

The Philosophy of Halal Science Concept in Al-Qur'an: A Study of Thematic Exegesis

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Abstract

Philosophy of science in general is divided into three types, which is natural science, social sciences and applied sciences. In fact there are also Islamic scholars who place the science of tauhid as the main factor for avoiding the modern science's thought such as saintism, rationalism and empiricism and that can effect the philosophy of Islamic science. This includes the field of halal science which is a branch of philosophy of Islamic science. Furthermore, the impacts of science and technology on the theory and application of halal science has led to some polemics in the community including genetically modified food (GMF), biotechnology risk in plants, halal slaughtering using machines, wool or lecithin based on animal or human resources, the use of elements pigs and derivatives in various products, alcohol (alcohol and ethanol) in food and more. Hence, research on philosophy of halal science is important. Therefore, this paper has three objectives. First, identify the philosophy of halal science. Second; analyze the verses of the Qur'an on the philosophy of halal science and the third; to build the philosophy of halal science based on the Qur'an which is the main source and remains relevant. This literature study found that there are three important elements that must exist in the philosophy of halal science namely tauhid as the main support, wahyu as a reference source and third role and values of humankind in the philosophy of Islamic science in managing and using halal science products.

Keywords: Philosophy, Islamic Science, Halal Science, Thematic Exegesis

Introduction

The rise and development of the scientific discipline in Islam and its effects are evident until today. Thus, although research and the study of Islam today is not like the golden era of Islam before; hence, it still helps in the development of Islamic knowledge, either from the theoretical or practical perspectives. Among the fields of knowledge that have been affected by scientific development are astronomy, geography, physics, mathematics, botany, engineering (Ramli, 2003; Khalijah, 2014; Salahudin, Yadman & Faezah, 2006).

According to Ramli (2003:66), all these fields of knowledge contribute to the development of civilization. It is also a symbol of achievement in science and technology that drives humans towards nobleness and eventually, to respect knowledge. The source of knowledge, or

epistemology, in the philosophy of science according to Islam, places divine deliverance (*wahyu*) as a trustworthy source. Epistemology also involves the process of intellectual debate, classification and specialization of knowledge as well as the scope of the limitations of the mind needed to overcome it. Besides epistemology, axiology, which refers to the science of values, theories and the system of values, is also closely related to the philosophy of Islamic science. The development of science helps humankind to objectively and accurately measure values. Values are an element that reflect human behaviour. According to Islam, the value of knowledge and thinking are the most important elements that determine the actions and behaviour of humans. Other than epistemology and axiology, Abdul Rahman Abdullah (2010) included one more characteristic in the philosophy of science, which was ontology. Ontology discusses the scope or limitations of the mind. Usually the scope of knowledge is only limited to empirical experiences but according to Islam, the scope also involves metaphysical or supernatural knowledge. Hence, discussions on the philosophy of Islamic science should include epistemology, axiology as well as ontology, either directly or indirectly.

Looking at the branches of Islamic science, halal science is one of the branches of the philosophy of Islamic science. This is because the scope of Islamic halal products covers a wide aspect of community life, including faith (*akidah*), religious practices (*ibadat*), morality (*akhlak*), economy, family matters, commerce, crime, clothing, entertainment etc. (Saadan & Abidin, 2014:18). Developments in halal science is evident, especially when scientists widen their research on halal by including various fields of knowledge, such as agriculture, biology, food technology, medicine etc. (Farhani, Anuar & Saifuddeen, 2015). Following this, numerous bio-halal and halal-based scientific research centres have been established (Lokman, 2013). Whereas, in the Malaysian industrial context, the food industry is expected to continue developing in tandem with developments in science and technology (Suhaimi & Yaacob, 2011:123). Effects of development in halal science have caused fast and efficient production of better-quality halal products as well as successfully fulfilled the demands of consumers (Aizat, 2013:1).

Hence, halal science faces its own challenges, especially from the theory and application aspects. First, studies on halal science mainly focus on the application of halal science, which is usually explained in terms of only the science and technology or laws of *fiqah* aspects and this clearly indicates the lack of discussion about philosophy. Consequently, halal science faces various challenging contemporary issues, such as materialism, scientism, empiricism etc. Second is from the application aspect. The focus on science and technology is profit-oriented instead of producing halal products, which should be one of the aims (Khalijah, 2007:106; Lokman, 2013 and Rahman (2010:246). In addition, there are halal science products that have a long-term negative effect on humans, such as *genetically modified food* or GMF (Izhar & Kashim, 2015) and food additives (*Monosodium Glutamate* or MSG) (Sofea et al., 2017:118).

