

# *Islam and Science in the Future*

with Majid Daneshgar, "The Future of Islam and Science: Philosophical Grounds"; Biliiana Popova, "Islamic Philosophy and Artificial Intelligence: Epistemological Arguments"; Mohsen Feyzbakhs, "Theorizing Religion and Questioning the Future of Islam and Science"; Ali Hossein Khani, "Islam and Science: The Philosophical Grounds for a Genuine Debate"; and Majid Daneshgar, "Uninterrupted Censored Darwin: from the Middle East to the Malay-Indonesian World."

## UNINTERRUPTED CENSORED DARWIN: FROM THE MIDDLE EAST TO THE MALAY-INDONESIAN WORLD

by Majid Daneshgar

*Abstract.* This essay outlines the significance of understanding the relationship between Islam and science, particularly from the twentieth century onward. It mainly revolves around the viability of Darwin's evolutionary thought in the Muslim world, which is confronted by various groups of Muslim commentators and scholars. This study goes through various original sources, official documents, former unpublished theses, and Qur'ānic commentaries in Islamic languages from north Africa to the Malay-Indonesian world to display the uninterrupted challenge of Muslims with European science in general and European evolutionary thought in particular; an act which is not going to stop now, nor tomorrow. Finally, this essay aims to inform readers how a philosophical reading of Islam and science would be crucial before approving or rejecting any form of connection between the two, particularly in future.

*Keywords:* Charles Darwin; Darwinism; European evolutionary thought; evolution; Islam; Islam and science; Islamic evolutionary thought; Qur'an; Tafsir

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Mīrzā 'Alī Ṣālehī, one of my uncles, was known as a profound practitioner of Islamic teachings, until he went to study and work in the Soviet Union before the Iranian revolution of 1979. Upon his return, he was no longer viewed as "pious" 'Alī among his family. Some relatives called him an "atheist." When he visited us, his main topic of conversation with the family and especially me, due to my expertise related to Islam, was Darwin's evolutionary thoughts. He said that Muslim religious figures

[Correction added on 14 January 2021, after first online publication: Albert-Ludwigs-Universität Freiburg im Breisgau was added for Majid Daneshgar.]

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[*Zygon*, vol. 55, no. 4 (December 2020)]

[www.zygonjournal.org](http://www.zygonjournal.org)

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should eventually agree with Darwin's theory that human and other beings (especially animals) have a shared ancestral background. My lovely mother and another uncle never agreed with this presumption and were embarrassed by it. During the last years of his life, Mīrẓā 'Alī was more pro-Darwinian and pro-evolutionist than ever. He assumed that Darwin's theory led him to believe that "it is the human who created the God, not vice versa." He was excited by all sorts of books and studies that brought him to this conclusion. He was a big fan of the Iranian-American scientist, Ebrahim Victory (b. 1933) whose bilingual English-Persian works such as *The mysteries of the universe* and *Cosmic phenomenon: fact or fiction* were warmly welcomed in Iran, and were available in the book [black] market of Tehran's Enghelab Street, and also his satellite TV program *God, Religion & Science* through which Victory challenged the existence of God and the authenticity of religion by means of science and history. For Victory, human is the evolved form of the ape; of course, not a new idea, but still commonly discussed in both public and academic spheres.

When I visited my uncle a few months before his death in 2018, he held my hand, and, while not able to speak properly, he showed me posters and pictures about Darwinian evolutionary theories and Victory's cosmological arguments. His smile truly explained many things; that he had no regrets at all. For him, reading both Darwin and Victory, challenging the divinity of the universe, was more therapeutic than reading traditional Islamic supplications and incarnations. His younger brother, who was concerned that his health should not get worse, was determined to go to Karbala, Iraq to visit the shrine of the third Imam of Shī'a Islam, Ḥusayn b. 'Alī (d. c. 680), and pray for his older brother to become *physically* and *doctrinally* better, soon. For some, my uncle could have become ill due to his disbelief and reducing human dignity to, for example, that of an ape—perhaps "a divine wrath was wrought on his profanation"; also reminding us of some common Christian and Islamic claims that natural disasters (e.g., drought and earthquake) happen because people commit sins (see Yazawa 2017, 165). He died, and all his efforts to stimulate his traditional and fundamentalist relatives to review the origin of humans in the light of Darwinism were buried with him. Not only was Mīrẓā 'Alī's voice no longer heard, his "Darwinian" memory was erased or *modified* by uncles, aunts, and other conservative family members—new-born babies would have no idea about Mīrẓā 'Alī's belief. Falsifying and abolishing his Darwinian memory would lead younger generations to forget his identity entirely.

Altering and marginalizing others' memory is not limited to this family. On a larger scale, authorities (and whoever has power to control) try to interpret the memory of others as well as the past, for their own sake. However, preserving identity and values against this kind of "censorship" is actually the only thing that oppressed people have shown they can do. Like my former Palestinian-German landlord, who, instead of Germany, spent

many months in Jordan (literally the second homeland of Palestinians) to date a Palestinian girl. He has been saddened by—what he assumes—“removing Palestine from the world map”; he knows that erasing the memory of Palestine means removing memory of the past, and who is not to know this [Khalidunic] idea that “the future is revealed in the past.”

