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# Appreciation of Science in Al-Qur'an

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#### Abstract

Science is knowledge related to a person's understanding of the natural world, whereas technology is knowledge related to how knowledge of science is utilised for overall development. Science of revelation is knowledge revealed by Allah SWT to Prophets and Apostles to be conveyed to their followers as a guide to develop the self and human civilization. Throughout the history of human civilization, knowledge of science is very crucial to developing a civilization. There is no development of civilization without science and technology. But in a civilization developed by the West, revealed knowledge has no role. Instead, the presence of revealed knowledge is considered to be interfering with the smooth development of science itself. Thus, for Western scholars, revealed knowledge needs to be ignored and ruled out. Consequently, today's development becomes lame so as to cause environmental and global warming issues without viable solutions; issues of exploitation and manipulation of natural resources so as to adversely affect the world's economic system; and social issues which are very disgraceful, like giving birth to one who does not know how to respect his own parents. This paper expresses the position of science in revealed knowledge (al-Qur'an). This issue needs to be addressed because scientific development without religion is blind to the point that the goal of development to produce a happy and prosperous human being will not be achieved. While religion without science is equally lame, because religious demands cannot be implemented without appropriate science and technology.

Keywords: Western science, Islamic science, acquired knowledge, revealed knowledge, prosperous human being.

### 1. Introduction

Science and technology development is frequently concomitant with development of nature by man. No one may deny that man needs science and technology to develop and prosper in this world. Without science and technology, the world would not be as developed as we see it today. Only mankind, and no other creatures, has the potential to develop science and technology, because mankind has the capacity to understand nature in a limited way. Mankind's ability to systematically, logically and objectively understand nature, and then develop science and nature themselves, enables them to properly administer and manage nature.

Science is not knowledge which can explain everything. At least everyone knows that it cannot explain the happiness aspect in man's life. Science is also unable to explain the aspects of emotional and spiritual satisfaction. Unfortunately the over-adulation for science has caused it to dominate every aspect of human life – all knowledge including social sciences and literature are required to be explained scientifically for it to be universally accepted. Likewise with knowledge related to psychology and humanities – all are using a scientific approach, even though scholars understand very well that knowledge concerning humanities is very subjective, not objective as science. Even religious and cultural knowledge are required to be justified scientifically to gain universal acceptance.

This reality is causing society to neglect religious teachings, culture, tradition and ethics (subjective knowledge) in their daily life, which ultimately produces 'scientific mind' people – making science as their ideology (which may be called as scientism), such as to bring forth humans who are blind to religion, and unclear about life's objectives, thus undermining the family institution, lack of etiquette in social manners and destruction of the natural environment, and also chaos and disorder in the economic system. All these are the consequences of science being developed without religion, without the pristine values of humanity, which causes people to be blind.

The consequence is that a system is born which separates between affairs related to understanding nature, that is science; and a system which enables man to understand God, that is, religious knowledge as well as knowledge which enables man to properly understand his social responsibilities. Some alternative suggestions have been submitted by Gardner (1984) who discusses the Concept of Multiple Intelligence, Daniel Goleman (1996) in submitting the Concept of Emotional Intelligence, and Donah Zohar (2000) in submitting the Concept of Spiritual Intelligence. But as for the writer, the concept of human intelligence which they propose is still out of the scope of revealed knowledge as taught in Islam.

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Even worse, many people are pointing the finger at the current education system for the uncontrollable environmental pollution and the breakdown of the family institution are the consequences of the system. This education system emphasizes on the scientific aspect at the expense of neglecting the aspect of responsibility based on the concept of divinity and social culture based on religious teachings and social harmony. In fact, some people in society consider that religion and culture are not as important as science, technology, engineering, health and economics, and this is reflected in the indicator of national progress which measures the index for science, technology and economy, without taking into account matters relating to humanity values.

This paper attempts to uncover this topic based on the writer's observations of the current development in Science, Technology, Engineering and Mathematics (STEM) education, which the writer feels contributes to the lameness of human capital development as a whole. This paper also attempts to see the position of science in the wider map of revealed knowledge in order to create a desire to propose a new approach in teaching STEM in our education system – a science education which is based more on divinity, friendliness to the environment, humans and society, a science which we name as Tawhidic Science.

