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## AL-SHAJARAH

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### RECONCILIATION AND ISLAMISATION - A ROADMAP FOR AN ISLAMIC INTELLECTUAL REVIVAL

Safiyyah Sabreen Syeed<sup>1</sup> and Ahmad El-Muhammady<sup>2</sup>

#### Abstract

The Muslim world produced one of the greatest intellectual revolutions in history. Since the Colonial Period, the effort to bring about a global Islamic Revival has been a much sought after project for Muslim intellectuals worldwide. This paper studies the core principles that were instrumental in building the Islamic Intellectual Revolution (8th-18th Century CE). These core principles are identified as the centrality of the Qur'an in all intellectual discourse, a broad epistemological landscape and the unity of the sacred and secular sciences. This paper explores how returning to the same methodology can lead to an Islamic intellectual revival. The Our'an identifies eight valid epistemic sources apart from itself while declaring itself as the Furgan (Criterion) to judge their validity. These include Sunnah, human intellect ('Aql and Qiyas), Ijma' (consensus), intuition (Basira), the physical universe, history, and certain knowledge from other civilisations. It is the duty of the scholars to work towards an integration of knowledge derived from these different sources and thus 'Islamise' them. This paper identifies the core reasons for the present intellectual crisis to as being rooted in an ignorance of the broad epistemological landscape of Islam.

The Qur'an anticipates how a better understanding of the self and the cosmos will lead to a validation of the truth of the Qur'an in the future (41:53). Contemporary scientific discourse has uncovered important perspectives related to these two domains, presenting a good opportunity for Muslim intellectuals to study them in the light of Islamic thought. It is argued that science today needs a new

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philosophical paradigm as breakthroughs in physics and cosmology have made the current mechanistic and deterministic philosophy of science obsolete. This paper discusses how a new Islamic philosophy of science that rests on the Kalām and Sufi view of the universe and consciousness is one of the best contenders for this change in paradigm. Developments in Quantum Physics, Fine Tuned Cosmology, and the Hard Problem of Consciousness are taken as case studies to propose solutions from Islamic thought to conundrums related to them. Thus, a practical guide to the Islamisation of the fields of cosmology, physics, biology, and neuropsychology is proposed and it is argued that this approach will inevitably revitalise Muslim thought, reconcile physical sciences with it and thus has the potential to bring about an intellectual revival in the Ummah.

**Keywords:** Islamic Epistemology, Intellectual Revival, Islamic Scientific Revolution, Quantum Physics, Consciousness, Fine Tuned Universe, Islamisation of Knowledge

#### Introduction

Between the 8th and the 18th centuries, the Muslim world witnessed one of the greatest scientific and technological revolutions in history.<sup>3</sup> If Kuhnian terminology <sup>4</sup> is used then the scientific developments that took place in the Islamic civilisation represented a major paradigm shift from the theoretical and deductive approach of the pre-Islamic civilisations which could be called the 'normal science' of that age to the inductive and experimental approach that became the revolutionary paradigm of the Islamic Scientific Revolution.<sup>5</sup> Thus the term 'Scientific Revolution' applies to the

<sup>&</sup>lt;sup>3</sup> Khalili, Jim. The House of Wisdom: How Arabic Science Saved Ancient Knowledge and Gave Us the Renaissance, (The Penguin Press, 2011), 60. Hossein, Seyyed Nasr. Science and Civilization in Islam, (ABC International Group, 2001), 43.

<sup>&</sup>lt;sup>4</sup> Kuhn, Thomas, S. *The Structure of Scientific Revolutions*, 50<sup>th</sup> ed., (University of Chicago Press, 2012).

<sup>&</sup>lt;sup>5</sup> Briffault, Robert. The Making of Humanity, (London: G. Allen & Unwin Ltd,

historical period during which the Islamic intellectual tradition was formalised and multiple sciences including religious, philosophical and physical sciences were developed across the Islamic civilisation. This period deserves to be termed the Islamic Scientific Revolution, just as the physical sciences developed during this period deserve to be called 'Islamic', because the underlying worldview and philosophy was '*Tawhidic*'.<sup>6</sup> This is true even when we take into consideration the various non-Muslim thinkers who participated in this tradition, since all the sciences were developed within a common intellectual milieu that was grounded on a '*Tawhidic*' worldview and epistemology. This paper will discuss Islamic intellectual tradition, including the scientific developments within in.

Islam is essentially an intellectual tradition, and Muslims are a people of a book. The word '*Iqra*' was the first revelation sent down to the Prophet (ﷺ) that initiated one of the world's largest intellectual traditions. The reason for the rise of the Islamic civilisation from the deserts of Arabia to becoming a global superpower can be attributed to the intellectual and scientific revolution that was heralded by the Prophet (ﷺ). Dr Fazlur Rahman Ansari explains:

"The Prophet (ﷺ) has two roles being the landmark in human history. He (ﷺ) came to close one era - the era of Prophetic revelation or divine spoon feeding. But in addition, he also came to inaugurate another era - the modern scientific era. This can be deduced from the Qur'an, Hadith, Muslim history, and the history of science."<sup>7</sup>

Robert Briffault identifies the Islamic Scientific Revolution to be "truly scientific while all pre-Islamic science according to him were pre-scientific".<sup>8</sup> A formidable amount of literature dedicated to

<sup>1919), 185.</sup> 

<sup>&</sup>lt;sup>6</sup> Bakar, Osman. *History and Philosophy of Islamic Science*, (Cambridge: Islamic Texts Society, 2000), 6.