Therefore, observations on the philosophy of halal science are consistent with the demands of syarak. Thus, in order to fulfil the criteria, this study drew up three main objectives. First, to determine the meaning of the philosophy of halal science. Second, analyse selected verses of the al-Qur'an and third, build the philosophy of halal science concept based on the al-Qur'an. Next, discussions were divided into four parts, namely the meaning of the philosophy of halal science, analysis of selected verses of al-Qur'an, the element of *tauhid* in the philosophy of halal science as well as the overall conclusion.

The Meaning of the Philosophy of Halal Science

In order to facilitate discussions, this working paper divided the meaning of the philosophy of halal science into two words, namely philosophy and halal science and then summarised the meaning used in this working paper.

Generally, philosophy is frequently related to the field of knowledge that emphasises on the conceptual aspects compared to the factual aspects. The conceptual aspect refers to ideas that involve understanding, whereas the factual aspect refers to the truth or facts of something produced from observations. These facts are exposed to a situation that could be true or accurate today or at a certain point in time but inaccurate at another point of time, such as historical, scientific and other facts (Sunawari, 2008:14). Rofa (2006:56) stated that philosophy refers to the love for knowledge, truth, morals and a metaphysical system weighed through a precise and stable mind, which is a process that explains the assumptions about something that has been thought about and this thinking process aims to discover something (Latif, 1993:2; Baharudin & Mohamed, 2009:426; Hossein, 2008:38).

In addition, Yusof (1999:1) stated that the concept of thinking involves matters related to a person's worldview (*tasawur*). The ability to think causes a person to generate various activities that are creative and developmental as well as enhance knowledge. Sunawari (2008:16) stated that philosophy is a discipline of knowledge that adduces problems and ways how to solve these problems, which then benefits the individual, society and the nation. He further added that Islamic philosophy is the symbol and soul of the Islamic intellectual movement. Islamic philosophy is not a separate knowledge by itself but includes four fields, which are *fiqh*, *kalam*, *tasawuf* and practical knowledge. Whereas, Rofa (2006) focused more on the roles of philosophers, namely those who study nature in a fair and equitable manner. Philosophers should also use all the faculties bestowed by Allah SWT in order to seek the ultimate truth that coincides with reality.

The expression 'halal science' is made up of two words, namely science and halal. Before elaborating on the meaning of halal science, the meaning of science and halal is explained separately. Generally, science functions as a tool for seeking the truth about the universe as well as strengthening faith in the subjects. In more explicit terms, Yusoff (2009:45) stated that the basic aim of developing science is to ensure that it provides well-being and harmony to humans. Hence, the world develops through scientific activities. However, these activities are not the only processes that ensure humans understand nature and benefit from it, so humans should also endeavour to achieve peace and harmony (*sakinah* or tranquillity) by being responsible and aware about God. Osman (2008:81) emphasised on three fundamentals needed for achieving basic objectives, such as the human mind, universe and the al-Qur'an, when adhering or implementing the divine deliverance (*wahyu*) bestowed by Allah SWT. Science according to Islam refers to a process that explains the phenomenon of nature by using specific scientific methods without transgressing the *tauhid* of Allah SWT (Yusof, 1996:69). According to Ziauddin (1992:55) and Hossein (2008), Islamic science refers to specific activities used for seeking the truth and solving problems. All must operate in an Islamic value structure, which means that aims, tools, methods and processes must be Islamic-based.