Whether Darwin’s theory is right or wrong is not of concern here. What I care about is that his ideas *scientifically* gave, give, and will continue to give voice to the people who hold unorthodox beliefs about the origin of humans. Suppressing them for the sake of orthodox Jews, Christians, Muslims, and any other religious trends by minor or macro authorities has made inroads into any fields which engage with “orthodox and/versus unorthodox,” particularly religion and/versus science. Although this debate emerged a long time ago, it became more *systematically* analyzed after the publication of *On the Origin of Species* (Darwin 1859). All we know is that Darwin’s evolutionary theory, known as “the grammar of biology” (Jones 2019), is methodically and doctrinally rejected by critics who not only consider his ideas wrong, but also associate them with “Nazism and worse” (Jones 2011). For either Christian or Muslim critics in the *liberal* academic context, it sometimes seems prudent to drop a well-esteemed professor’s course on biology in Darwin’s homeland, viz., England, because the professor does not see Darwin’s idea as false. A genetics professor may wonder how is it possible to study biology, if students do not want to take courses that deal with Darwin:

For a biology student to refuse to accept the fact of evolution is equivalent to choosing to do a degree in English without believing in grammar, or in physics with a rooted objection to gravity: it makes no sense at all. The same is true for doctors. How can you put a body right with no ideas as to why it is liable to go wrong? (Jones 2011)

Apparently exasperated by creationists’ frequent criticism of Darwinism, the professor raises serious questions:

I sometimes wonder how many of those who pour their inane opinions about creationism into young pupils’ ears ever consider the damage they are doing; not to my science, but to their religion. Why, when a student begins to learn the simple and convincing facts, rather than what the imam has told him? Why build a philosophy based on fixed untruths, when we have so many truths, and so many things still to find out? (Jones 2011)

On the other hand, a contemporary Muslim scientist examining Darwin’s ideas through the lens of biology concludes that “if we compare the human being with other species one thing becomes clear; Most other species, such as the monkey, exist in sub-species. [...] This is further proof that man did not evolve as suggested by Darwin but came into being by the will of God. There is sufficient evidence to suggest that his arrival on the earth was not a gradual conversion from apes” (Islamabadi 1999).

The tension between anti-Darwinism and anti-Creationism is not limited to Mirzā ‘Alī’s house but encroaches on larger fields where one does not perceive the other’s concerns. However, unlike the secular academic context, where a professor *may* freely speak about his Darwinian thought, in more traditional contexts, particularly those of the Muslim world in the shadow of Islamic guidance power (i.e., *Irshādīc* power)—that “ensure that one would not be critical or controversial”—(see Daneshgar 2020, 20), the voice of creationists/theists is much louder and more obvious than that of pro-Darwinians; the mere mention of Darwin’s name, as will be shown below, may result in intellectual and social repression and suffocation.

It may be that Muslim self-satisfaction and interest in geopolitical independence in the mid-twentieth century<sup>1</sup> led Islamic nations to officially and systematically conclude that [modern] science emanates from the tree of power; well, who is powerful in their eyes... Western superpowers. So, it is no surprise that Western knowledge output should be monitored or, at least, used in a protected context by Muslims. The Islamization of knowledge as well as the de-westernization of social sciences are among many *temporary* strategies applied by some Muslim leaders and scholars, which have been repeatedly discussed (e.g., Furlow 2016; Daneshgar 2020). Darwin’s theory is no exception, and its reception within Muslim education is still disputed. An extremely negative view toward Darwin is now found in Turkey where secondary school biology texts “for 15-year-olds as part of an ongoing move away from a secular schooling system” are removed (Jolly 2018). Although in Ottoman Turkey there was a great deal of discourse about the significance of Darwin, studies show that it was not treated as systematically as it is today. Earlier Turkish thinkers not only brought Darwin’s opinion to the general public and translated European works into Turkish, they also “adopted Darwinism” to show that survival by means of natural selection is found naturally in all sorts of beings, including humans (Öktem 2012). Pro-Darwinists including,<sup>2</sup> among others, Asaf Nefi and Suphi Ethem, promoted “alien ideas” to the Ottoman Islamic world (Aydin 2005, 109–10) just before its transition into the modern Turkey, founded on the “Kemalist Agenda.” Particular attention was also paid to Darwin in Turkish magazines like *Muhit*, published by Ahmet Cevat from 1928 to 1933 (Bayraktar 2013), and other works dedicated to scientific progress. Dramatic changes in the reception of Darwinism in Turkey in the last few years evidently explain many things about the current situation of religion and science in the Middle East.<sup>3</sup>

