

Islam, Science And Its Contribution To World Civilization

Nawawi

nawawithabrani71@gmail.com

Postgraduate Lecturer in Islamic Economy Law Master

Ibrahimi Sukorejo University, Situbondo-Indonesia

PO. Box 2 Tel. (0338) 542570, Fax. 452570 Sukorejo- Sukorejo 68374

Mobile Phone: 085330867176

Abstract: *In Islam, the relationship between science and religion is mutually dependent, both of which are primordially derived from one source, namely God as the creator of nature. Various scientific problems in the form of technology have resulted in various humanitarian and environmental crises, due to the neglect of various values other than the truth value. As a result, values have a polar and hierarchical nature. Polarization is an assessment that there are two opposite poles such as right-wrong, good-bad, beautiful-ugly. In fiqh, polar values are contradictory judgments, such as haram-obligatory, makruh-sunnah, valid-void, azimah-rukhsah and so on. Every epistemological view must be aware that the essence of everything is material, so the epistemology is materialism. As a result each of his research on what is considered an ultimate reality, namely matter. This understanding can be seen in empiricism, rationalism and positivism. Thus, the integration between science and Islam is not something separate and not something that one is above the other. The assumption that religion is higher than science is the influence of the concept of the dichotomy of science and religion. So, science as a human creation has a relative truth, while religion is a divine creation that has absolute truth. Both of them come from the God who created the universe, if they are combined, they will make a big contribution to world civilization.*

INTRODUCTION

In Islam, people who are knowledgeable must teach their knowledge to others where teaching is the most commendable act as a form of scientific responsibility. Alia Sabur is a girl from New York who was born February 22, 1989 where her hobby is teaching although there are many other lucrative jobs. He became a professor at the age of 19 the youngest in modern mathematics. At the age of 14, he earned a bachelor's degree with the predicate Summa Cum Laude and he also received master's and doctoral degrees. Surprisingly, he chose to become a lecturer not in America and Europe, but at a university in Seoul, South Korea which is not well known, in addition to practicing Taekwondo seriously and successfully holding a black belt in Korea. In recent times, one of the very bright people is Terrence Tao, of Chinese descent born 17 July 1975, Adelaide, Australia. He is a person who has an extraordinary IQ that is fantastic above the average human with an IQ score of 230. Tao's intelligence has been seen since he was 2 years old, he managed to solve basic arithmetic questions. By the time he was 9 years old he had managed to solve university-level mathematics. With his intelligence Terence Tao became the youngest professor (professor) at UCLA.

The ideological era describes the history of Muslims who believe that Islam is able to overcome socio-political problems with indications of the contradictions between Islamic ideology and secularism. Meanwhile, the age of science is marked by the spirit of developing science. Science has a very important role in human civilization regardless of race and heredity. Atha ' ibn Abi Rabah, a slave of Bani Fahr was once believed to be a fatwa expert in Mecca and had been an interpreter of the Umayyad dynasty informing the pilgrimage season. Even though this is he with a simple appearance, slightly black skin and not from Arab descent with a strategic position in one country. Wasil ibn Atha', a Mu'tazilite, was once a slave but he became an expert in linguistics, kalam, literature and other sciences. Thawus bin Kaisan of Persian descent did not care even if he exposed the shortcomings and mistakes of the rulers in his lectures, but he was highly respected and consulted by the rulers. Surprisingly, when Thaus died, his body was paraded by a large number of Arabs. Some say intelligence comes from heredity.

In the context of the acceptance of Muslims towards science, we can also witness an extreme character such as that of Kemal Ataturk (1881-1938 AD). Ataturk carried out a blind acceptance of Western science and culture, all of which can be seen in Ataturk's way of adopting science and secularism from the West. Nevertheless, Ataturk had views that led to doing so. First Ataturk wanted Turkey to become a modern secular state. To be able to realize this, then what must be done is to study the history of Western science. As a result, Ataturk sent several people to attend doctoral courses at Harvard University in the scientific discipline of the history of science (Nasr, 1993: 3). Of course, what Ataturk dreams of is not far from secularization which has caused controversy, where he dreams of Turkey as a country like Western countries that do not have religious symbols (Islam).