### 2. Meaning of Science

There is no singly specific definition of science which may be given to explain its meaning. What is clear is that the method of understanding nature is an important basis in developing knowledge of science such that it is called knowledge of nature or the science of nature. Knowledge related to the application of science is named as technology or knowledge of techniques using a scientific approach.

In order to further understand what science is, let us begin by looking at the term science itself. According to Peter Medawar (1984), the word science in English is a new term not found in past civilizations. Therefore to discuss what is meant by science, we will use the meaning given by Western science scholars because they were the first introduced the term.

Traditionally, science as submitted by Western scholars may be defined as (Fowler, 1978),

'Systematic and formulated knowledge.'

The English-Malay Dewan Bahasa dan Pustaka Dictionary states that science is a (DBP, 1992),

'Systematic study based on observation and experiment.'

Mortimer J. Adler (1976) states,

'Science is a search for a rational explanation of natural phenomena. It is a continuing activity.'

According to Peter Medawar (1984) the term science is taken from the Latin term 'scientia'. There are 12 words which are similar to the term science as follows,

sienz, ciens, cience, siens, syence, syense, scyence, scyense, scyens, scienc, sciens, scians

The root word from the Latin word 'scientia' means knowledge, the degree of knowing of a person about a matter. But not all knowledge may be deemed as knowledge of science. What is meant by science is (Medawar, 1984),

'knowledge of information (result of observation of natural phenomena) generated and systematically developed by certain methods based on certain premises by the observer until reliable knowledge is aggregated, whether through experiment or theoretically logical argument.'

To Medawar, the truth of science is the truth based on the goals desired to be achieved through work done by a scientist through what is called asymptote; a truth which is not conclusive or absolute, which may still be disputed and criticised, but is assumed to be so. Science only gives the possible direction of the scientific study, but it does not have the ultimate goal desired. Thus, the exploration of knowledge on natural phenomena studied always varies and is not absolute. History of science has explained to us how theoretical science related to the cosmos, for example, constantly changes since the ancient times till today, from what was assumed and believed that the world was at the tip of a horn to the present well-known theory of the Big Bang. Likewise with the theory of atom which constantly changes whenever a

new theory is introduced; Dalton's theory of atom, then Thomson, then Rutherford until the quantum theory which proved those electrons, atoms and particles also propagate in waves form (the duality of wave-particle of energy and matter). All scientific theories will continue to grow and change throughout time appropriate to human understanding at the time of observing it. This shows that the theories of science, and thus science, are not absolute, and constantly change in time whenever new finding discovered.

After observing the history of scientists and their contributions to Western science and technology, Crump (2002) found it difficult to differentiate between the term science as used and knowledge which in Latin is called *scientia*. Crump stated that the Latin word *natuur* to describe nature, is then translated into English as nature, and connotes the meaning of knowledge related to the natural properties of an observed object. Even closer, the Latin word, *natuurkunde* means physique and in Greek is called *physis*, the basic meaning of which is the natural properties of an observed object or nature. Crump (2002) generally defines science as,

'Science is the aggregate of systemized and methodical knowledge concerning nature, developed by speculation, observation and experiment, leading to objective laws governing phenomena and their explanation.'

What is meant by laws here are the natural general rules which are followed or adhered to by the observed object, and which may be repeated. For example, study of a falling object when it is release from a height; why do trees need sunlight to grow?; why does fire burn?; why does a sharp knife cut?; why does water not break off when it is chopped?; and various other natural phenomena. Clearly there is a certain rule which is followed and can be understood as to why an object falls when it is release, why fire burns, why does a sharp knife cut and so on. These laws of nature are what the scientists wish to study.

Shaharir Mohamad Zain (2000), in his book *Pengenalan Falsafah Sains* (Introduction to Philosophy of Science), states that the definition of science usually supported by most scholars is as follows:

'Science is a systematic, rational and objective analysis of phenomenon (nature)'<sup>1</sup> by using a verifiable specific method to create aggregation of reliable knowledge.'

Although this definition of science may be improved and argued, generally it can be said that pure science is knowledge pivoted on how man is able to observe nature which behaves according to its *fitrah* (natural disposition). The result of systematic observation is then rationally and objectively argued and analysed, experimented and compared to its theoretical assumptions. This knowledge continues to be cultivated and developed to increase the treasure of science knowledge itself.