Unlike its somewhat warm reception in Turkey, *On the Origin of Species* had a complex introduction in the Arab world as well as South Asia. The way his theory was treated there has clearly shown how pro-Darwinians and anti-Darwinians communicated and that a new faction of Muslim so-called evolutionists emerged. While not categorically ignoring Darwin’s theory, they ascribed his innovation to former Muslim thinkers who lived

during the ostensible “golden-age” of Islam—and challenged Darwin’s innovation.<sup>4</sup> Earlier studies show the way Egyptian thinkers at the turn of the twentieth century, including Ṭaṭṭāwī Jawharī (d. 1940) and Farīd Wajdī (d.1954) ambivalently supported Darwinism while ignoring Western materialism (Elshakry 2014). Jawharī, for instance, clearly says that *lays<sup>a</sup> madhhab Darwīn jadīd<sup>km</sup>* / “Darwin’s school of thought/Darwinism is not new” and was clearly discussed by earlier Muslim thinkers (Jawharī 1906, 58–61), while he acknowledges Immanuel Kant’s philosophical accounts and disregards European belief in the Gospels (except that of Barnabas) (Daneshgar 2018). Such supportive approaches were not limited to Egypt. The famous South Asian scholar, Sir Syed Ahmad Khan (d. 1898), *apparently* believed that the human [might have] come from an animal ancestor, and evolved and was “guided by a divine creator.” Although Ahmad Khan had a neutral view toward Darwin’s evolutionary thought, he asserts that this is not contrary to Qur’ānic teachings, as a long discussion about various stages of human creation is found in Qur’ānic commentaries (see Qidwai 2019). He, therefore, displays how Darwin’s predecessors had had this question in mind, whether human might have come from an animal, an important approach which according to Qidwai affects the current reading of evolution:

[Ahmad Khan’s] approach to evolutionary thought presents some pedagogical advantages to teaching evolution today (Qidwai 2019, 216).

Apart from the possibility that teaching is largely subject to its Islamic [political] context, its teaching does not necessarily mean that it is *scientifically* and *systematically* treated...instead of being scrutinized, it is generally rejected:

Relatively poor education standards, in combination with frequent misinformation about evolutionary ideas, make the Muslim world a fertile ground for rejection of the theory. (Hameed 2008, 1637)

Nonetheless, two other groups of people viewed Darwin differently. First, strong advocates like the famous Arab physician Shiblī Shumayyil, who promoted Darwinism across the Arab world by means of his essays and translations, particularly his “A translation of Büchner’s Commentaries on Darwin on the Transformation of Species and the Emergence of the Organismic World and, from that, Man” (*Tā’rīb li-sharḥ Bukhnir ‘alā madhhab Dārwīn fī intiḡāl al-anwā’ wa-zuhūr al-‘ālam al-‘uḍwī wa-ītlāq dhālika ‘alā al-insān*), published in Cairo in 1884. This translation is acknowledged as one of the first comprehensive Arabic works before Darwin’s own theory was translated into Arabic in the early twentieth century by Ismā‘īl Maḥzar (1336/1918). Second, ardent opponents including, among others, Jamāl al-Dīn al-Afghānī (d. 1897) whose *al-Radd ‘alā al-Dahriyyin* (“A Refutation of the Materialists”) had already pervaded South

Asia and was later translated by his students and fellows Muḥammad ‘Abduh and Arif Effendi Abū Tarīb in 1902, and a Shī‘ī scholar, Shaykh Muḥammad Ridā Najafī Iṣfahānī who produced *Naqd Falsafa Dārwin* (“Critique of Darwin’s Philosophy”), initially as a response to Shumayyil’s works, in Baghdad (1331/1913). Further examination confirms that Najafī Iṣfahānī did not believe in human evolution, but he agreed that other beings could have evolved over the course of history (Gamini 2014).

Given the influence of the nineteenth-century scholars, particularly al-Afghānī and his Egyptian fellows, it is not surprising to see that this conflict and bewilderment also occurred in other Muslim societies, including Iran and the Malay-Indonesian world—whose reception of Darwinism has not yet been carefully examined, especially in European languages. Nonetheless, available archives and material suggest that Darwinism was either defeated by traditionalists and never had a chance to enter or remain in the Islamic educational system, or was altered by pro-science Muslim theists who tried to ascribe it to Islamic teachings or reinterpret Darwin’s views by means of Qur’ānic verses.

#### RECEPTION OF DARWINISM IN IRANIAN EDUCATIONAL CONTEXT

It is a view commonly held by scholars that Iran moved toward becoming a modern state (viz., industrial and educational) during the Qajar period, particularly since Nāṣer al-Dīn Shāh’s reign (r.1848–96). In consideration of the large volume of translation works from various European and Islamic languages into Persian, this period can also be known as the “Translation Period of Modern Persia.” Not only, for the first time, were different sorts of classical and modern commentaries of the Qur’ān (*tafāsīr*) translated into Persian during this period, but also different philosophical, biological, and geographical studies were rendered into Persian. However, Darwin’s *On the Origin of Species* has a complicated story in Iran, too. It is still hard to say whether it was fully translated during the Qajar period, but an important letter kept in the Iranian National Archive proves that the Iranian educational and cultural system, at the outset, became familiar with Darwinism by means of the Persian critical works on Darwinism,<sup>5</sup> which were also printed and taught in Iranian Shī‘ī Seminaries (*Hawzah*) in Qum and Isfahan in order to “serve the general public’s knowledge of Islamic belief.”<sup>6</sup> This letter had been written by E‘temād al-Doulah<sup>7</sup> to Suleimān Mīrzā between 1302 and 1303/1923 and 1924, when Suleimān Mīrzā was the [Grand] Minister of Islamic Teachings and Endowment (*Vazīr-e Jalīl-e Ma‘ārif va Oūqāf*) of Reza Khan (d. 1944).<sup>8</sup> The letter says,

And in order to congratulate you on assuming this high position [...] one translated volume of the book *Falsafa Dārwin* [Darwin’s Philosophy], which has just been published is dedicated to Your Majesty [...]

