



The Effect of Religious Worldview on the Metaphysical Principles Governing Science¹

Maryam Shamsaei¹ , Mehdi Golshani² 

¹ Associate Professor, Department of Islamic Studies and Research Centre of Quran, Hadith, and Medicine, Shiraz University of Medical Sciences, Shiraz, Iran
(Corresponding author). shamsaei_m@sums.ac.ir

² Distinguished Professor, Sharif University of Technology, Tehran, Iran.
mehdigolshani@yahoo.com

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Abstract

Abrahamic faiths, which are among the divine revelations, consider science to be the knowledge of the universe and humans. The proper understanding of science is the study of the natural world through the lens of religious metaphysics which takes into account all relevant factors from a religious viewpoint. This study aims to survey the effect of religious worldview on the metaphysical principles that govern science, and deals with the following questions: 1) What effect do religious metaphysical foundations have on the interpretation of scientific theories? 2) How scientific work, in the light of the divine worldview, ensures the material and spiritual needs of mankind? 3) Is experimental science influenced by religious and philosophical values and insights? 4) Are various human and natural sciences far from value judgments? In this paper, we use the fact that all scientific theories are based on some metaphysical assumptions that are not taken from these sciences but are rooted in philosophies or religions and provide a worldview for the scientist. Furthermore, these worldviews affect scientists' motivations and their choices of theories. We argue that the worldview of monotheistic religions puts the totality of scientific issues in the context of religious metaphysics.

Keywords

religious worldview, religious science, metaphysics, natural sciences.

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Introduction

Science flourished during the Islamic civilization era, during the Middle Ages, and at the beginning of modern science in the Christian world. The religious scholars during the Middle Ages believed in one God, the unity of the world, and religious values, and science was considered a suitable means to achieve spiritual goals. Throughout the Islamic civilization period, science was developed under the umbrella of the religious worldview, and science and religion were never at odds with one another. The same view was held during the Middle Ages by Western theologians.

The development of modern science took place in a theistic environment. But, about 100 years after Newton, with the development of the schools of empiricism, which relied only on data obtained through human senses the dignity of religion gradually decreased to the extent that there was no place for religion. This was due to the prevalence of positivism during the second half of the nineteenth century and the first half of the twentieth century, In the second half of the 20th century, the situation somewhat changed. Some very eminent scientists and philosophers rejected positivism, although it is still dominant among scientists. Among those eminent scholars who rejected positivism, some embraced philosophy and religion (theology).

About the relationship between science and religion, there are various views. In the most common view, the relationship between science and religion can be divided into four categories: conflict, independence, dialogue, and integration.

1. Some people consider religion and science to be independent. This is because they are different in subject, goal, method, and language. The purpose of religion is to be near God, whereas the goal of science is to understand the universe. The language of religion is prayer and worship, while the language of science is prediction and control. The topic of religion is God, while the subject of science is the world of nature. But, those who believe in the independence of these two are not necessarily deniers of religion.

2. Some scholars believe in the conflict between science and religion. These are mostly materialists who believe in the conflict between the two and do not value religion at all. Richard Dawkins, an atheist zoologist, says:

“The universe we observe has precisely the properties we should expect if there is, at the bottom, no design, no purpose, no evil and no good, nothing but blind, pitiless indifference.” (Dawkins, 1995)

3. Certain scholars feel that there is a common ground between science and religion, as there are some topics that science cannot solve but religion can. What, for instance, is the point of creation? This group includes some of the

greatest scientists of the 20th century. For instance, Arthur Shawlow, a Nobel laureate in physics, says:

“Origin questions should be pursued as vigorously as the scientists’ abilities and interests can take them. But the answers will never be final, and deeper questions will eventually have to be referred to religion.” (Margenau, Varghese, 1992, p.62)

Some of the scientists belonging to this group believe that science and religion are complementary. In the words of Pope St. John Paul II:

“Science can purify the religion from error and superstition; religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world, a world in which both can flourish.” (Russell, Stoeger, 1988)

Furthermore, this group believes that there are some assumptions in science that are accepted as a matter of faith. For example, in science, a scientist accepts that nature can be understood or can be explained in the language of mathematics.