Therefore, in Islam knowledge is the light of God which requires an approach to obtain it easily. The significant approach is prayer as a means of asking Allah SWT. That's why prayer is a powerful weapon to gain knowledge, especially the prayers of parents for their children. Therefore, knowledge is often obtained through kasyaf or laduni science, where generally obtained through *tazkiyah an-nafs* (purification of the heart). Samir Amin argues that the modern world crisis is characterized by three contradictions, namely: First, the increasing gradation of work in the industrial world, namely the acceptance of work skills along with the increasing number of workers. Second, the contradiction stems from the specialization of jobs that require skills. Third, the humanitarian crisis,

this crisis arises from changes in ownership and control of capital. The gradual disappearance of the individual or family ruling bourgeoisie in the 19th century and the emergence of a class which tends to exercise control over so much capital is increasingly centralized (Amin, 1977: 160).

RELIGION VERSUS SCIENCE

The use of the word 'versus' here is just to make it easier to choose a word that means not a contradiction. Religion does not always contradict science, although there are still claims from various religious figures and experts. Perhaps in human history there is no denying that the relationship between religion and science has not always been harmonious. The opposition or antagonist of the two had influenced the fate of many people's lives for a long period of time.

The second group is a group of Muslims who reject science, where this group is from the ulama although not all of them. They reject modernist views and base their views on the implementation of shari'ah. One of them is Nawab Alauddin, a ruler in the feudal state of India who rejected the telescope because it was considered to damage faith and oppose the Prophet SAW (Masood, 2009: 201). Meanwhile, according to Nasr, this group was originally from the Wahhabi thought and movement in the 19th century which opposed modern science and technology. However, according to Nasr, a massive transformation has taken place where Saudi Arabia currently has the best program on teaching science and technology in the Islamic world (Nasr, 1993: 5).

The third group is Muslims who hold the view that scientific endeavors in the West are born from a certain historical background; it is deeply intertwined with other institutions of Western civilization, and despite its claims to universality, it is a fabrication of Western civilization. The process of change (read: development) by negating the role of religion can at least be seen from the experience of the West in the past. Some experts state that the West is the oldest model for the ongoing modernism project, so that its society becomes a truly modernized society (Halman and Riis, 2003: 1). As such, it is deeply rooted in a worldview different from Islam. In fact not only science but all modern knowledge has been deemed to require epistemological correction. They took the initiative to give birth to science that breathes Islam. This kind of initiative and thought gave birth to a belief which later became known as the "Islamization of science" as pioneered by Ismail al-Faruqi (1921-1986 AD). This is a movement based on the assumption that the cause of the decline of the Islamic world is the "education system" which is divided into two subsystems, one side is "modern" and the other is "Islamic". To fix this problem, al-Faruqi tried to unite the two educational systems and Islamize knowledge.

According to Nasr, Islamic science is not part of Western science, but is an independent way of looking at the workings of nature. If Western science has a lot to do with Western civilization, then Islamic science, of course, has a lot to do with Islamic civilization. The principle is that science is not a value-free activity. In addition, it is very possible for a civilization to be able to learn science from other civilizations (Nasr, 2001: 6). Thus, epistemologically and axiologically there are differences between Western science and Islamic science. Epistemologically the sources of study for each of these sciences come from different civilizations, while axiologically Islamic science does not recognize the adage "value-free science". Of course, Muslims take any action, including science, which has legal consequences.

In this regard, according to Streetan (2001), we are currently in the great currents of globalization with changes taking place so rapidly. According to Paul Streetan in his book *Globalization: Threat and Opportunity* (2001), globalization not only gives birth to various conveniences but also creates various social changes. Streetan said that globalization gave birth to a paradoxical face, a threat on the one hand and opportunity on the other. Sociologically the threats and opportunities will be faced by every religion as an important element in society. Therefore, like it or not, religious roles need to be revitalized. In the midst of the onslaught of modernization and globalization which took place very quickly and whose direction was difficult to predict, people still hoped for religion to appear to face various problems caused as a consequence of the changes that occurred. Komaruddin Hidayat personified religion as a "superman" who is able to perform miracles to find a way out of various problems that arise in society (Hidayat, 1999: 36).

Islam gives a very high appreciation for the caliphs who are highly knowledgeable and have strong faith. community caliph is called *ulu al-albab* (Shiddiqi, t. th: 291). There are four main characteristics of the caliph as mentioned in the verse, namely: First, people who always make remembrance (remembering the greatness of Allah, mentioning the names of Allah, and reflecting on the blessings that Allah has given). Second, people who do contemplation or do analysis. Third, people who are fully aware of the wisdom behind Allah's various creations. Fourth, the recognition of all the greatness of God and the low capacity of humans (Shihab, 2009/II: 308-312).

