Islam and Science in the Future

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

THEORIZING RELIGION AND QUESTIONING THE FUTURE OF ISLAM AND SCIENCE

by Mohsen Feyzbakhsh 🗓

Abstract. Will there be any joint future for science and Islam? Although such questions have recently received considerable attention, more basic questions are often ignored. This article aims at addressing some of those more basic questions through exploring the assumptions that underlie different possible understandings of the question about the future of Islam and science. By investigating the relation between conceptualizations of religion and the question about the future of Islam and science, it will be argued that different understandings of the concept of religion (i.e., whether it denotes real objects, whether it is universal, and whether it is belief centered) lead to extremely different readings of the question. Besides, it will be argued that different answers to the question about the future of Islam and science can be understood in terms of the inference to best theological explanation; thus, the criteria that one assumes for the best theological explanation result in different criteria for evaluation of the answers.

Keywords: belief centrism; definition of religion; inference to the best explanation; science and Islam

Questioning the relation between modern science and Islam has always received considerable attention, particularly within the last two centuries. Addressing the question generally has two faces. First, there are propositions which arise from modern scientific discoveries in physics, cosmology, biology, and more recently neuroscience that seem to be at odds with Islamic notions about worldly affairs. Second, Muslims have had *prima facie* practical problems with modern products of science and technology,

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which have either posed unprecedented cases for, or implied prohibitions in Islamic law. This has led Muslim scholars such as, among others, Sayyid Hossein Nasr, Syed Naquib al-Attas, Islamil al-Faruqi, Parveez Hoodbhoy, and Zainal Abidin Bagir, to debate the (in)compatibility of, and the necessity of, the relation between Islam and modern science technology.

However, it seems inevitable that ongoing scientific development, and its significant impact on every layer of our daily lives, should be monitored. It is not surprising, then, to observe Muslims' concerns about the future of Islam and science, which has made inroads into both academia and the public sphere: will there be any common future for science and Islam? Although such questions about the possibilities are relatively popular, more basic questions are often ignored; for example, whether a question about the "future of Islam and Science" can actually be meaningful, and how.

In his monograph dealing with modern Islamic commentaries (*tafāsīr*) and science, Majid Daneshgar (2018, 151) raises some direct questions and indirect answers about a "semi-" *imaginary* future of Islam and science in 2154 AD, when "humans can easily cure the deadliest diseases using technology and live very long lives." His proposal addresses a set of theoretical and practical problems about incompatibilities between scientific discoveries and Islamic doctrinal propositions and Qur'anic teachings. For instance, he assumes that the Qur'anic legal decree about the prohibition of sexual intercourse during menstruation (Quran 2:222)¹ may contradict recent physiological findings, which prove that "not only is [it] not harmful, but it even has positive aspects for both partners" (Daneshgar 2018, 152).

Before challenging Daneshgar's arguments, let us ask how Muslim theologians or jurists would address these kinds of issues about the future of Islam and science. How many of them may dis/agree with his three alternatives about Muslim responses to the provision of future science:

Muslims will have three alternatives: to ignore scientific discoveries, [...] to ascribe the majority of scientific discoveries to Islam, [...] or to follow a metaphorical qur'anic exegesis, one focusing on ethics and goodness and ignoring the physical world. (Daneshgar 2018, 152)

Each of these alternatives can take different forms. For example, "to ignore scientific discoveries" can be interpreted in at least two ways. First, based on scripturalist assumptions, one can simply stick to the cosmological propositions that may be extracted from the scripture. However, a more sophisticated way to *deny* scientific discoveries is to call into question the value-neutrality of modern science and claim that there is an "Islamic science" (as an alternative to modern science) which is consistent with or even rooted in the scripture.²

In this article, I do not address how and under what circumstances one can prove one of the aforementioned alternatives to be the best, nor if there is any joint future for Islam and science. Rather, I aim to capture

the nuances behind the apparent simplicity of the very question and display how multifaceted is the road to answering it. The problem is not which answer to the question might be the best; instead, the problem concerns what scholars do when they want to answer the question. A scholar wishing to respond to the question may pose many assumptions about the "meaning" of the question itself. How may these assumptions influence the way one answers the question? My central argument is that understanding the meaning of the answer to the question of the future of Islam and science lies particularly in comprehending the complexity of the very question. The way we deconstruct and unpack the constituents of the question and its complexity may help find a way to provide an answer. Each of the concepts engaged in the question, viz., "Islam" as well as "science," should be reviewed precisely: the different understandings of these concepts, the different perceptions of the whole question.

