Integration of Science and Religion in the Methodology of Holmes Rolston's Philosophy

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Abstract

The viewpoint that talks about religion and science is not a subject that will run out with the times. This is because the connection between the two fills space and time, and it is interesting to study and accelerate the correlation between the two clearly. In fact, these studies need to be developed in a concentrated manner among scholars, especially academics in universities. The basis of the correlation between the two is to provide reinforcement that science and religion/theology are two sides of a coin that are interrelated to explain each other between the levels of belief and rationality. Moreover, this answer, on the other hand, makes the assumption that science and religion cannot be united. Based on this description, we will try to think about how scientific integration between religion and science is not dichotomized with its own scientific building. As seen in Holmes Rolston's philosophical methodology, which seeks to explain the correlation between the study of theology and science, In his view, theology, or religion, and science can clearly grow and develop together, and there is even certainty of complementarity between them. By using the writing rules of a qualitative approach through a literature study or library research, this research seeks to upload Holmes Rolston's views regarding the integration of science and religion/theology. Because, in his view, religion and science are a response to the cyclotomy that seeks to answer that between the two is able to meet and complement from a methodology.

Keywords:
Integration of Science
Religion,
Holmes Rolston, Philosophy,
Often accompanied by the birth of a paradigm to mimic the study of science with religion, or vice versa.

These kinds of things arise when there is a growing assumption that science is a product of thought whose usefulness is dominated by the currents of positivism (Rifqi Aulia Rahman, 2021). The assumption of science is a value of validity whose existence refutes facts as well as methods that are outside the circle in investigating facts (Nugroho, 2016). Auguste Comte explains in his large-scale explanation of the principle of positivism under the title Course of Positive Philosophy (1830–1834) that the currents and paradigms of this people's thinking are still widely used and exist (Muhammad Muslich, 2004). This means that science is positioned higher than religion.

In Ahmad Baiquni's theory of thought and view, science is accumulative and collective in human investigation of nature obtained by the ijtihad or agreement of various experts. This is the process that rationalists run by concluding that something happens on the basis of critical analysis of technology. And it's also a collection of human science about the use of nature, starting with the application of science (Achmad Baiquni, 1994).

There are many different perceptions that describe the connections between religion and science and generate several groups of perceptions. Among the other positivist thinkers, there are those who believe that religion cannot be merged with science. And above all, religion becomes an obstacle or a barrier to a scientific advance. Others also believe that religion is not a problem if it is combined with science. Because the two have interconnections, have commonalities, and can integrate one with the other systematically (Apriyansyah et al., 2022). There were also differences that questioned science and religion, among them Barbour, Haught, and Drees, who remained firmly of the view that religion and science were two sides that were not just different but completely opposed (Hidayatullah, 2019). Then there was another view of a Merciful Fascist who gave the idea that the science of obedience cannot be Islamized because there is nothing wrong with science and only the problem is science or science that is misused (Zarkasyi & Rachmawati, 20 As has been endorsed in the study of contemporary Western philosophy by Holmes Rolston. He describes the systematic linkage of science to the study of theology, which he has studied, and contributes in a moment to shaping the theoretical study of environmental ethics by connecting religious studies with science. In the study, Rolston Garap examines how spiritual religious people become basic guards within appreciating and respecting the environment. It is precisely environmental ethics that seeks to advance the understanding amongst society that science can grow and thrive when wrapped in ethics and morality. It is seen by Rolston that the anthropocentric theory of the creation of the universe and the process of earth evolution must be infiltrated with fundamental and very fundamental values connected with a theological and scientific attention to the study of science. This is what led him to incorporate elements of religion or theology into his scientific studies in the field of environmental ethics.

Holmes Rolston, on another occasion, revealed that "science and religion, a critical survey" (Yogiswari, 2020), or religion and science, have a similar nature compared to the difference (Muhammad Muslich, 2004). In line with the doctrine of science that a Western scientist like Einstein revealed with the statement that "science without religion is blind, religion without science is lame," science
without religion is blind, and religion without knowledge is paralyzed (Holmes Rolston, 2005). Other studies, such as Leahy's, suggest that religion and science can combine and communicate in an intensive and mutually supportive manner (Hidayatullah, 2019).

