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Integration of Islam and Science in Interdisciplinary Islamic Studies

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Abstract

Science plays a crucial role in Islam. No other religion, and no holy book like the al-Qur'an, places such a high value on knowledge and commands its adherents to seek it. Islam is a religion of salvation that does not separate knowledge into dichotomous boxes. Islam should not be separated from science; instead, it should be integrated. Everything in the universe, including human creation and culture, essentially belongs to and originates from Allah. Science and technology are developing rapidly. Allah has provided humans with the tools of reason and senses to produce knowledge, as well as the universe and its contents. All of this serves the purpose of science and technology, which are based on religion. Science, as it develops, can originate from religious, rational, empirical sources, or a combination of all three. The integration of Islamic religious knowledge with science, or vice versa, implies that all knowledge ultimately originates from Allah. All manifestations of knowledge are ultimately aimed at serving God Almighty.

Keywords: *Islam, Integration, Science, Interdisciplinarity*

INTRODUCTION

Islam provides various solutions in solving life problems, whether *ubudiyah* or social, scientific or non-scientific. Islam as a religion that is *rahmatan li al-'alamin* has recently experienced a decline in thinking. The regression was influenced by the philosophy of materialism, especially positivism. Mujamil Qomar stated that the influence of materialist philosophy and especially positivism is very strong on education; including Islamic education is negatively affected.[1] It is necessary to know the importance of religion in providing direction to all knowledge activities in order to realize a good and orderly civilization. Scientific problems and broad insights in Islam require rational and empirical thinking, of course, also using *naqli* postulate which is centered on the main reference in Islam, namely the al-Qur'an al-Karim.

The presence of Islam introduced by the Prophet Muhammad can ensure the realization of a prosperous life, both physically and mentally. Islamic religious guidelines guide various aspects of human life. Very noble and ideal guidelines can be found in the Quran and al-Hadith. Islam teaches an active and developing life, respects reason by advancing science and technology, and strives to be balanced in meeting physical and spiritual needs. Islam encourages a sense of social concern, respects time, is open and democratic, focuses on quality, egalitarianism, encourages partnership, anti-feudalism, loves cleanliness, prioritizes brotherhood, behaves nobilously, and shows other positive attitudes. Theideal condition looks very perfect from a theoretical point of view. Reality shows that conditions are not ideal. This is because almost all religions, especially Islam, are often seen as just a set of doctrines to be followed through mere ritual. Areligious

activity takes place lively and routine, but the reality shows many immoral acts, crime, corruption, forest burning, violence between students, and others. Questions arise in various seminars, symposia, or lectures about whether errors come from religious teachings or the wrong understanding of its adherents. The issue must be responded to by not directly blaming certain parties, because it can give rise to truth claims, especially religion as a sacred guideline should not be blamed for all problems that arise.

A number of contemporary Muslim thinkers identify this crisis of consciousness as a failure to understand Islam authentically. Umat Islam has not succeeded in responding to change by being based on the substantial teachings of Islam and also the experience of Islamic culture itself. [2] Requires a systematic policy to reformulate the way of understanding and practicing religion. Policies that do not make religion merely a normative theological aspect and ritual Policies that encourage religion to become a soul or a guideline for life that will lead its adherents to eternal prosperity. Understanding religion from various perspectives is a non-negotiable obligation for various reasons. .

The separation of religion from science in Islamic society leads to a decline in the achievements of civilization as well as a closed attitude and backwardness in facing the dynamics of the modern world. Muslims need to adopt an open attitude towards science, accepting knowledge from various sources regardless of where science comes from. Science should be seen as the legacy of human civilization that involves a process of giving and receiving throughout history. Rejecting the development of science just because it comes from the Western world is an unrealistic and ahistorical attitude. An open attitude towards science was an important capital shown by Muslim thinkers in the golden age of Islam. A thought that successfully integrates Greek philosophy with empirical natural knowledge as contained in the Qur'an.[3]

METHOD

Qualitative research in the form of literature studies to get an overview of a phenomenon or situation as well as get an in-depth description from various sources or opinions related to the integration of Islam and science in interdisciplinary Islamic studies. Data collection is carried out by finding books, scientific journals, encyclopedias, dictionaries, and other sources that are important and relevant to the research study. Library research is data collection by studying, studying and understanding the data sources in several books related to research.

RESULTS AND DISCUSSION

Integration of Islam and science in interdisciplinary Islamic studies

Bustanuddin Agus is of the opinion that science and technology without religion will experience a crisis of meaning and energy to continue doing something that science itself wants. A religion without being supported by science and technology in the perspective of religious teachings will only be in the form of passion, and a belief that cannot be practiced in real life.[4]

Islam is a religion that encourages its people to utilize reason and think about everything in the universe. This is reflected in the Qur'an, Surah Ar-Rahman verse 33, which states, "O jinn and mankind, if you are able to penetrate (cross) the corners of the heavens and the earth, penetrate it, you will not be able to penetrate it except by the power (of Allah)." The verse shows that Allah provides opportunities for humans to think

and explore the universe. Human efforts in conquering space should be seen as a form of worship that aims not only to understand the secrets of nature, but also to the future of humanity.