Daneshgar's alternatives presuppose, by and large, that investigating the relation between science and Islam would lead to exploring the connection between scientific propositions and Islamic beliefs. For instance, those who pursue a metaphorical commentary on the Qur'an, highlighting rhetorical aspects (e.g., Abdul-Raof 2012), do not see commonalities between modern cosmological propositions and Qur'anic cosmological and natural allusions. For them, modern cosmology is entirely about the physical world; consequently, their interpretations of Qur'anic allusions to celestial wonders are metaphorical; different from the usual claims of science.

There might be a couple of assumptions behind this approach: (a) it is supposed that scientific theories manifest reality (i.e., scientific realism); and (b) the notions of "science" and "Islam" are assumed to be identical to "scientific propositions" and "Islamic beliefs." Thus, a belief-centered definition of Islam (and religion in general) is taken for granted.³ But one may wonder if this is the only possible understanding of the question of the relation between Islam and science.

To uncover the complexity of questioning the future of Islam and science, three steps will be taken in this essay. At the outset, the difficulty of the question is argued for. Attention will be paid to how different understandings of the concept of Islam led to the raising of questions about Islam and science drawn from extremely different readings. In this regard, whether the concept of religion is factual as well as universal, along with the role of belief—a crucial notion to make sense of religion—will be taken into account. It will be argued in particular how a belief-centered conceptualization of religion in general, and Islam in particular, results in an extremely different understanding of the question from a conceptualization which is not belief-centered. In the second step, given the complexity of the question, I propose a framework through which one can not only comprehend the question of the (common) future of Islam and science, but

also provide an answer to it. To my knowledge, theological answers to the question are given on the basis of the best explanation for the data observed by theologians. Nonetheless, the data are broader than pure scientific phenomena; they include scriptures and/or the beliefs made on their basis, which I call: "inference to the best theological explanation." Subsequently, I will show how different answers to the question of the future of Islam and science would be possible. I argue that different answers stem from diverse proposals for the criteria of the best theological explanation. As a key example, determining the criteria depends on the role and credit one gives to reason ('aql) on the one hand, and on the literal meaning of the scripture under discussion, on the other.

Through an imaginary example of a Shi'i jurist, for instance from the 19th century, I will show how he wants to predict the "future" of Islam and science in the twenty-first century. His theological approach to the role of reason in systematizing theology will be developed on the basis of the framework outlined in the second section.

Conceptualization of Religion and the Future of Islam and Science

The answer to the question of the possible future of Islam and science is usually given on the basis of a straightforward understanding of the question. Interlocutors consider that there is an uncontroversial understanding of what "Islam" and "science" denote, and they can simply explore whether Islam and science can coexist in an imaginary future. In contrast to this naïve reception, different understandings of the elements contributing to the question result in raising vastly different questions. The main element of the question is the religion of Islam; a crucial concept which needs to be thoroughly investigated. Over the past decades, there has been a growing body of scholarship questioning various aspects of religion, from its concepts to its appearance in people's lives. But one set of questions challenges earlier debates: is it *at all* possible to define religion? Why is it even necessary to do so? If it is both possible and necessary, then how can religion be defined?⁴

Factuality of "Religion"

The rival ideas on different questions about the conceptualization of religion can considerably change any study of a "religion" including its relationship with science. For instance, there is an ongoing debate on whether the term "religion" corresponds to something real in the world or whether it is a fabricated concept. Wilfred Cantwell Smith (1962), Jonathan Zittell Smith (1982), Timonthy Fitzgerald (2000), and Russell McCutcheon (2001) are among the best-known critics of the validity of the concept of religion.⁵ Kevin Schilbrack (2014), to take an example,

tries to argue against the former idea. Drawing on John Searle's (1995) theory of "social reality," he seeks to argue for a critical realist approach to the notion of religion in contrast to an antirealist one. These rival understandings of the conceptualization of religion make a huge difference in what we are capable of discussing under the rubric of "Islam and science." If one believes that the concept of religion does not correspond to anything real in the world, then the question of the relation between science and religion in general, and science and Islam in particular, would be deprived of its *prima facie* meaning. In other words, assuming that the genus "religion," a species of which is "Islam," is not factual, makes the question of "Islam and science" irrelevant.