Other Shī'ī [religious] thinkers such as Asadullāh Kharqānī and 'Enāyatullāh Dastgheyb (known as Rouhī) tried to examine Darwin's work (Gamini 2014). Similar approaches are found in the earliest modern Persian-Shī'ī commentaries on the Qur'ān. Most of the exegetical figures were familiar with Darwin's theory through the language of Muslim and Arab thinkers and mentioned his name in their commentary. Generally speaking, most Shī'ī *tafsīr* are either impressed by (1) Najafī Iṣfahānī's *Critique* (e.g., al-Balāghī 1386/1966), (2) al-Afghānī's treatise (e.g., Mughniya 1424/2003), and (3) Egyptians, particularly Jawharī's *Tafsīr*.<sup>9</sup>

Regarding the creation system in the Qur'ān (Q 24:45),<sup>10</sup> al-Balālāghī (d. 13?/19?) says,

God has created every creature from water, and these beings are divided into three categories: 1- those that move on their bellies, 2- and of them are those that walk on two legs, 3- and a group that walks on four [hand and leg] [...] The message of this verse is firstly that animals view downwards while walking, humans view to the front, right and left while walking, and secondly, an animal's head and end (tail) are horizontal towards the sky when walking, while a human's head and legs are vertical while walking. But trees' and plants' head is inside the earth and their bottoms face the sky and space (totally in contrast to the human being). And as such issues are not found in Torah and the Gospels and that Christians, except a few, are not familiar with the Qur'ān, so the Christian Darwin, ignorant of the creation mechanism, strayed himself and influenced many others by his superstitions emanated from his diseased and invalid mind. (al-Balāghī 1966, VII: 65)

References to his own mentor and lecturer, Najafī Iṣfahānī, can be found in al-Balāghī's commentary on the Qur'ān (1966, VII: 36). Other Shī'ī commentators, including Ebrāhīm 'Āmelī (d. 1388/1968), present a novel idea in the Iranian context that Q 6:98 ("And it is He who produced you from one soul...") signifying that "I created you from one live creature," which is objected to by the deniers of the Qur'ān and the followers of Darwin. However, this objection does not make sense. This interpretation is not against any beliefs, because it is possible that that a live being from which we (humans) have been created was Adam, the father of mankind (*Abū al-bashar*) as commentators said, and it is also possible that before becoming *ādam* (a human), it was in another form of being that has gradually evolved to become Adam." (1981, III: 513).

Ambivalent reading of Darwin among Iranian commentators of the Qur'ān was not based on the original English version, or the translation of his works, but through the incomplete Arabic commentaries produced by Egyptian or Iranian thinkers. Nonetheless, the first translation of Darwin's book [apparently an incomplete version] in Persian was produced in 1318/1939 by the Iranian translator, 'Abbas Shouqī. Recent studies show that this translation was not infallible and was partially based on Mazhar's Arabic translation and not the original English. It is argued that

Shouqī's incompetent translation was cited and/or critiqued by Persian scholars for a long time, which was a "catastrophe" and it presented an unreal and "fictional" image of Darwin to the Iranian society (Masoumi 2015, 248). Although Shouqī and later Nouruddīn Farhīkhteh produced more comprehensive translations of Darwin's *Origin of Species* in 1972 and 1978, respectively, none of their works were actually based on the original English version. In the meantime, also according to Masoumi (2015), Iranian scientists and thinkers, including Maḥmoud Behzād in 1323/1944, 1325/1946, 1338/1959, and 1352/1973, M. Sabalānī in 1329/1950, Shāhpour Ravāsānī in 1336/1957 partially translated or discussed Darwin's book(s) in Persian.<sup>11</sup>

Apart from these books, very few academic theses were produced on the topic in the first half of the twentieth century: two Bachelor theses at the University of Tehran by Ja'far Nakha'ī (Divinity School) entitled "‘aḳideh Darwīn Rāje' be-Gharā'ez" ("Darwin's Opinion about Instincts") in 1316/1937 and Maḥdī 'Azīma (Psychology Department) entitled "Rābeṭeh-ye Falsafeh-ye Dārwīn" ("On the Philosophy of Darwin") in 1317/1938. Another thesis was written by Shahrām Shāh-valiyān in Tehran *apparently* in the late 1330s/1950s. The main reasons encouraging him to write "Naẓariyyāt-e Dārwīn" ("Darwin's [sic] Ideas") was his interest in biology and "comparing former scientists' ideas together, among whom Darwin is the most important one. Because, at present, scientists know him as the *factual* father of biology." To complete his thesis, he did not apply any religiously inspired work but only those of scientists including Behzād, Sabalānī, Ayyoub Maḥmoud-Pour, Īraj Īmen, Jalīl Mīr-Pouriyān, and Dr. Rouḥānī (Faculty of Science). He also ends his thesis with a comparison between the ideas of Darwin and Islamic jurists (religious thinkers): "ammā cherā dānesh-mandān bā naẓariyyeh ū movāfeḡh-and va foqāhā na" ("And why scientists agree with Darwin's ideas while Islamic jurists and religious thinkers do not"),