According to Muhammad Ismail,[5] the understanding of Islam includes thoughts that have real evidence that can be understood logically as long as they are within the limits of reason. When something is beyond the reach of reason, then it must be shown by something that can be sensed, without the slightest doubt. Thus, reason has a very crucial role for humans, because through reason, humans can determine the best for life in this world and in the hereafter. The Prophet once said that there is no religion (Islam) without intellectual activity. This means that, for a Muslim, belief in Islam must be built on common sense and reasoning, not just imposed dogma or information that is not based on reality. Therefore, reason must be optimally functioned.

Allah has sent down a miracle that is very valuable for human survival through the Prophet Muhammad in the form of the al-Qur'an al-Karim. Al-Qur'an is the holy book of Muslims that guides the lives and perfects the books that were revealed to the prophets before the Prophet Muhammad. The Qur'an is not only a holy book, but it is also universal, intended for all mankind. Al-Qur'an is a reference from various fields of science, although the al-Qur'an is not a book of science, all knowledge about science should refer to the al-Qur'an. Thus, al-Qur'an explicitly explains everything that exists and happens on this earth, and science can prove it.

Ian G. Barbour is a scientist who is engaged in two fields, namely science and religion. Barbour is known as a pioneer of dialogue between science and religion, and has made significant contributions to the relationship between these two fields. Barbour's contribution to linking science and religion far exceeds the contributions of other experts. Barbour proposed an understanding that science and religion are not mutually destructive or contradictory, but on the contrary, can integrate. Barbour put forward four models or typologies of the relationship between science and religion, namely conflict, independence, dialogue, and integrity. Among the four typologies, Barbour is more inclined to the dialogue and integrity model. Both concepts are based on a very important basic premise, which states that science and religion both provide descriptions of nature.

Sains and religion in the context of the relationship between conflicts, each negating their existence, each only admits its own legitimacy. Sains and religion in the relationship of independence, acknowledging the existence of each other, but consider that there is no common point between science and religion. Sains and religion in the nature of dialogue, recognize that there are similarities that can be discussed between scientists and religious leaders, and even the two can support each other. Sains and religion nature relationship integration, combining religion and science in two variants, namely natural theology and natural theology. Sains and religion in natural theology seek support from scientific discoveries. Sains and religion of nature natural theology view the theological view of nature (natural theology) must be changed in accordance with the latest discoveries about nature.

Criticism of Barbour's typology emerged from contemporary Islamic thinkers. Sayyed Hossein Nasr rejected Barbour's integration, because it seemed that theology was considered subordinate to science; theology was changed to conform to the results of scientific studies. According to Nasr and Smith, theology or tradition should be the benchmark for scientific theories. The Islamization of Science movement by Al-Faruqi and Syed M. Naquib al-Attas is here to defend science from westernization and to answer the

concerns of Islamic scientists about the destruction of monotheism and nature due to the negative impact of Western science. Both emphasized the concept of Tawheed as the basis of science.

Albert Einstein once stated, ‘‘Religion without science is blind; Science without religion is paralyzed.’’ This is also agreed upon by David Tracy, a Catholic theologian, who emphasizes that the religious dimension in science is essential to understanding the world and requires a rational foundation that is rooted in classical religious texts and the structure of human experience. Amril noted that currently, scientists, especially from religious circles such as Islam and Christianity, have paid great attention to the problem between religion and science. Religion and science should be able to exist, especially in the study of science. Abdullah emphasized the importance of *rapprochement* efforts (willingness to accept each other’s existence) between two scientific camps, namely religion and science. He added that in contemporary religious discourse, religion does not have just one face, but many perspectives. Today, religion is understood not only in the context of Godliness, beliefs, and views of life, but also closely related to various historical-cultural, sociological, scientific, economic, health, and other issues. The process of integration between religion (Islam) and science is inevitable; This is even a necessity in building human civilization on the basis of central normative values. This process continues to be carried out by Muslims to achieve a better civilization.[6]

The separation of science from religion has led to an epistemological crisis in the search for knowledge. Science, which concentrates only on empirical objects and relies on the senses and rationality as a measure of truth, consciously ignores the possibility of acquiring knowledge from other sources that can penetrate into the metaphysical and suprarational realms. The separation of ethics from science further exacerbates the epistemological crisis. Ethics is part of religious teachings and also the foundation for philosophy. Ethics in turn is the foundation of science. The absence of ethics in science has implications for the existential crisis of modern humans, raising profound questions about the essence and meaning of life, which has an impact on spiritual crises and the loss of meaning, vision, and legitimacy of life, leading to a sense of alienation from oneself.