Universality of "Religion"

Moreover, if one challenges not the validity, but the universality of the concept of religion, then this perspective brings new challenges for understanding the question of "Islam and science." Thus, another example is whether the conceptualization of religion is independent of religious traditions. Some scholars have tried to show that religion, as a category, stems from the Christian tradition and there are alternative ways of categorizing religion in different "religious" traditions. Yong Chen (2013), Anna Sun (2013), and Ya-Pei Kuo (2017) are but some of the scholars who attempt to deal with the question in the Chinese context, especially in terms of Confucianism. Edward Antonio (2017) addresses the problem of whether indigenous African traditions can serve in theorizing religion beyond the Western Christian context. Also, Ahmet Karamustafa (2017) suggests the concept of $D\bar{\imath}n$ (lit. religion) as an alternative to the Western conceptualizations of religion:

[...] Islamic $d\bar{\imath}n$ is certainly a powerful reminder that "religion" is not a naturally universal category. At the very least, close scrutiny of $d\bar{\imath}n$ leads to a serious reconsideration of the legitimacy of characterizing Islam as a "religion." Indeed, it is clear that "religion," in any of the specific forms it took in Western history, is not an automatically suitable category to use in describing Islam (Karamustafa 2017, 169).

Whether or not one accepts the idea that the modern definition of religion is ideologically motivated leads to different confrontations with the question of "the future of Islam and science." If one accepts the universality of the notion of religion, then one may be able to compare the relation between different religions and science. To imagine the future of Islam and science, it might be viable for these scholars, then, to draw on the history of the relationship between science and Christianity. But if one calls into question Christianity, and Islam being a species of the same genus (i.e., religion), then it is hard to imagine how the history of one can shed light on the future of the other.

Belief and "Religion"

One of the other questions which has received extensive attention pertains to the role of *belief* in defining the concept of religion. Traditionally speaking, belief has played a central role in the study of religion, and particularly in the philosophy of religion. For the most part, philosophers of religion were (and still are) focusing on the rationality of theism, that is, the *belief* that God exists. This has also been the case for theologians, whose task has been to give a set of coherent *beliefs* of the religion to which they belong, and also to justify those *beliefs*, in response to critics and opponents.

Historically, this pivotal role has led to definition of religion in terms of belief. Thus, to be religious, is assumed to be equivalent to having religious beliefs. This is the case among both scholars of religion and religious people themselves. William James ([1902] 2002, 46), for instance, defined religion as "the belief that there is an unseen order." Likewise, Edward Tylor (1871, 383) defined religion as "the belief 9 in Spiritual Beings, and James George Frazer (1911, 222) understands religion as "a propitiation or conciliation of powers superior to man which are believed¹⁰ to direct and control the course of nature and of human life." In general, "A belief-centered religious construct is a concept of religion, religiosity, or religious identity that gives special priority to an interior or 'mentalist' notion of religious belief" (Barrett 2017, 2). On the other hand, the popular understanding of religion also seems to be belief centric. A popular answer to the question "who is religious" would be "those who have religious beliefs." Thus, both among professionals and laymen, a belief-centered understanding of religion is widespread.

But scholars of religion have called into question belief centrism in understanding religion. The critique is focused either on the problems with the very notion of belief (e.g., Needham 1972, Pouillon 2016), or on the undermining of other aspects of religion. The material turn in the study of religion can be considered as a major critique to giving the central role to belief in the definition of religion. The works of Robert Bellah (1970), Talal Asad (1983), and more recently, Webb Keane (2008) and Manuel Vásquez (2011), are a few examples of different views on lamenting the central role of belief in defining religion.

There are at least two objections that show that a belief-centered definition of religion either makes religion incapable of being studied or is itself irrelevant. The first objection relates to the problem of access. The critics hold that belief is an inner mental state, thereby we cannot have access to it to be able to explore it. Thus, we have to leave the concept of belief in order to be able to study religion (Schilbrack 2014, 56).

