THE CONCEPT OF SCIENCES IN ISLAM

Niam Rohmatullah, Titim Khotimah
Institut Ummul Quro Al-Islami Bogor
niam.rohmatullah@iuqibogor.ac.id

Naskah masuk:06-03-2021, direvisi:28-04-2021, diterima:05-05-2021, dipublikasi:30-06-2021

ABSTRACT

This research discusses about the concept of science in Islamic perspective. The research was motivated by the fact that the concepts and the definitions of science in Islam is still influenced by the concepts of Greek philosophy. It caused that science is derived from the Greek, not Islam. And it is dangerous for Muslim students. Using comparative analysis. The results of this study concluded that the science in the Islamic view is synchronization between ideals and reality. The experts have different opinions in defining science. However, all the definitions and the terms are materialistic, and very secular. Then, we take the notion expressed by the muslim scholars. The purpose of science is actually should be proportional to the objectives of Islamic education. Thus, the orientation of the knowledge-seeker will be hereafter, not merely pursue to the world.

Keywords: Science, Islam, Islamic Education

ABSTRAK


Kata Kunci: Sains, Islam, Pendidikan Islam
INTRODUCTION

We all certainly agree that science is the principal and a pillar of a civilization. Science can encourage someone to do somethings that are beneficial to the mankind. Moreover, science can also form the people’s perspective and weeltanschaung in view of existing realities. This is because the science is teaching the values to a person.

However, someone weeltanschaung is strongly influenced by the appreciation of the religious teachings, as well as the awareness in reality. Then, as was said by Hamid Fahmi Zarkasyi, that the science is not value-free. Then, here where the base of the differences between Islam and the West to formulate and conceptualize about the science. West perceive the reality (a form) within the framework of materialism, so what is the outcome from the ideas are the things that related to materialistic. This materialism ideology resulted the empiricism, rationalism, and other ideologies that reject something immaterial and bathiniyyah.

It is of course inversely proportional to Islam, which holds that the exists reality essentially comes from the Most Single, Allah SWT. This monotheism paradigm was subsequently used by the Salaf scholars in formulating the rules of science to be the Islamic sciences as we know it today.

The Essence of Science
The virtue of Sciences

A knowledge in Islam has a high position. Some of the statements in the Qur’an and the Hadith of the Prophet Muhammad SAW. are evidence of this. Therefore, human position are very high in front of God because of science. Science occupies a central position in the Islam. Many arguments both naqily or ‘aqliy which describes about the virtues of science and the importance of seeking the knowledge. One of them is the word of Allah in Surah Al-Mujadalah verse 11:

“O you who have believed, when you are told, “Space yourselves” in assemblies, then make space; Allah will make space for you. And when you are told, “Arise,” then arise; Allah will raise those who have believed among you and those who were given knowledge, by degrees. And Allah is Acquainted with what you do.”

The above has been stated that the bookish has a high position in the side of Allah SWT. KH Hasyim Ashari explained that the people who will be elevated in rank as the verse above that they are studying while practicing the science that he has. In line with the verse above the Prophet Muhammad also once said:

"The virtue of the learned on people who loves to worship is like the virtue of the moon over the stars. For verily the scholars are the inheritors of the prophets, and the prophets do not inherit the dinar (gold) and the dirham (silver), but they bequeath the knowledge. So whoever is taking the science, indeed he has gained a huge advantage." (HR. Abu Daud and Tirmidzi)
Sayyiduna 'Ali had visited by some peoples and asked which is more precious, science or possessions. He answered that science is more precious. Then He said, "Science cares of you, while the treasure that you must guard it. The science will increase if you spread it, while the treasure decreases. Science is the legacy of the Prophets, while the treasure is a legacy of Pharaoh and Korah. Science makes you united, while the treasure can make you broken to apart ... "and so on (Husaini, 2009).

Moreover, at the beginning of human creation. that human already occupies the precious position on the side of God, as happened with the father of all mankind, that is Adam As, where the angels were commanded to prostrate to him. This is because that man- in this case Adam-blessed by Allah SWT many potentials and means to know the science. This point is illustrated in Surat Al-Baqarah (2) verses 31-32:

And He taught Adam the names - all of them. Then He showed them to the angels and said, "Inform Me of the names of these, if you are truthful. " They said, "Exalted are You; we have no knowledge except what You have taught us. Indeed, it is You who is the Knowing, the Wise."