Next, this paper elaborates on the halal concept. Halal according to Islam occupies a large part of life. It not only involves the food and beverage aspects, but it is more than that. Whereas, halal, according to several venerable ulama (al-Ghazali, 1988:530, IbnKathir, 2003:468, Qutb, 2000:128, Hamka, 1990:3977; Qudimah, 2005:170), generally refers to all things good as well as beneficial to a person's physical and religious aspects. It contradicts the

concept of haram, which contains negative and vile elements that affect a person's religious belief and physical aspects. However, Hamka (1990:3977) stated that something that is halal should come from positive or religiously legitimate resources, for example, something that has been obtained through theft, robbery, cheating or by causing a loss to others. Similarly, al-Ghazali (1988:309) also shared Hamka's views in his scripture *Ihya' 'Ulumuddin*. According to him, halal food refers to how the food is obtained, which should be according to the Sunnah and *wara'*, not according to natural inclinations (*hawa nafsu*) but fulfilling a certain level of *taqwa*. al-Qaradhawi (2015: xiix) elaborated about halal more thoroughly according to the *fiqh* concept, which relates to halal as something that is required (*harus*) and removed from the bounds of prohibition (*haram*) and permitted by syariat. IbnKathir (2003) had elaborated on the relationship between halal and *tayyiba*. The word *tayyiba* refers to something good, beneficial and positive in relation to *tabiat* and syarak. It involves two elements, namely physical and spiritual elements, that must be consistent with syariat and accompanied with sincerity towards Allah SWT.

When the words science and halal are combined, the term halal science is formed. Halal science refers to a halal research activity that involves the use of science and technology. The research indirectly needs a scientific method to fulfil the requirements of a research. Usually scientific research involves issues of establishing regulations or law that is contemporary in nature (Saadan, 2013, Aizat & Anuar, 2013). Since the activity is a new or modern issue, hence, the philosophy of halal science based on Islamic philosophy should be emphasised in order to ensure the prosperity of the *ummah* and *syiar* Islam.

Verses of the Al-Qur'an Related to the Philosophy of Halal Science

In order to identify verses related to the philosophy of halal science, this working paper had used the halal proclamation (*lafaz*) and several other proclamations (*lafaz*) that have the same meaning, such as virtuous proclamations (*tayyiba*), "have some food" or "have a drink". There were 35 pertinent verses from the al-Qur'an that were identified. These verses were analysed based on several venerable interpretation scriptures, such as al-Tabariy (2007), al-Qurtubiy (2008), Ibn Kathir (2003), al-Munir (2016), al-Maraghiy (2001), al-Misbah (2003), al-Azhar (1990) and Qutb (2001). Besides that, discussions and analyses also used secondary sources, such as journals, books, thesis, articles etc. in order to elaborate and support the main source in this study. After some examination, the discussions pertaining to the verses focused on three main themes, namely the ontology, epistemology and axiology of halal science. Thus, for a more focused discussion, this working paper only explained six verses for the first theme, five verses for the second theme and six verses for the third theme. This was enough to achieve the objectives of the study. The essence of each verse is explained according to the theme as follows:

The Ontology of Halal Science

Six verses were found to be related to the ontology of halal science. Generally, ontology refers to the occurrence of something related to nature, cosmology, the metaphysical etc. (Abdul Rahman, 2010). The essence of these verses is shown in Table 1 below

Table 1

The Ontology of Halal Science

No	Surah	Meaning of the Verse
1	Al-Ghafir (40:64)	All that is created by Allah SWT is for humankind, such as the sky and earth, facial appearance and good fortune. All these creations have their own purpose, are interrelated and harmonious (Ibn Kathir, 2008a:226 and Qutb, 2000a:85)
2	Al-Maidah (5:1)	There is an agreement between humans and Allah SWT, which shows humankind's commitment, absolute obedience and complete allegiance to Allah SWT (Ibn Kathir, 2008b: 2-3 and Qutb, 2001b:157).
3	Taha (20:23-26)	Allah SWT has created the earth as a place for humans to live and walk on, for the falling rain to give life to various plants and livestock to flourish for the benefit of humankind as well as the survival of life itself (al-Qurtubi, 1993a:560; Qutb, 2000:525 and Quraish, 2003a:20)

Six verses from the al-Qur'an were selected from surah al-Ghafir (40:64), al-Maidah (5:1) and Taha (20:23-26). Generally, the first theme involved three main elements, such as the fact that Allah SWT embodies the elements of tauhid *uluhiyyah*, *rububiyah* and *asma al sifat*. The second element is about the fact that humans portray the human psychology element, such as the greatness of humans compared to other creatures. The third element is about the fact that the universe portrays the supremacy of Allah SWT's creations as well as its benefits to humankind.