As Schilbrack (2014, 56) elaborates, the second objection is related to the problem of cultural bias. The main point of this objection is that the centrality of belief in defining/studying religion is rooted in the centrality of belief in Christianity. Since the study of religion is largely shaped in Christian contexts, belief has become central to the study of religion and this has been unjustifiably projected to other "religions" as well. Therefore, it is not religion *per se* that holds belief as its prominent constituent, but it is a specific kind of religion. Hence, a nonbelief-centered definition of religion is called for.

Schilbrack himself still tries to make room for belief. For instance, by appealing to the philosophical distinction between representationalist, dispositionalist and interpretationist understandings of religious belief, he demonstrates that those who hold that belief as an inner mental state, to which there is no access, rely upon a representationalist account of belief. But a dispositionalist account does not entail inaccessibility of belief as an inner mental state. Consequently, one can acknowledge that in terms of the problem of defining religion, there is still dispute over whether we should seriously take belief into account.

Again, asking about the future of Islam and science, a belief centrist would understand it as a totally different question than, say, a materialist. Even different theories within each of these approaches (reductionism vs. nonreductionism within materialism or representationalism, dispositionalism, and interpretationism within belief centrism) create different problems. Therefore, again, one's theory of religion entails a specific understanding of the question of the future of Islam and science.

Belief and "Islam"

We are confronted with a range of apparently *contradictory* and mutually *non-commensurate* statements and actions—whether that apparent contradiction is between doctrine and doctrine, doctrine and practice, or practice and practice—all of which claim, to their own satisfaction, to be representative of and integral to a putative object, "Islam." (Ahmed 2016, 109)

So far, it has been shown that there is a problem with the role of belief in defining religion in general, and different views on the conundrum result in different understandings of the question of Islam and science. Now, I want to show that, in a sense, the problem has been taken into consideration apropos of understanding *Islam* in particular. I will draw on Shahab Ahmed's *What Is Islam: The Importance of Being Islamic*. Ahmed's aim is to put forward an explanation of why there are contradictory phenomena, all of which can be called *Islamic*, and how one can give an account of *Islam* which coherently includes all of those contradictory phenomena:

Here I do not discuss how Ahmed gives such an explanation, but I contend that his account broadens the meaning of being *Islamic* far beyond being understood merely as having *Islamic beliefs*. As outlined in his conclusion, "[c]hanging the terms of the language in which we conceptualize Islam serves [...] to bring into focus constitutive and defining features

that are obscured or put out of focus by other conceptualizations and categories" (Ahmed 2016, 543). So, we might be able to specify various forms of being *Islamic* which have nothing to do with Islamic belief or even belief-informed practice.

Now we can address again the problem posed at the beginning of this section. Let us reformulate the question of the joint future of Islam and science with respect to the different understandings of the role of belief in religion. If one sees Islam as equal to Islamic beliefs, then the question takes the following form:

Can one imagine commonalities between Islamic and scientific beliefs about the universe in the future?

But if one defines Islam more generally than what is included in Islamic beliefs, then the question might appear differently:

How can various representations of Islam receive new scientific achievements?

While in the first form of the question the problem is to make a coherent set of beliefs, the possible answer in the latter has nothing to do with beliefs. In short, addressing the problem of the common future of Islam and science very much depends upon one's conceptualization of religion in general, and specifically of Islam. We are not faced with a single question that may have a straight affirmative or negative response. But we should determine to which conception of "Islam" we subscribe and thus which question we want to address. ¹¹

THE INFERENCE TO THE BEST THEOLOGICAL EXPLANATION: RATIONALE

In the second step, I want to propose a framework in which one can address the question of the future of Islam and science. In proposing this structure, it will be shown that even if one determines an exact understanding of the question, the answer is not straightforward. Here I will assume that we want to address the question by bearing in mind a belief-centered understanding of Islam, among other assumptions. ¹² I will argue that there is no straightforward answer to the specified belief-centered version of the question.