4. The last group thinks that science and religion both pertain to the same universe. Therefore, a single worldview that stipulates both the mission of science and the duty of religion should reign supreme.

According to Charles H. Townes (a Nobel laureate in physics) :

“In my opinion, if we investigate from a purely scientific point of view, the question of origin will always remain unanswered. Therefore, I believe there is a need for a religious or metaphysical explanation. If it is supposed to be an explanation.” (Margenau, Varghese, 1992)

Hamza Yusuf, an eminent contemporary Muslim scholar, too believes that Western science can’t ignore metaphysics:

“Western science cannot be divorced from its metaphysics. The two are inseparable. It is their metaphysics that produced their science, and if one adopts a civilization’s science without understanding that it is the product of a particular worldview, one is unwillingly adopting that civilization with all its attributes, including its social and spiritual ailments.” (Yusuf, 2017)

Some proponents of integration believe that science is a component of religion. Therefore, studying the realm of creation is one kind of religious devotion. The Qur’an explicitly recommends the study of nature:

“Soon we shall show them Our signs in the horizons and in their own souls until it becomes clear to them that He is the Real.” [41: 53]

It urges listeners to reflect upon God’s creation:

“Have they not observed the sky above them, how We have built it and adorned it, and that there are no cracks in it? And We spread out the earth, and cast in it firm mountains, and caused every delightful kind to grow in it.” [50: 6-7]

This kind of view dominated the mentality of Muslim intellectuals throughout the golden age of Islamic civilization and still prevails among some Muslim scholars. Those scientists considered their scientific work as God’s worship. In his book *The Social Structure of Islam*, Reuben Levy says:

“Muslims who engaged in scientific research did so because they wanted to discover the signs of God’s greatness in the wonders of nature.” (Levy, 1957)

Even Newton paid attention to this issue, as he considered scientific work as a kind of God’s worship. Ian Barbour supports a kind of synthesis that goes beyond natural theology and theology of nature and supports a metaphysical synthesis to which science and religion contribute (Barbour, 2003).

As far as the effect of religion on science is concerned, it can be said that religion can affect science in four ways: by providing the metaphysical underpinnings assumed by science, by offering avenues for understanding nature, by providing answers to questions that science is unable to address, and by offering fundamental principles for scientific applications.

During the second half of the 20th century, some philosophical-scientific coalitions emerged, which believe that we do not face nature with an empty mind, but we always use some supra-scientific (metaphysical) assumptions. What philosophers of science discovered in the second half of the 20th century, which physicists had largely neglected, was that empirical data alone does not determine theories. Rather, you can always have many theories that explain a set of experimental data, and that one experience can rule out many of these theories. The difference between these theories is in their metaphysical principles. All physicists have, knowingly or unknowingly, used some general metaphysical principles, over their scientific theories. For example, Heisenberg preferred simple theories, which involve minimal assumptions, while Feyerabend rejected the necessity of simplicity. Of course, none of these principles governing the minds of scientists can be obtained from experiments.

Rather, the root of many of these metaphysical principles is in religion. When some science is in its early stages and experience cannot provide answers or you are blocked off from experience, religion may aid and provide hints. These metaphysical ideas support the development of scientific theories. However, as far as philosophical principles are concerned, there are many commonalities between the monotheistic religions.

In science, we usually have two stages: experimentation and theorizing. The Qur'an, in addition to confirming experimental and intellectual work, considers two other channels of knowledge: one is intuition and the other is prophetic revelation. The mental ability that takes one to a goal, without following logical steps, is called 'intuition' (guess) and in its highest form was called revelation, which was specific to prophets. For example, the Qur'an says to the Prophet Muhammad:

“That which we have revealed to you of the book is the truth, confirming what was [revealed] before it.” [35: 31]

And talks about inspiration to the mother of Prophet Moses:

“We inspired to Moses' mother [saying], ‘Nurse him’..” [28: 7]

The Nobel laureate physicist Charles H. Townes puts the matter concerning intuition beautifully:

“Religion's discoveries often come by great revelations. Scientific knowledge, in the popular mind, comes by logical deduction, or by the accumulation of data which is analyzed by established methods in order to draw generalizations called laws. But such a description of scientific discovery is a travesty on the real thing. Most of the important scientific discoveries come about very differently and are much more closely akin to revelation. Since we are used to reserve revelation for the religious sphere, the word is often not employed for scientific discoveries. In scientific circles, one speaks of intuition, accidental discovery, or says simply that ‘=“he had a wonderful idea”.’ (Townes, 1966)

All sciences have a theoretical dimension and a practical dimension. In both dimensions, the religious worldview is effective. In the theoretical realm, religion offers scientists a divine worldview that affirms God as the world's creator and sustainer, views existence as larger than the world of matter, holds that the universe was created with a purpose, and holds that there is a moral code. Therefore, it provides a strong metaphysical background for science, which is effective in forming theories, choosing among them, and interpreting

them. In the practical dimension, a religious worldview directs the application of science and forces them to meet the legitimate needs of humanity. For example, the Qur'an says:

“And do not cause corruption on the earth after its restoration...” [7: 56]

This study aims to survey the effect of religious worldviews on the metaphysical principles that govern science, and deals with the following questions:

1. What effect do religious metaphysical foundations have on the interpretation of scientific theories?
2. How does scientific work, in the light of the divine worldview, ensure the material and spiritual needs of mankind?
3. Is experimental science influenced by religious and philosophical insights?
4. Are various humanities and natural sciences far from value judgments?

The basic concepts of the research

One of the important issues in the field of philosophy of science is to examine the knowledge of fundamental concepts. Therefore, we examine the fundamental concepts of science:

Worldview: “A broad perspective of what exists” is a worldview. Under a worldview, one understands the nature of people, the universe, reality, and ultimately science. Therefore, the concept of worldview is fundamentally different from the paradigm. It gives the whole perception that a person or school has about the world. Now, the source of a worldview can be scientific, philosophical, or religious.

Scientific worldview: This is an attempt to present a picture of the world based on scientific findings. By science, we mean experimental sciences and human sciences that familiarize us with the state of some parts of the world and deal with experience and hypothesis. Science is precise and detailed, but its scope is limited and it goes as far as it is possible to resort to empirical research. The findings of science are incomplete and it is a continuously growing enterprise. Therefore, the scientific worldview can only have practical and technical value because it cannot provide a comprehensive and consistent theoretical view of the world.

Philosophical worldview: This is based on metaphysical ideas which encompasses more than just a scientific perspective and offers a foundation for it. That is, it is based on a number of apparently evident principles which are parts of scientific and philosophical worldviews, with the difference that the

scientific worldview gives the power to conquer and change the world, but the philosophical worldview gives direction and way to change and determines the direction of human action and the way of choosing one's life. It defines a person's attitude to existence (Motahhari, 2004).

Religious worldview: This is based on the fundamental principles of religion, and in Abrahamic faiths is based on the worldview of monotheism. The worldview of monotheism means that the world has emerged from a wise providence and that the system of existence is based on goodness and mercy provided for creatures. It brings creatures to the perfection they deserve. The scientific activity of religious people has a divine orientation. The theoretical objective of religious science is to find divine revelations in the natural world and in human souls; the practical goal is to make appropriate use of the resources that God has given to humanity. Now, if the study of nature, society, and humans takes place within the framework of a religious worldview, we can call it religious or theistic science, and if it is done independently of a religious worldview, we call it secular science (Golshani, 2019).

Religious science: Religious science means that scientific activity and study take place within the framework of a religious worldview. The meaning of religious science is not that the laboratory and physical theories are abandoned or that they are followed via a new method, and that the formulas of chemistry and physics or the discoveries of biology are extracted from the Heavenly books. Rather, it means that the generalizations in science take place in a religious metaphysical framework. When scientific research is conducted with a religious worldview, the end result will be toward addressing both the material and spiritual needs of humanity. In religious science, religion is present and is involved both in the metaphysical assumptions and in the practical applications of science. Thus, the scientific activities of a believing scientist have a divine orientation and application. Moreover, we can talk about religious and non-religious science in two ways: one is in terms of metaphysical foundations that are present in science. The other is in its practical applications.

