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Darwin and Dunya: Muslim Responses to Darwinian Evolution

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Abstract

Darwin's theory of evolution caused considerable controversy among conservative Christians, but his ideas were not immediately available to Muslims. The first Arabic excerpts of Darwin's work were made in 1876 by a Syrian Christian who was influenced by pro-creationist Protestant missionaries. This article provides a brief historical overview of the debate among Muslim scholars about Darwin's theory of evolution. The range of reactions to Darwinian evolution in the Muslim world has included that of traditionalist scholars, who adhere to medieval views of a flat earth, to that of Western-trained Muslim scientists who see no contradiction between Darwinian evolution and Islamic religious beliefs. Since the Qur'ān does not provide as many details regarding theistic or God-guided evolution as appear in the biblical book of Genesis, Muslims can argue that Darwinian evolution does not directly contradict or harm Islamic teachings; nevertheless, "Islamic creationism" is on the rise, especially in cyberspace, particularly on the websites of Harun Yahya, who, in 2007, sent an *Atlas of Creation* to scientists in the Western world.

Keywords: Darwin, creationism, evolution, Harun Yahya, materialism, Qur'ān, theistic evolution, evolution

There are known to be frequent questions spread among people these days concerning the beginning of life, the origin of man, the unity of his body, his antecedents, the essence of his soul and so on.¹ (Al-Birbārī, 1876, p. 231)

In 1859, Charles Darwin's *On the Origin of Species* shook the Victorian Christian worldview to its cosmological foundations. The more that came to light about the earth through non-theologically driven, scientific investigation, the less likely it seemed that an all-powerful God in the biblical sense was controlling the world from a distant heaven. The idea of natural selection, as a viable alternative to supernatural creation, directly challenged prevailing dogmas about the origin of life not only in Christianity, but also in Judaism and Islam. Following the publication of Darwin's work, the creation story of Adam and Eve, shared by all three monotheisms, could be interpreted as either myth or allegory in the wake of a fast-growing scientific worldview.

While a strongly negative reaction to Darwin was immediate from Christian clerics, it was almost two decades before portions of Darwin's theory of evolution became available in Arabic, soon followed shortly thereafter by translations in Ottoman Turkish. The first translation of Darwin's work was made by Arab Christians. Most Middle Eastern Muslims and Christians, a large percentage of whom were illiterate in the latter half of the 19th century, would have been unaware of Darwin's ideas or other scientific breakthroughs in Europe. Today, the most ardent Muslim opponents of "Darwinism" today borrow arguments from Christian fundamentalist creationists, who often consider Islam a Satanic plot and evil religion.² As such, Muslims and contemporary Fundamentalist Christians, who both agree that Darwin's "evolution" is inherently materialist and atheistic, have become strange dogmatic, procrustean bedfellows.³

To speak of a "Muslim" or "Islamic" response to Darwin's ideas is a misnomer from the start, as suggested by Najm Bezirgan, since the earliest Muslim exposure to Darwin's work occurred in areas of the Middle East that were under foreign Christian missionary influence (Bezirjan, 1988, pp. 357-387).⁴ While dogmatic supporters of Christian views of creation have long criticized evolutionary science, the scientific community in Europe and America, shortly after Darwin's publication, adopted an evolutionary framework that has become the foundation for all modern sciences worldwide. Despite creationist claims that Darwin's ideas were, by necessity, materialist and atheist, many scientists in the West have accommodated their own religious beliefs for more than a century and a half without rejecting scientific methods based on Darwin's findings. The situation in most Muslim countries is different, however, with modern biological sciences not having entered the curriculum until the early to mid-20th century, and then only in a largely a colonial context.⁵ This lack of a developmental dialogue between religious scholars, scientists, and an educated public created a climate in which Islam's mid- to late-twentieth century and early 21st century rejection of Darwin's ideas has been conflated with the general frustration of many Muslims with Western cultural and political ideologies.

There is no way of viably surveying the diverse Muslim population worldwide with any degree of statistical validity on attitudes about evolution. Polls rarely distinguish between the scientific understanding of evolution and the various modes of theistic evolution and intelligent design. A survey conducted in 2006 found little support for evolutionary theory in Muslim majority countries. As noted by Salman Hameed, "Only 16% of Indonesians, 14% of Pakistanis, 8% of Egyptians, 11% of Malaysians, and 22% of Turks agree that Darwin's theory is probably or most certainly true" (2008, p. 1637). A 2009 British Council survey in Egypt found that only 38% of the Egyptians surveyed had ever heard of Darwin (British Council, 2009). Iran, however,

is said to have “the most in-depth and consistent coverage of evolution in its compulsory science curriculum and textbooks” (Burton, 2010, pp. 25-29). A poll by the Pew Forum on Religion and Public Life provides evidence that not all Muslims are as opposed to evolution as might be expected from their social conservatism (Pew Forum, 2013, pp. 132-133). Conducted between 2008 and 2012 in 39 countries and territories on three continents, this survey showed that Muslim acceptance of an evolutionary origin for life was 79% in Kazakhstan, 78% in Lebanon, 67% in the Palestinian territories, 63% in Morocco, 62% in Albania, 58% in Russia, 55% in Thailand and 54% in Bangladesh. By contrast, 67% of Iraqi Muslims reject evolutionary theory, perhaps in part due to the collapse of Iraq’s once excellent school system in the past two decades. In Afghanistan, 62% of Muslims reject evolution, according to the survey. A 2011 poll by Ipsos found that only 7% of Saudis accepted evolution in some capacity (Ipsos, 2011).⁶ It is reported that at present, it is illegal to teach evolution in Iraq, Yemen, and Oman (Khatri, 2014). While these statistics are not contextualized by sect, social class, or level of education, they do indicate that rejection of evolution within Islam is, in some cases, widespread.

The situation in the United States indicates that Muslims do not reject evolution as readily as do Christian fundamentalists and evangelicals. In a Pew Survey conducted in 2007, some 45% of Muslims in America said that “evolution is the best explanation for the origins of human life on earth.” (Pew Foundation, 2009). Consider that in this survey, only 24% of evangelicals agreed with this statement, and only 8% of the avidly anti-evolutionary Jehovah’s Witnesses did. In the same survey, 58% of Catholics agreed with the statement, and 77% of Jewish respondents were in agreement. This greater acceptance of evolution by Muslims compared to evangelicals and other Christian fundamentalists in general is no doubt related to the fact that there is a large number community of Muslims in America who are professionals with scientific backgrounds and who are more open to “secular” thinking regarding science.

Despite the general suspicion of “evolution” as an alternative to Allah as a creator, there are prominent Muslim intellectuals who accept a form of Darwin’s evolution by incorporating into it a place for theistic interpretation. Maḥmūd ‘Ashūr, the former vice-rector of al-Azhar University in Cairo, praises Darwin as a man of science whose diligence as a scientist was in line with the Qur’ānic call for Muslims to seek knowledge (Al-Ḥamāmiṣī, 2009). The emphasis on seeking knowledge in this life, promoted in the Qur’ān and validated by statements of the prophet Muḥammad, led to a vibrant historical tradition of scientific scholarship, especially in medicine and astronomy. As the Qur’ān (28:77) notes, Muslims are enjoined to enjoy what Allah has provided in this world, known as *dunyā* in Arabic, being careful not to engage in improper moral behavior. The issue that complicates Muslim acceptance of Darwin’s evolution, however, is that Muslims are instructed by the Qur’ān to discover, learn, and know about this world without compromising the ultimate goal of the hereafter. Thus, evolution becomes a problem for a Muslim when it mandates no role for Allah as the ultimate creator. This has long been the case for many Christians as well, who have argued that the mechanism of evolution can (and, indeed, must) be somehow harmonized with a divine creative origin. A similar understanding is spreading within Islam. Although it is not easy to shift the moralistic battle (i.e., Darwin vs. *dunyā*) to the more progressive argument in which Darwin’s ideas result from the divine command to know the world, this effort is underway among Muslim intellectuals.⁷

Any attempt to address Muslim responses to Darwin over the course of a century in a single article must be exploratory.⁸ My purpose here is to provide an overview of the conceptual differences among Muslim scholars on an issue that goes to the core of faith in the Qur’ān as incapable of error. While the early rejection of Darwinism as materialist still finds proponents,

some Muslim intellectuals recognize that the Qurʾān should not be judged according to how it conforms to any specific scientific theory. The examples provided here are primarily from the Arabic and Persian contexts, ranging from widely shared texts to opinion pieces. In the past three decades, much of the debate over evolution has occurred online. Among the most visible sources is the web network of Harun Yahya, a Turkish Muslim who promotes his anti-evolution views in multiple languages available to Muslims around the world. My concern is less with which views are correct than highlighting the kinds of arguments used by a wide range of individuals.

