shows how the Divine uses gravity as an analogy of Itself. Scientists who believe in gravity believe in it for the very same reasons why theists believe in a Divine. The study does not involve in arguments with truth in any specific religion, but merely argues the rationality for the existence of a Divine does not at all differ from the rationality for the existence of gravity.

### **Secular Society**

Many societies had an adopted religion in history (Finer 1999). Historically, an adopted religion allowed uniformity within the citizens of the society. Some societies still have an adopted religion to the present day. However, with the coming of the Age of Enlightenment in Europe, many governments started to become secular, while science and philosophy flourished, though they were once suppressed in parts of Europe.

Suppression of science is not part of any of the world religious Scriptures. In all the major religious Scriptures, science is never condemned. However, it may be true that some of the followers used the umbrella of religion against science. Nonetheless, a religion cannot be judged on how its followers follow its teachings. Most of the time, followers of many religions corrupt their own understanding of their religion for their own selfish benefits, while in reality, all religions call for selflessness. Some religious Scriptures even encourage its followers to learn sciences (Prakash 1999). After all, religions claim that the physical world manifests what is hidden, so that people may ponder and understand the truth [Romans 1:19 -20].

With the age of globalization, having a uniform society has become difficult. People from different social backgrounds, cultures, and religions have come together and taken advantage of opportunities provided to them in this world. Reconciling between their different backgrounds required many governments to adopt secularism to remain neutral in matters of faith (Conkle 2000). The rise of secularism initiated in countries that were pre-dominantly Christian, for the most part [Luke 6:37]. Theologically, Christian Scriptures require that people not to judge the other, implying neutrality. Hence, if a government adopts neutrality in matters of faith, it is not being anything, but Christian.

"Therefore judge nothing before the appointed time; wait till the Lord comes. He will bring to light what is hidden in darkness and will expose the motives of people's hearts. At that time each will receive his praise from G-d." [1 Corinthians 4:5] "256. Let there be no compulsion in religion: Truth stands out clear from error: whoever rejects evil and believes in Allah has grasped the most trusworthy hand-hold that never breaks. And Allah hears and knows all things.

257. Allah is the Protector of those who have faith: from the depths of darkness He will lead them forth into light. Of those who reject faith their patrons are the evil ones: from light they will lead them forth into the depths of darkness. They will be companions of the fire, to dwell therein (forever)." [Qur'an 2:256 – 257]

In the modern age, secularism is adopted by governments not necessarily to be against a religion or faith, but simply to reconcile multiple faiths within the same society, while allowing the freedom for people to practice their faith. Nonetheless, some governments have suppressed religion adopting science and productivity as its own religion (Yang 2004). Secularism is not meant to suppress a religion. Secularism is neither meant to deface religious symbols nor eradicate the freedom of people to practice their religions. However, some governments have adopted secularism as a religion of its own, along with its own fanatical interpretation of secularism, for instead of it being considered as freedom of religion, it has become understood as freedom from religion (Sapir and Statman 2005).

In most secular societies, religion is removed from public schools' curricula. In the age of globalization, such is done because people have different religious backgrounds. If theology is taught, then which theology needs to be taught? However, as in this paper, the argument is not the truth of any specific religion, but the argument is in the existence of a Divine. In many public schools today, the topic of the existence of a Divine is usually eliminated, because it is considered unscientific. While gravity and the theories of the beginning of the universe are discussed as science, the existence of a Divinity is usually a taboo.

Is the Divinity given its full right to be considered unscientific, or could it be a valid theory as any other, scientifically? On the other hand, is it also equally possible that both theologians and scientists are delusional? The debate below begins and ends.

#### Gravity

In physics, gravity is one of the four fundamental interactive forces, which are the ways that the simplest particles in the universe interact with each other. An interaction is fundamental when it cannot be described in terms of other interactions.

Gravity is responsible for keeping the Earth and other planets in their orbits. Gravity is responsible for making the whole universe in motion. It has a greater role in large celestial objects and a lower role in atoms and sub-atomic particles. Nevertheless, it is always there giving an inert push without physically touching objects.

Even before the general theory of relativity has arisen, Hill (1895) has distinguished how the gravitational field affects the circulation of the blood. As early as the 19<sup>th</sup> century, scientists were curious to understand how the mysterious force of gravity is affecting the physiology of the human being. This is mainly done to understand how to stop hemorrhaging and how to deal with wounds during an emergency or surgery. Yet, if Earth's gravitational force can affect the human physiology, how would the cosmic gravitation fields affect our lives?