### 3. Premises of Science

In order to develop knowledge of science as discussed above, scientists are required to make some certain basic assumptions as premises for the development of their science knowledge. The premises for knowledge of natural sciences, in material terms, have been discussed by Shaharir (1998). These show shortcomings according to the Islamic perspective, and the discussion is not repeated here. According to Toby E. Huff (1995), the philosophy of pure science requires three basic assumptions:

**First**, scientists are required to be confident and believe that nature is organized or regular in a certain order. This means that nature is coherent, organised according to certain rules or laws, and in a foreseeable or predictable domain. This is the basic premise in the effort to develop science knowledge. Without these assumptions and confidence, nature may not be understood through the scientific approach.

Second, scientific argument also assumes that man is able to give reasons and causes for the observed natural phenomena. By this, man must have the mental capacity to understand nature by conducting an investigation through rational argument. Nevertheless, scientists also believe with confidence that a certain theory about a phenomenon of natural science may be wrong at some point, while at the same time, they also believe that they probably may not know

<sup>&</sup>lt;sup>1</sup> In brackets is added by writer, because scientists study the habits and properties of nature. Not all phenomena may be studied by scientists, for example, happiness, supernatural phenomena addressed and understood through religious teachings. Social phenomena related to culture also may not be studied by scientific method only. For example, why do we need to give peace greetings when attending a gathering, bow our head when showing respect for older people and so on.

everything about the nature that they observe. But they are certain that ultimately man will be able to give reasons through a systematic, logical and objective investigation. Thus they are certain that a scientific investigation needs to be continuous in order to refine their understanding of nature.

Third, the philosophy of natural sciences also assumes that everyone, male or female, Westerner or Easterner, wherever he is, even from different backgrounds, has the liberty to use his power of intelligence which enables him to question and reason with logic (*taakul*) for a certain observed phenomenon. He is also free to question the veracity of the science the scientists claim. Scientists also believe that after scientific investigation, everyone will finally reach the same conclusion from observation, even if they are at different places, with different cultures. With these assumptions, they consider science as universal, unlike the arts of culture and tradition which are localised.

Based on the definition and premises of science above, we can conclude that in order to develop science and technology according to the Western scholars' perspective, attention must be focused on the following matters:

- All nature follows its own rules. Thus, scientists must have the ability to observe nature which follows its own rules or laws.
- Man has the ability to give reasons and causes for natural phenomena occurrences. The reasons given must be in a systematic, rational and objective manner. Objective, according to the Oxford English Dictionary, (Fowler, 1978) means 'dealing with outward things or exhibiting facts uncoloured by feelings'. Thus, a person has to put aside religious, cultural or traditional beliefs when making considerations of a scientific observation.
- Devise a suitable method to understand natural phenomena observed. This method is called scientific method, which is acceptable and reliable to the scientific community. It may be in the form of an experiment or theoretical argument.
- Aggregate or improve knowledge of natural phenomena observed. As scientists are convinced that scientific study is continuous so long as man argues in a systematic, logical and objective manner, so new knowledge obtained from this observation will aggregate knowledge on the same phenomena previously observed.
- As scientists are convinced that their study is not absolute, and may be explained in more detail later by those who are more knowledgeable about it, so they are required to state the degree of reliability towards the natural phenomena that is explained. This degree of reliability is stated in the form of error analysis, in which there are two matters that contribute to shortcomings or limitations of observation: systemic error caused by limitations of instrument to read with accuracy, and random error, that is an error by persons who did the observation.

This is the approach used by Western scholars in developing their knowledge of science. Epistemologically, the Western scientific approach may be depicted as in the following Figure 1:



Figure 1: Epistemology of science according to Western scholar perspective. Science is the intellectual ability of man to understand nature.

In the Western perspective, science is the knowledge relating to how man is able to observe natural phenomena with his intellectual intelligence. With his understanding of nature, he strives to obtain the techniques to utilise the observed nature. These techniques are known as technology.