Creation in Islamic Tradition

It is God who created you from dust and later from a drop of fluid; then He made you into two sexes: no female conceives or gives birth without His knowledge, no person grows old or has his life cut short, except in accordance with a Record: all this is easy for God. (Qurʾān 35:11)

Islamic theology follows Jewish and Christian thinking in positing a single all-powerful Creator God behind the universe. Unlike the Biblical book of Genesis, however, the Qurʾān does not provide a chronological approach to sacred history, nor does it treat the issue of creation in detail.⁹ Nevertheless, there are several passages that describe Allah as the creator of the world and heaven. The main Arabic verb used for the creative act of Allah is *khalāqa*, which is used in the Qurʾān both in the general sense of bringing the world into existence and also in the specific sense of creating humankind (*insān*) from a clot of blood (Qurʾān 96:2). As noted by Husam al-Alousi, the Qurʾānic usage alone suggests that general creation was out of pre-existing matter and not the creation *ex nihilo* of Christian theology—although later Muslim commentators often argue for the latter (Al-Alousi, 1968, pp. 14-15). Similar to Jewish and Christian sources, the Qurʾān presents the process of creation as having taken six days (Qurʾān 11:7), with the implication that the primordial matter was water. The Qurʾān does not specify, however, as Genesis does, what was created on each day, nor does it suggest acceptance of these as literal 24-hour days.

According to Qurʾānic verses 2:29-38 and 7:11-27, Allah created Adam from clay or dust in the Garden and taught him the nature of all things. Then Allah brought the angels to bow down and worship the new creature, but they complained that the new creature would “cause damage and bloodshed.” At this point, Iblīs (the Muslim Satan) rebelled and was cast out of the garden. Satan returned to tempt Adam and his wife to eat from the forbidden tree. When they did this, their shame compelled them to sew together leaves to cover their bodies. When confronted by Allah, they immediately asked for forgiveness but were told they would live and die until their bodies are resurrected. While this follows the general theme of Genesis, most of the specific details are left out. There is no reference in the Qurʾān to Eve by name, nor her being created from Adam’s rib, nor Satan tempting her first, nor the specific details of God’s curse.¹⁰ It is possible to view this account of the first couple as describing a spiritual rather than a literal creation, so that Adam is not created *ex nihilo* but “raised from the earth as prophet” (Shavanas, 2010, p. 199).

Much of the early Islamic commentary on creation resulted from contact with Jews and Christians (Al-Ṭabarī, 1989, p. 273). Early sources such as the late 9th century al-Ṭabarī and the collected tradition (*ḥadīth*) literature elaborated on the frame of the creation scenario found in the Qurʾān.¹¹ Like the rabbinical Midrash and medieval Christian sources, the Qurʾānic story of the first pair is spun out in miraculous flair with little pretense of being a literally believable or

“scientific” account.¹² Some of this reflects attempts to harmonize Islamic thinking with sources such as the Jewish Genesis Rabat and Christian commentaries. Muslim intellectual discussion of creation also stimulated a philosophical rather than a scientific trend. Thus, the creation story was important primarily for what it revealed about the Creator, who was above everything else, as indicated in the Qur’ānic verse (29:20), to travel the earth and see how Allah performed the creation. Within Islamic theology, a debate ensued over the nature of the Qur’ān as a direct revelation from the eternal Creator: Was the Qur’ān *created*, which was the position adopted by the Mu‘tazilite school, or was it eternally present with Allah, which was the theological position that prevailed after the end of the 10th century?¹³ Often referred to as a “rationalist” framework, the Mu‘tazilites’ interpretation was that acts attributed to the divine were allegoric, denying any possibility that mere humans could see or understand Allah in a material sense. Such a view, it seems, would be more favorable to the findings of modern science than the elaborate creation scenarios borrowed and enhanced from Judaism and Christianity. Nonetheless, the prevalent view of creation as a miracle has dominated Islamic cosmological views for well over a millennium.

Within the philosophical framework, several Muslim scholars have addressed the issue of how human life begins. An interesting example is provided in the 12th century Andalusian Ibn Ṭufayl’s fable, *Ḥayy Ibn Yaqzān*. Ibn Ṭufayl describes two scenarios for the appearance of the child Ḥayy on an equatorial island off the coast of India. One is a variant of the story of Moses found in the bulrushes, in which Ḥayy is placed in a tightly sealed ark by a king’s sister, who had a child against the will of her brother. Another account is given “by way of corroborating the alleged possibility of a man’s being engendered in this place without father or mother” (Goodman, 2009, p. 105). Drawing on the humoral theory of his day, Ibn Ṭufayl provides a rational explanation for spontaneous generation of Ḥayy from a perfectly located mass of clay. Through a process of fermentation, he said, the clay took on the shape of a man with bubbles forming, one of which was “divided in half by a delicate membrane and filled with a fine gaseous body,” at which point “the spirit which is God’s” sealed it in “a bond virtually indissoluble,” materially and spiritually (Goodman, 2009, p. 106). Ibn Ṭufayl continues with an elaborate description of how this fetus was formed outside a womb, returning to his creative anatomical model later in the fable when Ḥayy dissects his foster mother (a doe) to investigate why she is no longer alive. Although cast as a fable, this is no less a version of theistic evolution than the 20th century spiritual reconstruction by the Catholic father Teilhard de Chardin.¹⁴

Evolution Goes East: Debating and Defending Darwin in Arabic

As for the scholar Charles Darwin, he is a man of extensive knowledge, critical acumen, and skillful observation, known for clear and sound description. He is considered one of the most famous major scholars in the natural sciences, and his school of thought is greatly esteemed and very influential on people at the present time. (Al-Birbārī, 1876, p. 279)

When did Muslims first learn of Darwin’s ideas and the debate raging in Europe over evolution vs. creation? No doubt there were some Muslims living in Britain who read the daily papers, but the vast majority of the world’s Muslims in 1859 would have had no way of reading Darwin’s words or hearing a coherent account of his theory. As late as 1897, literacy in Egypt was only 5.8% overall and 21.6% for men in urban Cairo. A caveat is needed at the outset. It is virtually impossible to separate the earliest Muslim responses to Darwin in the Middle East from

those of Arab Christians, at least as known in the available literature. At first, there was no direct criticism of evolution as a scientific issue, as it was only considered vis-à-vis its implications regarding the explanation for species change rather than any connection to the supernatural origin of life demanded by faith. Those who saw Darwin merely as an atheist materialist or the proponent of “social Darwinism,” often echoing Christian rhetoric of the time, reacted predictably with a negative tone and rejection. Those convinced that true science could not contradict their sacred text saw the advances in Western technology as worthy of emulation, as long as there was room for the Creator at the beginning.

The first Arabic accounts of Darwin’s work in Arabic were promoted by Ya‘qūb Ṣarrūf and Fāris Nimr, who were Syrian Christians with ties to the Syrian Protestant College in Beirut.¹⁵ These appeared as early as 1876 in their journal, *al-Muqtataf*, which was a major conduit for European scientific ideas to Arab intellectuals.¹⁶ It must be stressed that circulation of the journal was minimal, with perhaps only a maximum of 500 subscribers between 1876 and 1885, after which the journal was moved to Cairo. Despite the journal’s limited readership, it appears that this article introduced what were to become the standard Arabic terms for “evolution” (*taṭawwur*), “descent” (*tasalsala*), “struggle for life” (*tanāzu‘ al-baqā’*), and Darwinism (*dārwinīyya*).¹⁷ In the first year of the journal, a Muslim student named Rizq Allāh al-Birbārī wrote an article attacking Darwin, based on a book in English by Protestant theologian Charles Hodge. For Hodge, the answer was plain: “[Darwin’s work] is Atheism.” Al-Birbārī echoes the contention of Hodge that acceptance of Darwinism was impossible for anyone who holds a teleological view of the ultimate origin of life.¹⁸ Not surprisingly, the first Muslim intellectual responses to Darwin’s ideas were filtered through this Protestant Christian religious lens.

The reception of Darwin’s scientific ideas was inextricably linked to the far more popular use of “social Darwinism,” exemplified in the work of philosopher Herbert Spencer. A Muslim or Arab Christian was likely to take the fuzzy notion of “survival of the fittest” as an imminent threat in an imperially bent world in which most of the Muslims outside Turkish sovereignty were under British, Dutch, or French colonial influence. As Marwa Elshakry argues in a major study on the issues surrounding Darwin and evolution, “Understanding Darwin independently of politics becomes almost impossible” (Elshakry, 2013, p. 43). If evolution was inevitably about progress, as measured by contemporary European standards, such an idea was more likely to cause theological conflict for Muslims than to thrive as a fitting scientific advancement. In addition, the lack of an educated Muslim public, even in many of the details of their own religion, along with low levels of literacy, ensured that the initial debate would be limited to those Muslim intellectuals most influenced, one way or the other, by Western culture.