According to Newtonian physics, gravitation occurs between objects with a certain mass. Although Newton provided a good approximation of gravity, it is flawed, especially when calculating gravitational fields in the cosmos. Since light has been discovered to be attracted by gravity, Newtonian physics was found to be lacking. Hence, other theories of gravity have developed since then (Copeland et al. 2006, Padmanabhan 2006).

In modern science, gravitation is described by the general theory of relativity, as a consequence of the curvature of spacetime, which governs the movement of objects with inertia (Will 2004). A modified gravity model has been developed, but that would only be a version with many updates in the future, as scientists attempt to unlock the mysteries of the Cosmos. Today's challenge is detecting the difference between dark energy and modified gravity (Lue et al. 2004). Gravity has always been and continues to be a mysterious concept, in which the whole universe is founded upon.

According to the spacetime continuum, Einstein implied that the more matter in a region, the more the curvature of the spacetime and therefore, dragging more matter into it. Einstein was alluding to black holes in the cosmos (Bassett and Edney 2002), though it was discovered later. The closer the objects are to each other, the greater the force of gravity between them, as the spacetime curvature increases.

In general, gravity is a force of attraction between objects in the universe. This attraction causes the whole universe to be in continuous motion. Gravity is described as an all-pervading force due to the curvature of spacetime.

All objects have the same potential in curving spacetime, but to different degrees, dependent on how much matter exists in them. The reason behind this is that all objects are made of the same material essence, such as electrons, which itself is a mystery acting as a particle and a wave. They are all made up of the same basic materials, and therefore, have the same potential.

No one has ever seen gravity, but it is known that something of that nature exists, because it can be seen how it manifests itself. The whole universe is governed by the law of gravity, although it is not yet known what exactly the law of gravity truly is. Scientists make many laws and flaws about gravity, and it continues to be enshrouded with mystery. Although from a local perspective, gravity may be approximated, but it is highly misunderstood when it comes to the vastness of the cosmos.

Sometimes gravity is defied, such that people may explore the world beyond. However, no matter where humanity travels in its attempt to defy gravity, it continues to be attracted by that force whether on Earth or beyond it. For that reason, humanity has learnt not to struggle against gravity, but to work with it. Humanity has been able to send exploratory satellites in their orbits in this solar system by trying to understand the nature of gravity and working with it, not against it.

#### The Divine Analogy

The Divine has provided gravity as an analogy of Itself. Just like gravity, no one has ever seen the Divine, but how the Divine manifests Itself can be sensed.

"Eye cannot see Him, nor words reveal Him; by the senses, austerity, or works He is not known. When the mind is cleansed by the grace of wisdom, He is seen by contemplation; the One without parts." [Mundaka Upanishad 3.1.8]

"But, you are not able to see Me with your physical eye; therefore, I give you the divine eye to see My majestic power and glory." [Bhagavad Gita 11.08]

"No one has ever seen G-d, but the Only Begotten Son, who is at the Father's side, has made him known." [John 1:18]

As gravity is responsible for the universe to be in motion (Billyard and Sajko 2001), so is the Divine.

As gravity is described as a force of attraction, the Divine is also described as a force of attraction. The Divine attempts to attract the whole universe unto Itself. Thus, human souls gravitate towards the Divine.

"27. "O (you) soul, in (complete) rest and satisfaction!

28. "Come back to your Lord, - well pleased (yourself), and well-pleasing unto Him!

29. "Enter then, in My Abode!

30. "and enter My Heaven!" [Qur'an 89:27 – 30]

As in gravity, the closer a soul is to the Divine, the greater the attraction between them than the souls who have forsaken the Divine. In gravity, the spacetime continuum makes it as if the pulling force between closer objects is greater. If this is calculated with instruments, such as a balance scale, the acceleration between the two objects increase and therefore, it would appear as if the weight of the object is greater. This is not because of a greater mass, but simply due to the apparent rate of acceleration due to gravity. The same analogy is that of the Divine. The closer a soul is to the Divine, the heavier its weight, not because it has suddenly become more massive, but because of the apparent rate of acceleration as they are attracted towards one another.

"8. The balance that day will be Truth: those whose scale will be heavy, will prosper: 9. Those whose scale will be light, they are those who lost their souls, for that they wrongfully treated Our signs." [Qur'an 7:8 - 9]

Sometimes, souls defy the Divine in an attempt to explore what is beyond, but no matter where it goes, it finds itself always trapped by the law of attraction with the Divine, just like gravity.

