Theology-Science: Monitoring the Dichotomy of Science and Religion in the Era 5.0 Mehdi Gholshani's Perspective

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Abstract: This paper aims to see the extent of the problems faced by humans, especially educators in overseeing the Religion-Science dichotomy. Here the researcher uses Mehdi Golshani's thinking. This is because Gholsani is one of the modern physicists who offers “ingredients” for theology-science in facing the 5.0 era. This is the reason for the researcher to reflect on his thoughts in observing the religion-science dichotomy for the present and future eras. The approach used in this paper is qualitative by describing articles related to the research title. However, the author also added the results of a questionnaire given to 203 students regarding science and religion. This is done to support more convincing data regarding religion-science. The results of the study provide an answer that Mehdi Golshani considers that modern science only relies on sensory reality, science has limitations in being able to talk about all aspects. The Golshani offer refers to the basis of the Quran, Sunnah and Muslim scholars. Golshani refers to the Quran so as not to mention that science is true, he also explains that the Koran does not regard it as the only source of knowledge about nature, because there are other sources such as reason. Meanwhile, for Golshani's reasoning and understanding, he uses 2 sciences, namely Aqaly and Sama'i Sciences. The meaning of aqaly knowledge is knowledge obtained through research, for example biology, chemistry and so on and sama'i knowledge is knowledge obtained through hearing such as linguistics and literature. Then the field of understanding the objects of science in Islam can be used in three ways, namely through the senses, mind and heart.

Keywords: Era 5.0; Science; Science-religion dichotomy; Theology-science

Introduction

One of the setbacks that is occurring in the Islamic world today is the dichotomy in viewing science and religion (Basri, 2019). This has an impact on the dualism in the management of educational institutions. As a result, what children learn from religion is considered different from or challenging sciences such as art, architecture, literature and natural sciences. The sharp dichotomy between religion and general science has resulted in a rejection of science by religious people and the belittling or isolation of the meaning of religion by scientists. Meanwhile, those who study religion feel that religious knowledge is far more important than general science, because according to them only religious knowledge directs human life. On the other hand, those who study science and technology consider it more useful in real terms than the religious sciences, because science makes it easier for humans to achieve their needs and desires (Rusdiana, 2014).

In Islam, there is no separation between religion and science. Therefore, there is no rejection of religion against science and vice versa, science against religion does not occur. In fact, what happened was that religion became the basis for the development of science (Meliati et al., 2021). While science can support the development of religious knowledge and make it easier to practice religious teachings, make it easier for Muslims to deepen their understanding of religious teachings, and make it easier for scholars to carry out ijtihad to solve various problems in life. So that the higher the mastery of science, the stronger the value of the Muslim faith which

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achieves high dignity and loses in civilization. The glorious era of Islam, the harmony of science and religion has been achieved in accordance with its era. During the time of the Prophet and the 4th generation of the Khalifahurrasyidin there was no rejection of science at all. Not because science has not found progress like in the present era, but indeed a pure Islamic view of empirical science. This happens because the guidance of revelation and sunnah is still running (Tjandrasasmita, 2009).

The description above can be seen from the events that have occurred, namely the lunar eclipse. Many people assume that the lunar eclipse that occurred during the Prophet's era was caused by the death of the Prophet's son, Ibrahim, from Al-Qibtiyah's wife. Even though the Prophet did not study science, in Islam he was neatly arranged in accordance with the revelations. The proposition above can be seen that the theological attitude of Muslims towards scientific phenomena is far beyond its era. This means that in the Prophet's era, there was no empirical tool to measure the occurrence of lunar eclipses (Qibtiyah & Ihsan, 2023).

In contrast to now, there are many tools to measure an event and the detectors are increasingly sophisticated. This is very different from what happened in the era of the Prophet, where if a lunar eclipse appeared, most people matched it with myth (mythology) (Thayyarah, 2013). Some say that the incident of the lunar eclipse was because of the Prophet's sadness over the death of his son. This kind of mindset makes rational reason very unsatisfactory. So that raises the question "what is the relationship between eclipses and someone who has died?" that's what's hard to accept (Adz-Dzakiey, 2008; Hairillah, 2015).

The era of super smart society (society 5.0) itself was introduced by the Japanese Government in 2019, which was created in anticipation of the disruption caused by the industrial revolution 4.0, which caused complex and ambiguous uncertainty (VUCA) (Wahyudin et al., 2023). It is feared that this invasion could erode the human character values that have been maintained so far. In facing the era of society 5.0, the world of education plays an important role in improving the quality of human resources. Apart from education, several elements and stakeholders such as the government, Community Organizations (Ormas) and the entire community also take part in welcoming the future era of society 5.0 (Kumorotomo, 2020).