According to M. Quraish Shihab, the philosophy of science is well articulated in the opinion of Muthahari that science can make man reach the desired goal faster, while religion helps in guiding the direction. He further argues that the function of science is to shape man according to the outer world, and religion helps man to have his own interior. Science gives hope and encouragement to the soul, while religion answers the question that begins with how, not why (Muslih, 2021).

Some of these studies and descriptions affirm the importance of studying, understanding, exploring, and applying religion as well as science. It is stated in the studies of Islam that science is not free from the study of religion. Many Muslims are born to study the science in which they are embedded with the belief in the righteousness of the religion (Islam).

On the basis of this interest, religion is related to science, and vice versa, science for religion. It prompted efforts to be made by Muslim thinkers related to science. Like Islamic thinkers Sayed Hossein Nasr, Zainuddin Sardar, Ismail Raji al Faruqqi, Abu Wafak, Ibnu Sina, Al Khindi, and others (Gade, 2021). And the most phenomenal idea is the idea of Islamization of science, as Raji al Faruqi says. With a view to unifying the dualism of science as a result of the dichotomy of science between religion and science in general for mutual integrity (Ismail Raji al Faruqi, Islamization of Knowledge General Principles and Work Plann, Terj. Islamisasi Pengetahuan (Anas Mahyuddin), Bandung: Pustaka, 1984). Also, some of these ideas were driven by the development of science in Islamic colleges in particular and institutions of higher education in general existing in Indonesia. Then, no matter how much the influence of science, including science and technology, seeks to be restored to the circle and scope of Islam, there is a need for comprehensive and concentrated integration (Muhammad Fahmi, 2013). Because science and technology are inherently a product of curiosity, or human values that are able to understand the universe, man and theology are inspired by the Almighty God. It needs to be looked at in depth, because if it's misunderstood, it'll lead to wild access (Yacintha Pertiwi dan Moch. Iqbal, 2022).

That is why, in this case, it is necessary to re-enlarge the study and expression of the connections between theology in this respect of religion and science. The one in this case is a trail of thought that deals with the integrity of religion and the science of Holmes Rolston's glasses. His view is how the existence of religion and science complement each other, mainly in the living process or theory of the universe and the environment (Taqiyuddin, 2021).

Rolston's extensive exploration of the theme reveals that the methods used in this context resemble a philosophical approach to revealing knowledge and not just technical procedures. As a result, Rolston's comprehensive analysis contributed to the advancement and evolution of the philosophy of science, as well as its integration with theory and theology. It is important to acknowledge the four central themes that Rolston emphasized: (1) the relationship between theory, belief, and experience; (2) the importance of models, patterns, and paradigms; (3) the balance between objectivity and personal involvement; and (4) the intersection of scientific and religious reasoning (Rifqi Aulia Rahman, 2021).
Research Methods

The research that was undertaken was to dig deeper into what Rolston's perspective really is in integrating theory of religion with science. This more literary research digs the linkages between theology or religion and science, in particular focusing on the flow of ideas and methodologies that link them. The research method used is qualitative, relying on extensive library research. The research process includes the collection of primary and secondary sources from libraries, data collection and evaluation, data analysis and interpretation, and the drawing of conclusions based on findings. Data is categorized using the prescribed research formula. To gather data, the authors use documentation and conduct a comprehensive literature review. Content analysis is used as the chosen method for qualitative data analysis (Mardalis, 1995).

Discussion

Meet Holmes Rolston

Holmes Rolston is a major professor of philosophy at the University of Colorado. Rolston is known by academics and thinkers as a modern philosopher who has a heavy position, always talking about environmental ethics. Rolston also sought to integrate religious values and ethics into his thinking and conception. Rolston has earned numerous awards, including the 2003 Templeton Nobel Prize, as an expert in environmental ethics and philosophy. Rolston describes how ethics and the development of philosophical studies express the interpretation of the universe or environment that discusses the concepts of science, philosophy, and religion (Holmes Rolston III, 2006b).