"O you assembly of jinns and people! If it be that you can pass beyond the zones of the heavens and the earth, then pass! not without authority shall you be able to pass!" [Qur'an 55:33]

As a smaller object is made of the same essence of the greater object, such as sub-atomic particles, so are people also made of the same essence as the Divine. As gravity is described as an all-pervading force, so is the Divine.

"Salutation to You before and behind, salutation to You on every side, O All! You, infinite in power and infinite in prowess, pervades all; wherefore You are All." [Bhagavad Gita 11.40]

"To Allah belong the east and the west: Wherever you turn, there is the presence of Allah. For Allah is all-Pervading, all-Knowing." [Qur'an 2:115]

At singularity, the gravitational field becomes mathematically infinite, and therefore independent of spacetime. In the same analogy, those who understand the Divine, understand Its singular infinite nature.

Modern physics describe gravity as a consequence of the curvature of spacetime dimensions and at singularity the coordinates disappear (Horowitz and Steif 1990). Similarly, the Divine is singular, transcendental, and beyond the coordinates of space and time. At the point of singularity, gravitation becomes infinite, and that space and time become meaningless and non-existing. Similarly, the Divine is singular, the One and Only, and therefore Infinite.

"OM. Infinite is That Brahman, infinite in this manifested universe. From the Infinite Brahman proceeds the infinite. After the realization of the Great Identity or after the cosmic dissolution, when the infinity of the infinite universe merges in the Infinite Brahman, there remains the Infinite Brahman alone." [Brihadaranyaka Upanishad 5.1.1]

As scientists attempt to formulate the law of gravity to try to explain its mysteries, theologians attempt to formulate the Divine through processes of rituals to try to explain the Divine and the path of human souls to attain the Divine.

The analogy between gravity and the Divine are strikingly similar in many respects, as it shatters the illusions of how the human mind and intellect perceive things.

# Science vs. Religion

Scientists have been described to be rational. Rationality of scientists is sometimes considered self-righteousness. However, when the essence of the human mentality and psychopathology is looked at under the scientific microscope, it is found that scientists are not any more rational than those who believe in G-d.

A comparison is done to see the similarities or differences in the human intellect that allows scientists to deduce in the existence of gravity and that allows theists to deduce in the existence of a Divine. This comparison is summarized in *Table 1*.

#### Table 1

	Scientists belief of gravity	Theists belief of the Divine
1	Never seen	Never seen
2	Can be sensed on how the force manifests itself	Can be sensed on how the Divine manifests Itself
3	Describes the interaction of all objects in the cosmos	Describes the interaction of all objects in the cosmos
4	All-pervading in the universe	All-pervading in the universe
5	Attracts objects together	Attracts the cosmos, souls, and spirits to it
6	Fundamental force of the universe	Fundamental force of the universe
7	At singularity, it is infinite and beyond space and time.	Is Single, Infinite, and beyond space and time
8	Inherent in every object	Inherent in every object
9	Scientific theories may be flawed, because of misunderstanding (not because it does not exist)	Theological theories may be flawed, be- cause of misunderstanding (not because It does not exist)
10	Equations are formulated to approximate an understanding of how it interacts in the universe	Rituals are formulated to approximate an understanding of how It interacts in the universe
11	To build, to prosper, to explore, and to discover is not to work against it, but to work with it	To build, to prosper, to explore, and to discover is not to work against It, but to work with It
12	Responsible for motion in the universe	Responsible for motion in the universe

Looking at this comparison is utterly shocking. If scientists are rational people and their deductions are based on experimental evidence, but still use the exact same reasoning to believe in gravity, then what makes them more superior than theists? Either both of them are rational or both of them are irrational. Scientists know that there is something out there (and in here) that remains a mystery, in which the foundation of the whole universe is built upon. Theists know that there is something out there (and in here) that remains a mystery, in which the foundation of the seeking the One and very same Ultimate Goal; they are both seeking to unlock the very same mystery.

Who is rational and who is irrational? It seems scientists are even a little more irrational. They do not even have the intellect to understand that the reason for what they believe in and the reason for what theists believe in are built upon the exact same principles. Any scientist who cannot intellectually deduce this cannot be logical. Anyone who is illogical cannot claim to be a person of reason and science. Therefore, they are not really scientists, and live in a world of fantasy and delusions, the exact same world that they claim their theologian peers live in.

