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SCIENCE IN PERSPECTIVE OF M. QURAISH SHIHAB

Charles Rangkuti

Yayasan Islamic Centre Sumatera Utara, Indonesia Email: charlesrangkuti30@gmail.com

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ABSTRACT

The purpose of this study is to analyze aspects of science in the perspective of M. Quraish Shihab. The method used in this research is the character study method, which is a study of the concept of thought of M. Quraish Shihab related to science. This type of research is library research. The approach used in this research is the historical approach. There are three aspects of science found in the thought of M. Quraish Shihab, namely ontology, epistemology and axiology. Related to the concept of science ontology, M. Quraish Shihab argues that the most real thing to be used as an object of knowledge is God, because God is the cause of all causes. Whereas the epistemology of science, he argues that the five senses, mind and heart are tools as well as sources or tools that can be used by humans in seeking knowledge. There are scientific methods in seeking knowledge, namely the *ijbari* and *'irfāni* methods. In the *'irfāni* method there is intuition, lad ladunni science, hunches, dreams and revelations. The measurement of the truth of knowledge obtained by various methods is revelation. As for the axiology of science, Shihab believes that a scientist must maintain the ethics of a scientist and always involve God in the process and results of the search for knowledge.

Keywords: Science, Perspective, M. Quraish Shihab.

INTRODUCTION

Al Qur'an (Islamic Holy Book) informs that all knowledge groups are at the same level because all knowledge groups originate from the same source. Al Qur'an also informs that there is no dichotomy of knowledge in Islamic teachings. It can also be said that all groups of knowledge both sourced from the scriptures and from nature are essentially sourced from Allah because He who ordered humans to pay attention to the scriptures and natural phenomena. With the realization that all knowledge is sourced from Allah, a scientist will present the intentions, processes and results of his knowledge for the benefit of all the universe or in terms of the verse called khasyyah (fearful and reluctant) to God if he does not offer the knowledge he has achieved and possessed to him.

Historically, historical facts have also been discovered that Muslims have studied and developed all knowledge groups. Historical facts inform us that the curriculum of Islamic education in the golden age of Islam is a curriculum that treats all knowledge groups. Scientists who live in the 'second' educational institutions develop all knowledge clusters in accordance with their respective tendencies without looking down on the knowledge clusters occupied by other scientists. One of the most influential figures in the effort to develop science in the golden age of Islam was al-Ma'mūn (813-833 AD). He founded Baitul Hikmah / Darul Hikmah and hired Christian translators, and even idolaters. It can be said that the era was the era where the highest Islamic civilization in all fields, including the civilization of science, which ultimately had an influence on the progress of contemporary Western civilization (Nasution, 2014: 63-69).

During this heyday, especially during the Umayyad and Abbasid dynasties, all knowledge groups developed very rapidly and brought Muslims to a high level of civilization, while at that time the areas far from outside Islam were still in the dark ages of civilization (Bakhtiar, 2015: 40-46). However, in subsequent developments, many of these knowledge groups were ignored by Muslims. Most scientists only develop religious knowledge and this is only in the form of comments or comments on comments. Sharh, hasyiah and khulashah traditions are traditions that are identical with the time of impasse or setback (Asari, 2018: 66-67).

The description and quotation above informs that the intellectual tradition of Islam throughout the history of Islamic civilization - one of which is the development of science - experiences ups and downs. One time it had a golden period and another time

it had a period of stagnation or setback and at another time it experienced a period of awakening (Nasution, 2014: 50-86.

On the basis of the gap between doctrine and historical facts, this research was conducted. This research was carried out as an effort to re-actualize Islamic intellectual traditions - especially in the field of studying and developing all knowledge clusters that had triumphed, stagnated and were emerging in the 19th century - by making M. Quraish Shihab's thinking the object of research. This research is more focused to see the view of M. Quraish Shihab about the nature of science and aspects of science.

LITERATURE REVIEW

Research on the thoughts of M. Quraish Shihab has been carried out both in the form of skiing, theses, dissertations and other research. Below will be described some research related to the thought of M. Quraish Shihab that is relevant to the the researcher's research. Mustafa P., M. Quraish Shihab Grounding Kalam in Indonesia, This book discusses M. Quraish Shihab's thoughts about kalam, at first this book was a Master's thesis at IAIN Sunan Kalijaga in 2001. (Mustafa, 2015: XII). Mohammad Nor Ichwan, Prof. M. Quraish Shihab Talking About Gender Problems, this book was originally the result of research conducted in IAIN Walisongo Semarang in 2007 and published by the publisher of RaSAIL Media Group in 2013 (Ichwan, 2015: VII).

Anshori, Interpretation of Gender Verses According to Muhammad Quraish Shihab, this dissertation was submitted to UIN Syarif Hidayatullah Jakarta in 2008, and was published by the publisher (Iqbal, 2015: 12-13). Muhammad Iqbal, Al-Qur'an's Insights on Politics: Study of Thematic Interpretation of H. M. Quraish Shihab Against the Verses of Power, this book was originally a report of the results of research conducted in 2008 (Iqbal, 2015: XI). Amiruddin Siahaan, Teacher Professionalism According to M. Quraish Shihab In Tafsīr Al-Mishbāḥ, this research is a dissertation submitted to the Postgraduate of UIN North Sumatra in 2016 (Siahaan, 2016: 325-328).