## 4. What is Al-Quran?

Generally it can be said that al-Quran is a book which contains a collection of revelations sent and conveyed to the Prophet Muhammad (pbuh) as guidance to the whole of mankind throughout man's life. According to Subhi Salleh (1978), this book is named al-Quran because it has to be remembered and memorized (*al-Qiraah*) by Muslims. Generally, al-

Quran can be summarized as follows:

Al-Quran is a book revealed as right guidance or enlightenment (*huda*) to man to guide him throughout his life. Its contents clearly state the difference between the rights and the false as asserted by Allah SWT in verse 185, chapter al-Bagarah (2) which means,

'Ramadan is the (month) in which was sent down the Qur'an, as a guide to mankind, and also clear (Signs) for guidance and judgement? (between right and wrong)'. Al-Bagarah (2): 185

As a criterion which explains the difference between truth and falsehood, man may thus look to al-Quran for guidance in managing his daily activities.

- a. Al-Quran is the Word (Kalam) of Allah SWT, a miracle (mukjizat) revealed to the Prophet Muhammad (pbuh), written (mashaf), and narrated by narrators, clearly without doubt. Thus recitation of al-Quran, even without understanding it<sup>3</sup>, is an *ibadah*. This definition by Soenarjo *et. Al.* (1412 H) in the famous *Al-Qur'an dan Terjemahannya* (al-Quran and its Translation) is used as reference in Malaysia and the Malay world today.
- b. Al-Quran is also an original, genuine and authentic book, it has never been challenged by anyone, is irrefutable and is undisputed since it was sent and bound during the time of Caliph Saidina 'Uthman till today. Its binding was led by Zaid bin Thabit, together Abdullah bin Zubair, Sa'id bin 'Ash and Abdurrahman bin Harith bin Hisyam (Ishfaq, 2000)<sup>4</sup>.
- c. Al-Quran is a book which has produced numerous religious (Islamic) individuals and societies. Islam encompasses the ritual and social aspects. It has produced cultured and civilized societies, whose lives are organized, orderly and systematic. In order to ensure the Muslim communities continue to develop, they are required to make al-Quran the source of inspiration to build the future (Dawam Rahardjo, 1996).
- d. Al-Quran is a book which needs to be fully believed as the revelations of Allah SWT. It is one of the pillars of faith. A true Muslim sincerely and earnestly believes in it. Disputing Al-Quran may revoke one's declaration of faith (*syahadah*), even though there are statements in it which rationally and logically do not make sense to one's or a group's thinking, such as the story of Prophet Ibrahim (Abraham) (pbuh) who was thrown into the fire by King Nimrod but the fire did not burn him; or the story of Prophet Isa (Jesus) (pbuh) who could bring the dead to life and so on. Al-Quran is the main basis of belief for the development of the Muslim *aqidah*. (Sayid Sabiq, 1991).

## 5. Science from Islamic Perspective

What is the position of science in revealed knowledge contained in al-Quran? Muslim scholars have never rejected the scientific approach such as being practiced by Western scholars as mentioned above (in fact, Muslim scientists were the first to establish the scientific method that we have today (Watt 1979)). In the view of Muslim scholars, Muslims are very much encouraged to observe nature. Verses 190-191 in Surah Ali 'Imran (3) clearly prove this statement, as in the following meaning:

'Behold! In the creations of the heavens and the earth, and the alternation of night and day – there are indeed Signs for men of understanding – Men who celebrate the praises of Allah, standing, sitting, and lying down on their sides, and contemplate the (wonders of) creation in the heavens and the earth, (With the thought): "Our Lord! Not for naught hast Thou created (all) this! Glory to Thee! Give us salvation from the penalty of the Fire!' Ali 'Imran (3): 190-191

<sup>&</sup>lt;sup>2</sup> Al-Quran uses the term al-Furqaan which means judgement to differentiate between right and wrong.

<sup>&</sup>lt;sup>3</sup> The meaning of Qur'anic contents is Allah's knowledge. Thus, it is impossible for man to fully understand the meaning of al-Quran because man's knowledge is limited compared to Allah's knowledge. But even with a little bit of knowledge is sufficient to provide man with guidance for life in this world.

<sup>&</sup>lt;sup>4</sup> Ishfaq Ahmad, 2000. Research and Development in The Islamic World: Past and Present Problems and Future Directions. Journal of Islamic Science. Vol 16(1-2). HIm 127-135. Ishfaq stated that the binding of al-Quran during the time of Sayidina Uthman r.a. shows how thorough was the study and investigation of before it was bound, because no one disputed it. That was and is the same al-Qur'an, from the time of its binding till today, even though interpretation, lectures and commentraies of it may differ according to the circumstances throughout the ages.