We know that in practice scientists conduct their studies based on experiments which rarely lead to failure. This is why some scientists agree with Darwin's ideas, because what we have read from him was based on his experiments. While, philosophers research principles in their imagination — and we may, therefore, find errors in their works — then they disagree with Darwin's ideas. (fl.61, also fl.30)

Although a number of Iranian scientists tried to support and promote Darwin's ideas, the government was under pressure from opposition wishing to exclude Darwinism from the Iranian educational system. A letter titled "Teaching Darwin's Hypothesis in Schools," no. 715, dated November 12, 1332 (February 1, 1954) from the Social Reform Association of Tehran (District 5) was written to the Ministry of Culture. Due



to its importance, the communication between the association and the ministry is addressed here:

Apart from that the teaching of Darwin's hypotheses in high school schedules is in contrast to religious piety fundamentals as well as the Holy Qur'an's texts and the Loving Shah's principles, it is now two years since the aforementioned hypothesis has been abolished and rejected by some English and American scientists who discovered skeletons belonging to humans seventy-five to a hundred thousand years old in the Alborz mountains and the eastern mountains of Iraq. Thus, as you are the head of the ministry of culture, and now that the Counsel for the Nations' Guidance has been formed, please command to prohibit teaching of Darwin's hypotheses in the high school's schedule, because teaching them has so far caused that hundreds of faithless, [...] or even young people who become traitors to patriotism graduate from our high schools and join the society, and when these young people become teachers then what a burning hell of faithlessness and anti-patriotism they would create. And be sure that some corruptions against and confrontations with nations is due to the teachings of the abovementioned hypotheses which is against and in full contrast to the Holy Qur'an.

According to this social and cultural association of Tehran, including 24 *active* activists, Darwin's work is not only antireligious, but also antipatriotic and against favoritism of the Shah. For them, Darwin might have an imperial effect stronger than any other internal or external "enemy"! This letter was discussed in different ministerial meetings for a couple of weeks, and particular committees were appointed as responsible agents to solve this issue. Their investigation proved that Darwin's theory was not taught in high schools (dated November 22, 1332; February 11, 1954):

[...] Teaching Darwin's hypothesis, as already concerned, is not taught in the sixth level classes of high schools at all. However, it might be possible that the name of scientists who contributed to the progress of natural sciences is mentioned while teaching. But as principally Darwin's hypothesis has been concretely rejected by natural scientists, there is no reason that an unnecessary topic about an abolished issue should be raised in the "science" classes. Moreover, it is not possible at all that any influence of the abovementioned hypothesis —that it is not of any sorts of impact—based on our [strong] religious beliefs remained in the student's mind.

This letter written by experts ironically addressed the concerns of people associated with the Social Reformism Association, that as long as belief (*īmān*) is strong, neither Darwin's name nor his hypothesis would remain in our cultural memory. But one may wonder if the hypothesis did vanish from our memory...the case of Mīrzā 'Alī and his brother showed that, in best scenario, Darwin's hypothesis was confronted with censorship or moved to the margin...but never vanished. To marginalize Darwin's hypothesis, the Social Reformist Association of Tehran did not give up [or apparently was not convinced] and sent another letter, this time to the

Prime Minister, which was quickly forwarded to the Ministry of Culture, and again the same answer from the special examination committee of the minister (no. 22176; dated September 3, 1333; November 24, 1954) was received.

Accordingly, the insistence of anti-Darwinists on blocking Darwin's influence in the Muslim world was not going to stop. "Censorship" has always had a link between "power" and the "knowledge" system (see Jansen 1988), and been practiced not only by powerful social authorities, but also at any level of domestic, social, and family complex...it is both a top-down and a bottom-up process, allowing one to ignore, control or marginalize what/who is not in line with his/her interests (Daneshgar 2020).

Such a censorship mechanism was not just limited to the core lands of Islam, it made inroads into the Malay-Indonesian world, too, where the largest Muslim population of the world exists.