RESEARCH METHOD

The method used in this research is the character study method, namely research on a concept or a thought that is related to M. Quraish Shihab's thoughts about the concept of science. This type of research is library research with a historical approach (historical approach) in the field of Islamic philosophy. The data source in this study is

divided into two, namely primary data sources obtained from M. Quraish Shihab's books, and secondary data sources obtained from books, articles, journals and other data sources relating to M. Quraish Shihab's thoughts and have relevance to the research topic. The primary and secondary sources are then collected and analyzed so that they become the data in this study (Nasution, 2016: 14-17).

Basic Concepts of Science

Science in Islamic perspective is different from science in Western perspective. In Islam, knowledge is knowledge of things as they really are, whereas in the Western perspective science is something that is only limited to the material world. This different understanding occurs because Muslim scientists recognize that scientific objects consist of spiritual objects and material objects, whereas Western scientists do not recognize spiritual scientific objects and only recognize material scientific objects (Al Rasyidin & Ja ' far, 2015: 111).

However, in the latest developments, discoveries in new physics have given awareness to some Western scientists that mysticism taken from several religious traditions turned out to be very potential as a guide to explain the puzzles that are found more and more in the physical world. The tradition of mystism is deemed very appropriate and needed in developing knowledge along with the increasingly sophisticated research methods and tools used to explore knowledge. With the influence of this mysticism, the present view of scientists experiences a significant struggle from the perspective of some rational-metaphysical (Western) scientists to a mystical-spiritual world view of science. At present, nonphysical or metaphysical realities are no longer isolated from scientific research both in the West and in the East. Intuitive methods as they are found and practiced in mystism are actually seen as something real and useful to explain mysterious things in contemporary scientific research (Kartanegara, 2014: 9-15).

From the last description it can be seen that the latest developments in the context of the development of science are no longer found too strict boundaries between epistemologies that are recognized in the West and in the East. That is, the more sophisticated the human civilization in the field of science, it turns out the more they are brought closer to the Owner of knowledge.

The Linkage of Science to Values

The issue of whether science is neutral or neutral has been a long debate among scientists both Western and Eastern scientists. This problem is not a simple problem because the face of the world that is witnessed by humans today stems from these two opposing beliefs. The two opposing opinions actually have advantages and disadvantages of each if examined more closely. For scientists who believe that the science of neutral status will be very easy and fast in developing science because it will not be selective in choosing research objects, how to research and when using the results of their research into the practical world. And vice versa with scientists who believe that the status of science is bound by values, it will be difficult and slow in developing science because he will be very selective in choosing research objects, ways of researching and when using the results of his research in the practical world (Tafsir, 2015: 46-47).

Scientists who believe that value-free science will conduct research without regard to the norms that exist in life, both norms that originate from humans and those that originate from God. The main objective of the scientist's beliefs is the development of science, or science of science, not science for humanity. The positive impact of this belief is the speed of development of knowledge because all objects, methods and objectives are used to the widest possible extent. Thus, it can be said that beliefs about the neutrality of science are beliefs that cause the speed of the development of science. In other words, the belief that science is bound to values is the source of the breakdown of more progressive science development in the face of the challenges of the times.

Source of knowledge

The discussion about the source of knowledge became a long debate among scientists both Western and Eastern scientists. Their debate about whether the heart or intuition whose peak is revelation can also be used as a source of knowledge or a source of knowledge limited to the senses and reason. Furthermore, the the researchers also see their debate about whether the senses and reason are the source of knowledge or tools - some also call them the means, tools and instruments - to gain knowledge.

Related to the debate whether the source of knowledge is only limited to the senses and reason, in this study, the the researchers chose the opinion that the source of knowledge is not only limited to reason and senses, but the heart or intuition whose peak is revelation (*Al Qur'an* and Hadith) is also a source of knowledge legitimate to be

recognized. While related to the debate whether the senses and reason as a source or tool for seeking knowledge, the the researcher does not side with one of the opinions because the the researchers see the difference that occurs in the second case is a difference that can be united by using certain approaches. The debate that occurs about the source of knowledge is a debate that occurs not only because of differences of opinion, but because of disagreements among philosophers. The debate on naming the senses and reason as a source or tool is a debate that occurs because of differences of opinion, not because of disagreements.