To face the era of society 5.0, education units also need a change in the educational paradigm. Among them, educators minimize their role as learning material providers, educators become inspirations for the growth of students' creativity. Educators act as facilitators, tutors, inspirers and true learners who motivate students. Apart from that, implementing it requires governance from all elements, including local government, private sector, school principals, teachers and the community (Reni, 2023). Through school-based management, the leadership spirit of a school principal is needed who collaborates with the local government and community in implementing education in their school (Istiningsih & Rohman, 2022). "To improve human resources, both teachers and school principals, continuous local and international development is needed so that they are able to answer the challenges of the industrial world or face the era of the industrial revolution 4.0 and society 5.0," he said. In facing the era of society there are two things that must be done, namely adaptation and competence. To adapt to Society 5.0, we need to know the development of generations (know generations). The term baby boomers referred to is the high birth rate of several generations starting from generation x to generation α where the transformation of human civilization occurred.

According to John F. Haught, historically, discourse regarding the relationship between religion and science has been going on for quite a long historical period. During this long period of time, the relationship between religion and science experienced various dynamics. At certain moments, the relationship between religion and science is at a crossroads (Saad, 2016). Here, religion does not harmonize with science. Instead, religion and science are trapped in a binary opposition relationship. At this time, religion, with all its majestic and magical values, became a dogmatic view that took over all aspects of people's lives. Religion holds sway on all fronts. Not only in the theological aspects that regulate humans' relationship with God, but also in other aspects outside of it. Even into the realm of freedom of thought and reasoning. Historically, this period was known as theocentric (belief age), where science was under the control of religion.

Based on the expression above, the researcher wants to see the extent of the problems that humans, especially educators, will face in monitoring the Religion-Science dichotomy. Here the researcher uses Golshani's thinking. This is because Gholsani is one of the modern physicists who offers a "potion" for science in facing the 5.0 era. This is the reason for researchers to follow up on their thoughts in monitoring the religion-science dichotomy for the present and the next era.

Method

The research that the author uses is a literature review (Faisal, 1982; Sugiyono, 2019). This means that the references in this article use several articles in the form of journals, books or magazines. The approach used is descriptive qualitatively. This is done by reading the contents of the book, the substance of the discussion.
and focusing on the study and thoughts (Nata, 2013). The research object is Mehdi Gholshani’s book which is related to Science and Religion. However, the author also added the results of a questionnaire given to 203 students regarding science and religion. This is done to support more convincing data regarding religion-science. Then the results of the reading are expressed in the form of a narrative which is structured according to the results of the thought process. So that it provides easy understanding for readers.

Result and Discussion

Biography of Mehdi Gholshani

Mehdi Golshani is an Iranian contemporary scientist and philosopher and also a professor of physics at Sharif University of Technology. His main research centers on fundamental problems in cosmology and quantum mechanics. Mehdi Gholshani was born in Isfahan, Iran in 1939 AD or coinciding with 131 H. Gholshani received a B.S. in Physics from the University of Tehran and a Ph.D. in Physics from the University of California at Berkeley in 1969, specializing in particle physics. In 1970, he joined the Sharif University of Technology in Tehran and served as chairman of the Department of Physics during 1973-1975 and 1987-1989 and as vice chancellor of the university during 1979-1981. Since 1991, he has been a distinguished professor of physics there. He founded the Faculty of Philosophy of Science at Sharif University of Technology in 1995, and has been its head since then. He was head of the Department of Basic Sciences at the Iranian Academy of Sciences during 1990-2000 and was director of the Institute for Humanities and Cultural Studies in Tehran from 1993 to 2009. Golshani received the Prize (Golshani, 2007).

John Temperon for the Science and Religion Course Program in 1995. Golshani has contributed greatly to the study of the relationship and interaction between science and religion (Hidayatullah, 2017; Rifenta, 2019). In 1998, Golshani approached 32 high-level scientists, philosophers and theologians (only six of them were Muslims (Shogar, 2012), the others were Christians of various denominations) with eight important questions addressing the relationship between science and religion; he published their answers, along with his own lengthy comments, in a book entitled “Can Science Dispense with Religion?”