In the Middle Ages, both in the Islamic world and in the Christian world, religious beliefs and scientific knowledge were united in a comprehensive metaphysical framework (worldview). European Christians believed that the world is good because it was created by a good God. It is reasonable because its creator, God, is wise and lawful. The world is comprehensible to the human mind because God orders mankind to subjugate the earth and he does not give an impossible order. Whitehead believed that medieval theology awakened

West's awareness of the comprehensibility of nature:

“Faith in the order of nature that enabled the development of science is a specific example of a deeper faith.” (Whitehead, 1967)

The correct understanding of religious science, which has many followers both in the Islamic world and among the scholars of other Abrahamic faiths, is a science that follows the study of nature in the framework of religious metaphysics and sees the totality of issues in the framework of a religious worldview. It is a science that is useful for knowing God and addressing the legitimate needs of the religious community on both an individual and social level. In the Abrahamic faiths, man is presented as God's vicegerent on earth and is in charge of its growth. This explains why knowledge and faith are combined in Islamic traditions as a means of prosperity and happiness.

In short, religious science has two characteristics:

1. Science is based on religious metaphysical assumptions.
2. Religious worldview plays a fundamental role in the orientation and applications of science.

Now, we want to discuss the important role of the monotheistic worldview in the theoretical and practical aspects of science.

Science is not free from metaphysical assumptions

Humanities and natural sciences are influenced by metaphysical foundations. In our belief, we should make humanities and natural sciences religious. First, we present some evidence for the influence of metaphysical foundations on natural sciences:

(a) The claim of some eminent scientists on the effect of metaphysical foundations on their work.

It is a fact that physics, biology, etc. are full of metaphysical assumptions, although previously few scientists admitted that. But, there was a shift in the attitude of philosophers of science since the middle of the 20th century. Before that, there were strong stances against the metaphysical foundations of science. But, Michael Ruse – one of the founders of the philosophy of biology – said in his 1993 speech at the American Association for the Advancement of Science:

“I am still in favor of the theory of evolution, but I want to say that the theory of evolution assumes naturalism.” (Ruse, 2004)

His speech brought protest from the audience who told him that this claim

destroyed all their findings about the theory of evolution (Ruse, 2004).

Michael Ruse himself ten years before that speech (i.e. in 1983), was one of the strong defenders of the theory of evolution at a court in the state of Arkansas, America, which decided to prevent the teaching of the biblical theory about creation in schools. His words in that court caused the judge to stop the teaching of the Bible in schools. But then he said that although he is still in favor of the theory of evolution, we should not forget that this theory assumes “naturalism” (Ruse, 1993).

According to this biologist, Darwin’s theory has a metaphysical basis and that is the assumption of naturalism. But if someone wants to believe in God, he cannot accept this basis.

Robert Young, editor-in-chief of the journal “Science as Culture” says:

“Recent work has made it clear to people of insight that there is no place in science, technology, medicine, or other specialties where you do not find ideology as an effective factor.” (Young, 1998)

Also, some scientists have been concentrating on the issue of psychological and social influences on the development, interpretation, and marketing of scientific ideas during the past few decades. Some researchers of the “Edinburgh School” have completely involved these factors in all the stages of formation, interpretation, and promotion of theories, and have considered knowledge to be subject to social conditions. On the other hand, some scholars have completely denied the involvement of these factors in the formation, interpretation, or promotion of scientific theories, and some scholars have voted for the involvement of only psychological and cosmological factors in some stages of establishing scientific theories. As an example, one of the recent disputes in this regard is the following:

In 1971, Paul Forman, a science historian, presented the theory that the rejection of causality by German physicists in the Weimar era (1919-1933) was a reaction against the existing cultural environment against quantum mechanics and its formation. Many renowned physicists, including Exner, Weyl, Sommerfeld, Reichenbach, etc., waved farewell to the causality between the conclusion of the First World War and the publication of Heisenberg’s work on matrix mechanics in 1925. Forman’s argument was as follows: For the physicists of the early twentieth century, causality represented the lawfulness of nature, and the scientific approach was considered a rational approach. But after Germany’s defeat in the First World War, science was considered responsible for Germany’s sad state, a reaction against rationality

emerged, and this was considered to mean the negation of science and, in fact, the negation of the lawfulness of nature. Consequently, if a physicist wanted to have a good image in German society, he would leave causality, as this was the solution that was considered practical to solve the existing problems of atomic physics at that time (Forman, 1971).