"19. He who free from delusion thus knows Me, the Highest Spirit, he knowing all, worships Me with all his heart, O descendant of Bharata.

20. Thus, O sinless one, has this most profound teaching been imparted by Me. Knowing this one attains the highest intelligence and will have accomplished all one 's duties, O descendant of Bharata." [Bhagavad Gita 2.19 – 20]

Scientists cannot be scientists, if they are not also theologians. Theologians cannot be theologians, if they are not also scientists. The only true scientists are those who understand that science and religion was never meant to go against each other, but to complement one another. Each is attesting and testifying for the other, and only irrational people are blind from seeing reality as it truly is. Lift up the veils and contemplate upon the *event horizon*, or any *absolute*, *apparent*, or other *horizons* of the cosmos, if that be your mantra.

"We will show them Our Signs in the (furthest) horizons, and in their own souls, until it becomes manifest to them that this is the Truth. Is it not enough that your Lord does witness all things?" [Qur'an 41:53]

# References

- Bassett, B., and Edney, R. (2002) *Introducing Relativity*, Appignanesi, R. (ed.), Cambridge: Icon Books.
- Billyard, A. P. and Sajko, W. N. (2001) "Induced Matter and Particle Motion in Non-Compact Kaluza-Klein Gravity." *General Relativity and Gravitation*, 33:1929 – 1952. gr-gc/0105074.
- Copeland, E. J., Sami, M., Tsujikawa, S. (2006) "Dynamics of dark energy." *International Journal of Modern Physics*, D 15, pp. 1753 – 1936.
- Conkle, D. O. (2000) "The Path of American Religious Liberty: From the Original Theology to Formal Neutrality and an Uncertain Future." *Indiana Law Journal*, vol. 75, no. 1.
- Drees, W. B. (1994) "Problems in debates about physics and religion." in *Physics and our view of the world*, Jan Hilgevoord (ed.), Cambridge: Cambridge University Press, pp. 188 225.
- Finer, S. E. (1999) *The History of Government: The Intermediate Ages*, Oxford: Oxford University Press.
- Hill, Leonard. (1895) "The Influence of the Force of Gravity on the Circulation of the Blood." *Journal of Physiology*, vol. 18, no. 1 2, pp. 15 53.
- Horowitz, G. T. and Steif A. R. (1990) "Spacetime Singularities in String Theory." *Physical Review Letters*, vol. 64, no. 3, p. 260 263.
- La Barre, W. (1972) The Ghost Dance. NY: Dell, p. 19.
- Lue, A., Scoccimarro, R., Starkman, G. (2004) "Differentiating between Modified Gravity and Dark Energy." *Physics Review*. [arXiv:astro-ph/0307034v2]
- Padmanabhan, T. (2006) "Dark Energy: Mystery of the Millenium." *American Institute of Physics Conference Proceedings*, pp. 179 196.
- Prakash, G. (1999) *Another reason: Science and the Imagination of Modern India*. Princeton: Princeton University Press.
- Sapir, G. and Statman, D. (2005) "Why Freedom of Religion Does not Include Freedom from Religion." *Law and Philosophy*, vol. 24, p. 467 – 508.
- Sigmund, F. (1927) The Future of an Illusion [1961]. Garden City, NY: Doubleday, p. 88.
- Will, C. M. (2004) "The confrontation between general relativity and experiment." *Pramana Journal of Physics*, vol. 63, no. 4, pp. 731 740.

Yang, F. (2004) "Between Secularist Ideology and Desecularizing Reality: The Birth and Growth of Religious Research in Communist China." *Sociology of Religion*, vol. 65, no. 2, pp. 101 – 119.

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Abdulla Galadari has a PhD in Civil Engineering with two Master degrees in engineering and two Bachelor degrees in Civil Engineering and Applied Mathematics, with minors in Astrophysics, Pure Math, and Computer Science. Besides his interests in the advancement of science and engineering, he has undertaken a spiritual journey through different religions and human philosophy in search for the Truth, studying Comparative Religion and esotericism. For such, he is currently working on a PhD in Islamic Studies. Human spiritual experiences have changed the course of history tangible to this day and Abdulla looks on how those experiences apply in everyday life. His research goes into esoteric symbolism and spiritual meanings of Holy Scriptures, comparing them and drawing parallels between different traditions. He believes that the power of any spiritual research is not through scholarly work alone, but also through experience.