<sup>&</sup>lt;sup>7</sup> Ansari, Muhammad Fazlur Rahman. "Prophet Muhammad Scientific Age" Lecture series, 10 min., 39 sec., https://www.youtube.com/watch?v= ZWgJXAIi\_ww&t=30s

<sup>&</sup>lt;sup>8</sup> Briffault, Robert. *The Making of Humanity*, 190.

analysing the decline in the *ummah* has emerged since the last century. However, this term 'decline' is meaning-laden and layered. What does it mean for a civilisation to be in decline? Is it just related to the political and economic crisis in many Muslim nations? Clearly, we can see that there was a time when the Islamic civilisation was a global superpower, and the cities of the Muslim world were powerhouses of innovations, knowledge and culture.<sup>9</sup> The Muslim world produced one of the best-known amalgamations of technological advancement with spiritual development. In contrast, we see the current western civilisation has invested in a global project of technological advancement at the expense of its religious and spiritual tradition. So clearly there is a socio-political decline within the Ummah which is also related to the economic impoverishment of the Ummah ever since the colonial period. Despite its rich resources, the Ummah as a collective entity across the globe has not functioned as a major socio-political player in global politics, nor does it have a significant place in international economics. Much of the Ummah is caught in debt traps to the IMF which further deteriorates its global standing. But these visible signs of weakness and crisis have deeper causes. The socio-political and economic crisis within the Ummah has a serious spiritual and intellectual crisis that underlies it. The Prophet (ﷺ) spoke about this when he said, "There will come a time when the nations will gather around you (to attack you) just like people gather around a table." When a companion asked, "Will that be because of our small numbers at that time? He replied: No, you will be numerous at that time, but you will be like the scum that is carried down by a torrent. and Allah will remove your fear from the hearts of your enemies and will cast wahn into your hearts. Someone asked, "What is wahn? The Prophet ()) replied, "Love of the world and dislike of death."<sup>10</sup> This hadith indicates the weakening of faith and the subsequent spiritual decline in the Ummah. He (ﷺ) also pointed towards an intellectual decline in his ummah when he said, "Knowledge will be removed."<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Sarton, George. *Introduction to the History of Science Vol 2*. (Carnegie Institution of Washington Press, 1931), 490.

<sup>&</sup>lt;sup>10</sup> Tirmidhi, 2652.

Because the hadith clearly mentions how the Ummah will have great numbers, it can be understood that the strength of the *Ummah* is not in its numbers or even the wealth of some of its oil rich nations. Instead, its strength is in its spiritual outlook to life, its faith and its intellectual vision. And this is something we can understand from early Islamic history. Islam started with a revelatory experience of one man i.e. the Prophet in an isolated cave in Arabia, prior to him impacting the hearts and minds of his close companions. Within a few years, less than fifty people in Mecca had accepted Islam and these were the people who later changed the entire landscape of the medieval world. At the time of the Prophet's declaration of his prophethood, only seventeen people were literate. When he (ﷺ) left this physical world, thousands of people had received education, and all the senior companions had become scholars.<sup>11</sup> So the Prophet (ﷺ) brought about a social, political, religious, spiritual, and most fundamentally intellectual awakening in the world. The scheme was as follows: First the Prophet (ﷺ) created an intellectual awakening among people, which quickly impacted their inner beings and created a spiritual awakening that oriented them to higher goals and Subsequently these spiritually and intellectually aspirations. awakened people were instrumental in creating a massive social change as they re-built their socio-economic and political systems founded on the values and principles obtained in the stages of their intellectual and spiritual upbringing.

Al Attas<sup>12</sup> and Faruqi<sup>13</sup> also identify the root cause of the decline and malaise of the *Ummah* as being the 'intellectual crisis'. Understandably, the revival of the Muslim *Ummah* then is dependent on an *Ummah*-wide intellectual uprising. It should be noted that we have mentioned the intellectual crisis before the spiritual crisis as we discussed the intellectual awakening before the spiritual awakening in the context of the early Muslim community. This is because the

<sup>&</sup>lt;sup>11</sup>Al Baladhuri, *The Origins of the Islamic State*, trans. Francis Clark Murgotten. Vol. 2. (Columbia University Press, 1924).

<sup>&</sup>lt;sup>12</sup> Al Attas, Syed Muhammad Naquib. *Islam and Secularism*. (IIUM Press, 1978), 171. Al Attas, *Prolegomena to the Metaphysics of Islam*. (ISTAC, 1995).

 <sup>&</sup>lt;sup>13</sup> Faruqi, Isma'il Raji and Abu Sulayman, Abdul Hameed. *Islamization of Knowledge: General Principles and Workplan*. (IIIT International Graphics, 1989),
2.

first recipient of knowledge and understanding in the human being is the intellect. It is only after a process of rationalisation that the process of spiritual awakening follows. In the case of the Prophet Ibrahim also we see that he first appealed to the intellect of his companions to turn away from idol worship and adopt the absolute monotheism of Prophet Ibrahim, their forefather. This was a very rational appeal which subsequently opened the doors for spirituality. The same is the case for crisis as well, that first the intellects are confounded with arguments and theoretical positions about the world and then these intellectual choices lead eventually to a spiritual crisis.

The factors that contribute to the crisis in the *Ummah* can also be categorised into external and internal. External factors include the incessant wars, sanctions, political instability, and economic deprivation that the Ummah suffers from. On the other hand, there are internal factors that contribute to the crisis in the *Ummah*, which relates to the aforementioned intellectual and spiritual crisis. These are foundational and the external factors depend largely on the internal factors. The purpose of this paper is to explicate these internal factors. We will present the example of the Prophetic community for this purpose. We will have to understand how the Ummah reached its zenith from the time of the first revelation to becoming a global superpower. It started with an intellectual awakening which led to a spiritual realisation, and it were these intellectually and spiritually awakened people who, within a few decades created a state that became a global superpower. So, this model needs to be revisited to cure the crisis at hand and create a revival in Islamic thought and civilisation.

#### Discussion

#### Characteristics of the Islamic Intellectual Age

Taking a broad survey of the medieval Islamic civilisation, we can identify the main characteristics of the Islamic intellectual age. We have broadly classified them as three:

#### Centrality of the Qur'an in all Islamic Intellectual Discourse

Firstly, the Qur'ān influenced all intellectual discourse in the Islamic world including the diverse sciences produced during the medieval

era.<sup>14</sup> Diverse sciences using different methodologies like the religious, rational, social and natural sciences were produced within the same intellectual milieu which was fundamentally Islamic or *Tawhidic*.<sup>15</sup> An analysis of Islamic history proves that the Qur'ān was fundamental to the development of Islamic Science.<sup>16</sup> But what are the ways in which the Qur'ān inspired the Islamic Scientific Revolution is open to debate. Many scholars have attempted to identify the multiple ways in which the Qur'ān influenced and engineered the Islamic Scientific Revolution. We will group these ways under four categories:

- 1. The Qur' $\bar{a}n$  provided the initial impetus towards the Islamic Scientific Revolution: One of the biggest impetuses to the development of the Islamic scientific tradition was the powerful call of the Qur' $\bar{a}n$  to study the cosmos. While both the Roman and Persian civilisations possessed great wealth and resources, we do not witness an international scientific revolution appearing during their time periods. It was only after the revelation of the Qur' $\bar{a}n$  that the Arabs and other non-Arab ethnicities developed a strong scientific bent of mind and consequently which led to the Islamic Scientific Revolution.
- 2. The Qur' $\bar{a}n$  imparted a *Tawhidic* philosophy of science within which a unified scientific tradition arose: Another name of the *Qur'an* is *Burhan*, which means demonstrable proof. This word was extensively used by Muslim philosophers and scientists in their arguments as they understood that both the scientific and philosophical quest should seek demonstrable proof. Science can only thrive within a tradition that prioritizes Epistemological Realism. Traditions that lean towards skepticism or ontological idealism can produce mysticism and philosophy, but not rigorous experimental science. The *Qur'\bar{a}n* issued a powerful call when it declared that the cosmos has been created on

<sup>&</sup>lt;sup>14</sup> Sardar, Ziauddin. *Explorations in Islamic Science*. (Centre for Studies on Science, 1989), 11.