Physical Problems of Modern Science in the 5.0 Era

The progress achieved by modern Western science has given birth to various revolutions in the field of technology (Groumpos, 2021). These revolutions have produced various kinds of things that are beneficial to humans. Such as saving time and energy, shortening distances, ease of transportation, and other ways to get comfort. Unfortunately, on the other hand, science and technology have also given birth to various problems in life (Barca, 2011). Both the social, economic, political and environmental fields. Environmental damage such as: pollution on land, sea, rivers and in the air (Nally & Taylor, 2015). So it is only natural that Arnold Toynbee mentions that there is a huge imbalance with moral wisdom and humanity that has not developed at all, it is even said that it is even backwards (Golshani, 2007; Usman & Saban, 2022).

The western world’s problem with modern science, of course, demands the need for concrete steps that are capable of being a solution to this paradigm gap. Therefore, many Muslim scientists like Mehdi Golshani consider that modern science only relies on sensory reality, science has limitations in being able to talk about all aspects. This is especially related to metaphysical areas that arise from ultimate questions, for example why do we exist and what is the meaning of human life and why there should be a universe. Nor can science provide an explanation of where natural laws arise from. This is a scientific problem that is only empirical (Yakin et al., 2021).

Theological-Science Offer According to Mehdi Golshani

Mehdi Golshani is a modern scientist from Iran, he is also a professor of physics at Sharif University of Technology. His main research focuses on basic problems in cosmology and quantum mechanics. Golshani argues that the fundamental issue that has been neglected in modern science is the aspect of spirituality (religion). Previously, in the discussion of science as a scientific discipline, religion did not really have a place. Even though science is useful if it can draw closer to Allah, it can help develop Islamic society and realize its goals, it can guide others, it can solve various problems of society. In his studies and research on the criticized aspects of modern science, Golshani refers to the basis of the Quran, Sunnah and Muslim scholars (Ulama) (Bistara, 2020).

Golshani refers to the Koran so that his view of science is correct, he also explains that the Koran does not regard it as the only source of knowledge about nature, because there are other sources such as reason. Golshani concludes, “Therefore, it can be concluded that though observation and experimentation is indispensible for obtaining information from the external world, they are not a sufficient means. Should we rely solely on external senses, we will not be able to interpret the physical world, and find the relationship between natural events (Golshani, 2005).

Furthermore, according to Golshani, science cannot escape metaphysics which influences the choice of theory and the formulation of interpretations of
scientific findings. Golshani also shows that metaphysical presuppositions are not unique (Ningsih et al., 2022). But basically each scientist can have a different metaphysical opinion, from this phenomenon Golshani asserts that in the last two centuries, science has been dominated by a secular worldview, which sees nature in a mechanistic and materialistic way. This means that there are many world views but the views are secular, mechanistic and materialistic which dominate so that they become the paradigm of modern science (Thoyib, 2016).

![Diagram](Image)

**Figure 1.** Gholsani’s thoughts regarding theology-science

Mehdi Golshani's views are the same as those of al-Attas. In his book Prolegomena it is stated that Western culture is a secular culture, in the sense that it does not provide room for God in life. Likewise in the world of science in particular. By viewing nature as something independent, eternal and working according to its own system, God has no place in the working mechanism of the universe. Science that deals with nature only works to understand the causes and effects that occur in nature as something natural (Meliani et al., 2021; Al-Attas, 2011).

In this case, modern science does not need to take the hypothesis that God does not play a role and they ignore theological discourse and the working mechanisms of nature. Nature is only understood as a physical reality that works naturally without a regulator, occurs accidentally, and happens by itself without an ultimate goal. This view strengthens the separation between facts and values as something objective and subjective, therefore, in the world of science, moral relativism appears, seeing morality as subjectivity. So if a tree grows well then it must be watered religiously. Goshani believes this so that Muslims can take a stand to challenge the absolutism of modern science (Bigliardi, 2013).

Golshani’s criticism of modern science is not only based on theological reasons, but also in the realm of social and ecological life. Golshani also links this metaphysical view with ethical issues in the application of science which have also attracted the attention of many world thinkers. For Golshani, this destructive impact is related to the area of ethics which is no longer considered in the world of science, while this result occurs because of a materialistic and mechanistic metaphysical view which emphasizes the separation of facts and values and considers the latter to be unscientific so that it cannot enter the area of science (Thoyib, 2013).

**Theology-Science in Supervising and Its Challenges in the 5.0 Era**

Aqāliy knowledge is knowledge obtained through research, such as biology, chemistry and so on and sama’iy knowledge is knowledge obtained through hearing such as linguistics and literature. Then the field of understanding the objects of science in Islam can be used in three ways, namely through the senses, mind and heart. Various ways of obtaining knowledge and its objects, especially the senses and reason, all lead to the brain as the center for conveying information that will be expressed by the human mouth. However, for the science of religion, it is not sufficient to understand only through reason (brain), but also through spiritual contemplation (heart), because religion focuses on two elements of study, namely the element of the occult and the real (Aflisia et al., 2021).