#### DARWINISM IN THE MALAY-INDONESIAN WORLD

Modern Malay-Indonesian Islamic literature is largely impressed by two different Sunni-oriented trends of Egypt and South Asia (Riddell 2001). As such, it might be expected to see that their readings of Darwin encroached on the Malay-Indonesian world. Darwin's *On the Origin of Species* has been treated selectively in the Malay-Indonesian world, too. For a long time, it was marginalized, as the Malaysian translation of it was either not available or banned from circulation across Malaysia (2014). "[D]ue to his significant influence on various forms of human knowledge," the Pusat Penerjemahan Universitas Nasional in association with the Yayasan Obor Press in Indonesia decided to publish the first Indonesian translation of Darwin's book in 2003. After highlighting how Darwin's theory might affect modern dialogue and conflict between Islam and science, the book begins with the Indonesian translation of Julian Huxley's (d. 1975), a famous advocate of evolution, introduction to the English edition of Darwin's book (2003, xii). The book also ends with an epilogue by Franz Magnis-Suseno.

This rendition paved the way for further Indonesian scholars to devote particular time to Darwin's book as well as to the relationship between Darwin and Islam. As such, one of the most comprehensive analyses of this link was that of Rosman Yunus, Bambang Haryanto and Choirul Abadi in 2006, through which they discussed "Darwin's theory from the perspective of Science and Islam." Although the book confirms that "through the lens of Islam, Darwin's theory is totally rejected [...] Q 32:7-9", (*dalam pandangan Islam, teori Darwin jelas tertolak [...] as-Sajda: 7-9...*) the authors provide further scientific analysis for readers to see to what extent these two concepts may cope with each other (Yunus et al. 2006). Later on, a visual story about Darwin's *On the Origin of Species*, particularly that

of Michael Keller which is a Graphic adaption illustrated by Nicolle Rager Fuller, was translated into Indonesian (Keller 2010).

While the translation of Darwin's book was an important contribution to the Malay-Indonesian reading of modern science, it took a longer time for Malaysians to welcome his work in their own language. Finally, it was translated into Malaysian (apparently in an incomplete version) just a few years ago. Hariz Zain's translation (Darwin 2017) obviously shows his attempts to familiarize Malay locals with Western scientists, so they might better analyze how to read both science and religion. This outlook among Malays was advocated and there was no opposition—as far as I am aware—to Darwin from the beginning. As I will show below, Malay-Indonesian commentators of Islam followed the footsteps of pro-Darwinian scholars from Egypt and India, and there was less anti-Darwinism among them.

The earliest known exegetical reference to Darwin in Malay-Indonesian commentaries on the Qur'an is found in *Tafsir al-Qur'an al-Karim* ("Commentary on the Holy Qur'an") by three Indonesian scholars, H. Abdull Halim Hasan, Zain al Arifin Abbas, and Abdurrahim Haitam in 1937. Given its large number of references to and rendition of works by modern Arab thinkers, particularly Muḥammad 'Abduh, Tawfiq Ṣidqī, Rashīd Riḍā, and Ṭanṭāwī Jawharī, and addressing Egyptian reading of European science, this commentary could be considered as one of the first Malay scientific interpretations of the Qur'an in the Archipelago. Even, it is among the first commentaries across the Muslim world which discusses the significance of "prayer" ('sembahyang') from biological, psychological, and physiological perspectives; topics which are still discussed in Muslim world (Hasan et al. 1938, II: 450–57).

Addressing Q 8:45 ("O you who have believed, when you encounter a company [from the enemy forces], stand firm and remember Allah much that you may be successful"), commentators discuss the importance of "Struggle for Survival/Life": *perjuangan merebut kekaln hidup dalam dunia ini* ("Struggle for eternal life in this world"), so Muslims are recommended to fight for God. This is actually a form of struggle to meet with God's satisfaction. Later on, in Q 2:251 ("[...]And if Allah had not repelled some men by others the earth would have been corrupted [...]"), it is declared and noted that both nature and humans are divinely created and they are intrinsically inclined to survive... So the motivation of humans to fight their enemies is divinely natural. And, the commentators say, one's victory is achieved by means of "natural selection" and as such, Muslims are allowed by God to try their chance at survival. They continue that this is why "fighting" for Muslims is permissible by God through Q 22:39-40: "To those against whom war is made, permission is given (to fight), because they are wronged; - and verily, Allah is most powerful for their aid; - (They are) those who have been expelled from their homes in defiance

of right, - (for no cause) except that they say, “our Lord is Allah” [...]” (Hasan et al. 1938, II: 500–01).

This earliest Malay exegetical allusion to Darwin’s ideas, i.e., struggle for life as well as natural selection, is dramatically, and unlike many other scholarly works on the Qur’ān in the Middle East, used for the sake of Islamic teachings and justification of Muslims’ intention to fight with non-Muslims.

### *A Muslim Darwin versus a Jewish Darwin*

In 1996, the Indonesian publisher Yushiko-Solo put out a book entitled *Asal-Usul Manusia* (“The Origin of Human”) by Ch. Darwin. I thought this was a promising discovery from the Leiden University Library...telling myself “look you found the translation of Darwin’s book in Bahasa Indonesia...Hmmm but Darwin did not publish anything titled “the origin of human”<sup>12</sup>! his “Origin of Species” literally means “Asal Usul Spesies.” Who knows, it might be an underexamined copy of his works...right? While turning the pages of the book, I found it replete with allusions to Qur’ānic verses. How might it be possible that Darwin’s book addresses the Qur’ān? I asked myself.