In the verses above, it appears that Allah taught Adam the names of objects (2002), then Allah showed him to the angels. God showing off the best of his creation to the angels, while challenging them (angels) to mention the names of these objects. It is because of the angels allegedly had filed "objections" over the appointment of Adam as a vicegerent on earth. In response, the angel replied: They said, "Exalted are You; we have no knowledge except what You have taught us. Indeed, it is You who is the Knowing, the Wise."

From here, it appears that the man (Adam) more mainstream and precious than the angels. And they (the angels) are not given knowledge except a little. Then, we can conclude that humans are more important and noble of all creatures because of awarded the scientific potentials, while other creatures do not. Then, it is true Arabic proverb that states that if not of science, humans will like animals (Arifin, 2013).

The high position of science in Islam is because of science is a prerequisite of the right words and deeds. As said by Imam Al-Bukhari, both that (sayings and deeds, pen.) Can be right only with science. Then science takes precedence over both. Because science is the justification for the right intention to act. The same thing also expressed by Murtadla al-Zabidi (d. 1205/1790),

"... Indeed it is fardlu on mankind to believe. Because the faith is essentially consist of a summary of the science (particular) and to act (particular); it is not depicted to be the form of faith, but with science and action.

Then from (the obligatory to believe in the pillars of the Faith), practice the Islamic way of life (shari'ah) is a duty upon every Muslim, and may not be fulfilled, but after reaching mukrifah (science) and the knowledge of the shari'ah.
And Allah has extracted you from the wombs of your mothers not knowing a thing [al-Nahl, 16: 78]. Therefore, seeking the knowledge is an obligatory upon every Muslim. Can not devote themselves to God- while worship is God's haq for all His slaves-except by science, and unlikely to achieve the science but rather by searching for it (even where though)? So that is true if the Prophet formerly has obliged to Muslims to seek the knowledge.

**The Understanding of Science**

Science is a term derived from Arabic language consisting of three letters, namely 'ain, lam, and mim. The word al-ilm is ism mashdar of alima-ya'lamu which means to know or find out. Then, science in the terms can be interpreted as a knowledge. According to Quraish Shihab, the word science in the various forms contained 854 times in the Qur'an. It is used in the process of achieving the goals. science in language means clarity. So, the science is a clear knowledge of something (Sihab, 1999).

Meanwhile, Wan Mohd Nor Wan Daud stated that, researched from the linguistic aspects, the word 'ilm has a wide meaning. Referring to the Dictionary of Arabic-English Lexicon, Wan Daud stated that the word 'ilm comes from 'alamah, that is a sign, pointer, or an indication that something or someone is known, cognition or label, characteristics, indications and signs (Syarif, 2013).

Then the Problem comes when the word 'science' is converted to the Western term. The mind of secular and materialistic tend to make Western scientists call the science with different terms. However, from some of these terms there are 2 popular terms that is used by them, namely science and knowledge. According to Prof. Dr. Ahmad Tafsir, 'science' which is a loan word from Arabic language interpreted with knowledge, while the word 'science' in Indonesian is the translation of science. A different point from the second term as explained by Prof. Tafsir, science is a part of the knowledge (Suriasumantri, 2009).

Oxford English Dictionary register 3 meanings of science, namely: a) the information and skills acquired through experience or education; b) the whole of what is known; c) consciousness or habit acquired through the experience of a fact or circumstance. Whereas in the Great Dictionary of Indonesian, science is expressed as follows:

"Science n 1 knowledge about a field that is arranged by applying certain methods, which can be used to explain the certain symptoms in the field of (knowledge) that: he obtained his doctorate dl - education; 2 of knowledge or skill (about world, afterlife, birth, spiritual, etc.)."

Plato defines the knowledge with, "the true faith which is justified", Dr. Syamsudin Arif breaks it down into three elements: (i) beliefs, (ii) the truth, and (iii) reasoning. According to him, the definition proposed by Plato had received a refutation from a philosopher. A Western philosopher, Michel Foucault (1926-1984) quoting the Descartes statement, stated about science as follows,

"Knowledge is a power over others, the power to define others. In this view knowledge ceases to be a liberation and becomes a mode of surveillance, regulation, discipline."
The definition proposed by Foucault above is highly tendentious. This may stem from the paradigm that he espoused. R. Harre, as cited Suwardi Endraswara states that science is,

“a collection of wellattested theories which explain the patterns regularities and irregularities among carefully studied fenomena,”

Furthermore Suwardi Endraswara defines science as a series of human activities that rational and cognitive by various methods such as a variety of procedures and measures thus resulting the systematic collection of knowledge about the symptoms of faulty, community, or individual to reach the truth, gain the understanding, give an explanation or do the application. In a similar way, Yunasril Ali defines science as a result of research and the analysis of the intellect of an object that is done systematically.

