

Article

Iranian Scholars' Contemporary Debate between Evolutionary Human Genesis and Readings of the *Qur'an*: Perspectives and Classification

Maryam Farahmand ¹, Mostafa Taqavi ^{1,*} and Ali Asghar Ahmadi ²¹ Philosophy of Science, Sharif University of Technology, Tehran 14588-89694, Iran² Islamic Philosophy and Theology, University of Religions and Denominations, Qom 37185-178, Iran

* Correspondence: m_taqavi@sharif.edu; Tel.: +98-21-66164114

Abstract: While the science–religion debate on human creation has been widely explored in the Muslim world, Iranian Muslim opinions have been missed in the mainstream literature. To see whether they follow the lead of the majority of Muslim thinkers or not, here is an overview of the Qur'anic Perspective of Iranian Muslim Scholars. After reviewing the previously categorized approaches of Muslims encountering evolution mentioned in the literature, this paper will survey the Qur'anic verses related to the biological creation of man with the “scientific-lexical” method of all possible states. Afterward, the views of the most-cited Iranian scholars, such as Saḥābī, Ṭabāṭabā'ī, Muṭahhari, and Jawādī, will be located within this classification by citing reasons and textual pieces of evidence from their accounts that determine the differences provided by the majority of Muslims.

Keywords: Islam and evolution; human creation; *Qur'an*; Iran; science and religion; classification



Citation: Farahmand, Maryam, Mostafa Taqavi, and Ali Asghar Ahmadi. 2023. Iranian Scholars' Contemporary Debate between Evolutionary Human Genesis and Readings of the *Qur'an*: Perspectives and Classification. *Religions* 14: 143. <https://doi.org/10.3390/rel14020143>

Academic Editors: Piotr Roszak, Sasa Horvat and Mariusz Tabaczek

Received: 24 November 2022

Revised: 2 January 2023

Accepted: 3 January 2023

Published: 25 January 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Preface

This paper aims to shed light on a rather neglected part of the relations and interactions between science and religion on the subject of human genesis and biological evolution, particularly the part that belongs to “the Qur'anic Perspective of the Iranian Muslim Scholars”. While the debate on the relationship between the theory of evolution and religion has been widely explored in Christianity, there have only been a few published pieces of research on this topic among Muslim scholars throughout the Islamic world during the last century. Worse still, the research and opinions of Iranian scholars on this subject have been widely missed in the mainstream literature. Therefore, in this paper, we focus on Iranian scholars' thoughts and understanding of the aforementioned problem. Since almost all Iranian scholars who have written their treatises in this regard are Shīa Muslims, the outcome of our research can be considered as a study on Iranian Shīa scholars.

In order to clarify the viewpoints of the Iranian scholars and to distinguish between them and other main characters of the Islamic world, we ought to classify their distinct ideas. Such current classifications in the literature are, in our opinion, unsatisfactory in detail distinctions; hence, in this paper, we propose a new classification based on the distinction between evolution as a fact and evolution as a theory, which has been famous in the literature since Darwin (Darwin 2008, p. 53) and contemporary Stephen Jay Gould's paper in 1985. As specified by our proposed classification, we classify the Iranian scholars during the last century according to how they understood the theory of evolution, how they regarded scientific observations of facts that support such a theory, and finally, how they read the Qur'an according to their different exegetical, jurisprudential, or even philosophical backgrounds.¹

The approach² and the methodology³ of this research come in part from a historic base with a critical review. The main debate in the literature from the time of Darwin himself was between the literalistic understanding of the sacred text and the theory of evolution as

a scientific theory which seems to be in conflict with the literalistic understanding of the text. In this debate, literalism includes reading of the text in a canonical approach and the traditionally confirmed views of the meaning of the text in Christianity. In contrast with this very well-known literalist view, we see a “lexical view” among some Muslim scholars such as Saḥābī and Ṭabāṭabā’ī who take the meaning of the text from the text of the *Qur’an* and pay special attention to the etymology of the terms and the function of the term in the area of the prophet’s life in early Islam. This lexical view is in contrast with literalist views since it does not concern the canonical and well-established traditional backgrounds. We put this important distinction in our classification as well.

2. Introduction

Post-Darwinian debates in Iran by reviewing science–religion documents concerning how the human body came to be created could be seen in three main periods: the period of encounter, the period of utmost dynamism, and the recent period. The first period, going back to early encounters with Darwin’s theory, coincides with the years 1870–1940, beginning about a decade after the publication of *On the Origin of Species*, when the prominent scholars Seyyed Jamāl al-Dīn Asadābādī and Muḥammad Rezā Najafī Iṣfahānī devoted themselves to the refutation of the naturalistic materialism associated with Darwin’s work. The second period, marked by the zenith of theological and Qur’anic debates on the problem, extends from 1940 to 2000, with the most prominent scholars being Ṭabāṭabā’ī and Saḥābī.⁴ The debates in this period, which mostly involved Islamic seminary scholars and only a few academics, are characterized by concerns over the scriptural implications of the physical creation of man and the scriptures. The third period, inspired by theological advances in the West as well as intra-religious debates, is marked by a new dynamism among religious intellectuals, mostly academics who adopt extra-religious approaches such as philosophy of religion, history of science, and scientific studies, as well as academics with an intra-religious approach both in theology and Qur’anic studies. This period has also been investigated as an overview of the Muslim world in some works like Shanavas’s (2005), Bigliardi’s (2011, 2012, 2014a, 2014b), Clark’s (2014), Guessoum’s (2016), and Malik’s (Malik 2021; Malik and Kulieva 2020) around the last decade. However, the steepening slope of the debates and research on the third period in Iran is related to a very recent and new era that has not been studied yet.

The primary factor in the science–religion conflict is believed to be the disparity between scriptures and scientific findings (Alexander 2007, p. 2; Barbour 1929, p. 26; 1968, pp. 96–98) with regard to the classifications offered by the various scholars of Science and Religion (i.e., extra-religious scholars) and by those belonging to the Abrahamic religions (i.e., intra-religious scholars). Just as the text of the *Book of Genesis* (*Holy Bible: Douay Rheims Version 2009, Gen. 1,2,6*) is said to be at odds with the evolutionary creation of man, this biblical literalism as a thinking school played the same attributed role to the *Qur’an* by many famous Muslim scholars. However, the voices of those Iranian Muslim intellectuals who adopt a different textualist approach have not been heard in the international literature on the matter, and this is what the present paper will consider.

It should be noted that there is a long history of all sorts of evolutionary accounts of the origination of man and other beings, both in science and philosophy, in different religious eras. However, the problem of the science–religion conflict, and in particular the conflict between holy texts and the physical creation of man within the framework of evolutionary biology, came to light precisely when materialistic theories were furnished with a scientific basis thanks to the mechanisms proffered by Darwin’s theory of evolution, not evolution as a fact. Clark also characterizes anti-Darwinians in Iran such as Seyyed Jamāl al-Dīn Asadābādī (or al-Afḡānī) as being motivated by non-religious reasons; for example, he suggests that al-Afḡānī dismissed Darwin’s theory as materialistic and anti-Islamic just because he believed that the theory was affiliated with imperialism (Clark 2014, p. 232)—that is, al-Afḡānī did not reject evolution because of its conflict with religious texts. Guessoum (2016) also refers to his rejection of evolution, saying that al-Afḡānī did not access

Darwin's original texts. This shows that the reasons behind the rejections and endorsements of Darwinian evolution are highly influenced by political or ideological circumstances rather than purely scientific or religious ones. Thus, the atheistic consequences of Darwin's theory (natural selection) lie at the heart of the philosophical debates over science and religion. The scriptural conflict, however, concerns the problem of whether the Qur'anic text can be reconciled with the evolutionary origination of organisms and the location of man within the evolutionary hierarchy.

It is, therefore, important to distinguish between the two problems, one philosophical and one scriptural. In this paper, the focus is mainly on the latter point of view, particularly stressing the Qur'anic scripture from the standpoint of Iranian Muslim scholars. Nevertheless, as the scriptural approach has been developed mainly by Iranian theologians and philosophers, most of them have provided answers to the first problem as well.

3. The Approach of Scientists and Religious Scholars to Darwin's Theory of Evolution

The initial encounters of the majority of religious scholars and scientists with Darwin's theory of evolution, notwithstanding stemming from two different perspectives and occurring at two different times, apparently took a similar course. That is, in each group, their respective confrontations appeared first, and then they changed their positions, albeit with different paces of development. However, does this appearance truly reflect the trends that took place in the worlds of science and religion? We will take a closer look at this claim.

As for the scientists, when, for example, Darwin–Wallace's joint statement was read at the Linnaean Society of London in July 1858, the Society's chairman left the hall as a sign of objection (Desmond and Moore 1992, p. 470). Physicists contemporaneous with Darwin were reluctant to accept his theory (Cartwright 2000, p. XVI), and until not long ago (contrary to what we see today), psychologists believed that Darwinian evolution contradicted psychology, and they presented evidence against evolution. Yet although disputes over the mechanisms of Darwin's theory persisted, evolution itself (as a fact) has been virtually unanimously endorsed by biologists since about 1870, that is, around ten years after the publication of *On the Origin of Species* (Larson 2006, pp. 4, 8). Since the early 18th century, after Linnaeus's⁵ classification and Cuvier's⁶ study of fossil records, some aspects of philosophical evolutionary ideas deriving from ancient Greece had been beginning to assume a scientific mold. Twentieth-century psychologists, however, with the exception of William James, either stayed silent about Darwinian evolution or opposed it (Cartwright 2000, p. 1). Today, with the formation of sociobiology, behavioral ecology, comparative psychology, and the like, very few psychologists might be found who reject Darwinian evolution or, much like ethicists, do not seek supporting evidence for it.

With the accumulation of paleontological evidence during the 20th century, alongside evidence from genetics and other relevant sciences, not only was Darwin's theory of evolution solidified, but it also came to be widely received by scientists. The evolutionary theory then became the dominant theory in biology, to the extent that, for example, Dobzhansky, the prominent biologist and geneticist and winner of the Franklin Medal and the National Medal of Science⁷, could give the following title to his paper: "Nothing in biology makes sense except in the light of evolution" (Dobzhansky 1973).