Many scientists who support scientific culture based on texts (hadarah al-nash) do not realize and do not want to care that outside of their scientific entity, there are other scientific entities that are factual-historical-empirical in nature, so that they are in direct contact with the reality of the problem. humanity (hadlarah al-'ilm), such as social sciences, natural sciences and humanities. In addition to the hadlarah al-'ilmentity, there is another philosophical ethical entity (hadara al-falsafah). The three entities should greet each other, not stand alone because there is no one scientific discipline that is not related to other scientific disciplines. In this case, the science of fiqh, for example, requires the support of biology and its laboratory when discussing fiqh al-menstruation, as well as when you want to do rukyah al-hilal or calculate inheritance, you need help from astronomy and arithmetic such as mathematics, accounting and so on. science that is categorized as 'secular' also requires a content of religious moral values in it, so that it has ethical-moral values.

Gulen emphasized the unification of three important elements of science, namely natural, social and religious sciences. A perfect human will only be realized by the unification of these three elements in education. He also added the importance of the teaching process instilling ethical values. Education for him is an absolute requirement to achieve modernization in the social, economic, and political fields. For Gulen, law, democracy and human rights will only stand if an individual has received a proper education. In this way, Gulen actually wanted to combine modern education with Islamic morals. He acknowledged that the education system and the development of science had developed well in Western society. But he said the system had lost an important dimension in humans, namely spirituality. This has happened since the Enlightenment era, where religion was considered unrelated to science and even became a barrier to science. Gulen emphasized that science must go hand in hand and religion can play a role in the realm of ethical, intellectual and social development.

Actually, the obsession of religion as a sacred institution that can overcome social ills can be seen from the predictions of futurologists such as John Naisbitt and Patricia Aburdene. In modern times, religion is usually eroded by such rapid and rapid developments plus individualistic and materialistic lifestyles. However, according to Naisbitt and Aburdene, religion actually got an important moment of revival. Both explained that modern society is too tired of physical problems outwardly, therefore they need something that can guide them as well as quench their thirst for life through spiritual paths. Departing from the case of America, Naisbitt and Aburdene explained that in those developed countries, people flocked to religion and spiritual movements. It becomes something that is quite problematic and difficult to accept if the spirituality in question is only a spiritual movement without formal religion. The term used by Naisbitt and Aburdene is spirituality yes organized religion no. In Islam, spirituality and religion are two inherent things that should not be separated (Naisbitt and Aburdene, 2000).

Almost all Muslim countries do not have clear, comprehensive, integrated and directed policies and national plans for the development of science. In fact, in many cases it is the most neglected area of national policy that places too much emphasis on economic growth. This is different from developed countries which pay special attention to education policy in a broad sense, even exceeding foreign or military policies because the failure to develop national education broadly can hinder overall development in the future (Azra, 1999: 17). Actually now the Muslim world has been blessed with a great opportunity. First, the aspect of abundant natural wealth, so that oil resources can prosper other Muslim countries, if justice for fellow Muslims and their teachings are upheld. Second, the Muslim world has the greatest wealth of biological resources, such as in Indonesia. Third, the Muslim world has a unique and universal teaching potential for humanity.

The discovery of the scientific method which has an empirical and rational character has brought extraordinary advances in science and technology. Industry and various kinds of scientific discoveries bring ease of life, open new life insights, and give birth to a new pattern of life called modernism. Modernism is characterized by rationalism, progress, and secularism. Thus, the modern West is the age when humans find themselves as a force that can solve life's problems. Humans are seen as great creatures, independent from God and nature. Western modern humans deliberately break away from their attachment to God (theomorphism), to build a human-centered human order (anthropomorphism). Humans become masters of their own destiny, which results in a disconnection from spiritual values which implies that modern Western humans are unable to answer life's problems on their own.

In the Islamic perspective, nature in Arabic is 'alam which means symbol. Actually the Qur'an is the counterpart of the text in human words; the verses are called 'ayat' (signs), like natural phenomena. Both nature and the Qur'an speak of the presence and worship of God (Nasr, 1999: 24). "We will show them Our signs (of power) in all the horizons and in themselves, so that it becomes clear to them that the Qur'an is true. And is it not enough for your Lord (for you) that verily He is witness to all things?" (Surat Fushshilat: 53). If the tradition of symbolic interpretation of the biblical text has been lost, and the subsequent texts are reduced to their literal meaning, humans still know their obligations, but natural texts can certainly be understood (Nasr, 1999: 24).