Rolston graduated from Davidson College in physics and completed his Ph.D. in theology at the University of Edinburgh, Scotland. (1958). He is who, apart from his academic degree, in the case of a religious, Rolston holds as a Presbyterian priest with a degree in philosophy. He later became a major professor of philosophy at Colorado State University. (1976). It was published by Philosophy Gone Wild (Prometheus Book) in 1986, Conserving Natural Value (Columbia University Press) in 1994, and Environmental Ethics (Tample University Press) in 1988. Rolston wrote a lot of books on religious and scientific integrity, including The Science and Religion Critic Survey in 1987. Rolston's other concentration is also being the owner of the founding journal Environmental Ethics, where he is the deputy editor and also provides from his editors' boards a study with an emphasis on environmental values and ethics (Holmes Rolston III, 2006a).

Study of Religion and Science from the Perspective of Theory

The scientific and religious concepts that occur in the Western world are a description of the contradiction between positivism and religion. The length of time that has resulted in this intersection is becoming more apparent with the presence of a tactful attitude between each side of the scientist. It is seen in the pre-enlightenment period that the pronoun of religion refers to the study of a science and is collectivized in the regina scientarium, or the queen of the sciences (van den Brink, 2019). Despite all the discrepancies that appear in this contemporary time, the position of natural science is more dominant in the theory of rationality. That is why if this study of theology wants its existence in the academic and educational world, it is necessary to fight for the explanation of its
principles in the terminology of the study of religion that is clear and acceptable rationally or logically (Abdullah, 2020).

This is the integration that needs to be fought, with each element embedded between the elements of religion and science. Educational institutions and colleges strive to provide a response to the scientific world so that the integration effort and the fundamental idea of the fusion of religion with science are widely accepted. As has been done in the past by Muslim scholars and also by Rolston’s figures when integrating religious values into the science of environmental ethical relationships.

Roslton’s view that religion and science are in common explains the world’s science and theory of methodology from different lenses and scientific perspectives. The division of the world is achieved by finding the reason for its formation and being able to prove it rationally (Azman, 2023), whereas religion explains the reality of phenomena in a meaningful way (Yogiswari, 2020). Questioning science, Rolston argued, within the science approach requires a comprehensive and methodical in-depth. It’s as described by some figures and thinkers like Newton, Gerhald, and even Muslim scientists like al-Farabi. This methodical and comprehensive approach differs from the scientific approach of modern scientists such as Francis Bacon and David Hume, who are more inductive and also impressed empirically (Humaidi, 2015). That is why, in conceptual terms, the acquisition of science is not merely in the empirical realm of the senses; there is a realm that is more imaginative and rational.

As a scientific principle that also exists in Islamic studies, try to use complex scientific methods. By implementing its religious investigation of scientific elements, the combination of observation, theory, and conclusion forms a new idea that is also of rational value. Approach by applying if-then to all facts, finding the basis of its hypothesis, followed by experimental conclusions. It would respond to renewed expectations by re-implementing an observation to reinforce or deny the other evolving theories, so that it would re-birth the latest theories and conclusions and re-discuss the facts. This is what is called the hypothesis-deductive scientific method (Maksudin, 2013).

The concept or the doctrine of science and science, such as science and religion, should not be a value that is dicotomized or in the garden. But science or scientific doctrines between science and religions should be a dynamic value, complementing and filling each other, able to communicate freely and also naturally. It is this dynamic attitude that arises from the various concentrations of scientific expertise that exist in this universe. Receiving and giving input one to another in order to improve and perfect the theoretical foundations of other fields of science to be more comparative. So that there will be a rebirth of corrective, affirmative, clarificative, verifying, transformative, and complementary attitudes (Abdullah, 2020).

Even within Islam itself, the separation between religion and science is not new. However, the separation of these elements does not cause much significant turmoil, so problems and changes in the systems of science in education and Islamic worship occur. Until this change began at a time when the Western system of education and the spread of secular science into the Islamic world passed the path of imperialism. However, whenever Western secular scholars introduce the application of such education, nevertheless, the Islamic world has known much of the connectivity and completeness of the idea of the science of complementary
validity. Like Ibn Khaldun, Imam Ghazali, and Ibn Rush, his studies and scientific foundation supplemented and complemented the studies of other Islamic thinkers. This would be contrary to modern Western concepts of science that exclude or even consider the status of religious sciences as in Islam.

When it comes to mystery, religion cannot be regarded as knowledge because its objects are not empirical. But the scientists cannot avoid talking about mysterious things, such as gods, angels, and so on. Thus, this dichotomy of gamma and science cannot be left behind, where the integration of religion and science is the response to this problem (Muslih et al., 2023).