The Epistemology of Halal Science

Epistemology refers to the theory of knowledge (Yahaya & Azhar, 2012:79). As for the philosophy of halal science in the al-Qur'an, epistemology includes al-Quran and hadith as legitimate sources and not all knowledge can be grasped by the human mind. A summary of the essence of the verses are shown in Table 2 below.

Table 2

The Epistemology of Halal Science

No	Surah	Meaning of the Verse
1	al-An'am (6:118)	Must have faith in the signs or indicators delivered by Allah SWT through HIS divine deliverance about foods permitted/prohibited for consumption. Believe in the divine deliverance to avoid from being misled by the whispers of Satan, getting lost, overindulgence in natural inclination (<i>hawa nafsu</i>), lack knowledge etc. (al-Tabari, 2009a:426; Ibn 'Abbas, 2011a:441 and M.Quraish, 2002b:260).
2	al-A'raf (7:157)	The coming of the Prophet SAW was intended to elaborate on the <i>halal haram</i> , to facilitate matters related to daily life including the receipt of halal food and avoidance of prohibited food (al-Tabari, 2009c:631, Ibn Kathir, 2008b:468 and M. Quraish, 2002a:259).

3	Ali 'Imran (3:93-95)	A firm belief and adherence in what have been bestowed as syariat by Allah SWT and delivered by HIS Messengers (al-Tabari, 2007c:591; Ibn Kathir, 2008c:93-94)
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Based on Table 2 above, verses from three surah, namely Surah al-An'am (16:118), al-A'raf (7:157) and Ali-'Imran (3:93-95) were analysed. This study found that divine deliverance (*wahyu*) is the ultimate source and there is no doubt about the existence of Allah SWT. In reference to the issue of halal products, divine deliverance (*wahyu*) is the source of reference that drives humankind to live a better life and benefit from all that is bestowed by Allah SWT. In addition, the coming of the Prophet SAW had further helped explain all that was delivered by Allah SWT. However, not all matters can be explained logically by the human mind. This shows the limitations of the human mind besides testing the obedience of humans as HIS subjects.

The Axiology of Halal Science

Axiology refers to the science of values, theories and the system of values. According to Islam, the values of knowledge and thinking are important elements that determine the actions and behaviour of humans (Ramli, 2003:66). Hence, Table 3 shows six verses that were selected to reflect the theme of the axiology of halal science.

Table 3

The Axiology of Halal Science

No	Surah	Meaning of the Verse
1	Al-A'raf (7:157)	Those who are successful are those who stand to gain the most by implementing all that is mentioned by Allah SWT, including humankind's compliance to the decree concerning what food is prohibited or permitted in Islam (al-Tabari, 2007c:638)
2	Al-Mu'minun, (22:51)	Good deeds (<i>amal soleh</i>) refer to practices that are consistent with the syariat, which is to complete the fardu and Sunnah practices. This shows that obtaining halal food drives humans to carry out good deeds (al-Zuhayli, 2016a:341-342)
3	Al-Nahl (16:114)	Safeguarding well the blessings of Allah SWT is a sign that the subjects are grateful. Gratefulness is a practice that is almost like the concept of <i>'ubudiyat</i> , which is free from all forms of syirik (Ibn Kathir, 2003d:2008 and Qutb, 2001c:128).
4	Al-Nahl (16:116)	The prohibition of swearing in the name of Allah SWT, especially matters concerning halal-haram in life (al-Tabari, 2007e:371; IbnKathir, 2001d:200 and al-Qurtubi, 2007c:487)
5	Al-Maidah (5:4)	Takwa refers to the fear when implementing HIS commands and abstaining from HIS prohibitions (al-Qurtubiy, 2008b:185 and al-Maraghiy, 2001a:1490). For example, humans who show concern about halal-haram food are those who are aware of their <i>taqwa</i> (Qutb, 2000b:185)
6	Al-Maidah (5:88-87)	Humans need to manage their natural inclinations (<i>hawa nafsu</i>) in order not to give in to overindulgence. Although the consumption

		of certain foods is permitted, however, the spiritual struggle (<i>mujahadah</i>) against natural inclinations (<i>hawa nafsu</i>) is most demanded (al-Qurtubi, 2008b:629)
7	Yunus (10:59)	Matters concerning halal and haram are under HIS absolute power and only HE decides on the punishment. However, what is most worrying is the attitude that recognises one's own power, which associates syirik with Allah SWT (al-Qurtubi, 2008a:864 and Qutb, 2000d:287).