Such a reception was not limited to biology and the other natural sciences. During Darwin's lifetime, there was also a revolution in philosophical theories within the social sciences, led by Herbert Spencer (1820–1903)⁸. He published his philosophical theory based on the principle of evolution almost simultaneously with the publication of *On the Origin of Species*, laying the foundations of his notion of the survival of the fittest (Spencer 1864, pp. 444–45). As it happens, this was a turning point in the multifaceted development of the theory of evolution and its extension to other sciences, for it provided the material for opposition by religious intellectuals, whose initial introduction to Darwin's theory was henceforth mediated by the materialistic accounts of social Darwinism. For this reason, Darwin's theory of evolution had no opportunity to introduce its "principle of evolution" as a biological fact before materialist scientists articulated their ideological conceptions

through an appeal to the theory of evolution in order to account for the living world without recourse to a creator (Clark 2014, pp. 232–33; Gamini 2017, p. 9). In this way, the first impression about evolution that intellectuals in other countries had, prior to developing a close understanding of the theory, was its atheistic approach.

In their initial confrontations with the problem of evolution, religious scholars, particularly Muslims, did not oppose the principle of evolution as a biological fact. “In previous times, up to the modern era (the early twentieth century), they by and large accepted biological evolution and even welcomed it as long as it did not present itself in purely materialistic, atheistic garb” (Guessoum 2011, p. 303). Indeed, they saw it in line with their own pre-established doctrines as well as evolutionary ideas inherited from ancient Greece (Eslāmī 2013, p. 170). Moreover, they hinted at the evidence for evolution in the work of philosophers such as Fārābī, and Ḳazwīnī, as well as Ibn Ḳaldūn’s demography (Gamini 2017, p. 65). They also “have adopted various viewpoints, largely accommodating the Darwinian theory, although usually with a theistic interpretation”⁹ (Guessoum 2010, p. 828).

4. The Problem of Evolution

What is “Evolution”? Is it a theory? Is it a fact? What degree of certainty does it have in different contexts? What is the viewpoint of scientists, theologians, and philosophers of science on biological evolution?

This is the problem: what was agreed upon by practitioners of various sciences and religious intellectuals in their encounter with the theory of evolution, was their endorsement of the principle of evolution: “evolution as a fact”. What was controversial among scientists was Darwin’s proposed “mechanism for evolution,” i.e., natural selection as a non-teleological mechanism. Additionally, the controversial points among religious scientists were the repercussions of endorsing natural selection as a blind system that directs the evolutionary process with no teleology. It is also mentioned in the new research on categorizing contemporary viewpoints that it “is entirely dependent on the outcome of the debate on what, within evolution, is fact and what is interpretation” (Bigliardi 2012, p. 515). Moreover, Guessoum has declared that if no distinction is made between observed facts and theories that explain the observed facts, then it “constitutes a major cultural blockage in the Muslim world today” (Guessoum 2010, p. 827).

Now, on the one hand, religious scholars encountered the inundation of such atheistic thoughts, about which they could not remain silent; on the other hand, they could not easily access original texts on evolution in their own languages and countries. As for the natural and empirical sciences, things were straightforward: even Darwin himself had encouraged scientists to modify his theory and its evidence; thus, the evolutionary theory proceeded along its empirical path, as it continues to do today. The idea is that evolution as a fact is incontrovertible from the viewpoint of scientists. Such certainty is gained through investigations of fossils, geological inquiries, the human fetus having a tail at some stage along its development, phylogenic and genealogical research, and other facts of the sort. Evolution as a fact is an immediate result of observed data not being processed by man. The idea here is that empirical data, some of which were mentioned above, are not affected by human theories and presuppositions, and they are not susceptible to reservations and skepticism (Gould 1985). Evolution as a theory, however, is the outcome of human processing and reflection and is indeed susceptible to errors, such as in theories that seek to account for the origination of life from matter or provide classifications of species. This distinction between fact and theory concerning biological evolution is significant. It goes as far back as Darwin himself, who highlighted the distinction in his book *On the Origin of Species* (Darwin 2008, p. 53). Moreover, the distinction has been pointed out by most biologists (Dobzhansky 1973; Futuyma 1986, p. 15; Gould 1985) and philosophers of science (Ayala 2006; Ruse 1984, p. 100) who have discussed the issue of evolution.

From the viewpoint of the philosophy of science, however, the distinction between “evolution as a fact” and “evolution as a theory” rests upon a positivistically inspired distinction between theory and fact. Today, the theory-ladenness of observation is widely

acknowledged, which is to say that explanatory facts are not immune to human processing. This is not to say, however, that observations cannot be objective (or universal) in any sense (Chalmers 1990). One of the main areas of study in the contemporary philosophy of science is the process of generating and proposing a scientific “theory”. Of course, any set of perceived facts can be accommodated and incorporated into several, theories, all of which have claimed to have empirical adequacy. Here some sort of subjective or intersubjective elements such as beauty, simplicity, or even elegance comes into the scene. The question then is: what is the relation between these subjective elements of scientific theories and truth, which is the real goal of scientific inquiries? In addition to that underdetermination of scientific theories by empirical evidence shows that the theorist’s presuppositions play a role in the formation of the content of the theory. According to these considerations, we ought to make a clear distinction between evolution as a fact that can be perceived in archeology or paleontological inquiries and the “theory of evolution” in biology as a theory that tries to unify several perceived facts. This distinction is crucial since evolution “as a fact,” which can be perceived and is therefore as uncertain as any of our other perceptual beliefs, is less controversial than evolution as a theory.

Nonetheless, the religious encounter with Darwinian evolution cannot be so simply formulated. This is because religion and science (and also the philosophy of religion and philosophy of science in between) are divergent both with respect to the materials of their arguments and with respect to the forms thereof, differing remarkably as to the nature and character of their respective controversies.

5. What Is Meant by the Relation between the Qur’anic Text and Evolution?

Before embarking on our classification of the views of intellectuals about the relation between the Qur’anic text and evolution, we need to specify what we mean by “evolution” and our approach to the text. By “evolution,” here we mean the physical origination of man in the course of biological evolution or evolutionary biology. That is, we are seeking to determine whether religious intellectuals take the Qur’anic text to be compatible with the evolutionary origination of the human body and, if not, then how they interpret the Qur’anic text concerning the physical origination of man. To this end, we will consider the Qur’anic verses, concerning evolution as a fact¹⁰, not the hows and uncertain (developing) processes and mechanism that argues in progressive and oncoming theories (and their theological effects). Thus, as a fundamental step, two established stems are coming into comparison: the main text of scripture versus evolution as a fact.

But what approach do we adopt in order to examine the Qur’anic text? Religious intellectuals who have grappled with the relationship between the *Qur’an* and evolution have adopted two approaches to the Qur’anic text: literal and lexical. The former is a translation of Qur’anic verses by taking the different literature approaches into account, and the latter is a deduction of concepts from a verse by close scrutiny of etymologies, conjugation, and syntax of verses along with gleaning concepts from the *Qur’an* itself (just like the exegesis of the *Qur’an* by the *Qur’an*). Thus, we consider both literal and lexical approaches in our overview of Iranian scholars who have dealt with the relation between human physical evolution and the Qur’anic text.

Here we have to distinguish between the literalistic view and the above literal and lexical approach. The latter are two verities of approaches to the Qur’anic text with the above definition, but literalism actually refers to a school of thought. During a long term of asking about human genesis and creation from the far history of mind up to the modern age of sciences, the answers have come from myths, different religions and now science is added to the question resources. Due to the long history of the field, there are some answers in the historical mind of mankind, which is the common result of different ideas throughout history. Adding this assumption to the direct textual conflict of some phrases in the *Book of Genesis* as mentioned before plus the acceptance and approval of the previous Abrahamic religions by Islam and the *Qur’an*, this pattern implies some answers in the religious minds that could somehow be loaded on the text of the *Qur’an*. The literalistic view is rooted in

“biblical literalism”. Therefore, this definition, which is true of the *Bible*, has been applied to the “Qur’an” according to the mentioned history. However, among Iranian scholars, we see that the more lexical research, the more consistent with the evolution.

6. Contemporary Treatments and Classifications of the Views of Muslim Intellectuals and the Problem of Evolution

Extensive studies have lately been conducted on the subject (of Muslim perspectives on evolution), even though they are still very rare and have some missing data from different parts of the Muslim world. For instance, researchers such as Adel [Ziadat \(1986\)](#), [Shanavas \(2005\)](#), Salman [Hameed \(2010\)](#), and Marwa [Elshakry \(2014\)](#) have conducted valuable work on how evolution was received in Islamic civilization, although their research is mostly restricted to the Arab world and a few others. The domain of such research needs to be extended to a variety of non-Arab Muslim populations throughout the world. Whereas there are some studies of manuscripts in different languages, such as [Nadvi \(1998\)](#), [Hanioglu \(2013\)](#), [Riexinger \(2009\)](#), [Kaya \(2012\)](#), [Daneshgar \(2020\)](#), and [Paya \(2022\)](#). Still, there is an undeniable deficiency of international reflections from Persian manuscripts. Certain factors may be deemed responsible for this, including the lack of effort on the part of Iranian scholars to publish their views in international journals, as well as the fact that these pieces of research are mostly from an intra-religious perspective and written in Persian, which is why these views have not been taken into account in international (non-local) contexts. In the following paragraphs, we will explain why paying attention to Iranian Muslim opinions on evolution will be useful in molding people’s overall perception of Islam’s position on the problem of evolution.

The opening line of one of the most important articles in evolutionary biology, Dobzhansky’s well-known study, opens with Bin Baz’s anti-evolutionary fatwa as expressing the views of Muslims ([Dobzhansky 1973](#)). However, is this view the real position of Islam regarding evolution? Clark discusses this issue in the last chapter of *Religion and the Sciences of Origins*. He begins this chapter with an unusual question: “What is Islam?” He addresses this question by referring to the Gallop survey of “how Muslims see Darwin’s theory of evolution,” which was performed in 35 countries in 2010 ([Newport 2010](#)), and then claims that the Islamic fundamentalists¹¹, who constitute only a small fraction of the Islamic world, are not the voice of Islam. Indeed, 93% of Muslims feel that these fundamentalists do not represent the beliefs of 1.5 billion Muslims ([Clark 2014](#), p. 223). Clark’s approach to the problem of “Islam and Evolution” emphasizes the fact that orientalist must set aside their prejudices in order to grasp the relationship between Islam and evolution, and they must find a means to bring together all of the voices on this topic.

Afterward, we could see some attempts toward the gathering and classification of Muslims’ views on evolution. The latest book on the subject of “Islam and Evolution” ([Malik 2021](#), p. 110) demonstrates three major approaches: those of Malik ([Malik 2021](#)), Guessoum ([Guessoum 2016](#)), and Ghafouri-Fard and Akrami ([Ghafouri-Fard and Akrami 2011](#)), all of which provide classifications for a wide range of arguments on evolution and Islam. Any sort of classification is dependent on the predetermined conception of evolutionary theory held by the classifier through which she/he applies her/his methodology to the studies of other scholars. The methodology includes, for example, literalist, exegetical, or philosophical approaches toward reading religious texts and teachings.