Likewise with verses 27 and 28 in Surah Faathir (35) which means:

'Seest thou not that Allah sends down rain from the sky? With it We then bring out produce of various colours. And in the mountains are tracts white and red, of various shades of colour, and black intense in hue. And so amongst men and crawling creatures and cattle, are they of various colours. Those who truly fear Allah, among His servants, who have knowledge: for Allah is Exalted in Might, Oft-Forgiving.'

Faathir (35): 27&28

And in surah Al-Mulk (67), verse 3, Allah SWT says as in the following meaning:

'...No want of proportion wilt thou see in the creation of (Allah) Most Gracious...' Al-Mulk (67): 3

Further in Al-Qamar (54), verse 49, Allah SWT also says in the following meaning:

'Verily, all things have We created in proportion and measure (with predestination)' Al-Qamar (54): 49

The verses above clearly tell the Muslims to observe, and study the occurrences and phenomena of the creations, the earth and the heavens. They are told to use their intellect, a potential to give reasons and causes on the phenomena of nature's creation which is balanced and follow the rules or measures prescribed by Allah SWT. Study of the celestial phenomena is included in the field of astronomy as is now known. In Surah Faathir (35), Allah SWT tells Muslims to observe and reflect on the phenomenon of rain formation which comes down from the sky, then nourishes a variety of vegetation to grow. Likewise with the mountains, structure of rocks and minerals are useful for man. Other than nature, Allah SWT also urges Muslims to study humans, variety of wild and domestic animals of various behaviour from which human being may draw lessons and benefit.

In the above verse (3: 190 & 191), Allah SWT refers to people who observe nature with the sentence, "Men who celebrate the praises of Allah, standing, sitting, and lying down on their sides, and contemplate the (wonders of) creation in the heavens and the earth, (With the thought): Our Lord! Not for naught hast Thou created (all) this! Glory to Thee! Give us salvation from the penalty of the Fire!" It means that in Islam, knowledge related to understanding of nature, now known as science, is very important to study, but science must not make us forget our responsibilities to the Creator of nature, Allah SWT. In other words, Islam enjoins Muslims to master science and technology, but not at the cost of neglecting our responsibilities to Allah SWT.

Those who remember Allah SWT, wherever and whenever they are, at the same time they understand nature as created by Allah SWT, are given by Him the title, *ulul al-bab* or possessors of wisdom. In surah Fathiir (35: 27 & 28) above, Allah SWT names this group as people who have knowledge (*al-Ulama*) scholars. *al-Ulama* are people who understand nature or creation; the phenomenon of rain which falls from the sky, which nourishes various species of vegetation, who can understand the creation of mountains and all types of rocks, understand the atmosphere, the diversity of human, wild and domestic animals and their behaviour. In other words, they are scientists of nature and social scientists, at the same time they are most in awe (*taqwa*) Allah SWT, fear his sanction and punishment, do not transgress limitations, who are bold but humble in spite of their understanding of nature and human behaviour because they know that Allah SWT Knows More and is the Most Powerful, and they also promptly seek forgiveness from Him if they have acted in an unrestrained manner in attempting to understand nature.

In other words, Muslim scholars realize that nature has properties which may be understood and predicted, but these properties are not absolute, and not determined by nature itself (whether vegetation, animals, matter or human), but the properties of nature are determined absolutely by Allah SWT. That is why Muslim scientists or Tawhidic scientists believe in the property of fire which is hot when it burns, but the burning of the object on fire does not lie with the fire but with the permission of Allah SWT for it to burn. Thus, a Tawhidic scientist believes in the story of Prophet Ibrahim (Abraham) (pbuh) stated in al-Qur'an, who did not burn when thrown in the flaming fire because Allah SWT did not give permission to the fire to burn him. Likewise, with the story in al-Qur'an about Prophet Ismail (Ishmael) (pbuh) who did not die when slaughtered with a sharp knife. and the story of Prophet Musa (Moses) who crossed the Red Sea after he threw his staff into it and the waters parted for him and his people to escape from the Pharoah, and other stories in al-Qur'an without any doubt.