It would be wrong, however, to view the early reception of Darwin’s ideas as uniformly anti-scientific or simply a critical plagiarism of Christian rejectionism. This is evident in a student protest at Syrian Protestant College following the dismissal of Professor Edwin Lewis, who had mentioned Darwin positively in his commencement address of 1882. One of the students who was also dismissed during this incident was Jurjī Zaydān, a Christian who founded the journal *al-Hilāl* in Cairo in 1892. Believing that “Arab backwardness” could be overcome by adopting Western science, Zaydān promoted a positive view of human evolution (Ziadat 1988, p. 14).¹⁹ In their 1882 obituary of Darwin, the editors of *al-Muqtataf* were able to separate the scientific merits of evolution as an explanation for speciation from the far more tendentious issue of creation, arguing that the scientific argument need not be materialist (Ṣarrūf & Nimr, 1882, pp. 2-6). This reconciliatory approach was echoed in British India by Sayyid Ahmad Khan in the 1890s (Riexinger, 2009, p. 219).

It is important to remember that the debate over Darwin's ideas and indeed the progress of science in Europe were largely unavailable in Arabic during the 19th century. Those Muslims who could read Arabic and had access to books more often than not read translations of commentaries on Darwin. One of the earliest such commentaries was the Syrian Christian Shiblī Shumayyil's 1884 translation of the earlier French translation of Ludwig Büchner's *Sechs Vorlesungen über die Darwin'sche Theorie von der Verwandlung der Arten und die erste Entstehung der Organismenwelt*, a commentary on Darwin, later published and annotated in his 1910 book.²⁰ Shumayyil reminisces that he first heard about Darwin's theory in 1871 while studying medicine in Damascus. After initially rejecting the idea that man descended from apes, he later learned in France that Darwin had proposed a single origin for all life.²¹

The first direct translation of Darwin's *On the Origin of Species* into Arabic was undertaken by Ismā'īl Maẓhar and published in 1918, though it included only the first six chapters of Darwin's work. The translation of four more chapters was subsequently added in 1928, and the full translation became available only in 1964.²² Darwin's *Origin of Species* is now readily available in Arabic, including a new translation published in 2004 by Majdī al-Malījī. This most recent edition, covering some 855 pages with a glossary of Arabic terms used for evolutionary terms in English, ignores the controversy over the text. Indeed, the foreword by Samir Sadie argues that Darwin's ideas are essential for modern science. "Every patient who goes for an open-heart surgery is indebted to the voyage of the Beagle," he declares (Al-Malījī, 2004, p. 23). Al-Malījī also translated Darwin's *Descent of Man (Nash'at al-insān)* in 2005, noting the difficulty in adapting the scientific terms into Arabic (Al-Malījī, 2005, p. 20).

Between Materialism and Modernity

So long as humanity exists, there will remain an unceasing struggle will not cease between dogma and free investigation, between religion and philosophy, a desperate struggle in which, I fear, the triumph will not be for free thought, because the masses dislike reason; alas, the nature of the struggle itself and will only be understood by the intellectual of the elite, and because science, however beautiful, it is, does not completely satisfy humanity, which thirsts for the ideal and which likes to exist in dark and distant regions that the philosophers and scholars can neither perceive nor explore. (Jamāl al-Dīn al-Afghānī, 1883, quoted in Keddie 1968, p.181)

The response to Darwin among Muslim intellectuals was unlike those in Europe and America because there was no contemporary corps of Muslim scientists in the modern sense. Thus, the issue within the Muslim discussion was not centered on the scientific merit of natural selection but upon the implication of a materialist worldview. This is prominent in Jamāl al-Dīn al-Afghānī's *Refutation of the Materialists*, originally published in Persian in 1881.²³ Considered one of the most prominent Muslim intellectuals in the latter half of the 19th century, al-Afghānī dismissed Darwin as a modern-day Democritus. "Only the imperfect resemblance between man and monkey has cast [the] unfortunate [Darwin] into the desert of fantasies," writes al-Afghānī sarcastically, further saying of Darwin that "in order to control his heart, he has clung to a few vain fancies" (Quoted in Keddie, 1968, p. 136). Al-Afghānī does not appear to have read Darwin nor to have understood the evidence presented, since natural selection is ridiculed as Lamarckian, which was the prevailing interpretation of evolution in France at the time. Indeed, misunderstanding the very mechanism of evolution Darwin proposed—the gradual change in physical characteristics of species due to natural selection for beneficial genetic mutation—al-

Afghānī asks, “Is this wretch deaf to the fact that the Arabs and Jews for several thousand years have practiced circumcision, and despite this, until now, not one of them has been born circumcised?” (Quoted in Keddie, 1968, p. 137). Darwin is but the foil here for any materialism which denies the deity central to Islam, Christianity, and Judaism. Evolution is dismissed summarily as necessarily corrupting morals and spreading vice, following the conservative Christian reaction to Darwin.

It is easy to read the provocative rhetoric of al-Afghānī out of context and reject it as readily as he does the materialist interpretation of evolution. But al-Afghānī was adamant that the issue was not a matter of choosing between Muslim science and European science. In fact, despite his rejection of Darwin, al-Afghānī asserted, “The truth is where there is proof, and those who forbid science and knowledge in the belief that they are safeguarding the Islamic religion are really the enemies of that religion” (Quoted in Keddie, 1968, p. 107). Indeed, the Muslim intellectual community believed, as the Christian proponents of Natural Theology did, that there can be no incompatibility between science and Islam. This sentiment is echoed by the Egyptian Muḥammad ‘Abdu, who promoted al-Afghānī’s ideas and argued for modern interpretation of Islam in harmony with the findings of science. “Men are created from one soul, which is humanity ... all men are brothers in humanity ... which is why it matters little if they claim their father is Adam or a monkey or something else,” concludes ‘Abdu in a commentary on the Qur’ānic verse “Oh men! Fear your Lord who has created you of one soul...” (Quoted in Elshakry, 2013, p. 175)

Thus, the stage was set for the acceptance of a form of theistic evolution within Islam. After al-Afghānī’s attack on materialism, the Syrian Muslim scholar Ḥusayn al-Jisr wrote his *al-Risāla al-ḥamīdiyya fī ḥaqīqat al-diyāna al-islāmīya* (*A Hamidian Treatise on the Truth of Islam*) in 1888. Al-Jisr argued that evolution could be compatible with creation. His book was well received, receiving the Ottoman sultan’s prize in 1891. The inspiration for al-Jisr’s harmonization of Islam and Darwin’s evolution was the work of Isaac Taylor, an English cleric, who argued that evolution could be reconciled with the Christian faith. Ironically, al-Jisr chose a suitable ally since Canon Taylor’s *Leaves from an Egyptian Notebook* (1888) provided a remarkably favorable account of Islam. Like al-Afghānī, al-Jisr’s main target was atheistic materialism, not the role of natural selection, which he saw as directed by God.²⁴ Al-Jisr believed that the Qur’ānic verses stating that all life comes from water (Qur’ān 21:30, 24:45) were consistent with Darwin’s model of the general process of evolution, though he firmly stated that humans and apes did not have the same origin (*al-insān lam yashtaqq huwa wa-l-qird min aṣl wāḥid*) (Al-Jisr, 2012, p. 315). In al-Jisr’s case, the basis for accepting some of the elements of the scientific theory of evolution was not the critical evaluation of the scientific evidence but rather the assumption that true science could not contradict the Qur’ān.

Interest in evolution was generated among a number of Ottoman Turkish intellectuals in the final two decades of the 19th century.²⁵ The earliest discussion of Darwin in Turkish was given by Munif Pasha, who founded the Turkish scientific journal *Mecmua-i Fünūn* (1862-1882) and also served as a Minister of Education. Münif Pasha did not view science as being in conflict with Islam—likely reflecting the fact that he was a member of a small minority of scholars with access to Western scientific sources. Hoca Tahsin Efendi (1811-1881) argued that the universe was created over billions of years and referred to evolution as a law that rules over the universe.²⁶ Like a number of Ottoman intellectuals fluent in German, he was influenced by Ludwig Büchner’s philosophical work, *Kraft und Stoff* (1855). Ahmed Midhat translated into Turkish John William Draper’s *Conflict between Science and Religion* (which first appeared in

English in 1874, and in French in 1875) between 1895-1900. Draper was critical of Christian rejection of Darwinism; Midhat likewise claimed that Islam was not in conflict with science. In 1913, Abdullah Cevdet made a similar argument, saying that anyone who condemned Darwinism as blasphemy was living in the Middle Ages (Bilgili, 2015, p. 565). A small number of late Ottoman scholars advocated a materialistic philosophy; neo-Kantian Baha Tevfik (1884-1914), for example, accepted modern science as being based on the law of evolution; he was especially influenced by the work of Ernst Haeckel (Sükrü Hanioglu, 2005, p. 69). Most Ottoman intellectuals encountering Darwin, like Izmirli Ismail Hakki (1869-1946), were willing to accept evolution as a scientific theory but not as materialistic. As Sibel Özbudun Demirer notes, “Far from being the object of pure scientific scrutiny, the arguments derived from evolutionist theses served more as rhetorical devices in the [endeavor] of progressing towards an advanced civilizational stage represented by Western nations” (Demirer, 2011, p. 115).