Guessoum was among the first to attempt classification. First, in Islam’s Quantum Question ([Guessoum 2011](#)), he described how Muslim traditionalists and modern intellectuals differ, accounting for the range of their philosophical and theological divergences. Although the book might not make independent and direct remarks about the relation between the *Qur’an* and any of these views, in its different sections it points to how their approaches to the *Qur’an* affect their accounts. Given this background, in “Islamic Theological Views on Darwinian Evolution,” Guessoum examines views of Darwinian evolution by Muslim theologians (Table 1). He divides Muslim thinkers into three groups: proponents of evolution, opponents of evolution, and human exceptionalists who support evolution

except for man (Table 1). Unlike his earlier works, this classification is unconcerned with extra-religious or intra-religious beliefs or the philosophical perspectives of scientists; rather, it seeks to place intellectuals on a spectrum of support for or rejection of evolution by exploring their scriptural perspectives on the *Qur'an* and the role it plays in how they lead to diverse theologies. He finds that the more literalistic an intellectual is, the more adverse he/she will be toward the evolution theory; furthermore, interpretationists tend to support the evolution theory more favorably.

Table 1. Guessoum's attitude on categorization Muslim's opinions through evolution.

Guessoum's Classification	
The conceptual mainstream used for evolution	Darwinism
The approach and the context of the research	Theology
The adopted classification	1. Opposing view: total rejection; 2. Agreeing view: total acceptance; 3. Human exceptionalism.

Guessoum introduces a long list of thinkers in the Arab Muslim world who are staunchly opposed to evolution, including Bin Baz (the deceased Grand Mufti of Saudi Arabia, a Salafi scholar) and Safar al-Hawali (a Wahhabi scholar), as well as some influential opponents of Darwinian evolution and adamant literalists. Except for Seyyed Hossein Nasr, who has an extra-religious view regarding the problem of evolution, and some ambiguous references to other proponents of evolution stated in Muzaffar Iqbal's works, there is no mention of Iranian intellectuals in his classification. This might be because, with the exception of Seyyed Hossein Nasr, whose works are largely in English, little trace of Iranian Muslim intellectuals' opinions on evolution can be found in the literature.

It seems that by focusing on this neglected part of Islamic thought, we can shed light on hitherto unknown Muslims' views about Darwinian evolution. We shall demonstrate that the positions of Iranian Muslim scholars are different from what is seen as the common Islamic approach to the problem of evolution, which is the point that makes the discussion of Iranian works more vital.

Malik is the other main classifier of the beliefs of Muslims on the question of evolution. In his classification, evolution is defined based on Fowler and Kuebler's (Fowler and Kuebler 2007, pp. 28–29) three key concepts:

1. Deep time or historical evolution that claims: the geological timeline is roughly right, and the world has seen a long history of living forms over millions of years;
2. Common ancestor: the idea that all living things are descended from a single ancestor;
3. Causal mechanics: all of life's evolution can be explained by natural selection acting on random mutations, according to the Darwinian theory of evolution.

Based on this context, Malik considers evolution a multi-propositional theory and contends that various components have joined together to determine evolution. He chose the common ancestry principle (the second one) as the main criterion for his classification since human evolution appeared to be his primary concern (Malik 2021, p. 111) (Table 2). Malik's classification before presenting his proposed plan for its modification followed the same method as Guessoum's, i.e., the approach of rejecting or accepting evolution, with a minor difference: instead of exceptionalism, he used the term "accommodative" in his initial papers (Malik 2019, pp. 207–212). Then to solve the mismatches he added a fourth tier called Adam's excluders called again as Guessoum's expression Human and Adam's exceptionalism (Malik 2021, p. 111). That stated:

1. Creationism;
2. Human exceptionalism;
3. Adamic exceptionalism;
4. No exceptions.

Table 2. Malik’s attitude on categorization Muslim’s opinions through evolution.

Malik’s Classification	
The conceptual mainstream used for evolution	Common ancestor
The approach and the context of the research	Separate from the reasons and religious belief
The adopted classification	1. Creationism; 2. Human exceptionalism; 3. Adamic exceptionalism; 4. No exceptions.

Although Guessoum’s and Malik’s categorization system can sometimes aid in the resolution of issues raised by thinkers who completely reject or support evolution for a variety of reasons ranging from scientific to theological and hermeneutical, what qualifies as rejection and acceptance is heavily dependent on how the classifier perceives the positions under consideration, which is one of the most significant drawbacks of this type of categorization. Thus, in Malik’s latest classification, he pointed out that has included the scholars’ opinions apart from their causes and religious beliefs. (Malik 2021, p. 111) (Table 2)

When the classifiers try to bring the classified scholars (with different opinions and underlying reasons) all together and sort the categorization based on the conflict and compatibility with evolution, the classification will be heavily reliant on how the classifier perceives the positions under consideration. For instance, Guessoum (Guessoum 2016) and Malik (in his first categorization) classified David Solomon Jalajel as holding the opposing view of evolution. However, Jalajel (Jalajel 2009; Malik 2021, p. 110) claims his idea is compatible with evolution. So, finding a common denominator for these disagreements or agreements may be difficult. There may be a mismatch between the classifier’s conception of the positions and the persons being categorized. This comes with the risk of enforcing a categorization that may not be applicable in other instances (Malik 2021).

On the other hand, Ghafouri-Fard and Akrami, who attempted to categorize thinkers using the approach of the relationship between the *Qur’an* and science, are not only vulnerable to the mentioned mismatch, but they also cannot cover all Muslim thinkers’ viewpoints in this field—Seyyed Hossein Nasr is an example of this classification.

In order to solve this problem, Malik was more precise in categorizing the opinions of thinkers and added a fourth state called “Adamic exceptionalists” to the previous three states, i.e., those who support evolution, those who oppose evolution, and those who exclude humans. He clearly defined his evolutionary attitude in this category and eventually declared (as did Ghafouri-Fard and Akrami (2011, p. 1)) that he had only highlighted the views of thinkers who believed in a common ancestor in evolution theory. Instead of looking at Guessoum’s theological approach in the last portion of his study, he pointed out that he put intellectuals’ opinions in this category without taking into consideration their religious motives and beliefs.

Following these two considerations, which he referred to as his classification’s principles, he added a third principle to reduce the impact of the classifier’s opinion (himself) on the interpretation of the opinions of the scholars included in his categories as well as to avoid conflict between the interpretations. It was an attempt to separate answering (the issue of agreement and disagreement) from categorizing viewpoints. Malik, who goes into depth in the chapters of his book regarding his perspective and those of other thinkers on this subject, has sought to avoid interpretations as much as possible in his categorization in order to present a classification free of bias and individual interpretation.

Ghafouri-Fard and Akrami’s classification, the first by academics in the biological evolution field, was mentioned by Malik (2021, p. 110). The notable point at the beginning of their article is the designation of the evolution determination in their categorizing approach as universal common descent for organisms (common ancestor) (Table 3). They classify the *Qur’anic* verses further owing to the realm of human creation, and in the face of those verses, scholars are divided into four categories (Table 3). There are three

tiers to the text and its interpretations of evolution, with a fourth level rejecting evolution independently of text interpretation:

1. Compatible with evolution;
2. Incompatible with it—at least for Adam;
3. The *Qur'an* is not a scientific text and has a different language from science;
4. Separated those who hesitated on the validity of the evolution theory.

Table 3. Ghafouri-Fard and Akrami’s attitude on categorization Muslim’s opinions through evolution.

Ghafouri-Fard and Akrami’s Classification	
The conceptual mainstream used for evolution	Common ancestor
The approach and the context of the research	Science and scripture (The <i>Qur'an</i> and evolution)
The adopted classification	<ol style="list-style-type: none"> 1. Compatible with evolution; 2. Incompatible with evo. (at least for Adam); 3. The <i>Qur'an</i> is not a scientific text and has a different language from science; 4. Hesitating on the validity of the evolution theory.

While this method appears to be more focused on human evolution, the underlying issue with this structure is that it attempts to group numerous issues under one cover. This classification method combines epistemic commitments to science, hermeneutic commitments, and the link between science and scripture, which might result in arbitrary positional disparities.

The classification attributed to Ghafouri-Fard and Akrami is the only sample of the Iranian classifications that is solitarily reflected in the literature in English and in the international academic space. Since we aim to examine their classification as a representative among the categories offered in Iran, we will also examine other Persian works that sought to show different approaches to classification.¹²

In this article, we attempt to present a specific method of classification that addresses the shortcomings of prior classifications and is regarded as a new solution in this area that may be applied in similar situations. In this proposed methodology, instead of dividing the opinions of thinkers by affirming or rejecting evolution, their *Qur'anic* approach to reading evolution is classified. The integration of this approach with considering evolution as a fact that governs biological systems (regardless of the theories that describe it) led to our new method of classification, which we call the scientific-lexical method. We have retrieved all of a person’s conceivable approaches to a text using this classification method, regardless of whether someone has been placed in this position or not. This classification tool is nothing more than a way of logical restriction or dichotomy.¹³ The diagram presented in the next section (Figure 1) is on the basis of this logic. In the top title of the diagram, we settled: “Views of the scholars about the relation between the *Qur'an* and the human physical creation”. Now, for example, those who believe in “Adamic expectation,” shall put “Adam’s physical creation” instead of “human,” so they could have a variety of different approaches to Adam’s genesis in all possible Muslim views due to the *Qur'an*. It is also applicable to be changed to any other scripture in this subject.

In this way, not only are all opinions included in the classification, and no opinion is placed outside of this category, but even situations in which a person has not yet taken a position can also be identified. Additionally, unlike Guessoum and Malik’s classification, the classifier’s opinion will not be included in this classification problem since the method of reasoning for tackling the question of evolution is regarded as a taxonomy rather than just the outcome of the reasoning as the acceptance or rejection of evolution.

The following table (Table 4) compares what has been found in Muslim categorization attitudes regarding evolution in this essay.

Table 4. Comparison of Muslim attitudes’ categorization through evolution.