Biography of M. Quraish Shihab

M. Quraish Shihab was born on February 16, 1944 in Lotassalo, Rappang, Sidenreng Rappang Regency (Sidrap), South Sulawesi. A small town which is about 185 km from the city of Makassar. Sidrap Regency itself is located at the intersection of the lane to Palopo and Toraja, which is an area that is one of the rice producing centers in South Sulawesi. His family comes from an educated family of Arab descent (Ichwan, 2013: 25) His father is Abdurrahman Shihab (1905-1986), a businessman, educator, politician, preacher, cleric and professor in the field of interpretation. His father, who is of Arab descent is also an educational figure who is practically engaged in developing education. His contribution in the world of education is proven by his involvement in developing two universities at the same time in Ujung Pandang, namely the Indonesian Muslim University (UMI) and the State Islamic Institute (IAIN) which is now transformed into UIN Alauddin Ujung Pandang (Ichwan, 2015: 25-26).

The intellectual development of M. Quraish Shihab was very much influenced by his father as mentioned in the previous paragraph. This can be seen from the recognition of M. Quraish Shihab himself, even most of the messages conveyed by his father were the provision of M. Quraish Shihab to become a scientist in one of the subgroups of religious knowledge, namely interpretation. In addition, the intellectual development of M. Quraish Shihab was also forged in both formal education at home and abroad as can be seen in the following paragraphs. In 1956, M. Quraish Shihab continued his education in Malang after he was previously educated in Makassar. At that time M. Qurasih Shihab had just graduated from Muhammadiyah Middle School 2 in Makassar, but because of the urge to study at the Dārul Ḥadīsil Fiqhiyyah pesantren

was very strong, finally M. Quraish Shihab continued his education at the pesantren (Iqbal, 2015: 16).

The Dārul Ḥadīsil Fiqhiyyah pesantren is a boarding school established and nurtured by habib Abdul Qadir bil Faqih, a great scholar born on 15 Safar 1316 in Tarim, Hadramaut, Yemen. He is a charismatic scholar, broad-minded and always teaches the attitude of humility, tolerance and love of temple experts to his students. The professor died in East Java on 21 Jumadil Akhir 1382 H (Shihab, 2017: 3). M. Quraish Shihab continued his education to al-Azhar in 1958 when he was 14 years old. In al-Azhar he entered class II awianawiyyah. After completing his education at the awianawiyyah level, he continued his education to the 'aliyah level, after completing the aliyah level education, he continued his education at the college level. In 1967, at the age of 23 he had already obtained a Bachelor's degree. Then in 1969 or two years later, at the age of 25 years he won an M.A (Mustafa, 2015: 65). In 1980, he continued his education at the doctoral level at his old alma mater, al-Azhar University, Egypt. In a relatively short period of time, in just two years he won a Doctorate with a dissertation entitled Nazmud durār lil biqā'i: taḥqīq wa dirāsah. With this dissertation, he won a Doctorate with Summa Cum Laude and a first-level award dissertation (Ichwan, 2015: 29).

Aspects of Science in the Perspective of M. Quraish Shihab

One important point in the study of the philosophy of science is the discussion of aspects of science. The term aspects of science is a term that is not agreed upon by all philosophers, in some books on philosophy of science, some philosophers use the terms of the foundations of science (Bakhtiar, 2015: 131). In the the researcher's opinion, the term aspects of science are a more appropriate term. Ontology, epistemology and axiology of science are not properly referred to as the basics of science because the discussion of the "nature of science" also includes the basics of science. On that basis, the term used in this study is the term aspects of science consisting of ontology, epistemology and axiology of science.

Ontology of Science

The the researcher does not find an explicit understanding proposed by M. Quraish Shihab regards the ontology of science, but in various writings found answers relating to the substance of science ontology.

After outlining the views of Western philosophers about the ontology of science, M. Quraish Shihab turned into the verses of *Al Qur'an* to discuss this. He made the Qur'anic verses that command the use of the eyes and ears as an argument that in the world something exists. Something that exists in the world is something that is really a form, not all virtual as stated by Western philosophers before. In addition, he also made *Al Qur'an*'s command to travel on earth as an argument that the experience was something that is tangible and could be utilized. From this, he concluded that the form informed by the senses was something real as long as the senses worked in his area and as long as the senses were healthy. To reinforce his statement, he quoted the Qur'anic verse which informs about the powers given by God to humans to gain knowledge. In this case Allah Almighty said in the letter an-Nahl / 16: 78. Meaning: "And Allah has brought you out from the wombs of your mothers while you know nothing. And He gave you hearing, sight, and hearts that you might give thanks (to Allah)" (Shihab, 2015: 275).

However, besides the existence of beings that are accessible to the senses and reason, *Al Qur'an* further informs the existence of a form of 'life' that is not reached by the senses and reason. That is why *Al Qur'an* often informs that the earth is a living thing, thunder praises God, mountains glorify, even everything glorifies. Allah Almighty says in *Al Qur'an* Surah Al-Isra '/ 17: 44: Meaning: "the seven heavens and the earth and all that is therein, glorify Him and there is not a thing but glories His Praise. But you understand not their glorification. Truly, He is Ever Forbearing, Oft-Forgiving." (Shihab, 2015: 286). Even though these verses can be interpreted metaphorically, the meaning of 'life' in these verses can be interpreted by the functioning of everything in accordance with the purpose of its creation - but M. Quraish Shihab reiterates that the Qur'anic expression states, "But you all do not understand their tasbīḥ, "not only hints at the limitations of the human senses and reason, but also hints about the existence of a substance of substance which is not reachable by human senses and reason (Shihab, 2016: 133-134).