Muslims writing about the relationship between science and the Qur‘ān in the first part of the 20th century rarely dealt with the scientific evidence being accumulated. Most insisted that the Qur‘ān could not be in disagreement with modern science and urged fellow Muslims to accept both. This led to what Muzaffar Iqbal has labeled a genre of “scientific *tafsir*”²⁷ (Iqbal, 2007, p. 151). In his 1913 *Naqd falsafat Dārwin*, the Iraqi Shi‘a scholar Abū al-Majīd Muḥammad Riḍā al-Isfahānī argued that there was no conflict between the findings of modern science on evolution and the Qu‘ran as long as Allah was acknowledged as the creator (Al-Isfahānī, 1331 A.H.).²⁸ The focus of all these writings was on the harmony of science and religion but with the caveat that materialism and atheism were false and unwarranted.

Harun Yahya: Trashing Darwin on the Net

THE ONLY POWERFUL ANTI-DARWINIAN MOVEMENT IN THE WORLD IS THAT INITIATED BY HARUN YAHYA. Because Harun Yahya has won hearts all over the world with his rational accounts that are grounded in the Qur’an and based on clear and unequivocal scientific evidence. This global success of Harun Yahya’s IS BASED ON FINDINGS THAT ADDRESS THE HUMAN MIND AND SOUL AND THAT ARE CONFIRMED BY SCIENTIFIC EVIDENCE THAT CANNOT POSSIBLY BE PROVED OTHERWISE.²⁹

Until the last decades of the 20th century, opposition to Darwin and the scientific theory of evolution among Muslims was more or less limited to a few elite clerics and a few intellectuals fluent in Western languages until the last decades of the 20th century. Most Muslims were not exposed to the concept of evolution in their pre-university schooling, nor was the conflict between religious dogma and Darwin’s evolution played out in the public sphere. Given the religious inclination of most regimes with Muslim majority populations, at least in principle no matter how secular the regime, For example, there has never been the equivalent of a Scopes Trial in the Muslim world.³⁰ Given the religious inclination of most regimes with Muslim majority populations, at least in principle, no matter how secular the regime, this is perhaps not surprising. However, times have begun to change. No crusading anti-evolutionist Muslim is more visible today, especially in cyberspace, than a charismatic Turkish cyber entrepreneur, Adnan Oktar, who has created a universe of web-based anti-evolutionism under the pseudonym Harun Yahya. The digital web ring run in his name, which is available in numerous languages, is extensive, available in numerous languages, visually dynamic, and pervasive. If one surfs the mother site, harunyahya.com, the graphics are dazzling. The war on Darwinism is

evident from top to bottom, and the persona of Mr. Oktar is omnipresent. The official biography declares the well-groomed middle-aged man to be a “prominent Turkish intellectual.” With Oktar having no educational background in the sciences, the portrayal of “Harun Yahya” is all about image; there are eleven glossy photographs of the man on the first page of his webiography.

The story of Harun Yahya is, in fact, the main story. As spun in his authorized biography, Oktar has been persecuted in secular Turkey for openly preaching the oneness of God and the truth of the Qur‘ān. Like the prophet Muḥammad (and this is an important part of the story for Oktar), he had few followers at first. He now oversees a media empire surrounded by a cult-like following. In 1986, Oktar was arrested and eventually moved to a mental ward, where he claims to have been tortured and drugged. After nineteen months, he was released and finished his first book on the falsity of evolution. In 1991, he was taken in by police a second time, this time on the charge of possession of cocaine, the result, as he claimed on his website, of a conspiracy against him due to the fact he was writing an exposé at the time on freemasonry. He was arrested yet again in 1999 and released; all of this misfortune is presented on his website as Allah’s testing of a faithful servant. However contrived, his efforts have yielded results, such as his successful campaign to block evolutionary biologist Richard Dawkins’s official website in Turkey in 2008.³¹

To say that Adnan Oktar is a controversial figure in Turkey is an understatement. He is viewed by most Turks as a cult figure.³² One of the most devastating portraits of Oktar’s charismatic persona is by Edip Yüksel, a Turkish intellectual who tutored Oktar in the early 1980s.³³ According to Yüksel, Oktar uses religion as a scam for personal gain, motivated in large part by his claim to be the end-time Mahdi, a type of Muslim redeemer.³⁴ Oktar has been accused of bilking the children of the wealthy and of sexual predation. According to Yüksel, “His sexual abuse of girls around him has been the frequent topic of Turkish media and acknowledged by the defectors. He reportedly claims right to have sexual intercourse with every female member of his cult. He has even invented a name for those females that roughly translates to “motor” (portraying them as the “engine” of his propaganda machine).” While Oktar’s reputation in Turkey is widely known and debated, the average internet surfer rarely encounters this criticism.³⁵

In addition to his websites, Oktar founded the Bilim Arastirma Vakfi (Science Research Foundation), which campaigned against the teaching of evolution in Turkey. This organization began as a result of a report commissioned for the Turkish Ministry of Education in 1985 by Adem Tatli. The report was written using the anti-evolution materials of the American Institute for Creation Research, based in California. As Kelly James Clark notes, “It is deeply ironic, then, that Yahya’s arguments are inspired by (and almost copied from) the Christian creationist and Intelligent Design movements in the United States”³⁶ (Clark, 2014, p. 237). In Turkey, the battle between anti-evolutionists and scientists has paralleled the debate over secularism in Turkey in the past three decades.³⁷ The Turkish Academy of Sciences, like its American counterpart, has strongly condemned the attacks on science, recognizing that such attacks are an import from Christian fundamentalist creationists:

The true purpose of these attacks on accumulated scientific tradition, which is centuries old, is to bring up unthinking, unquestioning, and uncritical individuals who do not test ideas and who accept dogmatic and incorrect information exactly as [it is] given to them. It is obvious that those circles who conduct an open or covert war against secular government, freedom in education, and advancement in science and technology in our

country do not desire independent-thinking civilized people. These segments of society initially work towards including non-scientific beliefs along with scientific ideas in educational curricula, and in the long term, they have the goal of totally eliminating the theory of evolution from textbooks. (Quoted in Iqbal, 2003).

This has not stopped government officials of the ruling AKP party in Turkey from criticizing evolution (Paulson, 2010). In June, 2017, the new national curriculum in Turkey announced the removal of Darwinian evolution from ninth grade biology classes starting in 2019³⁸ (Özkan & Kolcu, 2017). One study in Turkey indicates that only 25% of adults agreed with the statement that “human beings, as we know them, developed from earlier species of animals” (Hameed, 2008, p. 1638).

The complete works attributed to Harun Yahya include over 300 books available in sixty languages; despite being repetitive and derivative, the books were clearly not all written by one person. Scrolling through the various websites associated with Harun Yahya (some 550 are claimed), there are myriad resources available, including downloads, over 80 video documentaries, posters, and even children’s games.³⁹ There is also a television channel devoted to his teachings, with numerous excerpts available on YouTube.⁴⁰ The rhetoric on the numerous Harun Yahya websites is propaganda, supported by comments sent in by dedicated followers and unlikely to influence trained scientists. The creators of these sites aim for the visual, usually without proper citation.

The most aggressive outreach of Harun Yahya’s empire came with the visually impressive but intellectually void *Atlas of Creation*, sent to some 10,000 scientists, museum directors, and political leaders in Europe and America in 2007. A 43 mb pdf of this book is available free on the website. Like on the websites, multiple images of Oktar appear on the title page of the document. From the very beginning, the rhetoric is polemical, including the claim that “all the branches of science” have “revealed [extensive proof] that totally undermine the theory of evolution”⁴¹ (Harun Yahya, 2007, p. 15). The first volume of the atlas focuses only on fossils, claiming that fossil evidence is the major proof that Darwin was wrong. Not only is this claim absurd, scientifically, as fossil evidence indeed supports evolution, but it ignores the fact that the fragmentary fossil record has been superseded as the primary proof of evolutionary theory since the discovery of genetics. Few scientists, apart from Richard Dawkins, have bothered to respond to the text in formal articles; most are probably bemused at how pathetic Harun Yahya’s claims are.⁴²

The website page devoted to “The Collapse of Darwinism in Europe” claims that as a result of this book, belief in creation is “snowballing” and that the theory of evolution is on its “last legs,” with massive numbers of Europeans turning to Allah in waves.⁴³ The free movie on the website is worth watching for its unmitigated propagandic content. “Evolutionist are in panic,” proclaims the conclusion. And we are told that Charles Darwin is now the founder of the greatest fraud in the history of science. The content on the websites, which provide the corpus of books attributed to Harun Yahya, could be, and perhaps should be, mistaken for satire. How else can any educated person react to the following description of the book *Darwinist Dictatorship*: “Darwinism is a Shamanist religion. A secret fascist organization was founded in order to defend this pagan religion derived from the Sumerians”? Nevertheless, this lunatic fringe is presented as fact, and a public woefully ignorant of science and history is not immune to its message, no matter how bizarre.⁴⁴ This is especially the case in Turkey, argues Taner Edis, since Harun Yahya’s creationist literature “looks better packaged than books popularizing mainstream science” (Edis, 2007, p. 126). The Turkish Harun Yahya books are written in less formal,

popular language, appealing to young people, and are readily available in stores and exported in translation as school texts for Muslims elsewhere.