<sup>&</sup>lt;sup>15</sup> Iqbal, Muzaffar. *Islam and Science*. (Ashgate Publications, 2002), 6.

<sup>&</sup>lt;sup>16</sup> Sardar, Ziauddin. *How do you know?* (Pluto Press, 2006).

Truth (*Haqq*) and that the duty of the human being is to ponder, reflect and study the cosmos. This was an open call to develop a rigorous experimental, empirical and scientific tradition that would discover the attributes of God within and through the workings of nature.

- 3. The needs of the growing Muslim Ummah required the development of science: The growing frontiers of the Islamic Civilisation brought with it many opportunities for the development of different scientific disciplines. The calculation of the correct time for Asr prayer in places far away from the equator required the development of Mathematical Astronomy.<sup>17</sup> The calculation of the *Qiblah* led to the development of Spherical Trigonometry.<sup>18</sup> The need to calculate inheritance and zakat spearheaded the development of Algebra and Algorithms by Al Khwarizmi.<sup>19</sup> Industrial and agricultural needs led to the development of irrigation innovations,<sup>20</sup> robotics and hydraulics.<sup>21</sup> Defense and military needs led to the development of bifocals and a proto-telescope during Harun Rashid's time<sup>22</sup> and rocket technology during Tipu Sultan's time.<sup>23</sup>
- 4. The *Qur'ān* provided a wide epistemological landscape which facilitated the import of knowledge from different cultures and subsequent development of new disciplines. The knowledge developed by non-Muslim cultures was studied, *analysed*, and commented on which led to the development

<sup>&</sup>lt;sup>17</sup> Saliba, George. *Islamic Science and the Making of the European Renaissance*. (MIT Press, 2007), 234.

<sup>&</sup>lt;sup>18</sup> King, David, A. Astronomy in the Service of Islam (Routledge, 1993).

<sup>&</sup>lt;sup>19</sup> Rashed, Roshdi, ed., *Encyclopedia of the History of Arabic Science*. Vol 2, (Routledge, 1996), 349.

<sup>&</sup>lt;sup>20</sup> Hill, Donald, *Islamic Science and Engineering*. (Edinburgh University Press, 1993).

 <sup>&</sup>lt;sup>21</sup> Al Hassan, Ahmed, Y., *The different aspects of Islamic culture. Science and Technology in Islam: Technology and applied sciences.* (UNESCO publishing, 2001)
<sup>22</sup> Al Baghdadi, Al Khatib. *Tarikh Madinat Al Salam*, Vol.1. (Dar ul-Maghrib il-Islami, 2002). Rafiabadi, Hamid Naseem, and Kak, Amin, A. The Attitude of Islam towards Science and Philosophy. (Sarup and Sons., 2023).

<sup>&</sup>lt;sup>23</sup> Dalrymple, William, *The Anarchy: The Relentless Rise of the East India Company.* (Bloomsbury Publishing, 2019)

of new fields. For example, Al Biruni was well-versed with Sanskrit and produced the most detailed survey of medieval Indian society, thus founding the field of anthropology and comparative religion. Muslims pioneered the study of hieroglyphics. Kamal ad Din Farisi and Qutb ad Din Shirazi, two influential students of Shihab ud Din Suhrawardi brought about a great revolution in Optics. They incorporated the Illuminationist Philosophy of their teacher which was inspired by Zoroastrian ideas into experimental physics.<sup>24</sup>

#### **Broad Epistemological Landscape**

To understand how to revive Islamic thought and civilisation, it is imperative to appreciate earlier Islamic attitudes towards knowledge in general and science in particular. What are the sources of knowledge that the Qur'ān accepts as valid and how did early Muslims develop this Quranic Epistemology? We will be using the word source also to denote methodology, because a source of knowledge also determines the methodology that needs to be adopted to make that source of optimum use. So, the human intellect is a source, and the methodology related to this source is the rational and dialectical methodology. We have identified eight sources of knowledge that have been considered valid in varying degrees by the Qur'ān.

1. Firstly, the Qur'ān considers itself as the absolute truth and the ultimate source of knowledge to understand everything that happened in and beyond Time. The Qur'ān has also been called the *Furqan* or Criterion, meaning that because this is the Absolute Truth, it can serve as the judging criterion to verify all other sources and contents of knowledge.<sup>25</sup> Thus every other source of knowledge mentioned below will represent Relative Truths or sources of true knowledge that can be accepted only after a due process of verification and the Qur'ān serves as the ultimate criterion to judge which

<sup>&</sup>lt;sup>24</sup> Bakar, Osman. "The Unity of Science and Spiritual Knowledge: The Islamic Experience", Science and Spirit. International Cultural Foundation. (1990): 87-101.