In this case, science should stand alone separately (separated entities), let alone be arrogant and stand firm as a single entity (single entity). The current level of human civilization, which is marked by the increasingly rapid progress and sophistication of information technology, provides no other alternative for scientific entities except to hug and greet each other, be it at the philosophical, material, strategy or methodological level. That is what is meant by the integration-interconnection approach. If it is not possible to carry out the integration process, then using the interconnection approach can be an option (Abdullah, 2006: vii).

The world has recognized that Islamic science in the 7th century to the 16th century Muslim generation has had a major contribution to the progress of Western civilization. They are so synonymous with the positive achievements of science. They were born and developed just when the West was in the Dark Age. They not only learn the sciences from Greece, but they provide corrections and new scientific products as a complement to the previous Greek science (Saliba, 2007: 193). This is what causes the development of Islamic science at that time so rapidly.

For example al-Khwarizmi was a mathematician, astronomer, astrology, and geographer who came from Persia. Born around 780 in Khwārizm (present-day Khiva, Uzbekistan) and died around 850 in Baghdad. For most of his life, he worked as a lecturer at the Honors School in Baghdad. His first book, *al-Jabar*, was the first to discuss systematic solutions of linear and quadratic notation. So he is called the Father of Algebra. His Latin translation of *Arithmetic*, which introduced Indian numerals, was later introduced as the Decimal Positional Numbering System in the Western world in the 12th century. He revised and adapted Ptolemaic Geography as well as working on writings on astronomy and astrology.

The generation of Islam in the 6th to 11th centuries has been recorded as a pioneer generation in the field of science and philosophy. They are active in studying and producing scientific discoveries that benefit human life worldwide. For example, Abu

Abdullah Muhammad al-Idrisi as a geographer who is famous for his work on maps. The map of al-Idrisi has been used as a reference for three centuries by world geographers such as Baker and Stanley. This map of al-Idrisi has also been a reference for sailors in his time and after (Scott, 1904: 461-2). On the other hand, there were many services of Islamic science in the context of the renaissance and humanism in the West in the 16th century.

We also remember Jabir ibn Hayyan al-Azdi al-Tusi al-Sufi (722-804) who in the West is known as Geber, as a founder of Islamic Chemistry from Kufa, Iraq. Al-Jabir has written about 112 books. On the other side is Abu Yusuf Ya'qub ibn Ishaq al-Kindi (801-873) who in the West is known as al-Kindus. Al-Kindi is known as an Arab philosopher who produced about 207 books in various fields such as logic, philosophy, physics, mathematics, music, medicine, and history. There are also those who work in the field of mathematics such as Muhammad ibn Musa al-Khawarizmi (780-850 AD) so that his theory continues to be used in the West, namely the theory of al-Jabar, and many other Muslim scholars who are active in the world of science of their caliber above (Nasr, 1993: 42-45).

Integration of Science: Efforts to Find the Truth

Science has a high role and people with deep knowledge will obtain the title of scholar. Although the rank of the prophet has been closed after the Prophet SAW, but there are still scholars who have the same position as the prophets of the Children of Israel, namely the scholars of the people of the Prophet SAW. Indeed, in the quantity of prophethood after the Prophet SAW has been closed but in the quality of prophethood there are still those who do not have the title of prophet, but in the form of scholars who have deep knowledge and high value khasyyah to God Almighty:

"Asy-Syadzili once dreamed in Bait al-Maqdis that Imam al-Ghazali once met with Prophet Musa As, where Prophet Musa asked the Prophet SAW: O Messenger of Allah, is it true that you say that the scholars of your people are like the prophets of the Children of Israel? The Prophet (peace and blessings of Allaah be upon him) replied: Yes, it is true! Prophet Musa As: What is a scholar like, O Messenger of Allah and where is he ?. There is a scholar called by the Prophet SAW is al-Ghazali. Prophet Musa (as) asked him What is your name? Al-Ghazali replied: My name is Muhammad bin Muhammad bin Muhammad Al-Ghazali. Prophet Musa (as) said to him: Can this person be equated with the Prophet of the Children of Israel, O Messenger of Allah? Since I didn't ask the names of his father and grandfather, I asked what his name was. Al-Ghazali said to the Prophet SAW: Will you allow me to answer to the Prophet Moses? The Prophet (peace and blessings of Allaah be upon him) replied: Please! Al-Ghazali said to Prophet Musa AS: If I have sinned against you I apologize, but you have sinned against Allah SWT and have not apologized. Prophet Musa As was very shocked and said, "What is wrong with me to Allah? Al-Ghazali replied, "Did not Allah ask you what is in your right hand, O Moses? (QS. Thaha: 17). Though you should have answered enough in my right hand is a stick, but you actually answered very long. Moses replied: This is my staff, I hold on to it while walking, and I hit with it the leaves of the tree so that it falls for my goats and there is a need for me on the staff (QS. Thaha: 18). Prophet Musa (as) said: Allah is our beloved, so I took the opportunity to talk at length with him. Al-Ghazali also said: "So am I, you are also my lover, so I also took the opportunity to talk to you for a long time." (Miraghni, t. Th: 119).

Therefore, the position of scholars who have deep knowledge and contribute dominant knowledge is the same as the prophets of the Children of Israel. So logically Zwemmer, an English orientalist placed al-Ghazali as one of the four chosen people of Islam from the time of the Prophet SAW to the present day: first the Prophet SAW, second al-Bukhari, third al-Ash'ari, and fourth al-Ghazali. Knowledge flows from Allah SWT as a medium to carry out His commands and stay away from His prohibitions. This shows that science is not for science. Therefore, Prophet Khidir was allowed by Allah SWT not to follow the Shari'ah of Prophet Musa, as stated by Ibn Taymiyyah: Prophet Khidir said to Prophet Musa: 'I did something based on the knowledge that Allah taught me, which you did not know. While you do something based on the knowledge that Allah has taught you, which I do not know (Ibn Taimiyah, t. Th/ XXVII: 59).

Lukman was a black Abyssinian slave, his lips were thick and his soles were thick. Lukman was given wisdom by Allah SWT in the form of knowledge, religion, truth in speech, and wise words. He gave many fatwas before the Prophet David was sent. Prophet Daud As once found and learned from Lukman. When Lukman was asked about his attitude, he replied: "Wouldn't it be better for me to stop giving fatwas if someone has dealt with it?" Sayyid Qutb stated that the greatness of the companions lies in their enthusiasm to learn and then to the maximum effort to practice it (Budiyanto, 2009: 17).

On the other hand, ignorance is a source of disaster in the progress of human civilization. According to Gulen, the source of the destruction of Muslims today is inseparable from three problems: division, poverty and ignorance. For Gulen, faith is a result of an interaction between qualified knowledge and strong sincerity. The science he means is the science that is able to give birth to fear, accompanied by sincerity and be a method in reading the signs of the soul and nature in the Qur'an. Sincerity, according to Gulen, the belief that God gives to a pure heart, that is, the belief that changes a little into a lot, shallow into deep, limited worship into unlimited, so that human beings are able to achieve the most valuable in this world and the hereafter (Gulen, 2006: 114).

The integration of knowledge is the integration of separate sciences into one unity of knowledge. The integration of religious science and general science is an attempt to dissolve the polarization between religion and science caused by the mindset that distinguishes between religion as an independent source of truth and science as an independent source of truth as well. This is because- as explained in the introduction- their existence is mutually necessary and complementary. As felt by the countries in the

Western hemisphere that are known to be sophisticated and advanced in science and technology, they are aroused and begin to realize the need to re-examine the dichotomy of science apart from the religious values they have developed from the beginning, because religion is very wise in managing its interaction with nature which is the ecosystem in which human beings live.

Reviewing the role of religion in human life, then religion should be developed as the basis of values for the development of science. The fact is that the development of science without the advancement of religious values will lead to gaps that result in religion being abandoned and science arrogantly exploiting nature so that there is various ecosystem damage like today that plagues the world, as described in the Qur'an, "There has been damage on land and in the sea due to human deeds so that Allah may feel to them as from (the consequences of) their deeds so that they return (to the right path) (ar-Rum: 41). " This is where the integration of science and religion requires a philosophical foundation, which consists of three major pillars, namely ontology, epistemology and axiology, so that religion is not only an ethical foundation, but a philosophical foundation for the development of science. The consequences of science without an ethical-moral foundation cause an environmental crisis, whereas in Islam one's faith is directly proportional to responsibility for the environment. One of the principles to obtain longevity and full of blessings is not to cut down a wet tree unless there is a purpose, as the words of Sheikh az-Zarnuji (t. Th: 48): "One should stay away from cutting green trees unless there is a need."