In the Islamic context, the task of theology (*Kalām*) is to both justify and systematize Islamic beliefs. ¹³ In undertaking the second task, one has to develop a coherent set of beliefs. But the meaning of *coherence* here is significant in that it is something more than mere coherence of the beliefs extracted from scripture. Since one of the main sources of [Islamic] theology is supposed to be reason (*'aql*), coherence should be achieved not only within the scriptural beliefs, but also between the

scripture and reason. Needless to say, reason here means every human intellectual achievement gained—at least apparently—independent of scripture. Consequently, Islamic theologians try to go beyond the scope of scripture and communicate with human intellectual achievements.

Therefore, there is a set of data, not only from scripture, but also from reason and even experience, from which a theologian aims to build a coherent system of beliefs. The relationship between theological data and a theological system here can be analogized to the relation between data and theory in science to the extent that it is understood in terms of *inference to the best explanation (IBE)*. A scientist proposes theories as the best explanation for his/her observations. Correspondingly, the theologian proposes a theology as the best explanation for the theological data, that is, the beliefs produced from scripture, reason, and experience. Thus, the procedure in theology can be analogically called *Inference to the Best Theological Explanation (IBTE)*.

In other words, the scientist tries to choose the best hypothesis or theories that can be developed from the available data including observations of natural phenomena. The data available to the theologian, however, include more than mere natural phenomena; they also embrace scripture. ¹⁴ Both scientist and theologian seek the best explanations from their available data. But each one's data differs from the other in scope. Thus, while the scientist looks for the best explanation of scientific data, the theologian is in quest of the best explanation of theological data, that is, natural observations and scriptural propositions. I suggest that we may call the latter IBTE.

To avoid misconceptions, two points should be illustrated. First, IBTE should not be confused with religious explanation (van Holten 2002; Dawes 2009). The latter term is used for the works of those who assert that "[t]here is some fact about the world [...] that can be explained only [or in the best way] by positing God's existence" (Dawes 2009, 8). A noted contemporary example is Richard Swinburne (1979) who in his work tries to demonstrate that the best explanation of our observations of the natural world is to assume that God exists. This has also been called inductive arguments for the existence of God.¹⁵

By theological explanation, however, I need to clarify why it is different. Religious explanation is "religious" in that it explains the mundane world by appealing to a religious entity, that is, God; but theological explanation is "theological" in that its data are those which a theologian wants to systematize. Technically speaking, while in the former, "religious" describes the explanans, in the latter, "theological" describes the explananda.

Second, it is noteworthy that what is contended here is not so much a prescriptive theory about practicing theology as a descriptive one. Regardless of being justified or not, explanatory reasoning proliferates not only among scientists, but also in everyday life (McCain and Poston

2017, 1). This does not necessarily mean that people *can* rightfully infer to the best explanations. Rather, it means that, in reality, they *do* infer to the best explanations in various enterprises. By the same token, I do not necessarily claim that theologian *should* use IBTE as the framework of working out theology; but I hold that they *are* in fact using IBTE, even if they are unaware that they do so.

To conclude this step, it seems that the study of the relationship between Islam and science can be read in terms of IBTE. To recall the "alternatives" of Daneshgar:

Muslims will have three alternatives: to ignore scientific discoveries, [...] to ascribe the majority of scientific discoveries to Islam, [...] or to follow a metaphorical qur'anic exegesis, one focusing on ethics and goodness and ignoring the physical world. (Daneshgar 2018, 152)

Now let us rephrase the above passage in terms of IBTE:

Muslims will have three alternative explanations of theological data, i.e., scientific observations and the content of scripture: they claim that the data are best explained either by sticking to the apparent meaning of scripture and ignoring scientific observations as being human, or by reconciliation of the content of scripture with scientific observations, or by adhering to the content of scientific observations as factual and supposing that the content of scripture is metaphorical.

The different standpoints here are thus merely various theological explanations of a set of data including scientific observations and scripture. But how do these different explanations become possible? The key to answering this question, I contend, lies in further following the analogy between IBE and IBTE.

Pursuing the analogy, one should look for the *criteria* of the best theological explanation. In science, the best account is what provides as much explanation as possible for observation and leaves as little as possible unexplained. Likewise, the best theological explanation is the one in which there is consistency between as much theological data as possible and with as little data as possible left unexplained. But how might this task be undertaken, assuming that there are many theological data (including those extracted from scripture and those achieved by reason) that are, *prima facie*, inconsistent?