Table 3 above explains two main aspects, namely morality and values, that should be held by humans when producing, managing and using halal products. From its philosophical aspect, Islamic morality and values are important indicators that ensure the halal product is not only productive and beneficial but indirectly nurtures the relationship amongst humans as well as sustains nature. Among the values and morals that humans should possess are not overstepping the limits when eating or drinking and telling lies in the name of Allah SWT. Thus, in order to distance oneself from these attitudes, Allah SWT has commanded that one should ordain oneself with piety (*taqwa*), always be grateful with what one has (*bersyukur*), *mujahadah* against natural inclinations (*hawa nafsu*) etc.

***Tauhid* in the Philosophy of Halal Science**

Based on the themes discussed, which are the ontology, epistemology and axiology of halal science, there is one more important element that forms a strong foundation for these three themes, which is *tauhid* (monotheism) in the philosophy of halal science. According to al-Qaradhawi (2016), *tauhid* is the absolute submission by humankind to Allah SWT involving all actions in life (al-An'am, 6:162-163). Regarding the issue of halal science, not all things can be proved in an empirical or scientific manner. The duty of humankind is to comprehensively understand the knowledge Allah SWT bestowed through HIS divine deliverance and to then co-relate it with the supreme creations of Allah SWT. For example, the earth contains innumerable benefits for humankind, foods such as honey, *manna* and *salwa*, livestock, resources etc. that need to be explored not only by merely understanding its physical aspects but more towards its implicit meanings. This is what is known as *tadabbur* (a state of deep pondering).

Tadabbur refers to the oneness of the heart and mind in order to understand verses in the al-Qur'an, which is filled with innumerable miracles that help explain the meaning, wisdom and aim of those verses. Besides that, these miracles are lessons and practices in life (Zulkifli, 2013). Hence, the *tadabbur* process actually proves that not all things can be perceived or understood by human faculties or senses. The total prohibition of pig meat or its derivatives in all halal products ensures that these products adhere to the syarak. Science is only a tiny part of all the knowledge bestowed by Allah SWT that is used to understand the wisdom behind this prohibition. Similarly, the wisdom behind slaughtering (*sembelih*) of livestock for human consumption by uttering the name of Allah SWT, the prohibition of alcohol consumption, Islamic cleansing (*samak* and *sertu*) and others are full of lessons of life and not all can be measured by human senses or faculties. Science is only a tool that facilitates human understanding, but it is not the reason for humankind's obedience to the commands and prohibitions of the syarak (Mohd Yusof, 2017). The reason why humankind seeks the truth about the al-Qur'an is because of the limitations of contemporary knowledge. Understanding the true epistemology of Islamic scientific knowledge would enable the harmonious

integration of *naqli* and *aqli* knowledge. This would enable the building of an Islamic worldview (*tasawur*) that lends meaning to life and hence, help humankind to get closer to Allah SWT (Sidek, 2016).

Hence, from the halal science perspective, *ta'abudi* is an important element for *tauhid* in the philosophy of halal science. *Ta'abudi* implies the principles of courtesy, values and morality that emerges from the subservient characteristics of humankind to his Khaliq (Mohd Yusof, 2017:39). According to the analysis of the verses of the al-Qur'an concerning the axiology of halal science, Allah SWT served notice to those who transgress, submit to natural inclinations (*hawa nafsu*), lie in the name of Allah SWT as well as incriminate themselves. Therefore, when producing, targeting and using halal products, society must prioritise the aspects of quality, cleanliness, nutrient value etc. Fellow scientists and industry players should exercise responsibility and not only prioritise profits, be cautious when producing halal products and do not be influenced by Western ideologies such as materialism, scientism, empiricism and others. *Ta'abudi* refers to humankind's total submission due to a high level of religious understanding and not having any doubts about Allah SWT's commands (Qodir, 2014:46). Elaboration on the overall discussions in this article is shown in Diagram 1.