The websites, books, and films bearing the Mahdi label of Harun Yahya focus on Darwinism, but despite the claims of scientific refutation, the thrust of the entire enterprise is about conservative morality and conversion.⁴⁵ Following the argument of their Christian fundamentalist counterparts, according to followers of Harun Yahya, Darwinism is part of an atheistic conspiracy against organized religion, alongside communism, and freemasonry.⁴⁶ The audience targeted by Harun Yahya is not just Muslims, although the Qur‘ān is presented as the ultimate scientific text, but also individuals who are dissatisfied with the other two monotheisms. Not surprisingly, anti-Semitic dismissal of Zionism and holocaust denial figure into the mix.⁴⁷ In effect, all the evil in the world is symbolized in the person of Darwin. In a deceptively titled book, *Islam Denounces Terrorism*, even the 9/11 attacks on the Twin Towers is laid at the feet of Darwinism. Harun Yahya’s crude creationism appeals not because it has scientific merit but because it speaks to Muslims who feel their faith is under threat.⁴⁸

Christian fundamentalist attempts to introduce “creation science” into American public schools have largely been replaced by calls for the teaching of “intelligent design” as a supposedly religion-free alternative to creationism that can be deemed labeled “scientific.”. In the 2005 attempt in the US state of Kansas to instate the teaching of intelligent design in public school curricula, one of the experts called to testify was a Turkish Muslim named Mustafa Akyol.⁴⁹ “As a Muslim he seemed suitable to demonstrate that ‘Intelligent Design’ is a reasonable scientific theory and not Christian crypto-theology,” notes Martin Riexinger. (2008, p. 110) Akyol learned about intelligent design from a visit to Seattle’s Discovery Institute, a major player in promoting the idea.⁵⁰ He was originally affiliated with Oktar, but then went a separate way as a media pundit on multiple topics. Intelligent design is appealing to many Muslims, since it allows for the role of Allah as creator.⁵¹

Faith vs. Science in Contemporary Muslim Perspective

Clearly, the notion that science confirms deeply held spiritual beliefs is attractive to many different religious communities. Is there, then, anything distinct about Muslim efforts to find science in the Qur‘ān? Why should Muslim distortions of science be especially worthy of attention? (Edis, 2007, p. 107)

Since Muslim scholars became aware of Darwin’s theory of evolution, the main objection has been that it appears to reject the creative power of God and replace theism with atheistic materialism. Until recently, especially before the internet presence of Harun Yahya, there was little interest among Muslims in a “scientific creationism” or the flood geology promoted by fundamentalists like Henry Morris.⁵² Indeed, the young earth “Omphalos” argument of some Christian Fundamentalists is absent from Muslim literature.⁵³ Most Muslims trained in the sciences have had little problem accepting the framework of evolution, although only a few have written about the issue. Unfortunately, clerics with little or no knowledge of science and a tendency to accept the miraculous as real are the most likely to promote outdated cosmologies. A prime example would be the former Grand Mufti of Saudi Arabia, ‘Abd al-‘Azīz ibn Bāz (d. 1999), who, in 1964, first published a book claiming that the sun must circle the earth because that is what the Qur‘ān says. The most egregious part of his text is that he charges any Muslim who does not accept this teaching as guilty of apostasy (*kufur*) and error (*dalāl*)⁵⁴ (Ibn Bāz, 1982, pp. 72-73). In 2001, an official Saudi fatwa banned the Japanese card game Pokemon since it

was said to promote Darwinian evolution.⁵⁵ Ironically, despite the official condemnation of evolution in Saudi Arabia, Saudi biologists have received funding to pursue evolutionary research.⁵⁶

Given the conservative nature of Saudi Arabia, the example of Ibn Bāz should be seen as the ongoing presence of traditionalist distrust of modern science based solely on pre-modern exegesis of Islam's sacred texts. What is often styled Muslim "fundamentalism" or "Islamism," however, is a modern synthesis that rejects the perceived "materialist" and "immoral" basis of Western culture while embracing the pragmatic findings of science and technology. Thus, Islamic political parties like Hezbollah and Hamas have little interest in attacking Darwinism when they have a practical threat so close to home. Most contemporary rejections of Darwin, and by extension evolutionary science, do not rely solely on scripture or interpretive precedent but on the claim of "scientific" refutation. Harun Yahya is surely the most visible of this genre, although his approach is as charismatic leader of a cult rather than spokesman for a major Islamic religious sect.

Ironically, some of the more prominent Muslim voices raised in the diaspora against materialist evolution come from recent converts. A case in point is Shaykh Nuh Ha Mim Keller, an American who converted to Islam at the age of 23 while studying at al-Azhar in Cairo.⁵⁷ Although best known for his English translations of Arabic texts, Keller is also a frequent speaker in American Muslim forums. Keller claims he was convinced of evolution as a scientific fact until he read Darwin's *Origin of Species* and saw that Darwin had implied that his theory was not falsifiable due to the imperfection in the fossil record. Thus, Keller assumes it cannot be scientific, ignoring the fact that evolutionary theory has itself evolved and that there are multiple independent lines of evidence, that the relatively meager fossil record no longer provides the sole means of substantiating Darwin's theory. For Keller, not only is evolution "intrinsically impossible," but speciation, as described by Darwin's natural selection, is "incompatible with the Qur'ānic account of creation," in which Adam is said to be created from clay. Keller leaves no room for a Muslim to accept the scientific model of evolution, as he explains:

As for the claim that man has evolved from a non-human species, this is unbelief (*kufur*) no matter if we ascribe the process to Allah or to "nature," because it negates the truth of Adam's special creation that Allah has revealed in the Qur'ān. Man is of special origin, attested to not only by revelation but also by the divine secret within him, the capacity for *ma'rifa* or knowledge of the Divine that he alone of all things possesses. (Keller, 1996)

This knee-jerk rejection of evolution and Darwinism continues the argument made by al-Afghānī in the 19th century that one either accepts the religiously sanctioned creation scenario or slides into unbelief with materialism. One prominent supporter of the idea that the Western concept of evolution is nothing more than atheistic materialism is Abū al-A'lā al-Mawdūdī, who, like his predecessors, confuses Darwinian theory with the earlier simplistic notions of Lamarck.⁵⁸ Thus, Maqsood Jafri lays out the insurmountable binary:

The atheists and the materialists negate the existence of God and consider human life and even mind to be a form of matter. Darwin's theory of Evolution has influenced the minds of people, and their character has been influenced as well. Such people do not believe in divine morals and values. They do not believe in God, soul, and Hereafter. (Jafri, n.d.).

This is exactly the same argument used by Christians who view any kind of evolution as materialist. A contemporary review of Darwin's *Descent of Man* in the *Dublin University Magazine* charged that Darwin was attempting "to displace God by the unerring action of vagary" and had "resolved to hunt God out of the world"⁵⁹ (White, 1965[1896], p. 96). For

Fundamentalist Henry Morris, creator of the Institute for Creation Research, the choice is between believing the Bible or believing evolutionary theory. Not only is evolution dismissed as necessarily atheistic and anti-Christian, it is also the “pseudo-scientific rationale of the host of antisocial immoral practices that are devastating the world today (abortion, the drug culture, homosexual activism, animalistic amorality, and so on)” (Morris, 1986, p. 41). The term “Darwinism” in either context is dismissed as a cover for atheistic materialism and thus a threat to each theism.