<sup>&</sup>lt;sup>25</sup> Ansari, Muhammad Fazlur Rahman. *The Quranic Foundations and Structure of Muslim Society Vol 1*, (The World Federation of Islamic Missions, 2012).

knowledge content derived from these below sources is valid or invalid.<sup>26</sup>

- 2. Secondly the practice and sayings of the Prophet (ﷺ) or the Sunnah has been declared a valid source of knowledge. This includes the *qawl* (sayings) or *ahadith* of the Prophet (ﷺ) as well as his *a'mal* (actions). Ahmed ibn Hanbal was asked about the hadith, "Sunnah is the judge over the Qur'ān". He said, "I have to say that the Sunnah explains the Qur'ān and only the Qur'ān can abrogate itself".<sup>27</sup> We will include the Hadith as well as Seerah literature in this category.
- 3. The Intellect is taken as another source of true knowledge when it is illuminated by faith. Multiple *ayaat* of the Qur'ān exhort believers as well as unbelievers to think rationally and logically. If the intellect didn't have the propensity to reach the truth, then the Qur'ān wouldn't hold it responsible. An application of Aql is seen in *Qiyas* that is widely used as a methodology in *Fiqh*.
- 4. The Qur'ān also considers the *Ijma* (consensus) of the Muslim community as a valid epistemic source.
- 5. The fifth source of valid knowledge accepted by the Qur'ān is history. The historical process is presented by the Qur'ān as being divinely directed as serving as a valid source of knowledge and admonition.
- 6. Nature or the physical world is another source of knowledge according to the Qur'ān as Allah Most High emphasizes that the cosmos has been created with truth. This establishes how Islam accepts Epistemological and Scientific Realism, which are both indispensable for science.
- Intuition is also accepted by the Qur'ān as a valid source of knowledge. There are various words used for it like Basira, Nazar, Noor and *I'lm min LadunnAllah* (unmediated knowledge directly from Allah).
- 8. Lastly, the Qur'ān also considers that other non-Islamic civilisations can arrive at truth in certain domains and can

<sup>&</sup>lt;sup>26</sup> Hosein, Imran, N. *Methodology for Study of the Quran*. (INH Publishers, 2016),

<sup>&</sup>lt;sup>27</sup> Al Baghdadi, Al Khatib. Al Kifaya Fi Ma'rifa Usool I'lm Al Riwaya. (Dar Al Huda, 2003).

produce beneficial knowledge. Both the Qur'ān and the Hadith allow Muslims from accepting knowledge from non-Islamic sources if it is in harmony with the Qur'ān. Thus, inspired by sayings like these a project of incorporation of suitable elements from different traditions (Greek, Persian, Indian, Chinese) into the Islamic intellectual tradition was done to enrich it and to produce new fields. The Prophet (ﷺ) said, "Wisdom is the lost property of the Muslim. He takes it wherever he finds it and he is more worthy of it."<sup>28</sup>

It should be noted that the rich and diverse Islamic intellectual tradition developed primarily because of the broad epistemological Because the Islamic civilisation accepted multiple landscape. sources of knowledge to be valid, thus it produced multitudes of new disciplines that were unknown and even unimaginable to earlier advanced civilisations. For example, the Greeks passionately segregated between the celestial and the terrestrial realms. considering the former to be perfect and the latter to be imperfect. This view determined their philosophy of science as they used the perfect arts like mathematics and geometry to study the heavenly bodies and limited physics to the imperfect terrestrial domain.<sup>29</sup> When the Muslims inherited the Greek tradition, they readily removed these impediments as they inherited the Quranic vision of the universality and uniformity of laws across the terrestrial and the celestial domains.<sup>30</sup>

In the Islamic Civilisation anything and everything was not accepted as knowledge. The construction and formalization of this epistemological landscape required the pruning and severing of certain disciplines that were considered valid by earlier civilisations. Astrology and Alchemy, while being practiced during the Islamic Scientific Revolution, were subject to scathing criticism by scholars and eventually a project to segregate these pseudosciences from their

<sup>&</sup>lt;sup>28</sup> Tirmidhi, 2687

<sup>&</sup>lt;sup>29</sup> Nicholson, Ian., (ed.), Stars and Planets. (Star Fire, 2002), 45.

<sup>&</sup>lt;sup>30</sup> Jamil, Rageb, F., "Copernicus and His Islamic Predecessors: Some Historical Remarks". *Filozofski Vestnik* 25 (2). (2007): 125-42. https://ojs.zrc-sazu.si/filozofski-vestnik/article/view/3204.

scientifically valid counterparts of Astronomy <sup>31</sup> and Chemistry <sup>32</sup> was undertaken by Muslim scientists.

We will construct a principle in this paper based on a realistic and objective view of Islamic history that the broader the epistemological landscape of a civilisation, the larger the scope of its thought and intellectual tradition. And conversely the smaller the epistemological landscape of a civilisation, the narrower the scope of its thought and intellectual tradition.

This paper discusses how the predicament of the Ummah is largely due to an intellectual crisis caused by the shrinking of the epistemological landscape that underlies it. The western civilisation being dominant is spearheading what could be understood as a global secularization project. In such a scenario the Muslim civilisation has either the option to completely adopt this model and sever its religious and spiritual foundations and emerge as another replica of the modern western secular civilisation. Another option is passive resistance to this secularization project. But without an indigenous rival project that resists this massive secularization drive coming from the west, this would just lead to non-engagement of Muslims with the present scientific developments. Non-engagement and passivity have been identified as the root cause of post-colonial Muslim intellectual decline. A third option that was developed by thinkers like Dr Muhammad Iqbal, Said Nursi, Zaki Kirmani, Syed Ahmed Khan, Jamaludin Afghani etc was of engagement with the scientific knowledge that was emerging from the West to bring about suitable reconciliation with the positive elements of this а technological, scientific, and the sociological zeitgeist with the values and vision of Islam.<sup>33</sup> At the same time rejection of those elements that clash with the ideals and vision of Islam is also important. Thus, in such a multifaceted project we would see the role of the Qur'an as

<sup>&</sup>lt;sup>31</sup>Ayduz, Salim. "Astrology for the Ottomans," Muslim Heritage, 29 September 2004, https://muslimheritage.com/astrology-for-the-ottomans

<sup>&</sup>lt;sup>32</sup>Haq, Syed Nomanul. *Names, Natures, and Things: The Alchemist Jaabir ibn Hayyaan and his Kitaab al-Ahjaar (Book of Stones).* (Kluwer Academic Publishers, 1993), 52.

<sup>&</sup>lt;sup>33</sup> Bigliardi, Stephano. "Exploring the contemporary debate over Islam and Science in India: Portrait of the Aligarh School" in *Science and Religion: East and West*, ed. Y. Fehige (Routledge. 2016).

the *Furqan* (criterion for judgment) coming to the fore. The Qur'ān describes itself as an explanation of all things (*Tibyaanal Li kulli shay*). (16:89) Thus it surely can explain the mysteries of the cosmos to us.