M. Quraish Shihab asserted that it was intellectual arrogance to reject the form of something that was informed by the scriptures on the grounds that the form could not be witnessed in the empirical world and or because the form could not be detected in the laboratory. Being cannot be proven only by relying on laboratories and experiments because the facts show that so much information on the scriptures that was once

thought to be impossible, can actually happen factually today. On the other hand, so much information on *Al Qur'an* that used to be understood only metaphorically, in fact, today can be understood in essence (Shihab, 2016: 35-39).

From this description it can be seen that M. Quraish Shihab is a scientist who believes in the existence of existence and - besides recognizing the existence of existence, M. Quraish Shihab goes further than Western philosophers - in his view, not all existences can be reached by the senses or the human mind. There is an existence that exists in a way not by reason or human counterparts, but by using other potentials that also exist in humans.

Epistemology of Science

According to Shihab, epistemology is derived from the ancient Greek words, namely episteme, which means knowledge and logos which means knowledge. In the Big Indonesian Dictionary, the word epistemology is defined as, "A part of philosophical discussion that discusses the basics and limits of knowledge." In English the word epistemology is interpreted by the theory of knowledge and in Arabic the word epistemology is translated with nazariyyatul *ma'rifah* The translation of epistemology with nazariyyatul *ma'rifah* - according to the the researcher - by Muslim philosophers is more appropriate than translating it with nazariyyatul'ilmi. The word *ma'rifah* found at the end of the word indicates that - apart from being a signal to distinguish between Allah's knowledge and human knowledge - knowledge discussed in epistemology is human knowledge, not God's knowledge (Shihab, 2016: 126). Sources or tools to obtain knowledge according to M. Quraish Shihab are as follows:

1. Senses

M. Quraish Shihab is very doubtful that the five senses are something that can be used as a basis for gaining knowledge. As sharp as any and as sensitive as any senses that humans have, but not infrequently the results obtained do not reflect the true nature of the object that is captured. The analogy proposed by M. Quraish Shihab is that no matter how sharp a person's eyes are, the eye will still see a stick which is straight and not straight when put in water (Shihab, 2015: 75).

M. Quraish Shihab's doubts are in line with the doubts of the earlier philosophers who did not really trust the information obtained through the five senses. The doubt arises because the five senses have limitations in reaching objects. All senses can only

reach objects within certain distances and they are very limited. In fact, it is not uncommon for the senses of certain animals to be sharper than the human senses.

2. Reason

The Qur'anic command to use reason is an argument that can be used to prove that reason too - besides the five senses - is capable of gaining knowledge and truth (Shihab, 2016: 132). The word sense - according to M. Quraish Shihab - comes from Arabic, namely 'aqala, ya'qilu, 'aqlan. While experts argue that the series of the three letters revolve around the meaning of the meaning of "obstructing." From the word 'aqala was born the word' iqāl which means rope. The headband placed by Saudi Arabia is called iqāl because it prevents the turban that is placed on the head from being blown by the wind. The rope that ties an animal is also called iqāl because it prevents the animal from escaping or escaping from its mooring (Shihab, 2017: 273).

3. Heart

In the previous description, M. Quraish Shihab explained about the importance of functioning reason in the context of gaining knowledge, at the same time he also explained the limitations of reason in reaching all phenomena. That is, in addition to reason, humans must function another tool to gain knowledge, another tool that is the heart. M. Quraish Shihab states that reason is a lamp that illuminates the path to the nature of things, whereas intuition is a path to depth that reason cannot reach. Reason, before reaching the peak of his wandering, must reject something that is contradictory and contradictory. The mind will say, "There is no way that something can exist at the same time and in the same place and place," but the mind and intuition that have merged and have reached the peak of being will say, "This thing can or may not be at the same time and place." Islam came to combine ratio and intuition. There are teachings that can be easily understood by reason, there are also teachings that are difficult to understand - or even cannot be understood by reason - although it must be admitted that what is difficult to understand by reason is not necessary / not contrary to reason (Shihab, 2016: 4-5).

Scientific Methods

M. Quraish Shihab did not mention the names of scientific methods in gaining knowledge as contained in the books of philosophy of science, but even though he did not mention the names of scientific methods technically, from his descriptions obtained substance in accordance with the methods scientific contained in the books of philosophy of science.