Based on Forman's work, the basic problems of atomic physics had a secondary role in rejecting causality. But while Forman relied more on sociological factors, some physicists like James Cushing, a theoretical physicist, and philosopher of science, believe that: "Metaphysical factors are effective in the formation of concepts and theories and their interpretation, psychological factors play a greater role in the interpretation and formation of theory than sociological factors, while sociological factors play a fundamental role in the creation and acceptance of the theory." (Cushing, 1994)

The worldview of scientists often influences their theory or thoughts and determines their goals in scientific research, that is, metaphysics creates a framework for science. In this regard, Schrödinger says:

"Metaphysics does not form part of the house of knowledge but is the scaffolding without which further construction is impossible." (Schrodinger)

Additionally, some scientists claim that metaphysical concepts serve as scientists' compasses and are crucial to their study. According to Andrei Linde (a Russian-American theoretical physicist):

"When scientists start their work, they are unknowingly influenced by their cultural traditions." (Lindei, 1997)

(b) The impact of metaphysical foundations on natural sciences

Natural sciences are based on a series of metaphysical foundations, in such a way that if there are no such foundations, science will not be formed at all. If we want to have empirical science, we must accept a series of metaphysical foundations, otherwise, science and law will not be formed. In this regard, the problem of cosmology can be given as an example. In Golshani's words:

"We only have one universe to witness, we only observe it from one corner, and we have indirect access to celestial objects, which is one of the issues with cosmology. Only the light we get from them can establish a connection with them. As a result, in order to create a global model, local physics must be developed and generalized. But, with experience, such a generalization cannot be made because experience can only

comment on tangible things. This generalization is only possible if we accept this metaphysical basis that ‘the world of nature works uniformly and therefore its laws are the same.’” (Golshani, 2009)

In this generalization, some assumptions are used, none of which can be directly tested experimentally. If we want to generalize a theory in this small area of the universe where our science has reached, we need some metaphysical foundations. For example, if an element shows certain properties on the earth, it is usually assumed that this element has the same properties elsewhere in the universe. Without the existence of this metaphysical principle that the laws of nature are uniform, no such generalization can be made.

(c) The effect of the worldview of scientists on their scientific motivations and the choice of theories.

We may use the case of three physicists who collectively analyzed a theory, were able to draw conclusions from it, and won the Nobel Prize in physics to illustrate the impact of worldview on scientists’ objectives. One of them was a Muslim scientist named Mohammad Abdul Salam and the other two were Steven Weinberg and Sheldon Lee Glashow. The topic of their discussion was that in physics, weak forces are united with electromagnetic forces, in the sense that they originate from a single force. But their motivations for the unification of these forces were different Abdul Salam used to say that when we prove this unity of nature with science, it becomes clear that the world’s plan is one, and the sameness of the world’s plan shows that it is governed by a single planner. Glashow was motivated by the idea that if this assertion could be validated, it may be practical to employ. Weinberg said that this view is preferable since it makes certain physical problems simpler. Similarly, when it was established that the earth rotates around the sun, scientists at first struggled to provide an experimental foundation for the idea. Then, they said that this theory can answer some problems more easily than the complex Ptolemaic orbits, and therefore it found supporters (Golshani, 2009).

Similarly, the entropic principle which was proposed in physics, on the basis of the fine-tuning of the fundamental constants of nature, has two types of explanations:

- A) There are many universes and therefore it is not surprising that one of them has the necessary conditions for life.
- B) We have only one world and it has a designer.