#### No Sharp Distinction between the Secular and Sacred Sciences

Another major characteristic of the Islamic intellectual age was the lack of a sharp segregation and distinction between the secular and sacred sciences. This is in sharp contrast with how education is pursued in the world today. While the sciences were duly classified into different categories, but this classification or characterization did not serve to segregate them. There are three ways in which this integration of secular and sacred took place during the Islamic intellectual revolution. Firstly, both the secular as well as the sacred utilized the same methodology at times. It has been argued that the Inductive method was prodigiously used in the development of Figh as well as in physical sciences. Or the exercise of establishing demonstrable rational proof for an argument also known as Burhan was a term borrowed from the Our'an. Secondly, both the secular and sacred sciences were developed in a common intellectual landscape, thus there were many overlaps that we can find between scientific treatises and scripture. For example, Ibn al Haytham in his book on Astronomy, Ma Oala fi Daw al Oamar, while discussing the nature of the light of the moon, relies on the Quranic description of the moon's light being reflected from the sun. Then he provides scientific observational proofs to bolster his arguments.<sup>34</sup> The same attitude can be identified in Al Jahiz' biological treatise Kitab al Hayawan where the influence of the Quranic unified view of the cosmos can be starkly seen in his theories.<sup>35</sup>

And lastly, both the secular and the sacred sciences shared the same goals for their development. Because the emphasis laid out by the Qur'ān and *Hadith* was on the pursuit of beneficial knowledge,

<sup>&</sup>lt;sup>34</sup> Toomer, G. J., "Review of Ibn al-Haytham's Weg zur Physik, by Matthias Schramm," *Isis*, 55 no. 4 (1964): 463–465.

<sup>&</sup>lt;sup>35</sup> Syeed, Safiyyah Sabreen. "Islamic and Western Methodological Approaches towards the Study of Life Sciences," *Revelation and Science* 12, no. 2 (2022): https://doi.org/10.31436/revival.v12i2.335

secular sciences also were appropriated to meet this requirement. The primary goals of both the secular and the sacred sciences were to benefit the Muslim populace, to facilitate a better understanding of the 'signs' of God in the world and the facilitation of religious obligations. And thus, we see that there was no sharp distinction or segregation between the two types of knowledge as it was recognised that the source of the Qur'ān as well as the physical world is God. So, the principle of *Tawhid* was instrumental in bringing about the harmonious integration of knowledge. <sup>36</sup>

#### Identifying the Reasons for the Intellectual Crisis

There are multiple factors that scholars have identified as the primary causes of the decline of Islamic thought and civilisation. They can be broadly classified into two factors. One is the external factors. These include the incessant wars, sanctions, political instability and economic deprivation inflicted on the Muslim Ummah by more than two centuries of colonisation and Western hegemony. Since the colonial period the world has witnessed a unipolar world order with the emergence of the western civilisation as a global superpower and thus the clash with and the subordination of resource rich Muslim *Ummah* is part of its primary agenda. George Saliba notes that it was the discovery of the New World by Europe, its colonial conquest and the capitalisation of science that could be attributed to the decline of Islamic Science.<sup>37</sup> The term decline has a comparative connotation meaning when Europe embarked on a massive project of the colonisation of the entire globe, the production and capitalization of science was its indispensable tool. In contrast, the Muslim Ummah did not view science as a hegemonic tool.

There are other thinkers like Iqbal, Fazlur Rahman Ansari, Imran Hosein, and Israr Ahmed who identify the rise of the European hegemonic civilisation with the eschatological prophecies found in the scripture regarding the False Messiah (*Dajjal*) and the destructive forces of Gog and Magog.<sup>38</sup> Said Nursi also identified the modern

<sup>&</sup>lt;sup>36</sup> Bakar, Osman. *History and Philosophy of Islamic Science*, 1985.

<sup>&</sup>lt;sup>37</sup> Saliba, George. *Islamic Science and the Making of the European Renaissance*. (MIT Press, 2007).

<sup>&</sup>lt;sup>38</sup> Hosein, Imran, N. An Islamic view of Gog Magog. (INH Publishers, 2016)

civilisation to be a manifestation of the False Messiah in its one-eyed blindness about the sacred.<sup>39</sup> It is crucial to observe that for the first time in history we witnessed the rise of a civilisation that was driven to colonise most of the planet's landmass and even occupy the water and air space along with usurping global resources. This has never happened in history where one ethnicity or civilisation establishes control over so much of the planet in such less time. Since the West's colonial project depended on the massive resources of the Muslim world, the entire Muslim world had to be brought under colonial occupation.

On the other hand, there are internal factors that contribute to the crisis in the *Ummah* which are the serious intellectual and spiritual crisis. These are foundational and the external factors have been able to wreak havoc largely due to the internal factors. In the Qur'ān, we are told that Allah doesn't change the conditions of a people before they change what is within themselves. So, there must be an internal awakening prior to an external awakening. This internal awakening is first intellectual and then spiritual. To understand the factors that led to the intellectual and spiritual crisis in the *Ummah* we must understand the subtle forms of colonization that followed territorial colonisation.

An important example of this subtle colonisation was the induction of the collective amnesia of the *Ummah* with regards to its indispensable contributions to making Modern Science. This was largely due to the colonial and European orientalist effort to obscure Muslim scientific legacy and most importantly the impact Islam had on the development of Islamic Science which later influenced Western science and philosophy. Many historians of science like Fuat Sezgin have noted that Western scientists excessively plagiarised Muslim scientific works in centres of exchange like Italy and Spain.<sup>40</sup> And it was this plagiarised knowledge that laid the foundations of the European Enlightenment and Scientific

<sup>&</sup>lt;sup>39</sup> Nursi, Said. Risala-i Nur Kulliyati I-II. (Yeni Asya Yayinlari, 1996)

<sup>&</sup>lt;sup>40</sup> Sezgin, Fuat. Science and Technology in Islam. vol 1. (Institut fur Geschichte der Arabisch-Islamischen Wissenschaften an der Johann Wolfgang Goethe, 2010), https://archive.org/details/history-of-science-and-technology-in-islam-fuat-sezgin

Revolution. Colonial powers then utilised this technology to improve their weapons, and the Muslim lands were at the receiving end of their tyranny. Once the large regions and rich resources of the *Ummah* came under Western control, they embarked on a project of westernisation of the socio-economic, political and most importantly the educational system. This completely sealed the Muslim populations from their rich intellectual legacy.