Date	By	Evolution as	Approach and Context	Adopted Classification
2011	Ghafouri-Fard and Akrami	Common ancestor	Science and scripture (<i>Qur’an</i> and evolution)	<ol style="list-style-type: none"> 1. Compatible with evolution; 2. Incompatible with evo. (at least for Adam); 3. The <i>Qur’an</i> is not a scientific text and has a different language from science; 4. Hesitating on the validity of the evolution theory.
2016	Guessoum	Darwinism	Theology	<ol style="list-style-type: none"> 1. Opposing view: total rejection; 2. Agreeing view: total acceptance; 3. Human exceptionalism.
2021	Malik	Common ancestor	Separate from the reasons and religious belief	<ol style="list-style-type: none"> 1. Creationism; 2. Human exceptionalism; 3. Adamic exceptionalism; 4. No exceptions.
2022	This article	Fact	Rational Restriction (<i>Qur’an</i>)	The forthcoming chart (Figure 1)

7. Classification of the Possible Views about the Relation between the Qur’anic Text and Evolution

Since classifications will provide material for future analyses and conclusions, it is of great importance to (i) define the distinguishing characteristics of each part in order to proceed with as few errors as possible and (ii) provide a wide-ranging framework for the classification, so as to encompass all possible cases. To obtain these, so far, we have tried to review the previous works on classifications and clarify the problem by providing the definition of evolution as well as the approaches to the Qur’anic text and also introducing the social, intellectual, scientific, and argumentative backgrounds of Iranian Muslim thinkers. Now we deploy the “rational restriction” framework to enumerate all possible states of the relation between the Qur’anic text and the evolutionary origination of the human body in this classification.

Here, with the help of the following diagram (Figure 1), we intend to sum up the possibilities that may be raised and discussed in a text regarding the issue of the origin of man. Thus, it would be viable to seek out and locate how and where religious scholars could have interpreted the Qur’anic text as far as the physical creation of man is concerned. To arrive at a more precise and transparent taxonomy of the views, we will define and demarcate the terms used in these classifications in what follows.

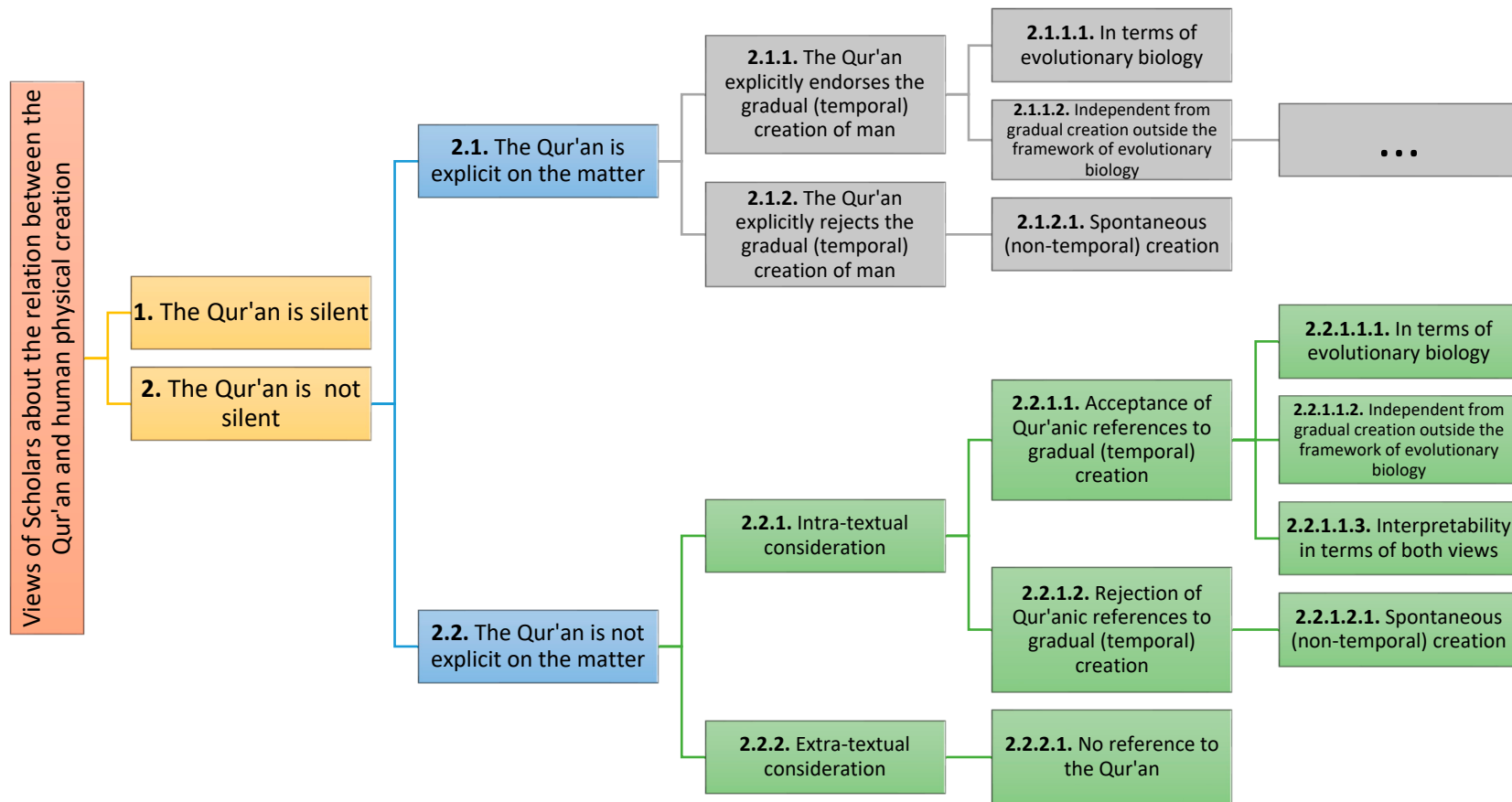


Figure 1. Classification of the possible views about the relationships between the Qur’anic text and human physical creation.

8. Locating the Views of Iranian Muslim Scholars on the Relationship between the *Qur'an* and Evolution

Is the *Qur'an* silent about the physical creation of man, according to Iranian intellectuals? (This is the question from cells 1 and 2 of the diagram.) By “silence,” we mean the claim that the *Qur'an*'s main (explicit) text involves no reference to the physical creation of man. Such a claim has not been made by any Iranian scholars since there are *Qur'anic* verses that are explicitly concerned with how man is created, such as “created man from a blood clot” (Alaḳ: 2). “He created man from dried clay, like earthen vessels” (al-Raḥmān: 14); and “He created man from a drop, and behold, he is a manifest adversary.” (al-Naḥl: 4). These counter-examples are sufficient evidence against the silence thesis.

Some Iranian scholars, such as Ja'far Subḥānī, suggest, however, that if the theory of evolution reaches a point of certainty where it involves no ambiguity, then that will mean that the *Qur'an* is silent about the stages between dust or clay and fully-developed man (Subḥānī 2008, p. 671). Having said that, this is different from the full-fledged silence of the *Qur'an* and does not fall within our classification.

Eslāmī has classified another opinion as the silence view: the positions of those like Muṭahharī who refuse to consider scientific issues in the *Qur'an* or those like Meshkīnī who believe that the *Qur'an* can be interpreted in favor of both sides (Eslāmī 2016, p. 211). This is also different from what we mean by the silence view in the above logically restricted diagram.

Now, given the above *Qur'anic* verses and other verses concerning human creation, the views of all Iranian intellectuals at present (and, logically, all practitioners of *Qur'anic* studies) fall within the branches of this class (i.e., branches from cell 2 in the diagram).

However, what does *Qur'anic* “explicitness” in cells 1.2 and 2.2 mean? An explicit text is one that is clearly interpretable only in one particular way, without being subject to any alternative interpretations (Madārek-e Islāmī 2010, vol. 1, p. 4729). That is, the text of the *Qur'an* is explicit when it obviously and simply connotes something in a way that leaves no room for an alternative meaning. Nonetheless, disputes over the implications of the *Qur'anic* text for human creation can be evidence that the *Qur'an* is not explicit on the matter.

In terms of the principles of jurisprudence and *Qur'anic* sciences, this means that there is no explicit text in the *Qur'an* as to how man is created, where an “explicit text” is a word that clearly means something, unaided by anything else, and the meaning is what is in fact intended by the revelation of the verse in question or the legislation of the ruling (Heyidāari 1994, p. 340).

In his essay “Suḳānī darbāre-ye Nuḳustīn Insān” (“A Word on the First Man”), Ṭabāṭabā'ī says: “the noble *Qur'an* has not explicitly touched [the question of] how man is created on Earth” (Ṭabāṭabā'ī 2008, vol. 3, p. 134). Saḥābī also seeks to draw on the rhetorical character of *Qur'anic* words to find *Qur'anic* verses of human creation (Saḥābī 1996, p. 25), suggesting that he tries to grasp the meanings of verses via conceptions and the literary subtleties of *Qur'anic* letters, words, and phrases (Saḥābī 1996, pp. 26, 53). Thus, on both approaches, the literal approach adopted by the majority of intellectuals, such as 'Allāma, and the lexical approach adopted by Saḥābī regarding evolution, the *Qur'an* is believed not to be explicit on the matter. The same conclusion can be arrived at through both methods.

In this way, the course of the majority view among Iranian intellectuals will continue from cell 2.2. That is, the *Qur'anic* account of the physical creation of man is not fully explicit and is in need of further investigation. We will proceed to review the accounts provided by some intellectuals as to intra-textual consideration of the *Qur'an* (diagram: 1.2.2).

Yadullāh Saḥābī (1906–2002) was a *Qur'anic* scholar and professor of geology at the University of Tehran. He advocated the evolutionary and natural creation of man and wrote the first specialized book on evolution and the *Qur'an*. Proponents of the theory of evolution in Iran generally cite Saḥābī's books on the matter. He is distinguished from other religious intellectuals by his comprehensive knowledge of the problem of evolution. As a

prominent geology professor, he could initiate the teaching of evolution in some schools in Tehran. In the preface to his book *K̄el̄Āt-i Insān* (Creation of Man), he briefly overviews notable theories of evolution, asserting that none is perfect and comprehensive (Sahābī 1996, pp. 4, 9–10, 73). Notwithstanding this, in outlining the views of natural scientists, he never casts any doubt on gradual and evolutionary creation, believing that all animals are biologically continuous and that their life began with the emergence of the simplest species from primitive muddy waters and that, through billions of years of evolution, the great variety of plants, animals, and humans evolved (Sahābī 1996, p. 75). He is the first among these intellectuals to take into account the distinction between evolution as a fact and evolution as a theory (Sahābī 1996, pp. 6–74). For him, gradual evolution and the interconnection of all species are indubitable, whereas the theories accounting for such gradual development are not unquestionable. In the preface of his book *Qurʾān-e Majīd wa Takāmūl-e Mowjūdāt-e Zendeḥ* (*The Noble Qurʾān and the Evolution of Living Beings*), he says:

“Although new discoveries bring about changes in the concepts involved in sciences, and I do not believe that contemporary science is in a position to have disclosed many mysteries of the existential system, as much advanced as it might be, the rhetorical character of Qurʾānic words suggest certain comparisons with scientific data and make a fact more salient” (Sahābī 1996, p. 25).