In Islamic history, as seen in Khaldun's (2000) study of civilization, attention to culture and morality is very important in building a nation. The progress or decline of civilization is highly dependent on the morality of the people. Civilization is directly proportional to morality so that moral values must be integrated in every generation. Islam places revelation as a religious paradigm that recognizes the existence of Allah SWT both in belief and its application in building knowledge. That is, Islam rejects the notion that science is for science, but Islam requires morality in seeking the truth of science. The purpose of knowledge is to be practiced as Ali ibn Abi Talib said: "Knowledge will invite its owner to do charity, if he fulfills the invitation his knowledge will remain and if not, then his knowledge will be lost." In addition to scientific ontology (whatness), scientific epistemology (howness), religion emphasizes the axiological dimension of science (whyness). Actually, previous scholars have integrated knowledge as a whole. For example, al-Ghazali's Sufism in the book *Ihya' Ulum ad-Din*, where axiology comes from revelation, epistemology is the relationship of reason and intuition, and ontology is terms, such as al-aql, al-nur and ethics or morals.

Likewise, in the science of kalam it is explained that 'What exists' can be divided into three parts, namely impossible to exist (*mustahil al-wujud*), possible to exist (*jawaz al-wujud*) and obligatory to exist (*wajib al-wujud*). Must exist is the existence of something that is mandatory. It exists not because of anything else but is the cause of the existence of all things. This in Aristotle's view is called the *Prima Causa* (in religion: God). God that must exist is mandatory, including knowledge (al-'science) so that the existence (existence) of science and religion is identical and united in the form of God. Therefore, integrity and interconnectivity at the philosophical level in scientific discourse must be given fundamental existential values in relation to other scientific disciplines and in relation to humanistic values. For example, *fiqh* in addition to its fundamental meaning as a philosophy to build a relationship between humans, nature and God, furthermore the study of *fiqh* must also be mentioned that *fiqh* cannot stand alone (self-sufficient) with the word developing together with other scientific disciplines such as philosophy, sociology, psychology. etc. In this way, *fiqh* can play its role and contribute to the development of Islamic thought. Sociology as a scientific discipline that examines social interactions between humans will be well empowered if sociology teachers – as an element of the knowledge transfer process – also invite students to review social interaction theories that already exist in cultural and religious traditions. Such interconnection will empower each other between sociology on the one hand and cultural or religious traditions on the other.

Model of Integration of Sciences

Integration of knowledge is one of the typologies of the relationship between science and religion, as are the other three typologies, namely typologies of conflict, independence and dialogue. Integration has two meanings. First, that integration contains an implicit meaning of reintegration, which is to reunite science and religion after they are separated. Second, integration implies unity, namely that science and religion are a primordial unity. First, the first meaning is popular in the West because historical facts show the problem of separateness. This departs from the case of Copernicus (1473-1543 AD) which was later strengthened by Galileo Galilei (1564-1642 AD) about the heliocentric structure of the universe (the sun as the center of the solar system) in contradiction with the church which has a geocentric understanding (the earth is the center of the solar system).). This problem has created tension between science and religion. As a result, acceptance of the truth of science and religion (church) becomes a dilemma choice. Hossen Nasr (d.1933 AD) as written by Komaruddin Hidayat classifies Western society as the post-industrial society (Roharjo, 1985: 184-185) which has achieved such a level of material prosperity with all-mechanical technological traps. automaton, instead of getting closer to the happiness of life, but on the contrary, he feels anxious precisely because of the luxury of life he has achieved.

Second, the second model is developing in the Islamic world because ontologically it is believed that the focus of the truth of science and religion is one, the difference is only in the scope of the discussion. The first study starts from reading the Qur'an (deductive), while the second starts from reading nature (inductive). The truth of the two supports each other and does not contradict each other. Hamed A EAD, from Cairo University wrote under the title "Alchemy in Ibn Khaldun's Muqaddimah" stating that Ibn Khaldun defined chemistry as the study of substances from which the generation of artificial gold and silver can be created. In this case, actually the two met at one point of truth. Namely, the two have never experienced conflict because it is not really a conflict

between science and religion, but a conflict of understanding between scientists and clergy. Therefore, the view that science must be value-free on the one hand has accelerated the development of science but on the other hand has produced a very large negative impact. The two knowledges complement each other and become one unit (integrative-complementary). The 'ilm 'ilāhī as stated in the Qur'an is positioned as the grand theory of science or in other words, the 'ilm 'ilāhī grand theory is taken from the qauliyah verse, while the 'ilm insān, grand theory is taken from the kauniyah verse.