The colonial period acted as an age of disruption that severed the Islamic civilisation from its ideological, intellectual, cultural, and most importantly epistemological roots. A clear example that illustrates this is the wide difference between the madrassa curriculum that existed in Muslim cities like Samarkand, Baghdad, etc. and the post-colonial madrassa curriculum. Historical evidence shows how madrassa students were instructed in anatomy, astronomy, mathematics, geometry during their years of Islamic training. Whereas post-colonistion Madrassa curricula were reduced to mere institutes of teaching medieval Islamic texts where memorisation and regurgitation were emphasised at the expense of critical reasoning and integration of knowledge.

Thus, we see that the westernisation of the socio-economic system led to a capitalistic and materialistic monoculture that pervades the globe today. This is the primary cause of the spiritual crisis in the *Ummah*. And the westernisation and secularisation of knowledge in general, leading to its compartmentalization into sacred and secular, is the root cause of the intellectual crisis in the *Ummah*.

#### **Opportunities for an Islamic Intellectual Revival**

Now after discussing in detail the characteristics of the Islamic Scientific Revolution and the factors that led to the decline and eventual intellectual crisis within the *Ummah* that continues till today, we want to delve into the great opportunities for an intellectual revival that confront us. The Qur'ān prepares us for a time when both the realms of existence - the cosmos as well as the human self will validate and verify the truth of the Qur'ān.

"We will show them Our signs in the universe and within themselves until it becomes clear to them that it (the Qur'ān) is the truth. Is it not enough that your Lord is a Witness over all things?" (41:53)

Thus, it is the task of the scholarly Muslim community to prepare for this universal revelation that will come from these two domains. This is an epistemic event or a collection of events, not an aesthetic event or collection of events. Meaning this will bring along a greater and deeper understanding and knowledge of three things: the universe, the human self and the truth of the Qur'an. The fact that the Arabic phrase 'sanureehim' is used which means 'soon We will show them', it clarifies that this revelation will be empirical and objective in nature. Thus, we can understand that these revelatory events will be in the form of scientific discoveries related to the cosmos and human self as it is science alone that investigates these subjects in an empirical and objective manner. This cannot fundamentally be a mystical or spiritual investigation into the universe as the word 'ra-aa' in Arabic means physical vision, whereas na-za-ra or ba-sa-ra are sometimes used for intuitive or spiritual insight. Thus, the Our'an is alluding to a collection of events when humanity collectively (not individually) will 'see' or 'witness' the truth of the Qur'an manifest in an empirical study of the cosmos and the human self. The use of the plural pronouns 'hum' clarifies that this will be a collective and universal experience, not singular and individual. Again, this is very characteristic of scientific discoveries. Mystical and spiritual disclosures are individual, whereas empirical and objective disclosure is universal. The Qur' $\bar{a}n$  is alluding to the latter.

In summary, there will be certain paradigm shifting and revolutionary discoveries emerging from the domains of cosmology and consciousness studies that will converge with the Quranic view and thereby confirm the truth of the Qur'ān. And Muslim intellectuals thus should expect such events and work to identify and study them. We have outlined three candidates that may fit this description.

#### **Quantum Physics and the Revival of Islamic Physics**

In 1920, German Physicist Max Planck discovered that deep down at the elemental level of the universe the energy that is emitted is not in

continuous amounts but in discrete packets or quanta. This discovery was observational, and it led to the beginning of the Quantum Revolution. Later Heisenberg proved how there is a major constraint on how accurately we can measure the events at this fundamental level.<sup>41</sup> Thus, nature allows us to know only one property at a time and shrouds the other property with uncertainty. So, if the momentum of a quantum particle was known with precision, its position would become uncertain and vice versa.<sup>42</sup> This was called the Heisenberg's Uncertainty Principle. There were two great and unprecedented implications of this discovery. First, there was some inherent uncertainty and lack of knowledge about aspects of the universe and more importantly it was an act of observation that affects the universe at this fundamental level as to reveal one aspect and hide another. Another important development was the Double Slit Experiment that observationally and empirically proved how the universe at the atomic level when it is not observed is a collection of uncertain probabilities and the moment it is observed it takes definite values and properties.<sup>43</sup>

Basil Altaei posits a viable reconciliation between these developments and the Islamic view of the cosmos. The Kalam tradition highlighted the indeterminacy of the universe to establish the will of Allah as the ultimate causal power at work. Quantum Physics has refuted determinism completely while presenting a probabilistic and indeterminate model of the universe. In such a universe the only thing that can be achieved is a set of probabilities.<sup>44</sup>

Altaie mentions five themes that *Daqiq al Kalam* engages in that are remarkably compatible with Quantum Physics, i.e., Indeterminism of the world, temporality of the world, Atomism, continual recreation of the world and the integrity of space and time. In fact, according to him, *Daqiq al Kalam* presents the most adequate framework for the further advancement of Quantum Theory – as the latter has undoubtedly outgrown the mechanistic and deterministic

<sup>&</sup>lt;sup>41</sup> Heisenberg, Werner. *Physics and Philosophy*. (Harper Collins, 2007)

<sup>&</sup>lt;sup>42</sup> Polkinghorne, John. *Quantum Theory: A Very Short introduction*. (Oxford University Press, 2017)

<sup>&</sup>lt;sup>43</sup> Bricmont, jean. *Making sense of Quantum Mechanics*. (Springer, 2016)

<sup>&</sup>lt;sup>44</sup> Altaei, Basil. *God, Nature and the Cause*. (Kalam Research and Media, 2016)

framework it and all modern Science was born in. Here we have *Daqiq al Kalam* having the potential to provide the philosophical framework for one of the most successful scientific theories that commands one third of the global economy. If it is proven that within this Islamic philosophical framework the theory can advance much greater than its western counterpart, this would have important implications for the economies of those nations that fund such a project.

Another important development in this field is the work of Mohamed Hai Yousef gives Ibn Arabi's cosmological model a mathematical formulation and then uses it to address the big unsolved problems of contemporary Physics like the interpretation of Quantum Physics, EPR paradox, low value of cosmological constant etc.<sup>45</sup> Ibn Arabi was known to develop the Recreation Theory of the universe which is originally attributed to the Mutakallimun. But for him it is the Jawhar al Fard that undergoes the creation-recreation at every creative moment. According to Yousef, this framework provides a viable model for the much sought after Quantum Gravity by quantizing time itself.<sup>46</sup> Every event that occurs in the universe is understood to be a result of the recreation of the entire universe at that particular quantum event. This harmoniously reconciles with Ouantum Field theory that reduces the universe to nothing more than quantum fluctuations that create virtual particles from the quantum vacuum. The pursuit of these ideas is a milestone in the path to revive Islamic Physics, which is a very significant part of the Islamic Scientific tradition.