The existential crisis began when modern scientists denied the existence of God and hoped for the promise of happiness offered by post-Renaissance science in the Western world. Scientists assume that the universe operates in an evolutionary manner on the principle of creating each other without relying on external aspects. Scientists view nature as an eternal and evolving entity based on existing laws, without considering God as its creator. Happiness is understood as something that comes from the material world alone. Happiness develops in line with the scientific progress that humans have achieved.[7] The integration between Islam and science is very important. Islam needs science to strengthen its dogma of teachings It needs religious guidance to direct knowledge to the right path, for the good of man and the balance of the cosmos. Emmanuel Kant stated that the senses are able to absorb information, the intellect can understand, which ultimately produces science. Religion can serve as a guide that directs science to the right goal. Efforts to integrate Islam and science have been made by various parties.[8]

Contemporary Islamic scholars have made various efforts to bring science closer to Islamic values. M. Naquib al-Attas has introduced a pattern of de westernization of science, while Raji al-Faruqi has promoted the Islamization of science as a way to associate knowledge with Islamic teachings. Ziauddin Saddar puts forward the Islamic concept of civilization, while Mehdi Golshani emphasizes the importance of science in an

Islamic perspective. Kuntowijoyo proposed Islamic science through an integralization and objectification approach. Muslim scholars in various universities have made this integration effort. Amin Abdullah with the spider web theory. Imam Suprayogo with the concept of the tree of knowledge. The integration between Islam and science and its practical nature becomes more evident through the method of Islamic study with the application of multidisciplinary, interdisciplinary, and transdisciplinary approaches.[9]

Religion, philosophy, and science cannot, in essence, negate each other. Religion cannot negate philosophy and science. Philosophy cannot negate religion and science. Science cannot negate philosophy and religion. Each has its own truth. The truth of science, the truth of philosophy, and the truth of religion are three stages of truth that must be integrated, to complement each other and work together, so as to obtain a complete and comprehensive view of truth. Religion, philosophy, and science are not meant to blame each other, but to greet each other and unite according to their respective perspectives of truth.[10]

In the 16th century, Christianity, institutionalized through the Church Council, massacred scientists and invalidated scientific discoveries that contradicted Church doctrine. The reaction that emerged was that the surviving scientists formed a coalition with the king to overthrow the power of the church, and the effort was successful. This is where the history of secularization and secularism in Europe arose. Conversely, positivism, which sought to eliminate values, including religious values, from the scientific process, also met with strong resistance from post-positivism and Muslim scientists. Then, scientists tried to unite science, even philosophy, with religion.

The goal of complementing and collaborating is not to expose each other's weaknesses, especially in religion. Rather, each has its own unique method for solving a problem. Because a problem can be viewed from different perspectives, giving rise to different ways of addressing it. Science views a problem as an object of study and research. Philosophy views a problem as an object of thought and contemplation. Religion views a problem as an object of introspection and development.

Religion, philosophy, and science have their own areas of exploration. The area of exploration of science is rational and empirical. The area of exploration of philosophy is purely rational without empirical. The area of exploration of religion is the broadest area of exploration, namely empirical and meta empirical, physical and metaphysical, rational and suprarational, the sense (*dzauq*) of truth and the sense of beauty (aesthetics), the conceivable and the unthinkable, human achievement efforts and gifts from God, confirmation and completely new information. and so on. The area of exploration of religion crosses the areas of science, philosophy, mysticism and aesthetics.

The rise and fall of civilizations occurs because science and technology are separated from the perspective of *tauhid* that integrates theological, cosmological, and anthropological insights. Science and technology are far from being controlled by human desires for narrow, egoistic, and sectoral practical interests. All civilizations that have reached their peak, then experience weakness and decline until they are destroyed. This event, although it is a law of history, is caused by the denial of positive values that should be internalized. There are actions that abandon ideal ideals (das sollen) in education.

Fortunately, awareness is rapidly growing among Muslim scholars. Recently, a growing awareness of integration based on multidisciplinary, interdisciplinary, and even transdisciplinary discussions has begun to flourish. Kuntowijoyo reports that the increasing interaction between scientists and religious scholars in social studies has

stimulated interdisciplinary research. Many professional scientists in their fields have ventured into writing on religious topics. For example, issues of zakat and usury are popular topics among economists. Seminars invite religious scholars to speak on economics, the environment, health, social change, art, culture, and so on, thus fostering interdisciplinary collaboration.

The integration of Islam and science is an effort to bridge and harmonize Islamic religious understanding with modern scientific discoveries and methodologies. An integrative approach seeks to find common ground and complement each other. The integration of Islam and science is a holistic approach that seeks to enrich our understanding of the universe. It combines religious wisdom with the power of science. Integration is not merely about finding compatibility, but also about leveraging both perspectives for the advancement of a better and more meaningful civilization.

CONCLUSION

The integration of Islam and science is a holistic approach aimed at deepening understanding of the universe. This approach combines religious wisdom with the power of science. This approach goes beyond simply seeking compatibility between the two. Integration aims to utilize both Islamic and scientific perspectives for the advancement of a better and more meaningful civilization. Religion, philosophy, and science are not mutually exclusive; rather, they need to be integrated to achieve a comprehensive understanding.

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