Religion and Science for the Interconnection of Knowledge

If we look and try to define the difference between religious science and science, we will surely find points in different directions. This view is not unfounded because religious studies are placed as a value of the supra-rational element of part-group recognition. It affirms that the stronger elements of science and religion cannot be united. So the middle way is to integrate the two when building a new scientific building. Although in Islam this is not a new thing, as a step toward development and perfection, it is necessary to see a renewal that integrates the interconnection between religion and science. Because in Islam, as Aaron explains, the most important element of a religion is the belief and emotional response to the secret and the cultivation of all forms of holiness (Sunardin, 2021).

On the other hand, science, in the view of Western sciences, has various characteristics, so called a science is activity, methods, and knowledge. Where the values in it are not contradictory or even systematic. In the Western view, science is necessary and must be pursued by a series of human activities that are carried out in a manner that forms knowledge. (Hidayatullah, 2019). Then a re-perception was born that must be noted with regard to science in this contemporary era; it must be acknowledged that the scientific theoretical model is limited in nature and its form is predictable. Because science and science are related, one instrument and the other are related. Its essence characteristic is that any shadow and correlation of events or phenomena with each other is pervasive. It is mentioned in religious studies that there is a theory of causes and consequences between one symptom and another symptom or occurrence. (Hidayatullah, 2019).

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So we need to come to a fundamental conclusion: that religion or theology is influencing science, and science moves on the basis that most of the truth is because of the existence of the supra-rational nature of man. And science is the reflexive form of religion in which it has significant relationships as a form of manifestation of Islamization.

The real study before us for academics struggling with the world of college education is the theory of integration-interconnection presented by Muhammad Amin Abdullah (Arfan Nusi, 2020). The other kind of integration that Mahzar's Armahedi has endured (Armahedi Mahzar, 2004). And a prophetic paradigm integration (Kelik Wardiono, 2016) launched by Kuntowijoyo. In this scientific study, Kuntowijoyo introduces the idea that a doctrine of prophetic science is a matter of faith in God (QS. Al-Imron: 110) (Mufidah & Tamrin, 2022). It contains humanization (ta’muruna bil ma’ruf), liberation (tanhauna anil munkar), and transcendence (tu’minuna billah). The Qur'an and Sunnah are the foundations of the law of nature, of humanity as the basis of meaning, and of the values of divine awareness (Qauliyah) (Absori, 2018).

Such concepts are not present in the progress of Western science, which has caused a lot of disintegration and misperception among scientists. The most fundamental path is belief, and belief in a state of great power (theology) is to be put aside. With that, exploring Western civilization that we can no longer ignore has produced many social inequalities, political disharmony and corruption, environmental damage, alienation, war, degradation of ethical values in social life/anomie (Sopiyan et al., 2022), individualism, and prolonged impasse whose ending is not to create a balance and order (B Hendrianto, 2019). This is the problem, the obstacle to the progress of science, and the middle way is to try to fully integrate the general principles of science or science with religion. This instrument is then attempted by Muslim thinkers and scholars to attempt to Islamize knowledge and ensure that all knowledge is connected with religion, theology, and science. Although most of this science is also derived from other traditions, for example, filosafat Yunani, Romawi, Eropa, and Lainya, The whole attempt to color with the theory of divinity as the worldview of Islam is also patriotic in the concept of Tauhid (QS. Al Anbiya; 107) (Zarkasyi & Rachmawati, 2020).

Rolston's View on the Integration of Religion and Science

Verification is a study carried out by Rolston in his methodology, forming a theory and adding falsification (Riski, 2021). In Carnap's view, science is a systematization of theory and statement that basically starts from an event of controlled empirical experience with an experimental verification. The flow of
positivism offers the theory that science is not a single property but is part of the system and structure of the statement.

Just as a verification exists in a scientific study of a theory, there is a direct and indirect nature. Direct is showing a narrative expression that occurred at the time, and unabated is a paradigm building of theoretical meaning with various possibilities of induction of the statements built (Muslih, 2021). Verification is an attempt to prove the truth of a new theory or idea that is born. As for falsification or error elimination, it is a denial of what is understood (Hidayat, Muhammad Sofian Tsaqib, 2022). Or is it a falsification that makes a distinction between knowledge and non-knowledge?