The scientific methods found and discussed in this study are as follows:

1. Tajrībi Method

According to H. Junaidi, *Tajribi* is defined as an experiment, so that the *tajribi* method was the same as the "experiment method". The *tajribi* method is also used as a scientific method for examining empirical fields (H. Junaidi, 2014: 173). One way to gain knowledge in empirical fields is to apply the trial and error method. This method is a method that cannot be applied in non-physical-spiritual matters. Its territory is only limited to physical-material things. For M. Quraish Shihab, trial and error is something that is recommended even ordered in Islamic teachings. Trial and error - in his view - is one way to gain knowledge. It's just that Islam puts the method in its proper portion, trial and error cannot be applied to objects that are outside the working area of the method. M. Quraish Shihab limits the area of this method - not only to the object, but also the subject - by saying that trial and error must not be carried out by someone who has knowledge while the object of science to which the trial and error method is applied is a science object that is beyond the ability or the field. "

In this context, M. Quraish Shihab provides an illustration of a layman in the medical field, the person may not do trial and error to operate on patients (Shihab, 2016: 144). Trial and error - according to M. Quraish Shihab - is not forbidden in Islam to gain knowledge, it's just that *Al Qur'an* puts this method in its proper portion, which is to do trial and error only on matters that are areas of empirical science. As for problems that cannot be brought to the laboratory, *Al Qur'an* directs humans / scientists to use other approaches to dissect them (Shihab, 2016: 137). The tajrībi method or also called the *ijbāri* method is a method of seeking knowledge by relying on sensory observation. This method is recognized in Islamic civilization, but it is not the only method. The scientific method in Islam goes beyond the physical realm to the metaphysical realm. One method introduced by Muslim philosophers whose scope extends beyond the physical realm is the *'irfāni* method.

2. The 'Irfani method

On one occasion M. Quraish Shihab wrote, "Knowledge is *nur* or light that is cast by Allah into the hearts of those who prepare themselves to gain knowledge (Shihab, 2016: 51). The expression M. Quraish Shihab illustrates that there is a kind of

knowledge that comes suddenly to humans without going through the bayāni, burhāni or tajrībi methods.

On the other hand, there are many abstract realities, but also their concrete reality is recognized by scientists, such as the density of objects and roots in mathematics. In addition, scientists also recognize the reality that can only be revealed in its potential, but cannot be captured by its nature, such reality is the reality of light (Shihab, 2017: 93-94).

Thus, it can be seen by M. Quraish Shihab's opinion about the importance of the 'irfāni method for gaining knowledge. With this method, the method used by scientists (Muslims) to gain knowledge is complete, not only limited to material areas, but also to reach non-material regions. In more operational areas, this method is also called the intuitive method.

Intuition

The philosophers, in an effort to gain knowledge introduce what is called intuition. Some philosophers divide intuition into three types: First, intuition based on sensory experience, such as knowledge of the aroma or color of something. Second, intuition is based on direct knowledge gained through reasoning and axiomic character, like ten more than nine. Third, intuition is based on the emergence of a bright idea suddenly (Shihab, 2015: 344-345).

From the example presented by M. Quraish Shihab, it can be seen that intuition can come to anyone who is diligent in seeking knowledge. Intuition does not only address God to those who believe in His form, but He also addresses all human beings who diligently hone the potentials that are bestowed upon Him.

Intuition: Between East and West

West has a different perspective from the East in reading natural phenomena. The West relies more on reason, reasoning and analysis in reading natural phenomena, while the East uses more intuition and reflection in reading natural phenomena. Such a Western perspective makes them often forget spiritual values, while such an Eastern perspective makes them more often look at natural phenomena with a soul approach.

East - in the view of M. Quraish Shihab - is richer than the West in the spiritual field. Even the East is the source of everything spiritual. Because of the difficulty of

bringing East and West together on this issue, until finally there is a popular phrase, "East is East and West is West, they will not be possible to meet (Shihab, 2016: 378).

This view was born because of the Eastern and Western perspectives in seeing natural phenomena are often different and even contradictory. The east - especially the far east - relies heavily on intuition and the purification of the soul to obtain and apply truth. The Eastern almost forgot the reason in finding and applying the truth. They assume that everything has a soul. They are like letting everything scattered about and enjoying it without trying to analyze it.

East and West ways of looking at natural phenomena will never meet unless-according to M. Quraish Shihab-they both make *Al Qur'an* and Hadith as a guide in viewing natural phenomena (Shihab, 2015: 378).

Ilmul Ladūnni

M. Quraish Shihab said that this knowledge is a knowledge based on mukāsyāfah, that is knowledge obtained because something is revealed through the light of the heart. If humans diligently cultivate their souls, earnestly hone their spiritual potential, avoid ignoble morals and adorn themselves with noble qualities, then he will reach the potential of *aqliyyah* (mind) that is very clear and strong. The climax of a clear and strong heart is the disclosure of special knowledge of the person concerned.

Every action of knowledge - continued M. Quraish Shihab - has two factors, namely the subject and object factors. In general, the subject is required to examine the role of the object so that science is born, but scientific experience shows that the object also visited the subject to give birth to knowledge. Events that occur in the scientific world prove to humans / scientists that sometimes the object of science can visit humans who are subjects of science. The analogy proposed by Shihab in this context is the Comet Halley case which enters the horizon only once every 76 years. Even though astronomical instruments which are the subject of science are trying to photograph the presence of the Comet, but the most important role in the birth of science through this case is the presence of the Comet which plays as an object of science (Shihab, 2016: 341-342). In this case the researcher can say, if the Comet Halley analogy proposed by Shihab is understandable, then it is not too difficult to understand and recognize the truth of *'ilmul ladūnni*.