#### The Fine-Tuned Universe and a New Islamic Cosmology

Despite the fundamental indeterminacy and statistical nature of the universe, it has been scientifically proven that the laws, physical constants, and the initial conditions of the universe take up extremely precise values that if there would be even a tiny fraction of a change in anyone of them, the universe would cease to exist.<sup>47</sup> For example, if the expansion of the universe was just a little bit faster, no galaxies

<sup>&</sup>lt;sup>45</sup> Yousef, Mohamed H. *Time and Cosmology*. (Routledge, 2008)

<sup>&</sup>lt;sup>46</sup> Yousef, Mohamed H. Single Monad Model. (Ibn Arabi, 2016)

<sup>&</sup>lt;sup>47</sup> Carr, Bernard., (ed.) Universe or Multiverse? (Cambridge University Press, 2007)

would be formed and thus no life would exist. And if it was just a little bit slower, the universe would collapse on itself as gravity would dominate and would cease to exist.<sup>48</sup>

Before it was accepted in the scientific community that whatever the initial conditions of the universe, given enough time and sheer chance eventually intelligent life forms like humans would evolve. But instead during the last fifty years one of the most startling discoveries has been made that the existence of intelligent life in this universe depends upon a complex and delicate balance of initial conditions given at the Big Bang itself.<sup>49</sup> In fact, it has been found that the universe has been incredibly fine-tuned for the existence of intelligent life from the very moment of its inception and this fine tuning is beyond comprehension in its preciseness. For the universe to produce life forms, the force of gravity and the weak force have to be fine-tuned to the precision of one part out of 10 to the power of 100. The cosmological constant that governs the accelerating expansion of the universe is fine tuned to one part out of 10 to the power of 120.<sup>50</sup>

Penrose has estimated that the odds of the initial low entropy state of the early universe obtaining by chance alone is one chance out of 10 to the power of 10 to the power of 123.<sup>51</sup> This number is almost incomprehensible and all this proves that the universe from the very beginning was created in such a delicate balance that it is impossible to come out of sheer chance and this delicate balance was directed towards the emergence of intelligent life eventually.

Now all these breakthroughs are nothing but an empirical confirmation of the Quranic view of the universe. The universe according to the Qur'ān has been held on an extremely delicate balance by God and were He to remove His providence it would cease to exist. Additionally, one of the teleological goals of the

 <sup>&</sup>lt;sup>48</sup> Carr, Bernard and Rees, Martin, J. "The Anthropic Principle and the Structure of the Physical World". Nature, 278 no. 605. (1979): https://doi.org/10.1038/278605a0
<sup>49</sup> Rees. Martin, J. *Just Six Numbers*. (Basic Books, 1983)

<sup>&</sup>lt;sup>50</sup> Carter, Brandon, D. "The anthropic principle and its implications for biological evolution", *Philosophical Transactions of the Royal Society of London. Series A, Mathematical and Physical Sciences.* (310) 347–363. (1983) https://doi.org/10.1098/rsta.1983.0096,

<sup>&</sup>lt;sup>51</sup> Penrose, Roger. *Road to Reality*. (Jonathan Cape, 2004)

universe is the emergence of humanity. So, from a Quranic perspective this Fine Tuned universe is essentially a 'God-Held' universe according to the Qur' $\bar{a}n$ .

In order to avoid the mention of God, scientists attributed this delicate balance to the Multiverse hypothesis. Islam reserves for itself the leverage in such a perspective as well. The Ouran begins by the mention of God as being the Lord of the worlds (Aalameen). The existence of an infinite number of universes does not reduce the value of the God-Held universe or Fine-Tuned universe argument because there is nothing that would prevent an infinitely powerful God from creating an infinite number of universes each with their own specific constants and laws. And Islam has always accepted the existence of multiple universes besides our own. In fact, Muslim theologians like Razi critique the Aristotelian static universe by insisting on the Islamic concept of the multiverse. Some contemporary philosophers have resurrected the Liebnizian argument of the 'Best of Possible worlds' in the context of the Fine-Tuned universe.<sup>52</sup> However, it is well known that this principle of the universe being the 'best of the possible worlds' was originally created by Ghazzali.<sup>53</sup> These discussions provide ample opportunity for Muslim thinkers to revive these Islamic theories and present viable solutions to contemporary discussions adequately.

## The Mystery of Consciousness and the Development of an Islamic Philosophy of Mind

It has been proven without a doubt that the universe is extremely fine-tuned and teleologically directed for the emergence of conscious life that would reflect on this mystery. But the big question is what is consciousness in the first place? And why is it so elusive? This is one of the many mysteries of contemporary science. Chalmers argues that it is perfectly conceivable to have a complex biological system that

<sup>&</sup>lt;sup>52</sup> Naumann, Thomas. "Do We Live in the Best of All Possible Worlds? The Fine-Tuning of the Constants of Nature", *Universe* no. 3: 60. (2017) https://doi.org/10.3390/universe3030060

<sup>&</sup>lt;sup>53</sup> Kukkonen, Taneli. "Possible Worlds in the Tahafut al-Tahafut: Averroes on Plenitude and Possibility", *Journal of the History of Philosophy*, 38, 329 - 347. (2005): https://dx.doi.org/10.1353/hph.2005.0055

does not have a first-person inner experience. Why do we have this elusive phenomenon of an inner experience intimately attached to us for life? There is nothing in the biochemistry of neurons and synapses that tells us why this particular combination of biomolecules and not the others should evoke an inner experience? This is called the Hard Problem of Consciousness, and it is hard because it resists a reductionist and mechanistic explanation.<sup>54</sup> Iqbal observes that this field has never been a point of interest for Muslim scholarship in the past and the theologians were satisfied with accepting the soul as some finer substance that animates the body and leaves at the time of death. On the contrary the Ouran resists this classical view of the soul as being some finer body. Instead, it advocates for the soul being act-like rather than body-like. Allah calls it "My command." And this command undergoes a process of descent and ascent across the universe. The hard problem seems impossible when we insist that it is only the human brain that somehow creates this epiphenomenon of consciousness mysteriously, whereas the same combination of elements in varying capacities in a cat or a plant or a table somehow don't do that. But if consciousness is understood as *Ruh* or *Amr* that pervades the entire existence then that will provide an important head start to this issue. <sup>55</sup> An emerging theory called Integrated Information Theory (IIT) considers consciousness to belong to any system that exhibits integrated information and causal links within.<sup>56</sup> In such a view even a cell. plant and animal could potentially have rudimentary self-awareness. Thus, we can notice the various points of convergence of this theory with the unique panpsychism advocated by the Qur'an.