The answer to this question lies in the framework in which one can (or even should) explore the (future) relation between science and religion, and Islam specifically. Ironically, the criteria one proposes depend upon what one counts as data in theology, which in turn depend on one's idea about the sources of theology. Islamic theologians (*mutakallimun*) usually count scripture, tradition, and reason as the sources of theological data. But the problem is on which theoretical basis one should understand the

statements stemming from each of these sources. For example, how can we understand the Qur'an and where can a true rational belief be found? Also, another challenge is with the status of each source in relation to the other, that is, which source is superior. So, the question is what criteria may one use to determine the best theological explanation? In the next section, I want to address this problem.

THE INFERENCE TO THE BEST THEOLOGICAL EXPLANATION:

I now want to focus on two illustrations of the criteria for the best theological explanation. Before giving the examples, it is worth emphasizing that the instances given below are not themselves explanations. They are examples of how different criteria of the best explanation may result in different explanations.

The first example is the role of *ta'wīl* (allegorical interpretation) in the exegesis of scriptures. In Qur'anic exegesis, a major function of *Ta'wīl* is to give an allegorical interpretation of the text of the Qur'an in order to harmonize it with a widely held rational belief. For instance, since it is widely held among many Muslim theologians that God cannot be embodied, then they have to give an allegorical interpretation of the verses that implies that God has body. The difficulty is the extent to which one should rely on the literal meaning of the scripture. To what extent and on what basis can one interpret the scripture metaphorically? Are we obliged to take as many scriptural passages as possible in their literal meaning?

The flip side of *ta'wīl* is the extent to which one may give credit to "reason alone" as the source of producing religious beliefs. In what realms can the judgment of reason be counted as religious or, in other words, can be attributed to religion/God? Different answers to each of these questions significantly influences the way one can define the criteria of the best theological explanation.

While the first example (the role of $ta'w\bar{\imath}l$) mostly belongs to theoretical beliefs, the second for the most part pertains to practical beliefs. The second instance is the role of jurisprudence and its principles ($Us\bar{\imath}ul$ al-fiqh) in recognizing the divine commands. To put it simply, $Us\bar{\imath}ul$ al-fiqh is a collection of rational principles by appealing to which one can infer the divine commands from the scripture. Thus, the question is about the extent to which rational principles play a role in determining what God actually wants us to do.

Although legal theories are not "single, uniform phenomenon" (Hallaq 1992, 179) and every Islamic legal and theological school presents a different and distinct interpretation, here, I want to use an imaginary *legal* example. In relation to the theme of the special issue, one may ask what could be the reaction of a Muslim jurist (*faqīh*) to "how Islamic

law (figh) might respond to various controversial topics such as, 'liver transplantation." This topic is controversial because it is primarily prohibited to dissect the body of a dead Muslim. I take Muhammad-Kaizm Khurāsānī (d. 1911), a famous Shi'i Islamic jurist in the nineteenth and early twentieth century, as an example. Imagine one asks him "if medicine develops enough in future to be able to transplant organs from a dead Muslim body to save a human life, then is it religiously permissible to do so?" My conjecture-based impression is that he would cite a passage from his masterpiece in *Usūl al-Figh*, *Kifāyat al-Usūl* (lit. *Adequacy of Principles*) in which he delineates the area where prohibition of an action (rooted in a divine command in scripture) can be repealed in the case of an emergency (Khurāsānī 1989, 167). I do not aim to address the details of his idea of how prohibition may be repealed. But based on his notion, it can be said that he would have answered that although there is some scriptural content that implies prohibition of dissection of a dead Muslim body, it is allowed to transplant a liver (which requires dissection of the body) because there is an emergency, that is, saving a human life. This may be an example of a Muslim confrontation with an imaginary "future" regarding the relationship between science and Islam. It seems that we would comprehend his answer to the question especially if we understand his idea of the role of rational principles of *Usūl al-Figh* or legal principles by which one can recognize the divine command. This can also be understood in term of the criteria for the best theological explanation.