Dream

An example cited by M. Quraish Shihab is a dream about teeth being torn or falling as a sign of a family death. In addition, according to him in various literatures, it was found that Ibn Sina (980-1037 AD) often obtained answers through dreams concerning the complicated problems he faced when exploring knowledge. In the Western world, Rene Descartes (1590-1650) wrote a diary about the dreams he experienced and the book had a great impact on the development of science (Shihab, 2018: 192).

The researcher has difficulty accepting dreams as one of the methods of intuition that can be validated in the scientific tradition. Of the various books that the researcher referred to, only M. Quraish Shihab found the the researcher recognizing dreams as a method of intuition. Two examples of experts presented by Shihab in the the researcher's view are not dreams in ordinary sleep, but dreams due to sleep due to exhaustion of thought which then brings dreams so that what they think outside of sleep, carried into dreamland. Something that is thought out of the dream world and carried into the dreamland is a normal phenomenon experienced by humans. Although it must support the opinion of M. Quraish Shihab who recognizes dreams as one of the methods of intusion, at least the researcher can say that the dream that brings knowledge is a dream that comes from not ordinary sleep, but sleep due to exhaustion thinking about an object.

Premonition

M. Quraish Shihab also introduced a hunch to gain knowledge. His hunch was likened to the eyes of the heart. Religionists, according to him, introduce two types of hunches. The first type of hunch is a hunch based on indicators, experiences and observations of human behavior. The second type of hunch is a hunch that is not based on any indicator, in this case knowledge or information presents to the subject without human effort. This second type of hunch is the knowledge that God has thrown at humans directly (Shihab, 2016: 142).

The information presented in the previous description - according to M. Quraish Shihab - is often lost in the midst of some contemporary scientists because of their views that have been anesthetized by the flow of rationalism and empiricism. In fact, all

knowledge obtained through these methods is valid knowledge and then proven / argued in the real world (Shihab, 2017: 347).

Revelation as a Measurement of the Truth of Science

According to M. Quraish Shihab, Protagoras is a philosopher of sophism who believes that there is no absolute truth in life, all truths are relative. It could be true for one person, but not necessarily true according to others. From this way of thinking he concluded that there is no such thing as a mistake, it is even impossible that there is a mistake because everything that people judge as truth, that is truth for himself even though others judge the truth he believes to be a mistake (Shihab, 2016: 129).

This opinion is born from thinkers who do not make a revelation as a handle in thinking. In this case, M. Quraish Shihab argues that there are three types of measurement of truth that are used as a benchmark by scientists. The first, some scientists — M. Quraish Shihab did not name the flow of this first group of scientists - arguing that the measure of truth is direct experience of knowledge that comes suddenly (Shihab, 2016: 341). The second, the rationalists, according to M. Quraish Shihab, argue that the measurement of the truth of knowledge is the basic character or nature of reason. The third, the empiricists argue that the measure of the truth of knowledge is the ability of that knowledge to be proven through experience, even some followers of empiricism argue that it must be proven in practical experience (Shihab, 2015: 341-342).

The measurement of the truth of the knowledge proposed by the experts above - according to M. Quraish Shihab - is not entirely accepted by Muslim scientists. The measure of experience about the truth of knowledge as already stated cannot be used except for knowledge relating to tangible objects. Experience measures for the truth of knowledge also cannot be used in problems of mathematics and pure reason. In addition, to produce experience, of course, using the acquisition tools, and there is no guarantee that the acquisition tools used to obtain knowledge can be justified (Shihab, 2015: 342). With a more mystical expression, M. Quraish Shihab states that revelation can be likened to the spirit. Human bodies will live with spirit and human soul will live with revelation. By ignoring revelation - including in seeking knowledge - the human soul will fall and even die (Shihab, 2015: 528).

From this description it can be seen that the epistemology of science in the Islamic world is far more complete than the epistemology of science in the Western world where the epistemology of science in Islam reaches phenomena that cannot be reached by the senses and reason, whereas the epistemology of science in the Western world only stops at phenomena which can be reached by the senses and reason.

The Axiology of Science

Axiology is the science of the value or final use of something, including knowledge. In the teachings of Islam, science must be utilized for the benefit of mankind, the term science is not known for knowledge in Islamic teachings, the purpose of the search and development of knowledge in Islamic teachings is to provide benefits to the universe. In the teachings of Islam there is no known concept of science for science, but the concept of science in Islam is that science must provide benefits for the entire universe. It means that a scientist must be integrated in every movement of God's presence, because only with an awareness of God's presence, a scientist will always be willing to spread the benefits through the knowledge he has.

In discussing the ethics of scientists, which was first criticized by M. Quraish Shihab the tendency of some scientists who could not distinguish between the desired knowledge with the knowledge needed. Many scientists suspect that something good is something that can be done without caring whether what is done is really needed or only desired by scientists. M. Quraish Shihab expressed his criticism by asking the questions, "Is moving from one place to another exceed the speed of sound something needed or just something desired?" "Is the ability to penetrate the space necessary or desirable?" human needs or just desires arising from the success of cloning already so close? "(Shihab, 2016: 157).