Rolston, as a thinker and scholar who struggles in the study and philosophical pronunciation, gives the flow or process in the scientific theory conducting research. Just like a causality or law pattern, the beginning is a pattern of finding the study of the theory of the hypothesis of facts in the field by drawing a coincidence with the reinforcement of observation (hipotesis deduktif). Rolston reveals that since the time the scientific position was as an observer, it has now grown to its active malfunction in contributing.

In actual theory, science is focused on an empirical study of the treatment of everything as an object. It's different from a religious expression, where the dimensions of the study are focused on a moral, existential, spiritual, or moral principle while keeping an eye on the subjectivity of values. Because, in this case, religion is more participatory in commenting on things that are not valued by science. But the fundamentals of these differences can be integrated into a methodological theory used in the study or attempt to give birth to a new perception of a science.

So in this case, Rolston took and presented his middle way, which is to make methodology a philosophical and not a technical one. With classification into some of the arguments Rolston used as his instruments in constructing the logic of deductive hypotheses, paradigms, meanings, and values of objectivity. First, the logic of a detective hypothesis is an explanation that leads to a basic theoretical and theological formulation of religion or science. In Rolston's view, the world as it is around us is derived from the deduction of a theory. With the various steps in mind, it is like observation, experiment, and experiment. By explaining that the process of deduction in science is with observation and experiment, compared to religion, which is with experiment and experience, So in Rolston's view, this one is the truth of a value depending on the taori threshold, as the theory expressed is causality or the law of the case-by-case. Second, questioning religion and science in terms of a value or paradigm. It's questioning an assumption that explains how an event can happen and is as valuable as what we've experienced. However, the recognition and similarity of such events must be qualified and understood in terms of recognized dialectical expectations. Rolston says this paradigm is a disciplinary matrix or perspective of the theory (Rifqi Aulia Rahman, 2021). That's why paradigms sometimes have a wide range and order, but sometimes they're narrow. For that, Rolston offers to make a systematic polarization within the history of religion and science so that it's easy to understand. So the aim is to give birth to a paradigm that is not a mere cognitive expression but has skills in decision-making and implicit knowledge of how to use the results of an investigated study.
Thirdly, meaning is an interpreted manifestation of reality and forms a mental construction of causality and fact over an empirical value. Rolston conveyed that meaning and causality are the essence values that constitute the composition of the mind. It means that this attitude is born after, in real circumstances, we find the correspondence between the structural elements and the mental construction, which then gives birth to the connectivity of the subject between the experiential and its world (Mohammad Muslih, 2017). Fourthly, Rolston's objectivity refers to the existence of an attempt by science to claim a disproportionate reality that reveals the disintegration of science. Science assumes that a variety of findings and discoveries are marginalized by the pretext of an irrational study and the escalation of its assumptions. So religion and science should be an attempt to unify and communicate science that is subjectively prepared by accepting input and wanting to put out an idea. So in the study of religion and theology, it is universally accepted that the value of truth is equal for all people (Muhammad Muslich, 2004). Finally, in this regard, Rolston explains that religion has the capacity to be more comparable to the objectivity of science because religion knows in detail and validity the value of objectiveness and the true value through its subjective formal study. Because religion is not only a tool for imitating reality, but it also becomes a balancer of the value of truth.

Conclusion

The concentration of discussions that question the existence of religion in science is inviting varied responses from some scientific figures, both religious and philosophical. Wacana, and the problem is caused by the pretext of criminalizing the study of scientific science from the side of religion and science in general. It's the same as Holmes Rolston, who commented on this field of study as a special concern of philosophy.

Rolston, who, besides being an environmental ethics activist, is also a religious and scientific figure, has a duty of purpose or view of thought. He explained that the fundamental values of religion can be integrated or correlated with science, or vice versa. Then this integrity between religion and science can be merged into the doctrine of methodology. And the methodology that Rolston describes is a method of philosophical nature and not of tactical value. Because religion is, according to him, used to find meaning that is proved by the theory of law or the concept of realistic or empirical causes and consequences and has meaning for life. In the meaning of the word, religion and science are very closely linked and become one unity. Even Islampun conveyed that the integration of religion and science must take place as reactionary phenomena of belief in religion and proved by science. It's like Muslim scholars develop their expertise in science by collaborating on the integrity of science in religion.
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