

# THE PERSPECTIVES OF FOUR MUSLIM SCHOLARS ON ISLAMISATION OF SCIENCE

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**ABSTRACT:** *Islamization of science has become a debatable issue among Muslim scholars since 1970's. This debate emerged due to the crisis of modern Western science that views a dichotomy between science and religion. To date, there have been many prominent Muslim scholars from the West and the East who discuss this dichotomy based on their understanding and expertise. This paper aims to report a study that analyzes the discourse of Islamization of knowledge from the perspective of four Malaysian Muslim scholars, namely Syed Muhammad Naquib al-Attas, Osman Bakar, Shahrir Mohamad Zain and Wan Mohd Nor Wan Daud. The selection of scholars are in line with their scholarship and contribution to the discourse of science both nationally and internationally. Based on interviews and analysis of documents written by the four scholars, four terminologies that structure the discourse of Islamization of knowledge have been identified. The four terminologies the paradigm of Tawheed, indigenization of science and technology, philosophy of Islam and issues of secularism. It is found that the core philosophy and responses of these scholars in Islamization of science are very relevant in all domains of knowledge. The paper also highlights that their contributions to the discourse of Islamization of science have significant impact not only in Malaysia, but also in a variety of disciplines across the Muslim world.*

**Key words:** Islamization of science, secularism, Tawheed, philosophy of Islam, idigenization of science and technology, Muslim scholars

## 1.0 INTRODUCTION

Islamization of science (IoS) has become an issue of discussion within the Islamic scholars since 1970's and much of the discussion focuses on the theoretical understanding, philosophy, methodology, history, epistemology and socio-political criticism and economic political criticism in relation to the modern Western science [1, 2, 3].

Islamization of science, also commonly known as the 'indigenization of science and technology' refers to the efforts to develop the knowledge of science and technology framed within the local culture and religion mainly for the purpose of national interest [4]. In this respect, the discourse of IoS is considered as dynamic and continuously changing as it is continuously influenced and shaped by various interpretations posited by Muslim scholars. There have been a number of local Muslim scholars in the field of science who have consistently and constructively debated this issue. Examples of strong voices consistently being heard and influenced the development of IoS are such as, Seyyed Hossein Nasr, Syed Muhammad Naquib al-Attas and Ismail al-Faruqi. All of the three thinkers have been recognized as the major contributors to stimulate debatable issues related to Islamization of Knowledge [5].

With respect to the term Islamization of Knowledge, it is stated as *Islamiyyat al-ma'rifat* in Arabic [6], which means a process of developing a comprehensive framework that determines the level of thinking and actions of an individual and community for the purpose of education and practice, managing an organization, government and public for the present and the future world [7]. Therefore, IoS needs to be considered as an important agenda for the development of a nation. With regard to the discourse of IoS, there are several points that need to be considered when discussing the issues of IoS. Firstly, it is not a process of replacing the existing knowledge with a new knowledge that has been converted to Islam. Secondly, it is not a rigid ideology or a religious

affiliation, but rather it refers to the process of developing a methodology for dealing with knowledge and its resources.

At present, the biggest challenge faced by Muslim scientists is that the scientific discipline that studies the formulation of all Islamic science as a practical long-term research plan are aimed at adopting and implementing the values of Islamic culture and sciences in all scientific activities [8]. In this case, failure to overcome these challenges can result in all Muslim scientists being trapped within the framework of scientific research underpinned by the understanding of the secular West.

The purpose of this paper is to discuss the thoughts and understanding of four Muslim scholars related to IoS. It focuses on the analysis of the terminologies used by the four Muslim scholars to represent their thoughts and understanding of the IoS. These terminologies has wide influence to the discourse of IoS both locally and internationally. In this context, this paper is organised into five sections. After the introduction, the second section of this paper presents the literature review. This is followed by the third section that describes the methodology. The fourth section presents the results and discussion and this paper ends with a section on conclusion.

## 1.0 LITERATURE REVIEW

Studies and publications that discuss the Islamisation of knowledge and discourse of science have been extensive and comprehensive. One of the famous Islamic scholars, Ismail Raji al-Faruqi have authored several books in this discipline, such as the "Islamization of Knowledge: General Principles and Workplan" [9] and "Tawhid :Its Implications for Thought and Life". In his work, Faruqi posits that the conflict between revelation and reason or between science and religion has never happened in Islam. However, the debate has been mainly on the conflicting understanding between the interpreters, AlQuran researchers and scientists of Islamic knowledge. Thus, the main role of the discourse

of IoS is to reform and improve the knowledge disciplines of humanities and social science by infusing a new framework consistent with the Islamic principles [10]. Further, Louay Safi highlighted the need to overcome the limitation of both modern and classical Muslim western methodological approaches to knowledge. According to him, “modern western sciences deny the significance of transcendence and confined truth to empirical truth, while classical Muslim sciences ignore the importance of gaining a systemic understanding of empirical reality and using it to transform the society” [11].