He asserts that what he cites as an example and explanation of scientific citations is not a matter of uncertain results and new scientific findings that are subject to change. Rather, he has tried to use the definite facts of the biological sciences, as far as they are available, to provide a means to study and receive more detailed insight through the verses (Sahābī 1996, pp. 67–76, 181). He emphasizes that his book is not an account of Darwin’s theory, and his distinction between evolution as a fact and evolution as a theory is signified throughout his book in different expressions (Sahābī 1996, pp. 74, 251).

Sahābī says that his purpose in writing books on evolution is “to prove the connection and continuity of divine creatures and that the human creation is no exception” (Sahābī 1996, p. 247). He believes that even “if there were no evidence from biological and geological sciences for evolution and the gradual branching of creatures, which is an awkward supposition, his ideas of human creation will not be problematic” (Sahābī 1996, p. 251), since he sees his ideas as inspired by the *Qurʾān*, rather than being supported by it (Sahābī 1996, p. 247–251). In this way, Sahābī’s view will definitely fall within cell 2.2.1.1.1 of the diagram that is, although the text of the *Qurʾān* is not explicit on the creation of man, the Qurʾānic references confirm not only the evolutionary development of man but also an evolutionary biological development in continuity with other species.

‘Alī Akbar Fayḍ Ālenī, known as ‘Alī Meshkīnī (1921–2007), was a cleric and teacher in the Seminary of Qom, and a professor of jurisprudence, principles of jurisprudence, Qurʾānic exegesis, and ethics. He was the first figure in the Shiite seminary to teach the evolution of species and its comparison with Qurʾānic verses in his lectures on Qurʾānic exegesis. In the 1970s, Meshkīnī defended Sahābī’s views, suggesting that certain Qurʾānic verses support the idea of human evolution from other species. For example, he interprets the Verse of Choice (Iṣṭafā)¹⁴ as implying that Adam was chosen from among his contemporary people, since he was more intelligent, and thus he learned divine names from God and the angels prostrated themselves to him (Meshkīnī Ardabīlī 2013, vol. 1, pp. 661–62).

According to Meshkīnī, nothing is to be found in the *Qurʾān* that is contrary to the established theories (such as the evolution of plants and animals) (Meshkīnī Ardabīlī 2013, vol. 1, p. 664). In reply to the question, “if there is conclusive proof for evolution by which it is rendered indubitable, are there Qurʾānic verses that contradict it?” he says: “never!” If Darwin’s theory is conclusively proved, it will turn out that we have made a mistake in understanding the apparent meanings of Qurʾānic verses since the *Qurʾān* never contradicts what is “established by scientific observation and experiment” and “conclusive reason” (Meshkīnī Ardabīlī 2013, vol. 1, p. 665). If an indubitable and unquestionable idea is at odds with the apparent meanings of Qurʾānic verses, we should draw on tools provided by

the principles of jurisprudence to interpret these verses in accordance with the indubitable fact (Meshkīnī Ardabīlī 2013, p. 667).

In the fourth premise of his book *Takāmūl dar Qurʾān (Evolution in the Qurʾan)*, he points out the distinction between the fact of evolution and the theory of evolution, suggesting that the continuity of creatures is an incontrovertible scientific fact that is not contradicted by any Qurʾanic verse. As to the question of whether the prophet Adam is an exception to this framework, he says that this is not scientifically provable (Meshkīnī Ardabīlī 1991, p. 17). He then considers Qurʾanic verses concerning human creation in five sections in terms of five groups, where one of these (the second section) consists of verses cited by opponents of evolution. In this section, he articulates their views and evidence, and then he deals with arguments for evolutionary interpretations as well as the weaknesses or strengths of the cited hadiths (Meshkīnī Ardabīlī 1991, pp. 46–62). At the end of his preface, Meshkīnī maintains that if it turns out in the future that our inference is wrong, then it will not pose a problem for the *Qurʾan*; it will just invalidate our inference (Meshkīnī Ardabīlī 1991, p. 22).

Seyyed Maḥmūd Ṭāleqānī (1911–1979) was an enlightened cleric, a religious scholar, and political activist in Tehran, and an exegete of the *Qurʾan* and *Nahj al-Balāḡe*. In 1964, he and Saḥābī were confined in Qasr prison for their political views, and there he delivered lectures on the exegesis of *Nahj al-Balāḡe*. His view that Adam was not the first man and was preceded by other humans before him, although he was the first chosen and rational man, was an illuminating point in Saḥābī's studies. Ṭāleqānī wrote a Qurʾanic exegesis under the title *Partuwī az Qurʾān (A Ray from the Qurʾan)*, in which he brings Qurʾanic evidence for gradual creation and evolution, but at the end, he refers his readers to Dr. Yadullāh Saḥābī's books for a more complete discussion (Ṭāleqānī 1983, vol. 6, pp. 50–53).

Thus far, we have introduced proponents of the thesis that the *Qurʾan* is compatible with the evolutionary creation of man in terms of evolutionary biology and in continuity with other species. Let us now introduce proponents of the view that subscribes to the evolutionary development of human creation but sees this as distinct from the natural evolution of other species. These include Seyyed Muḥammad Ḥuseyn Ṭabāṭabā'ī, 'Abdullāh Jawādī Āmulī, Ja'far Subḥānī, and others.

Seyyed Muḥammad Ḥuseyn Ṭabāṭabā'ī (1904–1981), known as 'Allāma Ṭabāṭabā'ī, was a Shiite clergy, mystic, philosopher, and Qurʾanic exegete who endorsed evolution as a fact, believing the discovered fossils which trace back to a period before Adam belong to previous generations of man; in other words, they belong to people who were not offspring of Adam and Eve, and were indeed another species of man (Ṭabāṭabā'ī 2008, vol. 1, p. 250; vol. 3, p. 149). However, the same biological evolution is not true about the origin of Adam, which is the modern human race (ibid., vol. 3, pp. 134, 139, 149). He reviews various possibilities of how man was created from dust—instantaneous, short-term, and long-term—and says that none of these possibilities is stated in the *Qurʾan* (Ṭabāṭabā'ī 1970, vol. 16, p. 256; Ṭabāṭabā'ī 2008, vol. 3, pp. 143–44). Ṭabāṭabā'ī indicates that the *Qurʾan* is almost explicitly against the biological evolution of man, and although man is created gradually, this is not a biological process. However, if there is conclusive evidence for Darwin's theory of evolution,¹⁵ such verses could correspondingly be interpreted in an evolutionary biological framework (Ṭabāṭabā'ī 2008, p. 255). In this way, he sees Adam's creation as distinct from that of other species, yet the such distinction is still subject to interpretations (Ṭabāṭabā'ī 2008, p. 142).

Ja'far Subḥānī (1929–present) is a student of Ṭabāṭabā'ī, a Shiite authority, a professor in the Seminary of Qom, and an expert in jurisprudence, the principles of jurisprudence, Qurʾanic exegesis, the history of Islam, and theology. He has dedicated about 80 pages of his book (Subḥānī 2008, pp. 661–748) to Darwin's theory of evolution as developed by biologists, but in his treatment of Qurʾanic verses, he believes that they are not explicit, suggesting that if conclusive evidence is found for evolution, "then the apparent meanings of the *Qurʾan* are still interpretable, since we might propose that although God said that man is created from dust and mud, this is compatible with there being stages of development between the mud and humanity, which are not implicitly or explicitly mentioned by God.

Silence is no evidence for a negation of such intermediary stages" (Subhānī 2007, p. 23; 2008, p. 671). Notwithstanding this, he does not take the theory of evolution and transformation of species to contradict theism, nor does he believe that the independent creation of man and the constancy of species reinforces and confirms theism (Subhānī 2007, p. 21).

Saḥābī's view was criticized by Muḥammad Taḳī Meṣbāḥ Yazdī (1934–2021), a mujtahid, philosopher, exegete of the *Qur'an*, professor in the Seminary of Qom, and a student of Ṭabāṭabā'ī's *Qur'anic* exegesis. In his book *KeḷḲat-i Insān az Manzar-i Qur'ān* (*Human Creation from the perspective of the Qur'an*), he maintains that *Qur'anic* verses conclusively negate evolution (Yazdī and Taqī 1988, p. 91). He believes that there are almost explicit verses to the effect that Adam is the father of all human beings,¹⁶ and there is "evidence" that Adam had no parents (Yazdī and Taqī 1988, p. 45) and was created from clay without going through the stages of biological evolution (Yazdī and Taqī 1988, pp. 41–45). The *Qur'an* involves no affirmation or negation of the idea that there were people on Earth before Adam (Yazdī and Taqī 1988, p. 45).

One important idea of Jawādī Āmulī regarding the relationship between science and religion is to see both of them as research platforms and as means for seeking God's signs in the world, one through experience and reason, the other through revelation and reason. Since both of them reach for the truth in different ways, there should ultimately not be any difference between them. The basis of this matter is that in his view there is no difference between the world of creation (nature) and legislation (religion). Thus, there is no conflict in taking the criterion of truth to consist of reason and proof. Moreover, he sees no difference between rational and transmitted evidence. In his view, rational reasons include both empirical and abstract reasons. He suggests that just as when there is a contradiction between empirical sciences, we seek a solution to resolve the contradiction, and we should do the same when there is a contradiction between religion and other sciences. Such solutions are often introduced in the principles of jurisprudence. The languages of religion and science (including mathematics, empirical sciences, jurisprudence, philosophy, mysticism, etc.) are different, but they do not contradict one another, since the criterion (for accepting or rejecting a proposition) is logical proof and argument (Jawādī Āmulī 2005, pp. 98–100). In other words, the criterion for endorsing one theory and rejecting another is the cogency of the argument in its favor. A theory with a more justification-conferring argument is espoused. Elsewhere, he says that when something is proved by a rational argument and valid scientific evidence, then if it is contrary to some transmitted evidence, the contradiction should be resolved by the familiar methods in the principles of jurisprudence. He sees valid rational reasons (either empirical or abstract) as religious evidence for the fact that God did such and such in the natural order (Jawādī Āmulī 2005, pp. 4–33).

Regarding Darwin's theory of evolution, however, he believes that it is not indubitable and unquestionable, since it has been subject to objections by some biologists. Although, he suggests that if the theory is proved beyond doubt, then the apparent meanings of *prima facie* contradictory verses should be interpreted away through the methods of contradiction-resolution in the principles of jurisprudence, such as restriction (*taqyīd*), specification (*taḲṣīs*), figurative construal, esoteric interpretation (*ta'wīl*), and the like, all in favor of the indubitable fact of evolution (Jawādī Āmulī 2002, pp. 25–31; 2005, p. 34). In other words, what is indubitable and certain is preferred over other evidence.