In a more concrete level, M. Quraish Shihab revealed that the findings in the field of technology which were originally intended to shorten human time actually took up a lot of human time. The use of computers and the internet for example, which was originally intended to shorten the time to complete a task, but in reality very often takes more time than the time taken before the existence of the two inventions. Likewise, television shows that broadcast insignificant and time-consuming broadcasts — or in M. Quraish Shihab, are called fooling and damaging — humans. In fact, so many technological inventions were originally intended to provide a sense of security for

humans, but instead turned into a source of anxiety for humans themselves (Shihab, 2016: 157).

The source of the problem from the phenomena that have been mentioned - according to M. Quraish - is the mentality of human beings - both those who use and who find these sophisticated tools - which are not in line with the guidance of religion (scientific ethics), especially Islam since the first revelation emphasized must read, research and develop knowledge must be in the name of God (Shihab, 2016: 158). Scientists' ethics - which is often forgotten by scientists - is an awareness of the limitations of their knowledge. According to M. Quraish Shihab, whatever understanding the experts propose about science / knowledge, there is one important thing that is underlined by *Al Qur'an* about knowledge, that knowledge does not always have to be confronted with ignorance. If there is a difficult problem and someone says, "I don't know," because he is aware of his ignorance, then that person can be judged more knowledgeable than the person who says, "I know," when in fact he is wrong about that knowledge.

M. Quraish Shihab proposes a very logical argument in dealing with this problem. He pointed out that people who say they don't know because they really don't know are essentially more knowledgeable than those who claim to know even though they don't know, because those who answer do not know essentially know about their own abilities and about the difficulty of the problem to be answered, whereas people who claim to know even though they do not know their nature cannot be judged as knowledgeable because they do not know their abilities and do not know how difficult the problems they face. That is why *Al Qur'an* taught the Prophet to say the word, "I do not know," and *Al Qur'an* instructed him to pray that his knowledge be added continuously (Shihab, 2016: 143-144).

With this awareness, a scientist will always humble before God because he is aware that his knowledge is only a drop from the ocean of divine knowledge of the owner of the essential knowledge.

The Glory of Scientists

Science is a feature that makes humans superior to other creatures in order to carry out the task of the Caliphate (Shihab, 2015: 820) *Al Qur'an* informs that humans are only noble with the knowledge they have. Without developing the potential of its

knowledge, humans do not naturally get a place or an honored position as a human (Shihab, 2015: 17).

From the very beginning, the command was prostrating to humans that God had commanded the angels and Satan because Adam had been taught by God. From this revelation information, M. Quraish Shihab concluded that humans are not natural beings who get a respectable place without the knowledge they have. On the other hand, the religion which God imposes upon humans also demands the importance of knowledge, because God does not want to command to humans things that are contrary to nature and God also does not want to burden humans with trust while closing their eyes. Religion (Islam) is a rational religion, although it must be admitted that there are things that are irrational. However, the last two does not mean that you do not need knowledge, just a different scientific approach. That is why, according to M. Quraish Shihab why the Qur'anic verse that introduces God also begins with a word taken from the root word "Knowledge" which means "Know!".

Thus, humans will be noble if they have knowledge. Without knowledge, humans will become useless creatures. With human knowledge will gain a high position and can exceed the glory of angels.

Utilization of Knowledge

From the beginning, through the first revelation, *Al Qur'an* has underlined the importance of utilizing knowledge. The knowledge obtained by human beings is essentially not for the purpose of knowing, but rather to be applied. One form of application is to provide benefits for human life. That is also why *Al Qur'an* underlines the importance of linking knowledge seeking activities with the name of God (*bismi rabbīka*), because by relating knowledge seeking activities in the name of God, a knowledge seeker will obtain goodness or at least avoid negative whispers so that the knowledge he gets will provide benefits throughout the universe. From this it can also be understood the expression of M. Quraish Shihab - which, according to him is the information about *Al Qur'an* - which states that Islam does not recognize the term science for science. Every step and movement that is directed to seek knowledge, must not be separated from the good cause of as many creatures as possible in all of nature (Shihab, 2016: 147-148).

According to the Qur'anic message, M. Quraish Shihab concluded that the knowledge obtained by humans must be beneficial to the wider community and should not be detrimental to the wider community. In this context, M. Quraish Shihab criticized the bombings carried out by the United States on Hiroshima and Nagasaki with the goal of saving the lives of hundreds of thousands of people, but instead eliminated more lives and even caused far longer suffering than the targeted suffering would disappear (Shihab, 2016: 148-149).

In humans, there are positive and negative potentials when processing knowledge. For the sake of his safety in processing knowledge, a scientist must always associate all his activities in seeking and utilizing knowledge with the Owner of knowledge. Priority scale must remain prioritized in scientific activities. If the use is more detrimental, then the knowledge must be abandoned. If the knowledge obtained has positive and negative impacts, then it must prioritize positive impacts for the wider community.