## METHODS

The study is a qualitative research analysing the perspectives of four Muslim scholars related to IoS. It focuses on the analysis of the various terminologies used by the four Muslim scholars to describe IoS. The four scholars are Syed Muhammad Naquib al-Attas from The International Institute of Islamic Thought and Civilization (ISTAC), Wan Mohd Nor Wan Daud from ISTAC, Osman Bakar from Institute of Advanced Islamic Studies (IAIS) & Academy of Science Islam Malaysia (ASASI) and Shaharir Mohamad Zain from ASASI. The selection of the four scholars was based on their significant contribution, responsibilities and commitment in sharing their thoughts and understanding of IoS particularly in Malaysia. They were among the significant scholars who discuss the relationship of science and religion in a holistic manner. They have showed their strong commitment in this effort by actively involved in several organisations and institutions contributing towards achieving the civilisation of mankind within a framework of a harmonious relationship between religion and science.

Data were collected from several face-to-face interviews and written documents. Two types of face-to-face interviews have been conducted: The open-ended face-to-face interviews were conducted with the four Muslim scholars, while a semi-structured face-to-face interviews were conducted with several academics who are closed to the four Muslim scholars. The interviews with the selected academics and the analysis of written documents authored by the four Muslims scholars serve to verify and support the data collected from the interviews with the four scholars.

The purpose of the open-ended interviews with the four scholars was to capture their thoughts and understandings regarding the IoS. Meanwhile, the main purpose of the semi-structured interviews with several academics closed to the four Muslim scholars were to collect the opinions and responses regarding the understanding of IoS among the four Muslim scholars. For each of the Muslim scholars, two interview sessions have been carried out and each session lasted for one hour. Similarly, the semi-structured interview focused on eliciting the academics' responses regarding their understanding of the four Muslim scholars's understanding of IoS. All the interview sessions were recorded for the purpose of transcription. Further, the transcribed interview data were analysed qualitatively and they were categorised according to pre-determined categories identified from the literature review.

For the document analysis, information were collected from written materials that capture the understanding and thoughts of the four scholars regarding IoS. The written documents were in the forms of books, journals, monographs, articles and conference papers. The data was obtained from two sources: primary sources and secondary sources. These documents were collected from the university libraries. such as the University of Malaya (UM), International Islamic University Malaysia (IIUM), National University of Malaysia (UKM) and the International Institute of Islamic Thought and Civilization (ISTAC).

## 2.0 RESULTS AND DISCUSSION

This study aims to analyse the understanding and thought of four Muslim leaders regarding IoS. The four Malaysian Muslim scholars are Syed Muhammad Naquib al-Attas from ISTAC, Wan Mohd Nor Wan Daud from ISTAC, Osman Bakar from IAIS & ASASI and Shaharir Mohamad Zain from ASASI. As shown in Table 1, the four scholars contribute to different ideas and concepts of IoS. For example, Syed Muhammad Naquib al-Attas focuses on Islamic Thought and Islamic Worldview, Wan Mohd Nor Wan Daud focuses on Islamic Education and Islamic Thought, Osman Bakar emphasises on Philosophy of Science, Tawhidid Paradigm and Civilisation Dialogue. Meanwhile, Shahhari Mohamad Zain focuses on indogenous knowledge, and indigenization of science and technology. This indicates that all the four scholars contribute to the philosophical aspect of IoS but with different specialisation.

**Table 1: The Scholars and their Focus on IoS**

| No | Scholars                              | Focus on IoS  |
|----|---------------------------------------|---|
| 1  | Syed Muhammad Naquib al-Attas (ISTAC) | Islamic Thought, Islamic Worldview                                |
| 2  | Wan Mohd Nor Wan Daud (ISTAC)         | Islamic Education, Islamic Thought                                |
| 3  | Osman Bakar (IAIS & ASASI)            | Philosophy of Science, Tawhidic Paradigm, Civilizational Dialogue |
| 4  | Shaharir Mohamad Zain (ASASI)         | Indigenous Knowledge, Indigenization of science and technology    |

The different focus of IoS can also be contributed to their different educational background and the different organisation that they are attached to. For example, both syed Muhammad Naquib al-Attas and Wan Mohd Nor Wan Daud are attached to the International Institute of Islamic Thought and Civilization (ISTAC) and both of them have similar emphasis which is in Islamic thought. On the other hand, Osman Bakar and Shaharir Mohamad Zain are attached to Academy of Science Islam Malaysia (ASASI) and their focus seem to relate to the areas of civilisation and indeginuous of Islam. These differences are mainly due to the differences in the objectives and policy of the respective organisations.