The definition given by two experts in the above
In addition to the experts above, Jujun S. Suriasumantri gives a definition for science with a bit ridiculous, He said,
"Science is the knowledge that we struggle since the elementary school to the high school education and university."

The definition that given by Jujun above contradicts with Islam which ordered his followers to seek knowledge throughout of life.

The question is, "what is the designation for the knowledge that we gain after finishing the college?" If we observe, all definitions above just relying on one of epistemology, it is rationality. The definitions above tend to be materialistic, because it relies on rationality as epistemology. Certainly it is understood, because it is still using the West paradigm.

The West looking at reality more emphasis on the things that are material. This has implications to the way they formulate the concept of science. Then their paradigm and frame building of science was materialistic and secular, something that is contrary to Islam.

The Definition of Science According to the Muslim Scholars

Long time ago before Western scientists define what is the science called, actually the Muslim scholars have defined it. Al-Raghib al-Isfahani (d. 443/1060), an expert in philology of Islam in the Mu’jam Mufradat Alfadz Qur’an as quoted by Dr. Syamsudin Arif, stated that science is the perception of a thing essentially. Dr. Syamsudin Arif then explained it as follows,

"it means that just view the properties (i.e., The shape, size, weight, contents, color, and other properties) something does not constitute a part of science. Underlying this definition is a philosophical view that every substance composed of the essence and accidents. Essence is what makes something as itself, something of it will remain one and the same before, contemporary, after the change, then it is called as nature. Science is all matters relating to the nature of which has not changed."

Furthermore, Imam Abu Hamid Al-Ghazali (d. 505 AH / 1111 AD) defines a science as "the introduction of something over it". That is, to know something intact with truth. Dr.
Syamsudin Arif elaborates it into three things. First, science is an individual problem. Second, science comes as itself into a person’s mind. Third, regard to the statement ‘ala ma huwa bih. In the view of Imam Al-Ghazali, he continued, we can not claim to have knowledge except if and until we know that tsomething is "as it is”.

Another case with Al-Sharif Ali al-Jurjani in his work Al-Ta’rifat (d. 816/1413) which states that science is Minda reaching on something. This definition then inspire Syed Muhammad Naquib Al-Attas in the definition of science as “the arrival of the meaning in the soul as well as the arrival of the soul in the sense.”

However, Syed Naquib Al-Attas in his other work said,

"Generally it can be understood that the science does not require the definition (hadd). The meaning that contained in the term 'ilm is naturally can be directly understood by humans based on his knowledge of science, because of science is one of most important trait to him. the meaning of science has been clear to him that no more explanation is needed to explain the nature in particular. It has been accepted that science can be classified into major elements, so that the basis of classification, as long as related to the human, it can be beneficial. All knowledge comes from Allah Subhanahu wa Ta’ala. For the purpose of classification that is accordance with our actions, we say that in the same way as humans are composed of dual nature that has two souls, as well as science divides into two types: the one is a dish and life for his soul, and the other is provision for completing the human being in the world to pursue the pragmatic goals."

Next is, Jamil Saliba in Al-Mu'jam al-Falsafi states that science is to understand the absolute, either tashawwur nor tashdiq, either believe or not. Some understandings states by the experts above, there are at least four interrelated components in the system of acquisition of knowledge, the subject which is to understand, object or shurah (form) was painted in the soul of the subject to understand, and the success of shurah (form) was painted in the soul of understanding subject. Further definition presented by Zuikifli and Sentot Budi Santoso, which define science as follows,

"Science is the light that Allah has given to human. There is no doubt that the position of the knowledgeable people on the side of Allah is higher by several degrees. Only the people who have sense who can understand the greatness of God through the creation of the universe and all its contents."