With these preliminaries in hand, Jawādī āmulī believes that the principle of evolution is at work in nature and that theories of evolution are true of non-human animals, but there is *Qur'anic* evidence that the present generation of humans is the offspring of Adam and Eve outside the ordinary evolutionary biological order, suggesting that Darwin's evolutionary theory (if not falsified) does not contradict the *Qur'anic* account of man, since it does not prove that this is the only way in which man comes to exist (through natural development). Empirical science, he suggests, has a positive aspect only; that is, it implies that a phenomenon occurs in such and such a way, but it never implies that it cannot happen otherwise (Jawādī Āmulī 2002, p. 26): "since the present certainty of biologists

might be subject to further biological developments just like some (and not all) of their other certainties, at present we should leave religious texts to their own experts until their final account is known and announced" (Jawādī Āmulī 2005, p. 34).

Just as he draws on Qur'anic evidence to show that the creation of the cosmos is temporal, he sees the creation of the human body to be temporal and part of the created world both in the case of Adam who went through stages of dust, mud, aging mud (ḥama' masnūn), and dry clay (ṣalṣāl), and in the case of his offspring who go through the stages of seminal fluid (nuṭfa), clinging mass ('alaḤa), fleshy tissue (muḍḤa), bones, and so on (Jawādī Āmulī 2002, p. 55). Thus, he follows Ṭabāṭabā'ī's path: there are Qur'anic references to the evolutionary creation of the human body, albeit not in terms of evolutionary biology.

Nāṣer Makārem Shīrāzī (1926-present) is a Shiite authority and a professor at the Seminary of Qom. He enumerates arguments for the evolution of species and then says that each of these arguments makes evolution probable to some extent. However, overall, they do not yield certainty, since there are two ways in which certainty can be achieved: (1) rational proofs and (2) laboratory and sensory-empirical methods. The former does not work in this case, and the latter falls short of adjudicating what took place billions of years ago. Thus, there is no way in which we can be certain about the matter (Makārim Shīrāzī 2001, vol. 11, pp. 82–84).

Moreover, Makārem says that even if the evolutionary creation of man is proved in terms of Darwin's theory, it will not undermine theism (Makārim Shīrāzī 2001, vol. 11, p. 85), and he quotes Darwin in *On the Origin of Species* as saying that he sees no reason why the opinions elaborated in this book undermine religious sentiments, whatever they may be, and that without endorsing God's existence, one cannot justify evolution (Makārim Shīrāzī 2001, vol. 11, p. 84). He then suggests that if there is a conflict between religion and Darwin's theory, it is over the doctrine of Adam's creation. As to other issues, there is no conflict whatsoever between them. Furthermore, it is not difficult to justify and interpret Qur'anic verses in such ways that they are rendered compatible with the theory of evolution (Makārim Shīrāzī 1954). In his fictional book *Fīlsūfnumāhā*, which won the Yearbook Prize of Iran in 1954, he draws on quotations from Darwin's books and letters, as well as his distinction between evolution itself and the theory of evolution and his comments on natural selection and its proponents and opponents to display his familiarity with the main sources. In his Qur'anic exegesis, he says that the *Qur'an* is a humane book, rather than a book of natural sciences. Thus, it does not seek to talk about the evolution of species and the like. In the end, he believes that the apparent meanings of Qur'anic verses are closer to favoring the independent creation of man, although they are not explicit on the matter, stating that the *Qur'an* is also silent on other creatures (Makārim Shīrāzī 2001, vol. 11, pp. 80–89).

Thus, we could not find an Iranian intellectual who denies that the *Qur'an* implies an evolutionary or gradual creation of man in one way or another. Even those scholars who believe that man was created independently of biological evolution still believe that such independent creation is temporal, gradual, and evolutionary.¹⁷ On this account, no Iranian scholar falls in the cell numbered 2.2.1.2 of Figure 1 above.

Thus far, we have reviewed examples of intellectuals who believed that the *Qur'an* is not explicit on how man is physically created, and then sought to find intertextual answers to the question. Other intellectuals, however, were motivated by the absence of an explicit Qur'anic text on the matter to adopt an extratextual approach given that the *Qur'an* is not, in the view, a scientific reference point, although it is compatible with indubitable principles of science. These intellectuals do not build their belief or disbelief in evolution upon a consideration of the *Qur'an*. Their approach is of a piece with the dominant approach in the philosophy of religion, and thus these intellectuals fall outside the scope of this paper. Some of them, nevertheless, have provided accounts of why they adopted such an approach and the relation between evolution and the *Qur'an*, to whom we will briefly turn now (Muṭahhari 2008, pp. 104–105).

Murtazā Muṭahharī (1919–1979) was a Shiite clergy, a teacher of Islamic philosophy and theology, a professor at the Department of Theology in the University of Tehran, a contemporary philosopher, and a student of Ṭabāṭabā'ī. In his book *'Ilal-i Girāyesh be-Māddīgarī (Grounds of the Tendency toward Materialism)*, he believes that the story of Adam in the *Qur'an* is symbolic, aiming at presenting certain ethical points and the spiritual position of man. Although he believes that the first man is a real individual, he sees it as possible that Adam's creation was as described by contemporary sciences. Thus, in his view, the belief in scientific theories is not in conflict with the belief in the *Qur'an* (Muṭahharī 2008, p. 104).

While Muṭahharī endorses evolution as a fact, he believes that the human science and scientific theories of a given time should be acknowledged by people of the time, but he says that “we do not insist upon comparing what appears in the *Qur'an* to what is stated by old or new sciences. There might as well be issues that seem intractable and problematic to us, and are solved in future periods when human sciences achieve more progress” (Muṭahharī 2005, vol. 27, p. 521). In this way, he endorses Darwin's theory of evolution as a scientifically accepted view, although philosophically and theologically speaking, he criticizes the atheistic conclusions derived from the theories accounting for the empirical data of evolution and elaborates a religious approach to them. He goes on to say:

“We do not seek to reject the law of evolution and say that Darwin's view is wrong, since firstly, this is the domain of biology and we do not have the qualification for making any biological comments, and secondly, this problem has nothing whatsoever to do with the problem of monotheism.” (Muṭahharī 2005, vol. 4, p. 195)

Thus, although he does not engage in a scientific discussion concerning human creation, he introduces it and talks about different intellectual aspects of the problem and its philosophical repercussions in various sections of his books, such as the “evolution” section of his *Towḥīd (Monotheism)*. He discusses a range of issues from a number of theological arguments (Muṭahharī 2008, pp. 228–48), including the problem of chance and the gradual creation of the world and man in contrast to their sudden creation. He defines both by recourse to *Qur'anic* and philosophical evidence and analyzes them in virtue of divine knowledge and will (Muṭahharī 2008, p. 105).

Elsewhere, he says that religious texts can be interpreted in terms of evolution and then speculates that the course of development that is believed by biologists to have taken billions of years might have occurred within dozens of days, as is suggested in religious texts, just as a fetus is believed by biologists to go through its whole evolutionary development within nine months (Muṭahharī 2005, vol. 1, pp. 513–15).

Muṭahharī goes on to reject the restriction of creation to “evolution of species” and “constancy of species by way of temporal incipience (ḥudūt),” suggesting that there was a third horn in earlier books: the constancy of species from eternity as proposed by philosophers based on rational arguments and ancient astronomy, although it is evidently false by contemporary lights. In this picture, it is basically wrong to attribute the transformation of species to science and the constancy of species by way of material incipience to religious people. The roots of the theory of evolution can be traced back to Anaximander in ancient Greece, 2500 years ago. The transformation of species should not be deemed an invention of modern science, in spite of the fact that it (i.e., its mechanism) was elaborately and carefully accounted for by Lamarck and Darwin. Having outlined these preliminaries, Muṭahharī claims that the theory developed by Darwin and his successors is not sufficient as an explanation of creation, yet it might not be false. It needs to be supplemented by supernatural guidance (Muṭahharī 2005, vol. 1, pp. 199–203).

For a comparison, consider the following table (Table 5):

Table 5. Locating the views of Iranian Muslim scholars on the relationship between the *Qur'an* and physical creation of man.

Theories of Iranian Muslim Intellectuals about the Relation between the <i>Qur'an</i> and the Physical Creation of Man	Sahābī	Meshkīnī	Tāleiqānī	Muṭahharī	Ṭabāṭabāī	Jawādī Āmulī	Makārem	Subḥānī	Meṣbāḥ Yazdī
1. Is the <i>Qur'an</i> silent on the physical creation of man?	x	x	x	x	x	x	x	x	x
2. Is there an explicit text about how man was created?	x	x	x	x	x	x	x	x	x
3. Is an intratextual consideration of the <i>Qur'an</i> required in this case?	✓	✓	✓	✗	✓	✓	✓	✓	✓
4. Are there references in the <i>Qur'an</i> to the gradual (temporal) creation of man?	✓	✓	✓	✓	✓	✓	✓	✓	✓
5. Are there references in the <i>Qur'an</i> to the creation of man in terms of biological evolution?	✓	✓	✓	-	x	x	x	x	x

(✓): agreed with (✗): disagreed with (-): Silent.

9. Conclusions

In this paper, we began by providing a classification in terms of rational restriction of all possible cases of the subject layout (the *Qur'an* and the evolutionary creation of the human body) in order to locate the views of Iranian intellectuals. We reviewed the accounts of such hypotheses by prominent contemporary Iranian scholars who are authoritative as regards the *Qur'an*-evolution conflict or harmony. Regardless of whether they endorse or reject the evolution of man, these Iranian scholars agree that the *Qur'an* is not explicit on the physical creation of man. However, they have variously interpreted the Qur'anic text on the matter, depending on their methods of research and assumptions. This has in practice yielded a wide range of conclusions, from an almost explicit implication of verses in favor of biological evolution to an almost explicit implication in favor of the independent creation of man (this is the order in which the figures appear on the table above).

For instance, Saḥābī deploys a lexical method of research and believes that even if there were no biological and geological evidence for evolution and the gradual development and division of creatures, evolution is still implicitly mentioned in Qur'anic verses. Methods of research with a stronger inclination toward various hadiths and exegeses are more inclined to reject evolution. Thus, Ṭabāṭabāī believes that Qur'anic verses apparently, and almost explicitly, imply that Adam's creation is different from the creation of other animals, but if the theory of evolution is established beyond any doubt, then these verses might be reinterpreted in terms of evolution. Moreover, Meṣbāḥ Yazdī believes that Qur'anic verses certainly and conclusively imply the rejection of evolution. Another key point in these views is the accuracy of the information they have about Darwin's theory of evolution: the more up-to-date and specialized their information is, the less opposed they are to the theory. Thus, those who were careful to distinguish evolution as a fact from evolution as a theory are more inclined to endorse evolution. Moreover, at the time, the comments by opponents of evolution were also taken into account. These scholars encountered evolution as a hypothesis with a number of objections rather than a confirmed scientific theory. In general, Iranian scholars hold that the *Qur'an* is not explicit on the instantaneous creation of man, and if evolution as a theory is established, it could be compatible with Qur'anic verses since the criterion for understanding the Qur'anic text is (empirical or abstract) certainty.