Now, let us again recall the alternatives:

Muslims will have three alternatives: to ignore scientific discoveries, [...] to ascribe the majority of scientific discoveries to Islam, [...] or to follow a metaphorical qur'anic exegesis, one focusing on ethics and goodness and ignoring the physical world. (Daneshgar 2018, 152)

Let us try to find the criteria of the best theological explanation which lie behind each of the alternatives. Those who hold the first are likely making no room for *ta'wīl* and rational principles as criteria of best theological explanation and believe that the best theological explanation is the one which has as much loyalty to the scripture, literally understood, as possible. But the second and the third alternatives take scientific data seriously, and believe that the best theological explanation is that which explains the "religiosity" of as many scientific discoveries as possible.

Conclusions

I sought to argue that questioning the future of Islam and science is very complicated. First, since there might be many different understandings of the concept of Islam, the question itself might take various forms and one should determine whether, for instance, one wants to tackle the question

with a belief-centered concept of Islam in mind. Moreover, even if one wants to answer a specific form of the question, say, the belief-centered form, one has to determine the criteria to which one may appeal to assess the explanation of theological data.

Daneshgar gives some examples concerning the future of Islam and science, including the challenges AI and thebiological revolution pose to Islamic ontological and legal beliefs rooted in the Qur'an. Although many of the examples assume a belief-centered understanding of the notion of Islam, my attempt was to show that the question of the future of Islam and science is much more complicated than it seems at first glance. It is necessary to unveil the basis of the assumptions on which one has determined the meaning of the questions asked. As such, if Shahab Ahmed were still alive, he would have given a totally different understanding of the question of the future of Islam and science.

Notes

- 1. "And they ask you about menstruation. Say, "It is harm, so keep away from wives during menstruation. And do not approach them until they are pure. And when they have purified themselves, then come to them from where Allah has ordained for you. Indeed, Allah loves those who are constantly repentant and loves those who purify themselves.""
- 2. There have been hot debates on the concept of "Islamic science" within the past decades in Iran. For an overview, see Hassani, Movahed Abtahi and Alipour (2011).
 - 3. This point will be further discussed in the next section.
 - 4. For more, see Stausberg and Gardiner (2016).
- 5. There are nuances in the ideas of these scholars in critique of the concept of "religion." For instance, given that the term "religion" is fabricated, there is disagreement about whether the term is useful about as a second order concept for academic purposes. It is open to think about how these distinctions provide us with a different understanding of our question of Islam and science. Stausberg and Gardiner (2016, 11) have tried to categorize the range of these critics of the notion of "religion."
- 6. There is an exception. Those critics who do not criticize the notion of "religions" but merely that of religion per se might be able to defend the meaningfulness of the question of the relation between science and any particular religion including Islam. Masuzawa (2005) who criticizes the idea of "world religions" would be an example.
 - 7. For a counterview, see Casadio (2016).
- 8. It *might* be viable, because there are also other factors in deciding whether one can legitimately compare the history of science and Christianity to that of Islam.
 - 9. Italics are mine.
 - Italics are mine.
- 11. These are not the only aspects from which the complexity of the question of the future of Islam and science can be recognized. All issues concerning the conceptualization of Islam can be shown to make the question more complicated than it seems at first glance. Besides, this is only what stems from the conceptualization of Islam. It can also be pursued with respect to conceptualizations of science.
- 12. Needless to say, belief centrism also implies that defining religion is possible. The theory is assumed just to simplify the question; it does not mean that it is endorsed; evaluation of the theory should be addressed elsewhere.
- 13. It is a classical understanding that the task of *Kalām* is two-fold (justification and systematization). Whether or not these two tasks can be reduced to a single one depends on one's theory of justification. Separating the two tasks lies in holding a classical foundationalist theory of justification. But, for instance, if one embraces "explanatory coherentism" (see Thagard 2000;

Poston 2014), then the two classical tasks of *Kalām* would be reduced to a single one. Here, regardless of one's theory of justification, I want to focus on the systematizing task of theology.

14. It is not intended here to assess if theologians *can* reasonably consider scripture as

legitimate data; it is only important that they do consider it as data.

15. Teleological Arguments for the existence of God may also be read this way.

16. This might seem an oversimplification, because there is a vast literature on the criteria of best explanation. But since the aim of this article is not to deal with the criteria in science but to explore the criteria of best theological explanation (which is something totally different), this minimal explication of the criteria of the best explanation is sufficient for the purpose of this article.

17. By religiosity, I mean the situation in which scientific discoveries are accepted to be religiously authentic.

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