The background and the emphasis of IoS of the four scholars are presented below. Syed Muhammad Naquib al-Attas is among the Muslim scholars who has greatly influenced the discussions on the concept of Islamization of science and philosophy of science. He is the Founder and Director of ISTAC, established exclusively to implement the ideas of educational philosophy. ISTAC is a renowned institution of higher learning in the area of international scholarship in the West and East. His understanding and thought of IoS represented by his writing focuses more on the conflicting issues of science based on the framework of Islam and the Western knowledge of science. Among his well-known books are *The Concept of Education in Islam*, *Islam and Secularism*, *Prolegomena to the Metaphysics of Islam: An Exposition of the Fundamental Elements of the Worldview of Islam*, *Secularism and the Philosophy of the Future*.

The second Muslim scholar is Wan Mohd Nor Wan Daud, a former Deputy Director of ISTAC. His writing and thinking covers many aspects of education that reflect the system and the culture of the Malay-Muslims. The education system has made the students aware of their challenges in relation to the changing identity and heritage due to the influence of Western knowledge of science. Among his important works are *Cultural Studies*, *The Educational Philosophy and Practice of Syed Muhammad Naquib al-Attas*.

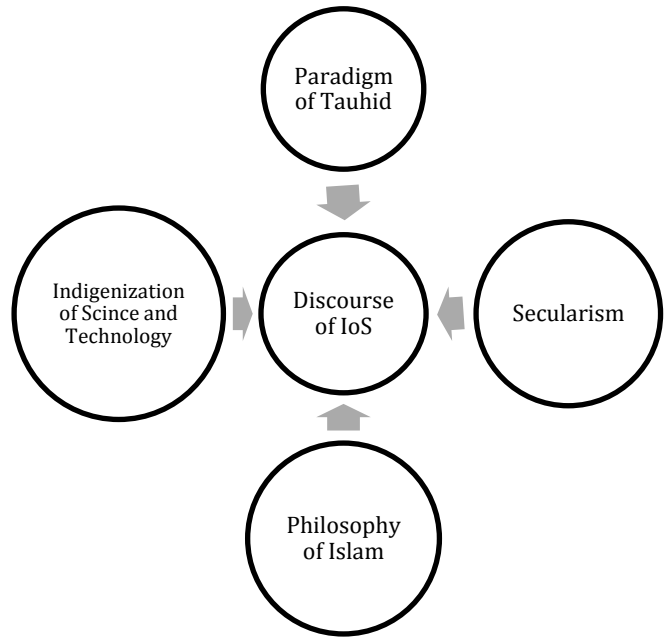
The third Muslim scholar is Osman Bakar who is the former president of HUMAN [12]. His writing and thinking has been greatly influenced by the thoughts of Seyyed Hossein Nasr. His main contribution has been his efforts to introduce the knowledge of History and Philosophy of Science when he was an academic at the University of Malaya. Among his important works are *Classification of Knowledge in Islam*, *Islamic and civilizational Dialogue: The Quest for A Truly Universal Civilization*, *Tawhid and Science*.

The fourth scholar is Shaharir Mohamad and he is the one who pioneered the idea HUMAN that focuses on the idea of indigenization of science and technology in Malaysia and Indonesia. His writing focuses mainly on the challenges of the Islamic science in relation to the modern Western science. Among his efforts in this knowledge of Islamisation of science is his effort to uphold the Malay language as the language of science, mathematics and technology customised to the local knowledge and cultural references.

The importance of the discourse of Islamisation of science based on the understanding and thought of the four scholars can be categorised into four main terminologies. As shown in Figure 1, the four main terminologies are the paradigm of tawhid, ndigenisation of science and technology, philosophy of Islam and secularism. these four terminologies are prevalent in the discourse of Islamisation of Science.

Firstly, based on the paradigm of tawhid, their efforts seem to emphasize the universal Islamic values and virtues within the context of today’s scientific research. The paradigm of Tawheed also includes an appreciation of religion and science in a holistic manner for the purpose of providing guidance and serving the welfare of all who seek the truth about the existence of man, nature and God. As emphasised by Osman Bakar, “logic, when used correctly and by an intellect that is not corrupted by the lower passions may lead to one to the Transcendent itself”(1998).

The second terminology is the indigenization of science and technology. In this context, the Islamization of science is viewed as the knowledge of science and technology that is underpinned by the principle of Islamic jurisprudence, hence allowing for the relationship between science and religion can be appreciated continuously, at present and in future. This effort include the role of Muslim scholars and scientists to make science and technology as the foundation of faith based on the development of science in the future.