The opening phrase says:

At present, it is seen that Humans have been investigating their earlier generations. In line with apes, ancient human fossils are found in Europe, China and Africa. Such as the ancient human, *Sinanthropus Pekinensis* (*Homo Erectus*). This ancient fossil creature was found in the Neander river(?) Valley near Düsseldorf, Germany. *Honiorbodesiensis*. This ancient human fossil was found in Africa specifically in the Broken Hill, Rhodesia, cave. According to Ch-Darwin’s theory, humans developed from a small monkey (*monyet kecil*) then evolved to a big monkey (*monyet besar*) and then again evolved to become a human. Such studies are conducted while straying/misleading (*menyesatkan*) human beings. Today, we may find that human fossils are similar to those ancient ones, in America and Africa. Let’s not engage too far with the ancient world, and return to the verses of God [in the Qur’ān] through which God informed the angels that God would make man on this earth. (Darwin 1996, 1).

It is crystal clear that the author’s view on Darwin is very much similar to Ahmad Khan who believed that humans evolved at various stages. The author continued that angels wondered and asked God whether humans would become the leader and spark bloodshed across the world, to which God responded by Q2:30

And [mention, O Muḥammad], when your Lord said to the angels, “Indeed, I will make upon the earth a successive authority.” They said, “Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?” Allah said, “Indeed, I know that which you do not know.”

Thereafter, he says, God created Adam, as the first human, from the soil after which He insufflated His spirit into it. Later on, the author says,

Based on the Book of God, there is a big contradiction between the theory in the Book of God and the Jewish-Darwin (“Darwin-Yahudi”) theory [...] through the latter human nature (*fitrah*) is neglected, and in the light of materialism ethics are not seen as part of the human nature, but evolved through social and material economics [...] so ethics is exterior to humans.

According to the author, such ideas that pervaded the whole of Europe were influenced by Charles Darwin who actually “downgraded” humans and “subverted the animal degree.” Here, the author emerged as an (pseudonymous) Islamized Darwin who critiqued the Jewish Darwin who is from England. For him, both Darwin and Jews follow each other in downgrading humanity:

Human is highly regarded in the presence of God, but Charles Darwin and Jews like to compare humans with ancestral animals, apes. (1996, 7)

The Islamized Darwin then discusses that God’s creation is based on evolution, but not that of Darwin’s, through which not only human but also other beings were created through various stages. Moreover, the human body, according to him, consists of four important elements: (1) soil; (2) air; (3) water; and (4) fire. “God created us from the clay and then we became the global mine of materials and minerals” (1996, 11). For him, although Darwin’s “natural selection” is more convincing than his predecessors, such as Jean-Baptiste Lamarck (d. 1829), he was overly confident in the reliability of his “natural selection,” and there were always scientists who quickly applied his theory to challenge biblical literature dealing with the origin of humans and species (1996, 11). Later on, in line with Egyptian scholars, he questions Darwin’s originality of idea, but by asserting that “the first one who put forward that humans come from animals is [Ernst] Haeckel in 1868.” (1996, 12) Furthermore, the influence of Darwin on philosophical, theological, sociobiological perspectives along with using Qur’anic verses is critiqued.

Whether Darwin is known as an atheist in traditional Islamic circles, an illiterate Christian among Persian Shi’i Qur’an commentators, or Jewish in Southeast Asian literature, the above true stories, commentaries and reports inform us how Darwin is selectively, incompletely, and fanatically read by various groups of Muslims. For them, anything in contrast to Islamic teachings should be either (1) rejected; (2) modified (Islamized); or (3) marginalized. The first two options have usually been practiced by anti- or pro-Darwinian religious thinkers and scholars, while the last one has occurred in smaller traditional circles where powerful people try to move Darwin from the center to the margin. However, one may wonder what could happen if science moves faster and more

precisely than before. When I published my final remark on “the future of Islam and Science in 2154” in my first monograph (Daneshgar 2018, 151–52), I provided readers with an *imaginary* future to see how Islam and Muslims can potentially cope with the future; at such time as the chance of dying is significantly less than today, philosophical and theological issues on fate and providence as well as the day of judgment, martyrdom, resurrection, and so on and so forth are challenged. This *imaginary* future is not that farfetched from reality as there would always have been scientists who equally challenged the divine origin of the human being and made the same conclusion as Darwin about the origin of species just a few decades after him; particularly, Peter J. Bowler’s (2013) “Darwin Deleted” discussed whether Darwin was or was not alive.