Given the lack of detail about the creation of Adam in the Qur‘ān, there is intellectual space for a theistic Islamic account of evolution. Most trained Muslim scientists or those willing to accept scientific theories on evolution as plausible probably do not see a problem reconciling science with their faith as long as the science is divinely directed. It is interesting to note that the official high school biology textbooks in Pakistan, as noted by Salman Hameed, present evolution in general as science, simply adding a relevant Qur‘ānic verse (“And He is who had produced you from a single being”)⁶⁰ (Hameed, 2009a). Munir Attaullah, a Pakistani intellectual, reflected on the bicentennial of Darwin’s birth by noting that Darwin’s theory makes no claims about the actual origins of life; simply rejecting the scientific evidence for evolution is no different than denying Galileo’s insight about the falseness of a geocentric theory (Attaullah, (2009, p. A7). Ghaffar Hussain argues, “Denying [evolution] not only puts Muslims out of touch with established science, it puts them out of touch with their own scientific heritage” (Hussain, 2013). The Algerian astrophysicist Nidhal Guessom (2011) argues that Islam can be reconciled with the sciences through an even-handed “quantum” model of harmony.⁶¹ There is also a contingent that argues for the evolutionary big bang origin of the universe and emergence of humans through speciation as in line with Qur‘ānic interpretation.⁶²

Central to virtually all Muslim reactions to the scientific arguments for evolution is the unshakable principle that there can be no real conflict between the verifiable findings of modern science and proper interpretation of the Qur‘ān. An interesting example of theistic evolution in a Muslim context comes from what might seem an unlikely place. Two Iranian clerics, Muhammad Husayni Behishti and Javed Bahonar, jointly wrote a lengthy book on Islam with a section devoted to the theory of evolution. Behishti was appointed by Ayatollah Khomeini to be the chief of the Supreme Court after the Islamic revolution in Iran, and Bahonar served briefly as Prime Minister. Both men were assassinated in 1981 (Ezzatyar, 2016, p. 89). Drawing on the Qur‘ān (Q 16:65 and 51:21), they assert that “the life of every living being, whether it is the result of any evolutionary process or not, is a sign of Allah.” (Behishti & Bahonar, 1982, p. 164). After summarizing Darwin’s model of natural selection, the authors agree that the evidence supports transformation of species rather than the old idea of creating fixed species. (p. 171). Since the Qur‘ān states that the divine spirit was infused into Adam’s material body, which was made of clay, this can be viewed as a type of mutation under divine guidance.⁶³ A comparison is made to the virgin birth of Jesus, which Muslims accept, as a miraculous event that does not invalidate the observable process of procreation. The conflict is thus said to be not with the teaching of the Qur‘ān, but with the corrupted text of Genesis.

Behishti and Bahonar are not alone in arguing that a divine creation by Allah need not be in conflict with evolutionary science. The Egyptian scholar Muhammad Shahrur, an engineer by training, argues that the goal of Islamic interpretation “is to establish a constant harmony between objective reality, which we perceive via our senses, and the theories and laws that we derive from reading the Qur‘ān” (Quoted in Christmann, 2009, p. 149). He notes that there are absolute truths proven by science, such as the fact that the earth rotates around the sun, and there

are cases in which a scientific theory is “not fully proven,” as in the case of Darwin’s theory of evolution. However, he is critical of the biblical scenario of Eve being created from Adam’s rib. He accepts the origin of life as single-celled organisms. “Only when evolution had reached the stage by which animals and humans reproduced life through procreative intercourse do we witness a (simultaneous) split into a male and female sex. In evolutionary terms, the traditional creation story simply does not make sense” (Quoted in Christmann, 2009, p. 276). This approach is not unlike that of Subboor Ahmed, who argues in a 2017 Youtube video that no scientific theory, including evolution, can ever be absolutely true.⁶⁴

Another Egyptian scholar, ‘Abd al-Ṣabūr Shāhīn, was critical of Shaḥrūr’s acceptance of evolution in principle and devised a theological argument that a distinction should be made between the Qur’ānic usage of *bashr*, which he interprets as life in general, and *insān* as humanity (Shāhīn, 1998, p. 122; ‘Afāna, 2008, pp. 99-105, 163-164).⁶⁵ Based on an analysis of thirty-five passages in the Qur’ān relevant to creation, he suggests that the creation process could have taken millions of years to reach Adam and Eve. He suggests that both Adam and Eve would have had parents, arguing that the Qur’ānic verse saying humans came from *mā’* is not in reference to water but to semen and that other life came earlier from *tirāb*, which he defines as the basic chemical elements in the body.

At times, the desire to read modern science into the Qur’ān leads to pseudoscientific claims, not unlike those made by fundamentalist Christians defending the accuracy of the Bible. In one of the more bizarre scenarios, Darwin is rehabilitated as a Muslim. This is the thesis of the so-called Shajara Code,⁶⁶ (Hassan, 2013) propounded by Sudanese physician Imad Hassan. In this theory, the Qur’ān is seen as encoding current scientific discoveries, including Darwin’s theory of evolution. Thus, “The idea of Charles Darwin of the ‘Evolution and the law of natural selection’ was an ‘evolution’ of ancient Islamic theories, not innovation!” Hassan claims that Darwin borrowed the idea that the monkey was the last animal created before man from the 12th century Ibn ‘Arabī, whose work had been read by Darwin’s grandfather.⁶⁷ But it is more than simple diffusion of ideas. “By this approach, Darwin acted like a divinely inspired messenger,” argues Hassan. He adds:

The question of who inspired Darwin to reach his findings and keep to the limits of his expertise, highlighting the prominent missing link, must be the one who revealed the missing link in the Qur’ān and Torah before, and provided all the needed detailed evidence on how the Intelligent Design took place. Darwin was a believer in God but not in the way the current Bible presented Him. Only the creator of evolution could have revealed the missing link that completed this ongoing, originally Islamic theory and confirmed all its details.

In this way, Darwin must be a Muslim, “just unaware that the word Islam, in its basic meaning, refers to a state of mind, an instinctive humble submission to the supreme creator, not a club that requires membership!” Hassan’s theory is not as unique as one might suspect, since Muhammad Hamidullah claimed in a 1980 lecture in Pakistan that Darwin knew and wrote in Arabic (Iqbal, p. 2003).

Conclusion

The question remains of remains how Islam can be reconciled with scientific theory? . Or as Inayat Bunglawala asks, “Darwin and God: can they co-exist?” “If its encounter with evolution is not to turn out to be Islam’s Galileo moment,” suggests Bunglawala, “then Muslim scientists have a crucial responsibility to engage in frank discussion about it with students and

with religious scholars in an open and honest manner to help address a dogmatic aloofness which can only harm future Muslim science students.” (Bunglawala, 2006). This Muslim author makes a point that many Christians have also made. By insisting on a dogma that is not rational within a scientific worldview, the danger exists that the sincere Muslim or Christian will throw out the moral baby with the exegetical bathwater. If Muslim students blame “Islam” as out of step with modernity, then dogmatic denials of scientific findings will only encourage educated people to leave their faith for a secular view of life.

In fact, Muslim scientists and intellectuals do defend the importance of Darwin’s ideas as established by scientific evidence. At a conference in Alexandria, Egypt, the medical scholar Dr. Muḥammad Rafīq argued that acknowledging the important role of Darwin is necessary as a foundation in scientific knowledge and the basis for all modern medical progress (Al-Ḥamāmiṣī, 2009). At the same conference, Dr. Muṣṭafā Fahmī stated that evolution is not just a theory (*nazarīya*) but scientific truth (*ḥaqīqa ‘ilmīya*). Scientists who happen to be Muslim are not leading the apologetic assault on evolution. The opposition by clerics and ordinary individuals stems as much from a lack of knowledge about what “evolution” is as it does from the conviction that as a Western scientific idea, it must be denying any role for a creator or God. With increased access to cyberspace, Muslims can readily find accurate information in Arabic and to a certain extent in other relevant languages on Darwin and modern evolutionary theory, so future responses will be interesting to watch. Unfortunately, there is also easy access to the anti-evolution websites of Harun Yahya and Salafi clerics who defend creationism.

In recent years there have been several debates and seminars about the relation of Islam and evolution. In October, 2009, a conference was held at Hampshire College in Massachusetts entitled “Darwin and Evolution in the Muslim World.”⁶⁸ Nine speakers discussed the spread of Darwin’s theory and its reception among Muslims in India, the Middle East, Pakistan, and Turkey. In January, 2013, the Deen Institute hosted panels about with the title “Have Muslims Misunderstood Evolution?”⁶⁹ Negative criticism by several Muslim student organizations forced the Deen Institute to shift the venue from Imperial College London to a conference center of the University of London, without the support of any formal group of Muslim students.