**Figure 1: Terminologies Related to the Discourse of IoS Represented by the Four Scholars**

The third terminology that represents the discourse of IoS is the philosophy of science which is one of the strands of history of thought. Philosophy and science plays an important role in life sciences since the beginning of civilization.

Finally, the fourth terminology is the history that shows the existence of conflict between religion and science. In this case the main conflict is whether Islam is influenced by the society or the society is influenced by Islam. In the West, the cause of the conflict is mainly due to the greed of the Western theologian and scientist which result in the emergence of secularism that separates the religion for the daily affairs of life. The issue of secularism is considered as a big challenge for the Muslim scientists. Hence, blending the religion and science together is essential to ensure the rise of Islam through the concept of Islamization of science.

**3.0 CONCLUSION**

The study analyses the thought and understanding of four Malaysian Muslim scholars regarding the IoS. It aims to demonstrate the efforts of four Malaysian Muslim scholars in realising the idea of Islamization of science through a holistic approach of science and religion. This study focuses on the terminology of IoS that frames the discourse of IoS. Based

on data collected from interviews and analysis of written work that represent the understanding and thought of Islamisation of science among the four Muslim scholars, four main terminologies have been identified. These terminologies framed the discourse of the IoS both in Malaysian context as well as the international context. The terminologies are the paradigm of tawhid, the indigenization of science and technology, the philosophy of Islam and the emergence of secularism. The analysis of the four Muslim scholars also indicates that there are differences and commonalities in their thought and understanding of IoS due to their different education background and the organisation which they are attached to. For further research, an analysis of the understanding and thoughts of other Muslim scholars focusing on the other aspects, such as the epistemological approach, historiography and methodology of the discourse of Islamization of science could provide more understanding of the discourse of IoS.

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#### REFERENCES

1. Adi Setia, M. D. Sains Islam Berdepan Sains Modern Dalam Pemikiran Ahli Sains Melayu Muslim, dalam Mohd Hazim Shah Abd Murad (ed.). *Sains, Agama dan Budaya Di Alam Melayu*. Dewan Bahasa dan Pustaka, Kuala Lumpur, Malaysia, pp. 286–355. (2009).
2. Shahrir, M.Z. *Mantik Melayu Separuh Pertama Abad ke-17 M Menerusi Manuskrip Mantik Melayu-Jawi: Manuskrip Nur al-Din al-Raniry*. Makalah yang dibentangkan di Seminar Kebangsaan Etnomatematik III. 18 November 2009. Universiti Putra Malaysia, Serdang, (2009).
3. Osman, B. *Islam dan Pemikiran Sains Masa Kini*. Akademi Sains Islam Malaysia, Kuala Lumpur, (1989).
4. Osman, B. *Tawhid and Science*, 2<sup>nd</sup> Edition, Arah Publications: Kuala Lumpur (2008).
5. Shahrir, M. Z. *Pendidikan Sains Terkamir di Peringkat Universiti*. Dalam Tajul Ariffin Nordin et. al. *Pendidikan Sepadu*. Penerbit UKM, Bangi, (1986).
6. Al-Faruqi, Ismail Raji *Islamization of Knowledge : General Principles and Work Plan*. International Institute of Islamic Thought, Virginia, USA. (1982).
7. Mohd Aslam, H. *A Critical Survey of Islamization of Knowledge*. IIUM Press, Selangor, (2009).
8. Mahadi, A.H. dan Khadijah, M.K. Wacana Pengislaman Sains dan Paradigma Tauhid Menurut Pemikiran Osman Bakar : Satu Analisis. *International Proceeding of Seminar on Research In Islamic Studies (ISRIS II)*. Universiti Malaya, Kuala Lumpur, Malaysia. pp. 70-78. (2012).
9. Al-Alwani, T.J.. *The Islamization of Knowledge: Yesterday and Today*. IIIT, Virginia, USA. (1995)
10. Al-Faruqi, Ismail Raji *Islamization of Knowledge: General Principles and Work Plan*. International Institute of Islamic Thought, Virginia, USA. (1982).
11. Al-Faruqi, Ismail Raji *Islamization of Knowledge: General Principles and Work Plan*. International Institute of Islamic Thought, Virginia, USA. (1982).
12. Louay Safi. *Islamization of Knowledge : An Integrated Model of Scientific Inquiry*. Shah Alam (1997)
13. Katherine Neilson, *The Philosophy of Osman Bakar, International Studies in the Philosophy of Science*, Vo. 22, No.1, March 2008, Routledge : London. pp. 81-95. (2008).