Furthermore, Kadar M. Yusuf, said that there are three terms contained in the system of human knowledge, namely al-’ilm, al-’alim, and al-Ma’lum. Al-’ilm (science) is the depicted the nature of things in mind, where the picture is an abstraction of something, good quality, quantity, or substance. Al-’alim (people who know) is a person who has successfully understood the nature of things. While al-Ma’lum is the object that is examined and everything related to it.

The description and explanation above, the authors conclude that the definitions of science that expressed by the Muslim scholars above in editorial is different, but all of them lead to the same meaning. All of the them ensures the four components as described above,
that subject, object, and the success object was reflected in the soul of the subject. Then, the authors propose a definition of science as, a compatibility between ideals and reality.

The Implication for the Islamic Education

It has been explained above, about the nature of science, and so forth. Then, it is certainly encourages us to think and formulate how this knowledge has implications for education. Imam Malik once said, that knowledge is not the amount of mastery of the knowledge theory, but knowledge is the light emitted in the heart. The light is the light of faith is meant to take someone to the piety and glory. Thus, this statement means that the amount of mastery of the science does not mean if it is not followed by the faith and piety. Science must be brought to piety and godliness. It is a science that is called a useful science.

Imam Ibn Rajab ra said that useful science shows on two things: First, to know God Almighty and all what is His rightfully such as His beautiful names, the noble qualities and the noble deeds. Second, knowing all what is hated and loved by Allah the Almighty and stay away from what is wrath by Him.

Similar statement was expressed by Syed Naquib Al-Attas, who saw that the science in Islam include faith and trust. Not only that, a study destination is to build the goodness or justice in as a human being and self-personal, and instead of a mere human being as a citizen or an integral part of the community. Based on this, a study destination is linear with the educational goals of Islam itself.

According to Abuddin Nata (1997) as cited by Ahmad Syar'i, Islamic educational goals can be characterized as follows:
1. Directing people to become a caliph of God on earth as well as possible, that perform the duties of prosperity and cultivate the earth according to God’s will.
2. Directing people to the entire implementation of the tasks carried out by caliphate on earth in order to worship Allah, so that the task was light implemented.
3. Directs the human to noble, so not to abuse the function of his caliphate.
4. Develop and direct the potential intellect, mental and physical, so he has the knowledge, character and skills that all of these can be used to support the task of devotion and caliphate. Leads people to achieve happiness of life on earth and in the hereafter.

CONCLUSION

Based on what is explained above, the authors conclude as follows:
1. Science is a process of synchronization between ideals in mind. So the reality of an object can be imaged in our minds.
2. The experts have different opinions in defining science. However, all the definitions and the terms of of science are materialistic, and very secular. Then, we take the terms notion expressed by the Muslim scholars.
3. The purpose of science actually must be proportional to the objectives of Islamic education. Thus, the orientation of the prosecution of science will be hereafter, not merely pursue the world.
REFERENCES

Ali, Yunasril, Jalan Kearifan Sufi Tasawuf Sebagai Terapi Derita Manusia, (Jakarta: PT Serambi Ilmu Semesta)
Arifin, Luqman Hakim, dkk, Kumpulan Kata Mutiara dan falsafah Hidup, terj. Fuad Syaifudin Nur (Jakarta: TUROS, 2013)
Attas, Syed Muhammad Naquib Al-, Islam dan Sekularisme, terj. Dr. Khalif Muammar, M.A. (Bandung: PIMPIN, cet. II 2011)
Endraswara, Suwardi, Filsafat Ilmu, (Yogyakarta: CAPS, 2013)
Misrawi, Zuhairi, Hadratussyaiikh Hasyim Asy’ari, (Jakarta: Kompas, cet. ketiga 2013)
__________, Wawasan Al-Qur’an, (Bandung: MIZAN, 1999)
Suriasumantri, Jujun S., Filsafat Ilmu: Sebuah Pengantar Populer (Jakarta: Pustaka Sinar Harapan, 2009)
Syar’i, Ahmad, Filsafat Pendidikan Islam, (Pustaka Firdaus, 2011)
Yusuf, Kadar M, Tafsir Tarbawi Pesan-pesan Al-Qur’an tentang Pendidikan, (Jakarta: AMZAH, 2013)
Tafsir, Ahmad, Filsafat Ilmu, (Bandung: PT Remaja Rosdakarya, 2010)
Zulkifli & Sentot Budi Santoso, Wujud (Menuju Jalan Kebenaran), (Solo: CV Mutiara Kertas, 2009)