The existence of two occult and real elements in the field of religion shows that religion cannot be fully understood by reason (brain) because the mind will not be able to penetrate the understanding of occult sciences, but it is the area of discussion of the heart to capture it. As for that which includes elements of the unseen, such as Allah, angels, jinn, doomsday, heaven, hell and so on. Meanwhile, the real elements of all of God’s creations on earth and under the sky, such as humans, animals, plants, natural phenomena, celestial bodies, the oceans and their various contents, the sun, moon, rain and so on. invisible to the naked eye, but Muslims still believe in it (faith) as a truth and reality in another world. Even though you are not visible in nature, God has given a parable or simile to humans as learning material (Muhajir, 2022).

This means that Allah SWT teaches humans about magical problems to be able to find them concretely through miniatures or models that resemble their original form. Both supernatural elements and real elements in the natural world can all be understood through reason (thinking) (Shapin, 2020; Shogar, 2012). As for the relationship with the study of science that all rests on problems that can be researched, observed, and studied carefully. This means that the approach to
learning science uses concrete things. To understand all kinds of science, it is certain to use the mainstay of reason (brain), because it deals with concrete (real) problems.

Thus, between religion and science there is something in common, that is, they both use the potential of the brain for various human purposes, such as observing, analyzing, criticizing, comparing, concluding and so on. For this reason, in the process of learning Islamic religious subject matter in junior high schools (SMP) between Islamic religion teachers and all science teachers do not claim to be parties that uphold the values of rationality (Aflisia et al., 2021; Gunawan et al., 2021). Islamic religious teachers also need a rational approach in understanding the various forms of reality that occur on earth and in the sky. To be clear, what is the relationship between religion and science in the learning process, what subject matter is taught in schools, all use the brain as the center of information study (Priatmoko, 2019; Ridwan, 2018). In simple terms, the relationship between religion and science can be described in the form of a diagram below.

![Figure 2. Gholsani’s concept of theology-science in era 5.0](image)

This is also supported by data from 203 students who stated that religion and science previously experienced tension between their religious beliefs and the results of scientific research (Iskandar et al., 2006). This can leave them feeling the dilemma of finding a balance between personal beliefs and scientific understanding. But now students are more open to different views in relation to theology and science. They may be more accepting of diversity, faith and seek to understand other people's perspectives. More clearly see the following diagram.

![Figure 3. Student satisfaction diagram on theology-science](image)

Figure 3 shows that the relationship between religion and science has two things in common; that is, it can be understood through the brain's ability to think and get the truth, and the object of study is equally realistic. Even though religion is reality, it can be understood with the brain (thinking), but it can also be understood through the heart (intuition) to believe in the truth because the study material is supernatural (abstract) (Abdullah, 2014; Stanley et al., 2001; Thoyib, 2016). Thus there is no disparity or dichotomy in the way of understanding religion and science as well as the object of study, all have in common that is understood through the ability of the brain and the study is realistic. Therefore, there is no reason for religious and general teachers to distinguish religion from science. Based on the similarities above, in fact the Qur’an does not distinguish between scientific studies and religion because both of them meet in the realm of reality and rational studies. This means that it is time for teachers to teach Islamic religious subjects to teach religious material using a rational (reasonable) approach.

**Conclusion**

This article aims to see the extent of the problems faced by humans, especially educators, in monitoring the Religion-Science dichotomy. Here the researcher uses Mehdi Golshani's thinking. This is because Gholsani is one of the modern physicists who offers a "potion" for theology-science in facing the 5.0 era. This is the reason for researchers to follow up on their thoughts in monitoring the religion-science dichotomy for the current and future eras. The approach used in this paper is qualitative by describing articles related to the research title. The results of the research provide the answer that Mehdi Golshani believes that modern science only relies on sensory reality, science has limitations in being able to talk about all aspects. Golshani's offer refers to the basis of the Koran, Sunnah and Muslim scholars. Golshani refers to the Koran so
that his view of science is correct. He also explains that the Koran is not considered the only source of knowledge about nature, because there are other sources such as reason. Meanwhile, for reasoning and understanding, Golshani uses 2 sciences, namely Aqaly and Sama’iy sciences. This means that aqaly science is knowledge obtained through research, for example biology, chemistry and so on and sama’iy science is knowledge obtained through hearing, such as language and literature. Then the field of understanding the objects of knowledge in Islam can be used in three ways, namely through the senses, mind and heart. Researchers also hope that there will no longer be any differences between the two, because they are interconnected and related.

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