Theistic scholars considered the fine-tuning of the constants of nature to

indicate a divine design. For example, Roger Trigg, a contemporary British philosopher, says:

“I think that it [anthropic principle] does point to something, like an argument from design. It is a modern argument from design for the existence of God. Now, I know that it isn’t a knock-down argument; other people may see it differently. Some people talk about an immense number of universes and it just happens that we’re in the universe that produced us – we wouldn’t be in one that hasn’t produced us! But, I think if the answer to a question is an infinite number of universes, one is in great difficulty. I think it’s much simpler to believe in God who created the one universe, rather than saying there is an enormous number and we just happen to be in the one that’s come up in this way.” (Stannard, 1996)

On the other hand, Peter Atkins, professor of chemistry and physics at Oxford University, who is one of the famous atheists of our time, accepts the following interpretation of this issue:

“You can imagine a whole crowd of billions and billions of universes, and it just happens that one of those ... happened to tumble into existence with a particular mix of fundamental constants that allowed life to develop.” (Stannard, 1996)

These examples show how metaphysical assumptions and worldviews of scientists are effective in their motivations and determine their goals in scientific research.

The role of worldview in the directions and applications of science

As we mentioned, religious science has two aspects: 1) the theoretical aspect of science and 2) the practical aspect of science. The theoretical component was covered in what has been spoken thus far. We now look at the second feature, which is its application. Religious science prohibits the abuse of science for mankind and the environment in its applications. But, this has not happened in the case of secular science, as in the view of liberalism, science is used for the benefit and pleasure of humans as much as possible, and therefore it does not matter if others are oppressed and colonized or if nature is destroyed.

The history of science has shown that value systems affect the direction of science. The famous contemporary historian of science John Brooke says:

“The direction and application of scientific research clearly can be different under different value systems. And since human values are often organically linked with religious beliefs, the latter can still be presented as relevant to the orientation of science and technology.” (Brooke, 1991)

Richard Thompson, a researcher at the Latoya Research Institute in California, has explained the issue well:

“The understanding of nature as a machine has resulted in much technological progress, but now we find people throughout the world abandoning supremacy – a struggle that culminates in the construction of more and more deadly machines of mass destruction. It can be argued that this trend of modern civilization has been strongly encouraged by scientific theories that appear to contradict any philosophy of life other than materialism. It may be very difficult to change this dangerous trend. But, an essential ingredient for such a change could be the wide dissemination of a valid approach to scientific knowledge that allows for a tangible spiritual dimension to human life and is compatible with the ancient understanding that mankind is dependent on a transcendental Supreme Being. Such an approach opens up the possibility of directing human energy towards higher spiritual goals and of providing a solid ethical basis for the conduct of our material affairs.” (Singh, 1987)

In Abrahamic faiths, man is introduced as God’s caliph (vicegerent) on earth and is responsible for its development. For example, the Qur’an says:

“He brought you forth from the earth and made it your habitation. So plead with Him for forgiveness, then turn to Him penitently. My Lord is indeed near most [and] responsive.” [11:61]

For this reason, science and religion are blended in Islamic traditions as a method of advancement and devotion. In short, religion may be useful in two different ways: one involves the development of science, and the other involves the use of science. Since science is an empirical activity, it is neither religious nor non-religious, and being religious or not is related to an aspect outside the context of science.

Therefore, considering that in the divine books, man is introduced as the caliph (vicegerent) of God and responsible for the development of the earth, the science that grows in the framework of the divine worldview, should be applied to provide the material and spiritual needs of mankind. But, there is no

guarantee that the science developed in the light of the secular worldview will not be destructive, as we witnessed many of these destructions in the last century.

Evaluation and conclusions

According to divine religions, the world of nature and humans are both signs of God, and knowing them is considered God's worship. In these religions, the foundations and frameworks of real science are based on a monotheistic worldview; the framework that views God as the universe's creator and preserver, and does not confine existence to the realm of matter. This indicates that religious science places a strong emphasis on situating all relevant questions within a religious metaphysical framework; specifically, a metaphysics that is derived from religious philosophy and is consistent with the contents of the holy books. In the words of Professor Seyyed Hossein Nasr:

“One can have a religious science if the term includes the metaphysics which underlies the religious view of reality.” (Golshani, 2021)