We might conclude that the accounts of evolution by well-known Iranian scholars are indeed different from those of their non-Iranian peers. According to the Oxford paper by Guessoum, well-known non-Iranian scholars fall within the following three classes as well:

1. Those who fully reject evolution;

2. Those who fully endorse evolution;
3. Those who restrict evolution to non-human creatures.

Those Iranian scholars who reject an evolutionist interpretation of the *Qur'an* believe that if the theory of evolution becomes so indubitable that it is not rejected by any biologists, then the apparent meanings of Qur'anic verses can be reinterpreted in favor of indubitable evolution. That is, knowledge by certainty outweighs anything else.

Along with the results of this article in completing the summarizing picture of the Muslims' views on the biological evolution of man from the Qur'anic perspective, we hope that the logically restricted diagram presented here could have a clarifying effect and facilitate the roadmap of other researchers to complete this image in response to the main question of how man came into being and the interactions of science and religion throughout.

Author Contributions: Conceptualization, M.F., A.A.A. and M.T.; methodology, M.T. and M.F.; software, M.F.; validation, M.F.; formal analysis, M.F., A.A.A.; investigation, M.F., A.A.A.; resources, M.F., A.A.A.; data curation, M.F.; writing—original draft preparation, M.F., A.A.A.; writing—review and editing, M.F.; visualization, M.F.; supervision, M.T. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Data Availability Statement: We declare that in this paper no new data were created.

Conflicts of Interest: The authors declare no conflict of interest.

Notes

- ¹ But which is the preferred thought for discussions like evolution? The preferred domain for going through the debate between religion and evolution seems to be theology as it is in Christianity. However, in the Islamic world and especially in Iran, Islamic (Shī'a) theology as a rational discipline is restrained by two traditional trends of thought. First, there is a dominance of jurisprudence in most Islamic seminaries among other trends of thought like Islamic philosophy or theology or even tafsīr. Traditionally the major education in Islamic seminaries throughout the Islamic world and also in Iran is jurisprudence. This dominance of jurisprudence currently is under pressure, nonetheless, still the dominance exists. As Ali Paya says: "The fact that fuḳahā (jurists), despite enjoying a privileged status, have come under increasing pressure with regard to their monopoly over 'representing' the official face of Islam, has provided further breathing space for the emergence of new, critical trends of thinking in the country [Iran]." (Paya 2014, p. 320). The powerful second trends that oppose rational theology are anti-rational tendencies among which in contemporary Iran what undermines the rational trend of theology is the Maktab-e Tafkīk (which has been gradually merged with Islamic philosophy as we come from early Islam towards contemporary schools of thought). As Paya Says: "The objective of the Tafkīkis is to cleanse the Divine message from all the impurities added to it and to understand and present it in its pure form." They are not in need of any other system of thought including mixed Qur'anic-theological knowledge (Paya 2016, p. 393). So, in our study, we were obliged to refer to scholars whose background education was mostly in Jurisprudence or perhaps exegesis (tafsīr).
- ² Qur'anic Perspective.
- ³ The basis and method of categorizing the opinions of scholars.
- ⁴ The good news that indicates the activity of Iranians in the field of science and religion debates on the subject of human creation is the articles and researches that are being carried out in recent years by university professors (mostly Iranian) around the world in order to transfer the knowledge and opinions of previous Iranian thinkers, and publication. Due to the lack of previous sources in the international literature about Iranian thinkers in this field, the first published works are necessarily descriptive works that introduce and compare them in the literature content. In Paya's article (Paya 2022), which deals with the exchange of historical thought between two influential Shiite researchers (Sahabi and Tabatabai), the historical and social background of that time can be well observed in relation to their understanding of the theory of evolution, and the role and impact of the exchange in contemporary Iran. Paya tries to introduce the opinion of these two influential thinkers gently.
- ⁵ Carolus Linnaeus, a Swedish scientist, published *Systema Naturae*, which includes the common modern naming system of binomial nomenclature, or the naming of species with two names (i.e., *Homo sapiens*, for humans).
- ⁶ Georges Cuvier, a highly respected French scientist, is known as the father of Paleontology. He is also well known for his denial of any sort of evolutionary theory by his study of the fossil record.
- ⁷ "The President's National Medal of Science: Recipient Details—NSF—National Science Foundation". [Nsf.gov](https://www.nsf.gov). Retrieved 2 December 2017., could give the following title to his paper: "Nothing in biology makes sense except in the light of evolution" (Dobzhansky 1973).
- ⁸ He used this term for the first time in his *The Principles of Biology* (Spencer 1864).

- ⁹ Such as Jamāl al-Dīn Al-Afḡani, Abu al-Majīd al-Isfahāni, Ḥusseyṅ al-Jisr, Muṣṭafa al-Mansuri, and Moḥammad IḲbal (Guessoum 2010).
- ¹⁰ As the consensus on some matters of facts like the common ancestor or the tree of life, or in better words, the evolutionary nature of the physical (biological) genesis of man instead of an all at once and immediate creation.
- ¹¹ For example, Abd al-Aziz bin Baz is one of the best-known Salafi scholars and an explicit opponent of Darwinian evolution. He holds that if a Muslim is aware of religious texts and still believes in evolution, he/she will be counted as a heretic (Dobzhansky 1973, pp. 173–74; Guessoum 2011). Safar al-Hawali says that it is indisputable that all humans are the offspring of Adam and Eve. Moreover, if one believes that non-human species were created ex-nihilio or believes in other myths, “we respond to them using our scriptures (and any doubting that is tantamount to heresy!)”. Abdul Majeed al-Zindani believes that Darwinian evolution is not even a theory despite the discovery of “Ardi” the 4.4-million-year-old man fossil skeleton and he holds that Darwin’s theory is a myth, evolution being just a hypothesis that was defended by materialists. He also believed that it was disseminated by the colonial powers in the Muslim world in an effort to weaken the hold of religion there (Guessoum 2016, pp. 3–4). All these figures are fundamentalist and literalist scholars. In this paper, we will show that Shiite Muslim scholars cannot issue such fatwas, given the rationality-oriented principles of their jurisprudence.
- ¹² For a quick overview, we could find three kinds of contemporary taxonomies; the first is by Ghafourifard—Akrami’s (Ghafourifard and Akrami 2011) which was also mentioned in Salehi’s (Salehi 2009) work previously with four categorizations as mentioned in the main text. The difference between these two is in their definition of evolution. Most of the essays in this field have not dealt with evolution in a specialized and scientific way. Still, it is distinguished in Ghafourifard—Akrami’s essay as a fact but Salehi consider it as mechanism described by Darwin (Darwinism). The second classification is a three-class categorization based on the *Qur’an*, by which, 1. Some believe that the verses on creation prove evolution, 2. Some believe they mostly deny it, and 3. Others who believe that the verses are silent due to their own interpretations (Eslāmī 2013, p. 175). The third classification is a four-class categorization attributed to the acceptance or rejection of the theory of evolution based on the *Qur’an*: 1. Those who reject the theory of evolution because of its apparent contradictions with the *Qur’an*, 2. Those who reject the theory of evolution, although they believe that it does not contradict the *Qur’an*, 3. Those who have accepted the theory of evolution and consider the verses of the *Qur’an* as its proof, 4. Those who have accepted the theory of evolution and believe in the expressive distinction between the language of science and the language of the *Qur’an* (Sofian 2018).
- ¹³ The dichotomy is a structure that divides elements of a matter into opposing but complimentary sections. This split can be repeated until the items of that level cannot be further subdivided (Falcon 1997).
- ¹⁴ Truly God chose Adam, Noah, the House of Abraham, and the House of ‘Imrān above the worlds (Al ‘Imran: 33).
- ¹⁵ At that time, there were many scientific critiques of Darwin’s theory.
- ¹⁶ This was confirmed through contact on 27 July 2020, from the Office of Ayatollah Miṣbāḥ Yazdī through a phone conversation with his son, ‘Alī Miṣbāḥ Yazdī.
- ¹⁷ Apart from the *Qur’anic* verses, from which it can be inferred that there are stages in the creation of man (Shaykh Tabarsi 1980, vol. 13, p. 184), this issue has been mentioned in many hadiths; for example, it took forty days (mornings) or forty years for the creation of Adam’s body (Al-Aḥsā’ī 1984, vol. 4, p. 98). Such evidence rejects the belief in the spontaneous creation of man without going through any stages, although they consider the creation of Adam as an exception to the process of the creation of other beings.

References

- Al-Aḥsā’ī, Abī Jumhūr. 1984. *Awali Al-La’ali Al-Hadithiyya ‘ala Madhhab Al-Imamiyya*. Qom: Sayyed Al-Shoha.
- Alexander, Denis R. 2007. *Models for Relating Science and Religion*. Faraday Paper. Kanpur: Faraday Institute for Science and Religion, vol. 3.
- Ayala, Francisco José. 2006. *Darwin and Intelligent Design*. Minneapolis: Fortress.
- Barbour, Ian G. 1929. *Religion and Science*. New York: HarperCollins, vol. 4. [CrossRef]
- Barbour, Ian G. 1968. Issues in Science and Religion. *American Journal of Physics* 36: 562. [CrossRef]
- Bigliardi, Stefano. 2011. *Snakes from Staves? Science, Scriptures, and the Supernatural in Maurice Bucaille*. Zygon®. Hoboken: Wiley Online Library, vol. 46.
- Bigliardi, Stefano. 2012. *Barbour’s Typologies and the Contemporary Debate on Islam and Science*. Zygon®. Hoboken: Wiley Online Library, vol. 47.
- Bigliardi, Stefano. 2014a. *Islam and the Quest for Modern Science: Conversations with Adnan Oktar, Mehdi Golshani, Mohammed Basil Altaie, Zaghoul El-Naggar, Bruno Guiderdoni and Nidhal Guessoum*. Istanbul: Swedish Research Institute in Istanbul.
- Bigliardi, Stefano. 2014b. *The Contemporary Debate on the Harmony between Islam and Science: Emergence and Challenges of a New Generation*. *Social Epistemology*. Abingdon: Taylor & Francis, vol. 28.
- Cartwright, John. 2000. *Evolution and Human Behavior: Darwinian Perspectives on Human Nature*. Bradford Books. Cambridge: MIT Press.
- Chalmers, Alan. 1990. *Science and Its Fabrication*. Minneapolis: Univ of Minnesota Press.
- Clark, Kelly James. 2014. *Religion and the Sciences of Origins: Historical and Contemporary Discussions*. Berlin/Heidelberg: Springer.