Various scientific problems in the form of technology have resulted in various humanitarian and environmental crises, due to the neglect of various values other than the truth value. In this case, the values are polarized and hierarchical. Polarization is an assessment that there are two opposite poles such as right-wrong, good-bad, beautiful-ugly. Wrong, bad and ugly are not something that has no value, but negative value. The hierarchy is a gradation of values, such as very bad, bad, quite good, good and very good. In fiqh, polar values are contradictory judgments, such as haram-obligatory, makruh-sunnah, valid-void, azimah-rukhsah and so on. While hierarchical values are legal values that are gradated, such as *makruh tanzih*, *makruh tahrim*, *khilaf al-aula*, *mustahab*, *nazab*, *najis* (*mukhaffafah*, *mutawassitah*, and *mughallazah*).

According to Paulo Freire, humans must be conceptualized as practical beings, namely beings who are aware of the relationship between awareness of direction and processes that form the basis for the creation of action plans that require methods, goals and choices of values. Thus, the human technique to achieve a goal in life is not something neutral (Freire, 2002: 83-84). Western experience so far can provide wisdom in development without religion. If it is traced that the modern era in the West since the seventeenth century was the beginning of the victory of the supremacy of rationalism, empiricism, and positivism over religious dogmatism. This fact can be understood that the modern era of the West was built on the basis of the separation between science and philosophy from the influence of religion (secularism). The combination of rationalism and empiricism in one epistemology package gave birth to what Thomas Henry Huxley called the scientific method. Likewise, when Turkey pursued the West by carrying out modernization pioneered by Mustafa Kemal, he misunderstood the modern perception that being modern must inherit Western culture, such as changing Turkish national clothes with European clothes, changing Arabic letters to write Turkish into Latin letters and so on. Meanwhile, Japan still maintains its own authentic culture by adopting Western technology, so that the so-called 'Japanese-style' management was once famous.

Ontologically, the relationship between science and religion is mutually dependent, both of which are primordially derived from one source, namely God as the creator of nature. Every epistemological view must be realized by a certain ontological understanding. For example, someone who has the belief that the essence of everything is material, then his epistemology is materialism. As a result each of his research on what is considered an ultimate reality, namely matter. This understanding can be seen in empiricism, rationalism and positivism. Likewise, someone who ontologically believes that ultimate reality is non-material, then their research direction is on the non-material, as is the understanding of intuitionism. Axiology is a branch of philosophy that deals with the issue of values so that axiology is defined as a philosophy of value. Values are objective and subjective. Value simply means 'quality' attached to something that carries value. For example the mosque is beautiful. The mosque is the bearer of values and beauty is the quality (value) attached to the mosque. Thus, the integration between science and religion is actually not something separate and not something that one is above the other. The view that religion is higher than science is the influence of the concept of the dichotomy of science and religion. Science is considered as a human creation that has a relative truth which has a lower position than religion as a divine creation that has absolute truth.

Conclusion

In Islam, the relationship between science and religion is mutually dependent, both of which are primordially derived from one source, namely God as the creator of nature. Various scientific problems in the form of technology have resulted in various humanitarian and environmental crises, due to the neglect of various values other than the truth value. As a result, values have a polar and hierarchical nature. Polarization is an assessment that there are two opposite poles such as right-wrong, good-bad, beautiful-ugly. In fiqh, polar values are contradictory judgments, such as haram-obligatory, makruh-sunnah, valid-void, azimah-rukhsah and so on. Every epistemological view must be aware that the essence of everything is material, so the epistemology is materialism. As a result each of his research on what is considered an ultimate reality, namely matter. This understanding can be seen in empiricism, rationalism and positivism. Thus, the integration between science and Islam is not something separate and not something that one is above the other. The assumption that religion is higher than science is the influence of the concept of the dichotomy of science and religion. So, science as a human creation has a relative truth, while religion is a divine creation that has absolute truth. Both of them come from the God who created the universe, if they are combined, they will make a big contribution to world civilization.

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