In fact, the physical sciences consist of two parts. The first part contains a collection of facts. The second part is the organization and interpretation of those facts. As far as facts are concerned, they are universal. It doesn't matter by whom they are collected. But, when we come to the second part, which is the introduction of concepts and theorizing, using metaphysical assumptions, religious beliefs, and psychological and sociological prejudices play an important role. The believer looks at the facts and integrates them into a theistic framework, while the non-believer interprets them on the basis of his atheistic inclinations. To pass from the limited realm of the natural to the infinite realm of the supernatural, one needs a proper metaphysical basis that accepts supernatural realities. For theist philosophers and scientists, creation simply means the complete dependence of everything on God. Because all attempts to explain the universe on the basis of secular science leave us with ultimately unanswered questions such as: where do the laws of physics come from and why is there a universe in which such laws apply? To understand the whole range of human experience, one must go beyond empirical science. This can be accomplished by incorporating science into a suitable metaphysical framework, which may be rooted in religion and, consequently, falls under a religious worldview, where science and religion share a common metaphysical foundation, and the purpose of religious and revelatory knowledge is to reveal divine works and attributes to humans. On the other hand, religious vision is

also effective in the practical applications of science. Therefore, science is under the effect of religious metaphysical presuppositions.

Conflict of Interests

The authors have no competing interests.

References

- Barbour, I. G. (2003). *When science meets religion*. Harper San Francisco.
- Brook, J. H. (1991). *Science and religion: some historical perspectives*. (Cambridge: Cambridge University Press.
- Cushing, J. T. (1994). *Quantum mechanics*. University of Chicago Press.
- Dawkins, R. (1995). *River out of Eden: a Darwinian view of life*. Basic Books.
- Forman, P. (1971). Weimar culture, causality and quantum theory,1918-1927: adoption by German physicists and mathematicians to a hostile intellectual environment. In R. M. Cormmach (Ed.), *Historical studies in the physical sciences* (vol. 3, pp. 1-115). University of Pennsylvania.
<https://doi.org/10.2307/27757315>
- Golshani, M. (2009). *From secular science to religious science*. Cultural Studies.
- Golshani, M. (2019). *Science & religion in a monotheistic rerspective*. K. N. Tousi University.
- Golshani, M. (2021). *Can science dispense with religion?* Al-Mustafa International Publication and Translation Center.
- Jastrow, R. (1984). *In the intellectuals speak out about God*. (A. Varghese, Ed.). Regenery, Inc.
- Levy, R. (1957). *The social structure of Islam*. Cambridge University Press, op. Cit.
- Lindei, A. (1997). *New Scientist (Magazin)*. Vol. 4.
- Margenau, H., &Varghese, R. A. (1992). *Cosmos, bios, heos; scientists reflect on science, God, and the origins of the universe, life, and homo sapiens*. Open Court.
- Motahhari, M. (2004). *A collection of works*. Sadra Press. Vol. 2, 76-81.
- Ruse, M. (1993). www.asa.org/archive/evolution/199608/oooj.thtmp
- Ruse, M. (2004). The noble prize in medicine-was these a religious factor in this year's(non) selection? *Metanexus Online Journal*.
- Russell, R. J., Stoeger, W. R., & Coyne, G. (Eds.). (1988). *Physics, philosophy and theology: a common quest for understanding (from the Vatican Observatory Foundation)*. University of Notre Dame Press, 11-120.
- Sacks, J. (n.d.). https://www.harhashem.org/in-other-news....html?post_id=321842
- Schrodinger, E. E. (1964). *My view of the world*. Cambridge University Press.
- Singh, T. D., & Gomatam, R. (Eds.). (1987). *Synthesis of science and religion*. The

Bhaktivedanta Institute.

Stannard, R. (1996). *Science and wonder*. Faber and Faber Press.

Townes, C. H. (1966). The convergence of science and religion. *Zygon*, 1(3), 301-311.

Whitehead, A. N. (1967). *Science and the modern world*. The Free Press.

Worthing, M. W. (1996). *God, creation, and contemporary physics* (Theology and the sciences). Fortress Press.

Young, M. R. (1998). *Discover*. N.P.

Yusuf, H. (2017). Is the matter of metaphysics immaterial? Yes and No. *The Journal of Zaytuna College*, 3(2).