Nonetheless, discussing the *future of religion/Islam and science* may be viewed as a “bizarre” prediction by some scholars (e.g., Haddad 2017, 155) who apparently ignore or do not want to know that what humans have achieved today is largely related to past imaginations<sup>13</sup>...the immortal desire of eternity is his/her lasting dream: that one would not die, but be cured and live in health and happiness. As much as flying from the East to the West or vice versa was a dream for European novelists in the seventeenth century, what would happen in the future is “bizarre” for contemporary fundamentalists. For them, any form of imagination of the future is only a pure nonachievable imagination. They view “super girl/woman”<sup>14</sup> peacemaking, flying from east to west to bring justice by means of technology and social networks, “bizarre,” too, because a “super girl/woman” only becomes, *traditionally* speaking, “super” when she serves mostly “at home” and decreases her engagement with social and political activities.<sup>15</sup>

Recent technological movements demonstrate that some people would recourse to “indigenization” of modern science and technology, when they refuse to experience, tolerate and embrace it as it is. This is why the role of Sofia Robot (b. 2015), an artificial intelligence and humanoid robot, and her sister, little Sofia, emerged in the Muslim world. The bigger sister was the first AI robot to receive Saudi Arabian citizenship, when she attended *the Future Investment Initiative* in Riyadh. There, western technology is linked with nationalism and domestication. A more indigenous example would be the production of a Muslim robot in Iran in 2014 whose main responsibility was to teach children how to pray and perform prayer (*ṣalāt*)—of course, a Shi‘ī version. The TV presenter explains,

A discerning teacher from Varamin [a part of Tehran] was determined to create a Robot to familiarize children with daily prayer, after he noticed the [western] toys actually teach Western culture to our children.

Later on, the inventor [teacher] says,

Why do not we make a Robot by which we can clearly/beautifully impart our religion [Islam] and denomination [Shi'ism] to our children.

The reporter then wishes that: “hopefully, one day such domestic toys, promoting our own culture and religion, are placed in our toyshops’ shelves.”<sup>16</sup>

Apart from this religiously inspired Robot, another humanoid project titled “Surena”—an ancient Parthian Persian name—including well-experienced scientists and engineers has been initiated in Iran. It produced the first hand national/Iranian humanoid.<sup>17</sup> Despite being an important and new project engaging various groups of people, what is bothering is the way such technological revolutions in the Muslim world may represent their national, cultural, and religious values, particularly in the future.

For rejecters, modifiers, as well as fundamentalists and traditionalists, the philosophy behind modern science may not be seen through the light of *history* and *philosophy*, but rather *religious teachings*. As such, this thematic issue of the *Zygon* journal will provide some philosophical ground for the future of Islam and science, a topic which, whether we want it or not, will potentially become more challenging and serious than today... the more discovery in science, the more the question about the relationship between religion and science.

#### ACKNOWLEDGMENT

This research received support via a grant from the Deutsche Forschungsgemeinschaft (DFG), project number 415543504.

Open access funding enabled and organized by Projekt DEAL.

#### NOTES

1. It should be noted that Muslims’ revolutionary thoughts (from Indonesia to Iran) were largely inspired by Western decolonization movement.

2. More names: Ahmet Midhat Efendi, Ali Suavi, Beşir Suad, Şemseddin Sami, Subhi Edhem (d. 1920), Memduh Süleyman (d. 1923), Elif Efendi (d. 1927). Thanks to Abdullah Oztop for providing me with some of these names.

3. Regarding the history of Science and naturalism in Turkey, see Küçük (2020)

4. See the collection of Jawhari’s works, particularly his commentary, *al-Jawāhir fī Tafṣīr al-Qur’ān al-Karīm* and his book, *al-Tāj al-Murāssa’* (1906).

5. Including the translation of Najafī Iṣfahānī’s critical response to both Shumayyil and Darwin.

6. Collection of his essays and works including the Persian translation of his critique of Darwin’s philosophy were published in a single volume entitled *Mortaḥaq* by ‘Abd al-Reḍā Ketāb-chī Kh’ānsārī in Isfahan (Maṭba‘a Emāmī). Other works on Najafī Iṣfahānī’s work are: Muḥammad Riḍā Najafī Iṣfahānī, *Naqd Falsafa Dārwin*, edited by Hamed Naji Isfahani (2015), and Amir Mohammad Gamini, (1393/2014).

7. Or one may wonder if it may be read as E’temād al-Touliya, also known as Dast-gheyb Shīrāzī (?).

8. Also known as Reza Shah.

9. See the Persian translation of Jawhari’s *Tafṣīr* by Iranian religious thinkers (from Tabriz) (Daneshgar 2018).

10. "Allah has created every [living] creature from water. And of them are those that move on their bellies, and of them are those that walk on two legs, and of them are those that walk on four. Allah creates what He wills. Indeed, Allah is over all things competent" (Q 24:45).

11. There were also other Iranian thinkers, like 'Enayatullah Dast-gheyb Shirāzi, who were impressed by Darwin's theory. Also, a full assessment of the Persian translation of Darwin's "The Descent of Man" will be the subject of a future study.

12. The title of *Asal-Usul Manusia* resembles the Malay-Indonesian rendition of Maurice Bucaille's *What Is the Origin of Man?* (1984) often translated as "Asal-usul Manusia" or "Dari Mana Manusia Berasal?"

13. For Muslim scientific imagination, see Determann (2021)

14. Referring to the American superhero television series.

15. A large number of essays, articles and reports by Muslim traditionalists, leaders and thinkers about this issue have been published.

16. Online source: 2014 <https://www.aparat.com/v/1GM2q>.

17. for more, see: <http://surenahumanoid.com/>.

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