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Tawhidic scientists also believe in their ability to understand nature systematically and logically but within limits because they have been entrusted by Allah SWT to be the administrator and governor of this world, as vicegerent or khalifah<sup>5</sup> of Allah SWT. They would not be able to properly carry out their task as *khalifah* if Allah SWT did not provide them with the potential to understand nature. At the same time they (as *khalifah* of Allah SWT) are required to develop their talents and personal skills in understanding nature. So their obligation to develop science is considered as a shared responsibility (*fardh kifaya*) which they do on behalf of the whole Muslim community.

For Tawhidic scientists, knowledge is not limited to what may be observed by the human intellect. Knowledge perceived by the human intellect is called *aqli*, whereas knowledge given by Allah SWT to a person, whether through reading of Allah's knowledge contained in al-Qur'an and the Prophet's (pbuh) Sunnah or through inspiration or intuition is called *naqli*.<sup>6</sup>. Both forms of knowledge or sciences are very necessary in the life of a Tawhidic scientist. *Aqli* science is knowledge obtained based on the strength of the thinking mind whereas *naqli* science is knowledge is given by Allah SWT based on Divine guidance. The strength of *naqli* is based on to what extent a person's belief develops his Tawhidic aspect – belief system asserting Oneness of Allah SWT and based on rituals and worship (*ibadah*) <sup>7</sup> practice of a person.

Thus, for Tawhidic scientists, knowledge has a certain hierachy (*marhalah*). The highest in the hierachy is the knowledge of knowing his God. This science does not only enable one to know his God but also makes all his deeds and practices for the sake of the God that he knows. There are levels of *naqli* knowledge discussed in detail in a book by Imam al-Ghazali(1990), *Bimbingan Mu'minin* (Guidance for Righteous Muslims) and by ibn-Khaldun (1993) in his famous book, *Mukaddimah* (Introduction or *Prolegomena*)

As a conclusion, the epistemology of Islamic science or science based on Divine Revelation is as depicted in Figure 2 below:



Figure 2: Epistemology of Tawhidic science which depicts relation with Allah SWT, man with man, and man with the world around him in developing science and technology.

The difference between science from the Western perspective and Tawhidic science is that the former rejects any form of religious argument, even though their scientists understand that their knowledge is limited, not absolute and is secular, whereas Tawhidic science places great importance on divinity that the spirit and ultimate goal in working is purely for Allah SWT. All innovations, creativity and inventions by Tawhidic scientists are manifestations of self-responsibility to their God. Thus, creativity which is destructive, uncivilized and environmentally and socially damaging to well-being is totally forbidden.

<sup>&</sup>lt;sup>5</sup> The concept of khalifah will not be discussed in detail in this paper. Nonetheless, it is impossible for a person to govern and administer the world if he is incapable of understanding nature and its properties.

<sup>&</sup>lt;sup>6</sup> Discussion of aqli and naqli knowledge, and thinking may be found in books by the writer, Mohd. Yusof Hj. Othman, 1998. Isu dalam Ilmu dan Pemikiran. (Issues in Knowledge and Thinking) Kajang, Aras Mega Sdn. Bhd. ISBN 983-9301-12-8.

<sup>&</sup>lt;sup>7</sup> It is inappropriate to restrict islamic Ibadah (worship) to rituals such as prayer (solah), fasting (sawm), tax payment (zakah), pilgrimage hajj) and specific incantations (wirid). Ibadah in Islam may be specific and also generally extends to practices which bring good while not contradictory to Islamic shariah or law.

## 6. Conclusion

The world is in great need of science and technology development. It will generate economic development and hopefully prosperity to the country. Unfortunately, the development of science and technology which neglects culture and religion blinds the people as to which direction development will take. The well-being and wealth obtained are just mirage or shadow of the sculpture in the middle of the barren desert, not real well-being which brings peace of mind to the heart and soul. Consequently, we see before us how a highly science literate society is unable to handle issues of global warming, speculation and currency manipulation and social moral decay of religion and culture. In fact, white collar crime in front of us is destroying the world economic system of today, as stated by Francis Fukuyama. The lesson in this article teaches us how harmful is a system developed based on scientific achievement but neglects responsibility to God. That is why we will be blinded if we develop science and technology without religion.