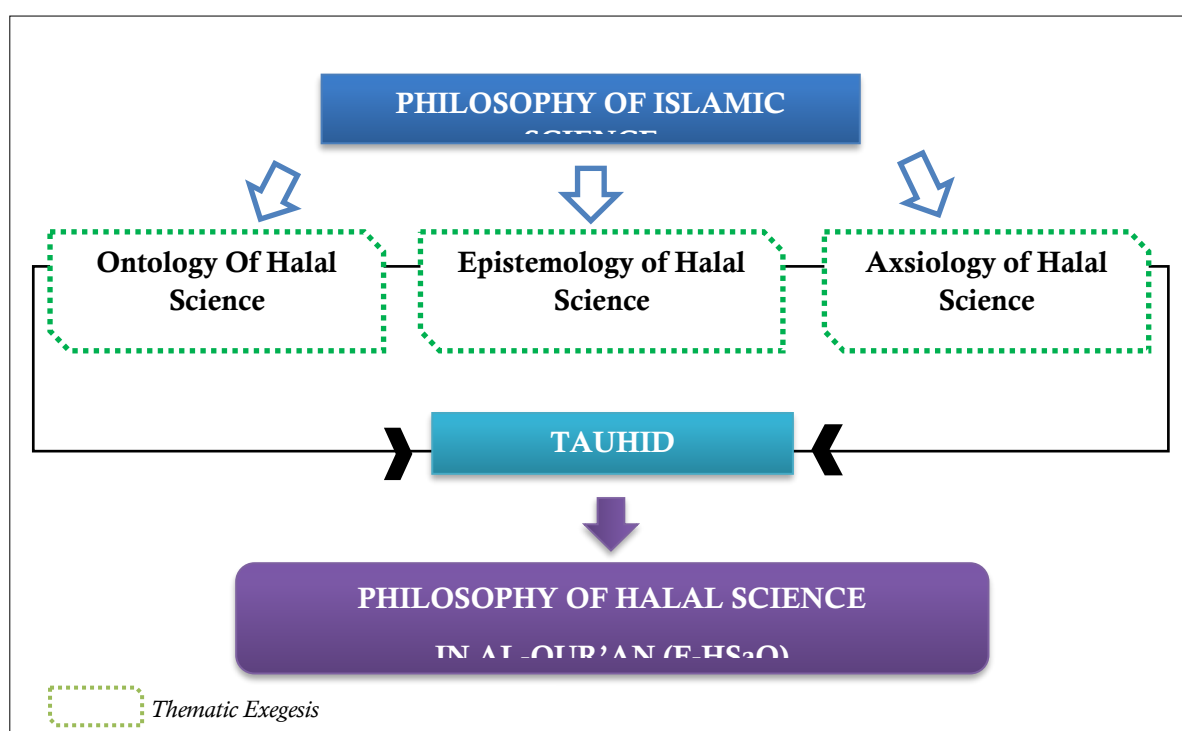


Diagram 1: The Process of Building the Halal Science Philosophy Based on al-Qur'an

Diagram 1 portrays the process of building the halal science philosophy based on al-Qur'an. Generally, the philosophy of Islamic science is a mould for building halal science philosophy. Consequently, there emerges three main themes, namely ontology, epistemology and axiology of halal science (OgHS, EgHS and AgHS). Next, there are 35 verses of the al-Qur'an pertaining to the philosophy of halal science, which was selected and analysed according to the thematic exegesis method based on the three themes. The analysis showed that all the themes are related to the basic element, namely *tauhid*. Based on the discussions, it could

be concluded that the philosophy of halal science is mentioned in the al-Qur'an or its acronym, F-SHaQ.

Conclusion

The philosophy of halal science according to al-Quran refers to three important elements, namely Allah SWT as the Creator, divine deliverance as the main source of reference and humankind as subjects who belief in noble moral values according to the mould set by al-Quran. All these elements cannot be implicated in the field of halal science if it is not based on a strong tauhid. *Tadabbur*, *ta'lamun* and *ta'abudi* are proof of humankind's allegiance to the All Mighty Allah SWT. Therefore, the higher the level of scientific technology used; the closer humankind will get to the Creator. It can be concluded that the philosophy of halal science mentioned in the al-Qur'an summarises a holistic discussion by relating the two disciplines of knowledge; firstly, halal science not only involves technical, scientific or empirical discussions but also involves the second aspect, which is concepts and philosophy. Both these elements are integrated to face various challenges concerning the contemporary field of halal, which involves Islam and specifically, the Islamic community.

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