In such a scheme it is not just that human consciousness is an emergent of universal evolution. Instead, the universe began with consciousness, is pervaded by consciousness and thus evolves consciousness. This view has strong parallels with the Quranic view of a conscious universe.

<sup>&</sup>lt;sup>54</sup> Chalmers, David. *The Conscious Mind.* (Oxford University Press, 1996)

<sup>&</sup>lt;sup>55</sup> Iqbal, Muhammad. *The Reconstruction of Religious Thought in Islam.* (ABD Publishers, 2007), 58.

<sup>&</sup>lt;sup>56</sup> Blackmore, Susan. *Consciousness: A Very Short Introduction*. (Oxford University Press, 2005).

#### Results

#### Reconciliation, Islamisation, and Revival

The project of Islamisation of knowledge (IOK) – as proposed by Al Attas and Faruqi – and the project of Integration of knowledge as propounded by Bakar, are indispensable steps in the process of an Islamic intellectual revival. Integration of knowledge with Islamic thought is Islamisation.

Taking this discussion forward, we classify IOK in three types or pertaining to three intellectual tiers.

- 1. Islamisation of knowledge at the school level
- 2. Islamisation of knowledge at the university level
- 3. Islamisation of knowledge at the research level.

This paper has provided a scheme of IOK which functions in a top-down approach. Meaning we first start with an analysis of the frontiers of scientific research i.e., consciousness, Cosmology and Quantum Theory. Even AI and Biology can be included in this. And then the suitable elements are reconciled with the Islamic view and Islamic responses to these big unsolved mysteries are provided by a team of eligible Muslim thinkers educated in science, religion and philosophy. This Islamisation would then be made to trickle down to the next lower level which is the curriculum of higher education in the Ummah. And finally, from there it would descend to the school education level. The other approach is the bottom-up approach where IOK proceeds from the school curriculum level and then moves up to the higher education level and then finally to the research level. These developments should also lead to a reformation of the *Madrassa* curriculum.

This would be a forward process that would initiate by reconciliation, then move on to Islamisation and then finally revival. Another significant achievement of this project would be the revival of the Islamic philosophy of science that would present itself as a competent rival to the contemporary secular philosophy of science.

The aforementioned three mysteries of science prove that the mechanistic, deterministic and reductionist paradigm within which science has functioned for more than two hundred years has become obsolete and incapable of even containing its breakthroughs. Science needs a new paradigm and what this paper posits is that Islamic philosophy of science that rests on the Kalām and Sufi view of the universe and consciousness is one of the best contenders for a contemporary philosophy of science. This would rival with the contemporary scientific paradigm by providing a much more viable philosophy of science instead of the contemporary philosophy of science by incorporating the indeterminate and probabilistic nature of the cosmos, its fine tuning, the fundamentality of consciousness to the cosmos, the unity of the two realms of life and non-life, the constant recreation of the cosmos etc.

Todav the different fields within science function as autonomous and disparate disciplines like General Relativity is at odds with Quantum Physics and Psychology and Consciousness studies have nothing to do with Cosmology and Physics is reluctantly being used to understand Ouantum effects in Biology. This compartmentalisation is the product of the general secular worldview that dictates the contemporary philosophy of science. This world view does not recognize any unifying factor between the living and the non-living world or the cosmos and consciousness. Whereas Islam does possess this unifying factor in the form of *Tawhid* that manifests at different levels. This Islamic philosophy of science because of its inherent unifying and integrative approach can provide the much sought after integration of all fields and theories, popularly known as the 'Theory of Everything'- a meta-paradigm within which multiple sciences function together. This project does not just have ethical and religious benefits for the Ummah. Rather, it has the potential to provide a technological and economic advantage to Muslim societies. For example, Quantum Computing has the potential to revolutionise a country's technological and economic infrastructure. But one major obstacle is the high cost and limited feasibility to produce and maintain quantum systems. However, rigorous research into Quantum Biology would help us learn how nature efficiently uses quantum effects for its operations. This could be bio-mimicked to produce optimal and affordable quantum computing systems. Because the Islamic worldview integrates the world of life and non-life within an umbrella term of *khalq*, it would

be convenient for Muslim scientists to apply Quantum Physics to all living systems and study how such mechanisms can be replicated to provide computational power. This is just one example, however, there are multiple examples that can be provided for the scope of the Islamisation and Integration of Knowledge that derives from the Quranic worldview. It should be noticed that this project of IOK is a collaborative project that must necessarily include the religious, philosophical, scientific, technological as well as corporate sectors of society for it to be effective.

#### Conclusion

The Muslim world produced one of the greatest intellectual revolutions in history between the 8th Century till the 18th Century. Part of this great intellectual tradition was the Islamic Scientific Revolution that marked the transition from the theoretical and deductive approach of the Greeks and Indians towards the experimental and inductive approach of Islamic Science. Many great innovations were made in this period that influenced modern science. However, since the Colonial Era, the Muslim Ummah has receded into a grave intellectual and spiritual crisis. This paper delved into the factors that cause this crisis. A thorough study of the Islamic intellectual age provides us with broad characteristics that led to the success of Islamic thought and civilisation. These were identified as the centrality of the Qur'an in all intellectual discourse, the broad epistemological landscape in Islam and the absence of a sharp distinction between the secular and sacred. It can be understood that an intellectual revival in the *ummah* depends on an appreciation of these characteristics and making them an integral part of the curriculum and research areas within Muslim universities. A three-step process of reconciliation (between Islamic thought and suitable elements from contemporary sciences), Islamisation and finally revival was provided. The paper provided a top-down approach to this Islamisation that starts from the frontiers of scientific research in physics, cosmology and neuropsychology. The three big mysteries of science today namely interpretation of Quantum theory, fine-tuned universe or multiverse and finally the hard problem of consciousness were discussed and Islamic solutions to these conundrums were provided. Inevitably, this project of IOK is a collaborative project that has the potential to revolutionise the intellectual, spiritual, social and economic landscape of the Muslim *Ummah*.

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