Both the long history of intellectual thought by Muslims and contemporary progressive interpretation of sacred writings suggest that Islam, like Judaism and Christianity, is capable of thriving without recourse to the decidedly irrational. Most Muslims no longer believe in a flat earth or that the earth is at the center of the celestial sphere. Even where Islamic law is practiced in its most conservative mode, the once sanctioned institution of slavery is no longer accepted, despite the recent atrocities of ISIS in Iraq and Syria. The voices sampled here are largely independent and increasingly diverse through the medium of cyberspace. Fortunately, unlike the case with Catholicism, which resisted both Galileo and Darwin in an official sense, there are no universally recognized institutional authorities telling Muslims how they must believe science. Unfortunately, even the major Arabic language media at times interpret new scientific discoveries as discrediting Darwin, as happened in a posting on al-Jazeera reporting on the early hominid known as *Ardipithecus* (al-Jazeera, 2009).⁷⁰ The headline suggests that Darwin’s theory is disproved because *Ardipithecus* is not as chimp-like as later hominids. A Muslim geologist, Dr. Al-Najjār, is quoted as saying that this will allow scientists to return to their senses and not reject religion. He rejects an age for the earth of millions of years but does suggest that creation may have happened as many as 400,000 years ago.

There is an extensive literature of claims that the Qur’ān is vindicated by science, but much of this is easily dismissed as naïve or even deceptive. The London-based scholar Ziauddin

Sardar is critical of such work, suggesting that it reveals an “inferiority complex” in the Muslim mind (Sardar, 2011). “Any attempt at reading science in the Qur‘ān makes the eternal scripture subservient to science, and it elevates science to the level where it becomes the arbitrator of what is and what is not Truth,” he insists. For Sardar, the Qur‘ān is book of ethical guidance rather than a reservoir of modern science. There is a grave danger is relying on a specific scientific theory or finding to corroborate the Qur‘ān. “And what if a particular theory, which is ‘confirmed’ by the Qur‘ān and is in vogue today is abandoned tomorrow for another theory that presents an opposite picture? Does that mean that the Qur‘ān is valid today but will not be valid tomorrow?” he asks.

Ultimately, it is not a battle over science, but interpretation of the Qur‘ān, statements of the prophet, and centuries of theological and scientific discussion in the broad and diverse heritage of Muslims. There are numerous publications and websites that promote supposedly “scientific” miracles in the Qur‘ān, and these will not disappear any sooner than the plethora of Christian creationist resources.⁷¹ A Muslim scientist can, like a Christian or Jewish scientist, maintain belief in God as the ultimate creator of the universe without having to literally accept the story of Adam and Eve. Importantly, this is an internal war on error that must be waged between and among Muslims; no argument can be imposed from the outside.

Notes

1 My translation.

2 For information on anti-Islamic Evangelical and Fundamentalist rhetoric, see Varisco (2007, pp. 207-230).

3 In the context of the 19th century, the concept of “materialism” primarily referred to what was perceived as an attack on traditional religious interpretation of a divine origin for humanity, both in Christianity and Islam. In both cases it was the idea that evolution could occur without divine origin that was seen as a problem. This was the thrust of the rejection of Darwinian evolution by the Islamic scholar Jamāl al-Dīn al-Afghānī, as analyzed by Keddie (1968).

4 Ironically, Christian missionaries preached a “gospel of science” in attempting to convert Muslims, inspiring an interest among Muslim intellectuals in science but not in Christianity; see Elshakry (2013, p. 50).

5 According to Iqbal (2007, p. 155), “For all practical purposes, Darwin did not exist in the Muslim mind until the first quarter of the twentieth century.”

6 See <https://www.ipsos.com/en-us/news-polls/ipsos-global-dvisory-supreme-beings-afterlife-and-evolution>.

7 A conference organized by Salman Hameed and held at Hampshire College in October, 2009, explored the impact of Darwin on Muslim thinking. The sessions are available as webcasts at

<http://evolutionandislam.hampshire.edu/conference-program>. The Arabic Wikipedia article on Darwin, translated from the English, is, surprisingly, quite accurate and one of the most accessible introductions to Darwin’s evolution in Arabic online.

8 I do not discuss the influence of Western philosophy and secularism in the 20th century; this is covered by Howard (2011) in a perceptive analysis of how science was perceived among Muslim intellectuals. For a lengthy overview of the reaction to Darwin and other aspects of Western science from 1850 to the Arab Spring, see Livingstone (2018).

9 For an overview of the Qur‘ānic view of creation, see Peterson (2001) and Chipman (2001).

10 For details on Islamic views of Adam and Eve, see Schöck (2001, 1993).

11 For a selection of Qur‘ānic passages and Islamic traditions about creation, see Shāhīn (1999) and ‘Afāna (2008).

12 For a concise summary of the variety of Jewish and Christian sources that may have influenced Islamic scholarship, see the anthology produced by Kvam, Scheuring, and Ziegler (1999).

13 For an overview of the evolution of Mu‘tazilite thought, see Martin, Woodward, and Atmaja (1997).

14 Like Ibn Ṭufayl, de Chardin combines a philosophically theological approach with a scientific argument. Ibn Ṭufayl would no doubt have little to disagree with in his Christian counterpart’s remarks, written on the eve of World War II, near the end of *The Phenomenon of Man* (de Chardin, 1959, p. 294): “The universe fulfilling itself in a synthesis of centres in perfect conformity with the laws of union. God, the Centre of centres.”

15 Ya‘qūb Şarrūf (1852-1927) was in the first group of graduates from the Syrian Protestant College. Although born into Catholicism, he converted to Protestantism. Surveys of the early Arabic references to Darwin can be found in Elshakry (2013) and al-‘Azmi (2016). There were earlier references to Darwin in Ottoman Turkey, including mention of evolution in the journal *Mecmua-i Fünūn* in 1863, as noted by Demirel (2011, pp. 111-129).

16 For information on the coverage of evolution in al-*Muqtaṭaf*, see Glass (2004, pp. 415-434).

17 For a detailed analysis of the role of translation in communicating Darwinian evolution, see Elshakry (2013, pp. 261-305).

18 See al-Birbārī (1876:280), where he notes that Darwin had no knowledge of Allāh and his theory was an incitement to unbelief (*kufṛ*). The following year a similar dismissal of Darwin was made by Bishāra Zalzal (1877:203).

19 Zaydān published a favorable biography of Darwin in his journal *al-Hilāl*, (1 October 1894, pp. 81-86). For further information on the Lewis affair, see Farag (1972, pp. 73-83).

20 The French edition is *Science et nature: essais de philosophie et de science naturelle*, translated by Augustin Delondre (Paris: [Germer Baillière](#), 1866).

21 Shumayil is sometimes compared to Thomas Henry Huxley, Darwin’s bulldog, for his promotion of Darwin’s ideas in Arabic.

22 The initial translation by Maẓhar (1918) was published in Cairo. Maẓhar was an ardent proponent of Darwinian evolution until his death in 1963. For more on his life, see al-‘Azmi (2016).

23 The Arabic translation was made in 1886 by Muḥammad ‘Abdu and entitled *Al-Radd ‘alā al-dahriyīn* (A Refutation of the Materialists). For more information, see Kalin (2007) and Keddie (1968). Livingstone (2018) defines al-Afghānī as a neo-Mu’tazilite.

24 There is a lengthy discussion of the dangers of the materialists (*al-māddiyūn*) given by al-Jisr, (2012, pp. 257-359). For an analysis of al-Jisr’s work, see Ebert (1991, pp. 138-161). For an overview of the rejection of materialism in the region, see Edis and BouJaoude (2014, pp. 1663-1689).

25 For a discussion of late Ottoman views on evolution, see Ihsanoglu (2011, pp. 148-174), Bilgili (2015, pp. 565-582) and Demirel (2011).

26 His text was titled *Tārīh-i Tekvīn yāhūd Hilkat* (The History of Genesis or the Creation), and it was originally published in 1893. Harun Yahya blames Hoca Tahsin Efendi, among others, for spreading Darwinist ideas over the Ottoman Empire; see <http://www.harunyahya.com/en/Articles/236573/During-the-Time-of-Abdul-Hamid-Darwinism-and-Materialism-Spread-to-Every-Corner-of-the-Ottoman-Empire-During-this-period-the-Ottoman-Empire-and-the-Islamic-World-were-Fragmented> (accessed August, 2017).

27 For more information on “scientific tafsir” see Baljon (1961, pp. 88-98 and index, s.v. Darwin).

28 Al-Isfahānī (1331 A.H.). He provides an analysis of both natural selection (*al-intikhāb al-ṭabī‘ī*) and sexual selection (*al-intikhāb al-jinsī*) on pp. 132-154.

29 From the Harun Yahya website: <http://m.harunyahya.com/tr/works/12561/The-guardian-Darwinism-in-Britain-has-collapsed> (accessed August, 2017)

30 The 1925 Scopes Trial, held in Dayton, TN, in the United States, tried substitute teacher John Scopes for violating the state’s law against teaching evolution in public schools. The trial publicized the conflict between modernists (those who asserted that evolution was not incompatible with religion) with the fundamentalists, who believed that Darwin’s evolution contradicted the word of God, as presented in the Bible. Scopes was found guilty, and the state’s anti-evolutionary stance was upheld. For information about this trial, see Jeffrey P. Moran (2002).