Conversely, religious development needs science and technology development. There is no point of man being the vicegerent or caliph of Allah SWT entrusted with governing and administering this world if man fails to understand it properly. How would man properly govern and administer the world if he is ignorant about it. Is it possible to make clothing to cover our privacy as demanded by religion if we do not know how to make appropriate clothing? Is it possible to fulfil our responsibility of putting into practice the tenets of Islam if we do not master science and technology? That is the reason religion will be lame without science and technology.

In this paper we introduce Tawhidic Science as perceived by Muslim scholars. Three entities which are very important to establish the concept are human being, nature and God which in the conventional science only two entities; human being and nature. Men are the prime mover in the developing scientific knowledge, but the without the sense of responsibility to God scientific activities might do more harm than good to the development of this world, and the future generations.

Wallahuaklam (Allah knows the Truth).

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#### References

(All the citations from al-Qur'an are referred to Abdullah Yusuf Ali, 1992)

Abdullah Yusuf Ali, 1992. The meaning of the holy Qur'an. Brentwoord, Maryland, USA, Amana Corporation.

Adler M.J., 1976. Great Ideas from the Great Books. N. York. Washington Square Press.

- Crump T., 2002. A Brief History of Science: As Seen Through The Development of Scientific Instrument. London, Robinson.
- Dawam Rahardjo, 1996. Ensiklopedia al-Quran Tafsir Sosial Berdasarkan Konsep-konsep Kunci. Jakarta; PARAMADINA Press.

Dewan Bahasa dan Pustaka, 1992. Kamus Inggeris-Melayu Dewan. Kuala Lumpur. Dewan Bahasa dan Pustaka.

Fowler F.G. and Fowler H.W, 1978. The Oxford English Dictionary. UK, Oxford University Press.

Gardner H., 1984. Frames of Mind: Theories of Multiple Intelligences. London, Heinemann.

Goleman D., 1996. Emotional Intelligence: Why It Can Matter More Than IQ. London, Bloomsbury.

Huff, T.E., 1995. Islam, Science and Fundamentalism. Journal of Arabic, Islam and Middle Eastern Studies, Vol 2(2). pp. 1-27.

Ibn Khaldun, 1993. Mukadimah, Kuala Lumpur. Dewan Bahasa dan Pustaka.

Imam Ghazali, 1990. Bimbingan Mu'minin. Singapura, Pustaka Nasional Pte. Ltd.

Ishfaq Ahmad, 2000. Research and Development in The Islamic World: Past and Present Problems and Future Directions. *Journal of Islamic Science*. Vol 16(1-2). hlm 127-135.

Medawar P., 1984. The Limits of Science. UK, Oxford University Press.

Mohd. Yusof Hj. Othman, 1998. Isu dalam Ilmu dan Pemikiran Kajang, Aras Mega Sdn. Bhd.

Sayid Sabiq, 1991. Akidah Islam (Pola Hidup Manusia Beriman). Singapura; Pustaka Nasional Pte Ltd.

Shaharir Mohamad Zain, 2000. Pengenalan Sejarah dan Falsafah Sains. Bangi, Penerbit Universiti Kebangsaan Malaysia. Pp 25.

Shaharir Mohamad Zain, 1998. Kritikan Awal Kepada Premis Ilmu Sains Tabii. Kesturi, Vol 1(1). Pp 81-93

Soenarjo R.H.A. (Ketua), T.M. Hasbi Ashshiddiqi, H. Bustami A. Gani, H. Muchtar Jahya, H.M. Toha Jayha Omar, H.A. Mukti Ali, Kamal Muchtar, H. Gazali Taib, K.H.A. Musaddad, K.H. Ali Maksum & Busjairi Madjidi, 1412 H. Al-Qur'an dan Terjemahannya. Medinah Munawwarah, Saudi Printing.

Subhi Salleh, 1978. Kajian al-Quran. Kuala Lumpur, Dewan Bahasa dan Pustaka.

Zohar D. and Matshall I., 2000. Spiritual Intelligence – The Ultimate Intelligence. London, Bloomsbury.

Watt M, 1972. The Influence of Islam. Edinburg, Edinburg University Press.