- Daneshgar, Majid. 2020. 'Uninterrupted Censored Darwin: From the Middle East to the Malay-Indonesian World:' With Majid Daneshgar', 'The Future of Islam and Science: Philosophical Grounds'; Biliana Popova, 'Islamic Philosophy and Artificial Intelligence: Epistemological Arguments'. *Zygon*[®] 55: 1041–57.
- Darwin, Charles. 2008. *The Descent of Man, and Selection in Relation to Sex*. Princeton: Princeton University Press.
- Desmond, Adrian, and James Moore. 1992. Darwin. *Medical History* 36: 333–34. [CrossRef]
- Dobzhansky, Theodosius. 1973. Nothing in Biology Makes Sense Except in the Light of Evolution. In *The American Biology Teacher*. Berkeley: University of California Press, vol. 35. [CrossRef]
- Elshakry, Marwa. 2014. *Reading Darwin in Arabic, 1860–1950*. Chicago: University of Chicago Press.
- Eslāmī, Seyyed Hassan. 2013. Theological Consequences of the Theory of Evolution and Iranian Answers: From Tabatabai to Meshkini. Paper presented at Conference Commemoration of Ayatollah Meshkini; Qom: Dar Al-Hadith Scientific-Cultural Institute, vol. 1, pp. 149–218.
- Eslāmī, Seyyed Hassan. 2016. *Motahari and the Philosophy of Religion. Motahari's Philosophical Encounter with the Darwinian Theory of Evolution*. Tehran: Allameh Morteza Motahari Scientific and Cultural Foundation.
- Falcon, Andrea. 1997. Aristotle's Theory of Division. *Bulletin of the Institute of Classical Studies* 41: 127–46. [CrossRef]
- Fowler, Thomas B., and Daniel Kuebler. 2007. *The Evolution Controversy: A Survey of Competing Theories*. Ada: Baker Academic.
- Futuyma, Douglas J. 1986. *Evolutionary Biology*, 2nd ed. Sinauer Associates: Sunderland.
- Gamini, Amir Mohammad. 2017. *Muwājiheh Bā Dārwin [Encountering with Darwin]*. Tehran: Kargadan.
- Ghafouri-Fard, Soudeh, and Seyed Mohammad Akrami. 2011. Man Evolution: An Islamic Point of View. *European Journal of Science and Theology* 7: 17–28.
- Gould, Stephen Jay. 1985. Evolution as Fact and Theory. *Discover* 2: 34–37.
- Guessoum, Nidhal. 2010. Religious Literalism and Science-Related Issues in Contemporary Islam. *Zygon*[®] 45: 817–40. [CrossRef]
- Guessoum, Nidhal. 2011. *Islam's Quantum Question*. London: I.B. TAURIS.
- Guessoum, Nidhal. 2016. Islamic Theological Views on Darwinian Evolution. *Oxford Research Encyclopedia of Religion*. [CrossRef]
- Hameed, Salman. 2010. Evolution and Creationism in the Islamic World. *Science and Religion*, 133–52. [CrossRef]
- Hanioglu, Sukru. 2013. *Blueprints for a Future Society: Late Ottoman Materialists on Science, Religion, and Art*. London: Routledge.
- Heyidāari, Kamal. 1994. *Sharḥ Al-Halq Ula*. Qom: Dar al-feraqad.
- Holy Bible: Douay Rheims Version*. 2009. Gastonia: Saint Benedict Press & Tan Books.
- Jalajel, David Solomon. 2009. *Islam and Biological Evolution: Exploring Classical Sources and Methodologies*. Cape Town: University of the Western Cape Western Cape.
- Jawādī Āmulī, 'Abdullāh. 2002. *Ṣūrat Wa Sīrat-i Insān Dar Qur'ān [The Human Outer and Inner Reality in the Qur'an]*. Qom: Isrā' International Center for Publication.
- Jawādī Āmulī, 'Abdullāh. 2005. *Tafsīr-i Insān Bi-Insān [Exegesis of Man by Man]*. Qom: Isrā' International Center for Publication.
- Kaya, Veysel. 2012. Can the Quran Support Darwin? An Evolutionist Approach by Two Turkish Scholars after the Foundation of the Turkish Republic. *The Muslim World* 102: 357–70. [CrossRef]
- Larson, Edward John. 2006. *Evolution: The Remarkable History of a Scientific Theory*. Modern Library Chronicles. New York: Random House Publishing Group.
- Madārek-e Islāmī, Markaz-i Ittīlā'āt. 2010. *Farhangnāma-Ye Uṣūl-i Fiqh [Dictionary of the Principles of Jurisprudence]*. Qom: Islamic Sciences and Culture Academy.
- Makārim Shīrāzī, Nāser. 1954. *Fīlsūfnumāhā*. Tehran: Dār al-Kutub al-Islāmiyye.
- Makārim Shīrāzī, Nāser. 2001. *Tafsīr Nimūna [Exemplary Exegesis]*. Tehran: Dār al-Kutub al-Islāmiyya.
- Malik, Shoaib Ahmed. 2019. Evolution and Islam—A Brief Review. In *The Muslim 500: The World's 500 Most Influential Muslims 2020*. Edited by Abdallah Schleifer. Jordan: The Royal Islamic Strategic Studies Centre.
- Malik, Shoaib Ahmed. 2021. *Islam and Evolution: Al-Ghazali and the Modern Evolutionary Paradigm*. Abingdon: Taylor & Francis.
- Malik, Shoaib Ahmed, and Elvira Kulieva. 2020. Does Belief in Human Evolution Entail Kufr (Disbelief)? Evaluating the Concerns of a Muslim Theologian. *Zygon*[®] 55: 638–62. [CrossRef]
- Meshkīnī Ardabīlī, 'Alī. 1991. *Takāmōl dar Qur'ān [Evolution in Qur'an]*. Tehran: Daftar-e Nashr-e Farhang-e Eslami.
- Meshkīnī Ardabīlī, 'Alī. 2013. *Tafsīr e Mabsūṭ [Detailed Exegesis]*. Edited by Jawād Faḍīl Bakhshāyeshī. Qom: Mu'assisa-ye 'Ilmī Farhangī-ye Dār al-Hadīth.
- Muṭāhhārī, Murtaẓā. 2005. *Majmū'a Āthār [Collected Work]*. Tehran: Ṣadrā Publications.
- Muṭāhhārī, Murtaẓā. 2008. *Kolliāt-e-Olum-e-Eslāmi*. Tehran: Sadrā Publications.
- Nadvi, Muhammad Shahabuddin. 1998. *Evolution Or Creation?* Bengaluru: Furqania Academy Trust.
- Newport, Frank. 2010. *Four in 10 Americans Believe in Strict Creationism*. Washington, DC: Gallup, Inc.
- Paya, Ali. 2014. Islamic Philosophy: Past, Present and Future. *Royal Institute of Philosophy Supplement* 74: 265–321. [CrossRef]
- Paya, Ali. 2016. The Disenchantment of Reason: An Anti-rational Trend in Modern Shi'i Thought the Tafkīkis. *Journal of Shi'a Islamic Studies* 9: 385–414. [CrossRef]
- Paya, Ali. 2022. Science vs. Religion: The Case of a Historical Intellectual Exchange between Two Shi'i Scholars Regarding Evolution. *Theology and Science* 20: 328–42. [CrossRef]
- Riexinger, Martin. 2009. Responses of South Asian Muslims to the Theory of Evolution. *Die Welt Des Islams* 49: 212–47. [CrossRef]
- Ruse, Michael. 1984. Commentary: Is There a Limit to Our Knowledge of Evolution? *BioScience* 34: 100–104. [CrossRef]

- Sahābī, Yadullāh. 1996. *ḲelḲat-i Insān [Creation of Man]*. Tehran: Sherkat-e Sahāmī-ye Enteshār.
- Salehī, Majid. 2009. Dīdgāh Qur'an Wa Andīsh'mandān Dar Ghebāl e Nazariye Tahawol Anwā [The View of Quran and Muslim Thinkers towards the Theory of Evolution of Types]. *Rahyaft ĪnḲelāb Īslāmī* 9: 113–30.
- Shanavas, T. O. 2005. *Creation and/or Evolution: An Islamic Perspective*. Bloomington: Xlibris Corporation.
- Shaykh Tabarsi. 1980. *Translation of Majma' Al-Bayan Fi-Tafsir Al-Qur'an [Interpretation of the Complex Statement. Interpretation of the Noble Qur'an]*. Beirut: Dār-al-M'arefah.
- Sofian, Safiye. 2018. Barresī Elal'e Tanawo e Dīdgāh Mutefakerān Musalman Darbāre-ye Nazaīye Fargasht [Investigating the Causes of the Diversity of Muslim Thinkers' Views on the Theory of Evolution]. *Biology Education Development* 2: 10–15.
- Spencer, Herbert. 1864. *The Principles of Biology*. London: Williams & Norgate.
- Subhānī, Ja'far. 2007. *Madkhal-i Masā'il-i Jadīd Dar 'Ilm-i Kalām [An Introduction to New Problems in the Science of Kalām]*. Qom: Imam Sadiq Institute.
- Subhānī, Ja'far. 2008. *Masā'il-i Jadīd-i Kalāmī [New Theological Problems]*. Qom: Imam Sadiq Institute.
- Ṭabāṭabā'ī, Muḥammad Ḥuseyn. 1970. *Al Mizan Fi Tafsīr Al-Qur'ān [The Balance in the Exegesis of the Qur'an]*. Beirut: Mu'assisat al-A'lamī li-l-Maṭbū'āt.
- Ṭabāṭabā'ī, Muḥammad Ḥuseyn. 2008. *Barrasī-Hāye Islāmī [Islamic Investigations]*. Qom: Būstān-i Kitāb.
- Ṭāleqānī, Maḥmūd Ḥuseyn. 1983. *Partuwī Az Qur'ān [A Ray from the Qur'an]*. Tehran: Shirkat-i Sahāmī-ye Intishār.
- Yazdī, Mešbāh, and Muḥammad Taqī. 1988. *ḲelḲat-i Insān Az Nazar-e Qur'ān [The Human Creation from the Perspective of the Qur'an]*. Edited by Maḥmūd Muḥammadī 'Irāqī. Qom: Shafaq.
- Ziadat, Adel A. 1986. *Western Science in the Arab World: The Impact of Darwinism, 1860–1930*. Berlin/Heidelberg: Springer.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.