CONCLUSION

Based on the description and analysis as stated above, it can be concluded that the ontology of science in the perspective of M. Quraish Shihab is not only limited to the physical realm, but extends to the metaphysical realm. The epistemology of science not only recognizes trial and error as a source or means of gaining knowledge, but there is also what is called 'irfāni, which is a method of uncovering the science by using a heart approach which in operation can take the form of intuition, 'Ilmul ladunni, hunches, dreams where the climax is revelation. Whereas the axiology of science is not science for science, but science for the benefit of the entire universe.

REFERENCES

Asari, Hasan. Sejarah Pendidikan Islam: Membangun Relevansi Masa Lalu dengan Masa Kini dan Masa Depan. Medan: Perdana Publishing, 2018.

Bakhtiar, Amsal. Filsafat Ilmu, cet. 12. Jakarta: Raja Grafindo, 2015.

Junaidi, H. Metode Ilmiah Dalam Islam, dalam *Jurnal Islamika*, Volume 14 Nomor 2 Tahun 2014.

Charles Rangkuti / JURNAL TARBIYAH 26 (2) (2019) 294-314

Igbal, Muhammad. Etika Politik Qur'ani: Penafsiran M. Quraish Shihab Terhadap Ayat-Ayat Kekuasaan. Medan: Iain Press, 2015. Ichwan, Mohammad Nor. Prof M. Quraish Shihab Membincang Persoalan Gender. Semarang: RaSAIL Media Group, 2015. Ja'far, & Al Rasyidin. Filsafat Ilmu Dalam Tradisi Islam. Medan: Perdana Publishing, 2015. Kartanegara, Mulyadhi. Menyibak Tirai Kejahilan: Pengantar Epistemologi Islam. Bandung: Mizan, 2014. ______, Mengislamkan Nalar: Sebuah Respons Terhadap Modernitas. Jakarta: Erlangga, 2017. Nasution, Harun. Islam Ditinjau dari Berbagai Aspeknya. Jakarta: UI-Press, 2014. P, Mustafa. M. Quraish Shihab, Membumikan Kalam di Indonesia. Yogyakarta: Pustaka Pelajar, 2015. Shihab, M. Quraish. Membumikan al-Qur'an: Fungsi dan Kedudukan Wahyu Dalam Kehidupan Masyarakat. Bandung: Mizan, 2015.

Jakarta: Lentera Hati, 2014.

________, Logika Agama: Kedudukan Wahyu & Batas-Batas Akal Dalam
Islam. Jakarta: Lentera Hati, 2015.

Jakarta: Lentera Hati, 2015. Volume I s.d XV.

, <u>Tafsir al-Mishbāh</u>: Pesan, Kesan, dan Keserasian al-Qur'an.

_____, Dia di Mana-mana: Tangan Tuhan di Balik Setiap Fenomena.

Charles Rangkuti / JURNAL TARBIYAH 26 (2) (2019) 294-314
, Menabur Pesan Ilahi: al-Qur'an dan Dinamika Kehidupan
Masyarakat. Jakarta: Lentera Hati, 2016.
, Sunnah - Syiah Bergandengan Tangan! Mungkinkah? Kajian
atas Konsep Ajaran dan Pemikiran. Jakarta: Lentera Hati, 2017.
, M. Quraish Shihab Menjawab1001 Soal Keislaman yang Patut
Anda Ketahui. Jakarta: Lentera Hati, 2018.
Titta Retartat. Sakarta. Ecitera Hati, 2010.
Jin Dalam al-Qur'an: Yang Halus dan Tak Terlihat. Jakarta:
Lentera Hati, 2015.
, Al-Qur'an dan Maknanya: Terjemahan Makna disusun oleh M.
Quraish Shihab. Jakarta: Lentera Hati, Agustus 2014.
Manchamilan al Ornian Elid a Manchamailan Wahan dalam
, Membumikan al-Qur'an Jilid 2: Memfungsikan Wahyu dalam Kehidupan. Jakarta: Lentera Hati, 2015.
Remaupan, Jakarta. Lentera Hati, 2015.
, Al-lubab: Makna, Tujuan, dan Pelajaran dari Surah-Surah Al-
Qur'an. Jakarta: Lentera Hati, 2014. Volume I s.d IV.
, Kumpulan 101 Kultum Tentang Islam: Akidah, Akhlak, Fiqih,
Tasawuf, Kehidupan setelah Kematian. Jakarta: Lentera Hati, 2016.
, Yang Hilang dari Kita, Akhlak. Jakarta: Lentera Hati, 2016.
Siahaan, Amiruddin. "Profesionalitas Guru Menurut M. Quraish Shihab dalam <i>Tafsīr</i>
Al-Mishbāḥ". Disertasi, Pascasarjana UIN Sumatera Utara, 2016.
Tafsir, Ahmad. Filsafat Ilmu: Mengurai Ontologi, Epistemologi dan Aksiologi
Pengetahuan, cet. 8. Bandung: Rosdakarya, 2015.