31 This was reported in *The Guardian*, (September 18, 2008). Electronic document: <https://www.theguardian.com/world/2008/sep/18/turkey>.

32 The journalist Steve Paulson (2010) interviewed Soli Ozel, a professor of international relations at Istanbul University; Ozel “called Harun Yahya’s organization “cultish” and said that it entraps young men and women and turns them against their families.” In a move that is about as cultish as one can get, Adnan Oktar offered, in 2008, 10 trillion Turkish lira—an astronomical figure that even his well-funded empire surely could not actually furnish—to anyone “who produces a single intermediate-form fossil demonstrating evolution.”

33 Edip Yüksel is an American citizen of Kurdish/Turkish descent. He has written extensively on the Qur’ān and Turkish politics. His website and blog can be accessed from <http://19.org/blog/edipyuksel/> (accessed August, 2017). For his criticism of Oktar, see Edip Yüksel (n.d.).

34 As is the case in Christianity, Islamic eschatology predicts a number of figures who will rise up before what in Islam is called “The Day of Judgment” (*yawm al-qiyāma*). The term *Mahdī* literally means “the guided one” and refers to an individual who will bring justice to the world and defeat the evil man known as Dajjāl just before the final judgment. For more information on the Mahdī, see Cook (2008).

35 For critiques of Oktar, see Hameed (2009b); Riexinger (2008); Solberg (2013); and François Tremblay (2002). Websites devoted to exposing Oktar include “Who is Harun Yahya?”

(<https://whoisharunyahya.wordpress.com/harun-yahya-tries-to-hide-his-past/>) and critiques by Muslim scholars, such as Sheikh Imran Hosein,

36 This point is also made by Howard (2011, pp. 5-6).

37 Peker, Comert, and Kence (2010) assess the impact of the anti-evolution campaign in Turkey.

38 In 2015, The Ecology and Evolutionary Biology Society of Turkey was founded, featuring scientific contributions by Turkish scientists. <https://ekoevo.org/society-for-ecology-and-evolutionary-biology-turkey/>, but its influence is hard to gauge.

39 The URL titles are clever, including darwinisminruins.com, darwinismisso19thcentury.com, whydarwinwaswrong.com, darwinismssocialweapon.com, ambersdenydarwin.com, and darksidedofdarwinism.com.

40 The television network can be reached at <http://en.harunyahya.tv/>; the main YouTube site is at <https://www.youtube.com/channel/UCoxzJuC8gLSB0DbZtwsMcZw>.

41 Harun Yahya (2007:15). The URL for the download is [http://harunyahya.com/en/Kitaplar/4066/Atlas Of Creation - Volume 1-](http://harunyahya.com/en/Kitaplar/4066/Atlas_Of_Creation_-_Volume_1-).

42 Richard Dawkins responded in a video: <https://www.youtube.com/watch?v=1L5TD3nwXXA>.

43 The URL is <http://www.atlasofcreation.com/en/Presentations/20855/Collapse-of-Darwinism-in-Europe>.

44 Western writers are also not always aware that Harun Yahya is not a serious scholar. Edis (2007, p. 131) notes that Yahya is referred to as a “top” Muslim scientist in *The Complete Idiot’s Guide to Understanding Islam*, a book which seems to live up to its title. See also the lack of critique by the Center for Islamic Sciences: <http://www.cisca.org/voices/h/Harun%20Yahya-f.htm>.

45 As Hameed (2008, p. 1637) observes, “The focus of his opposition is on the social and cultural threat posed by evolution in the form of materialism and atheism.”

46 Among Christian fundamentalists making the same claim is Jack Chick, who died in 2016. His tracts and books against communism, freemasonry, Islam, and a variety of other issues are archived at <http://www.chick.com/>.

47 This mixing of current politics is also found in the wider range of contemporary apocalyptic writings by Muslims; see Cook (2008, pp. 18-30).

48 This can be read at the website <http://www.harunyahya.com/en/Books/735/islam-denounces-terrorism>.

49 His testimony is recorded online at <http://www.talkorigins.org/faqs/kansas/kangaroo9.html>. For more information on Akyol’s position, see <http://www.hurriyet.com.tr/getting-creationism-right-11205621>.

50 The Discovery Institute (<http://www.discovery.org/id/>) promotes the work of Michael Behe, a biologist whose book *The Black Box* (2006) argued for “intelligent design” without theological reference. For criticism of Behe, see the reviews at Talk Origins, at <http://www.talkorigins.org/faqs/behe.html>.

51 See, for example, Rahman (2012).

52 The main text is by Whitcomb and Morris (1961). Many of the creationist writings of Morris are archived at the website of the Institute for Creation Science at <http://www.icr.org/>.

53 The “Omphalus” argument is that God created the world with the appearance of age; this theory was promoted by the nineteenth-century naturalist Philip Henry Gosse in his *Omphalos* (1857).

54 He also rejected Darwinian evolution; see <http://www.binbaz.org.sa/noor/8937>. It has been asserted that this shaykh may have also believed the earth to be flat, but this appears to be a false accusation; see his *fatwa* at <http://www.ahlalhadith.com/vbe/showthread.php?t=440>. However, the video of a Saudi cleric named Bandar al-Khaybari arguing that the earth is flat went viral in 2015; see <https://english.alarabiya.net/en/variety/2015/02/16/Saudi-cleric-Sun-revolves-around-stationary-Earth.html>.

55 This can be read at

<http://www.alifta.net/Fatawa/fatawaChapters.aspx?languagename=en&View=Page&PageID=10338&PageNo=1&BookID=7&TopFatawa=true>

56 This issue is analyzed by Determann (2015). One of the primary examples is Abdulaziz Abuzinada, who founded the Saudi Biological Society in 1974.

57 Keller is most known for his translation of *Umdat as-Sālik* by Aḥmad ibn Naqīb al-Miṣrī (d. 769/1386) in 1991. Several of his articles and online audio tapes are available at <http://www.masud.co.uk/ISLAM/nuh/>.

58 For a discussion of al-Mawdudi’s views on evolution, see Riexinger (2009, pp. 226-230).

59 On a visit to Egypt in 1888-89, White met Fāris Nimr, one of the founders of *al-Muqtaṭaf*, as noted by Elshakry (2013, p. 1).

60 However, there is still resistance: “Darwin’s theory of evolution is roundly rejected even by students and teachers in biology departments. Instead, the common belief is that all of modern science can be extracted by mastering Arabic and interpreting holy texts expertly enough,” according to the noted physicist Pervez Hoodbyoy (2014).

61 For an analysis of this approach by a non-Muslim, see Brooke (2012). For a critique of Guessoum as a neo-modern Mu’atazilite, see Hamza (2014).

62 One of the most quoted is a book by the French physician Maurice Bucaille (1976), *The Bible, The Qur’ān and Science*. Bucaille was at one point personal physician to King Faisal of Saudi Arabia. For a critique of Bucaille, see Syed Kamran Mirza (n.d.).

63 Thus, a Muslim can accept the evolution of the human form from earlier primates: “According to their general line of thinking, the scientists hold that man has evolved from the primates, which existed before him. We leave the study and evaluation of this evidence and all other indications to the anthropologists and confine ourselves to making a few general remarks on the origin of men” (Behishti & Bahonar 1982, p. 173).

64 This can be viewed at <http://www.islamicity.org/13335/islam-evolution-and-darwinism/>.

65 This view was not without its critics, especially the geologist Ḥusnī Ḥamāma (1999).

66 The original website at <http://www.shajarakode.com> was accessed January, 2016 but is no longer available except for pages preserved in the Internet Archive

(<https://web.archive.org/web/20170408071459/http://shajarakode.com/html/darwindiedmuslim.html>). All quotes here are taken from the original website.

67 Claims that Muslim scientists first discovered evolution are widespread. Jim al-Khalili (2012, p. 76; 2008) claims that the 9th century author al-Jāhiz wrote about natural selection in his natural history of animal lore; see also Malik, Ziermann, and Diogo (2018); Shah (n.d.); and Abo-Elkhear (n.d.). Some go so far as to claim European scientists purposefully ignored early Muslim scholars who were aware of evolution, e.g., Shavanas (2010, p. 152).

68 The program is available online at <http://donescience.files.wordpress.com/2009/09/darwin-muslimworld-program-full.pdf>. There is a Science and Islam Video portal maintained at Hampshire College: <https://sites.hampshire.edu/scienceandislamvideoportal/>.

69 For a review of the conference, see Hameed (2013).

70 The English version of al-Jazeera did not provide this report.

71 See, for example, the website of the International Commission on Scientific Signs in the Qur’ān and the Sunnah, which has sections in major European languages, Turkish, Kiswahili and Hausa: http://www.eajaz.org/eajaz/index.php?option=com_content&view=frontpage&Itemid=57&lang=en.

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