

The Contribution of Science in Contemporary Fiqh Thought

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Abstract: *The development of science, especially from the West, to date is an inevitability that cannot be avoided. If you look at the history of the arrival of Greek science into the Islamic world, it brought Muslims to reach the peak of their glory in the Middle Ages. However, recently, the development of science in the Islamic world has stopped. After the Renaissance, philosophical and scientific thought in the West developed very rapidly. Along with the progress of science and technology in the West, religious values have gradually shifted and even come into conflict with science. The implication of secularization in the West is that Muslims tend to abandon science and become a people left behind in the field of science. In fact, science is very necessary when Muslims need answers to contemporary fiqh problems. This research is library research with a qualitative approach. Data sources are documents related to the development of jurisprudence and sciences. The data analysis technique uses content analysis. The research results show that from an Islamic perspective, there is no separation between fiqh and science. More than that, science and technology are tools used by humanity in carrying out the duties of its caliphate. Al-Qur'an and Sunnah of the Prophet PBUH. contains many verses and hadiths that provide information about natural phenomena, and encourage humanity to carry out ijtihad as a method of exploring Islamic jurisprudence or law. Therefore, there is no reason for today's Muslims to rise up and redevelop science and technology in carrying out their ijtihad in order to formulate contemporary jurisprudence that fulfills the objectives of enshrining Islamic law.*

INTRODUCTION

Muslims today live in difficult and challenging times. Demographically, Muslims are a major force. Nearly one and a half billion of all humans today are Muslims. Their economic potential is large. Their countries which have large portions of uninhabited land are endowed with rich natural resources. However, their influence on world economic and political affairs as well as

scientific and technological progress remains marginal. Militarily, Muslims are also weak. Now they still do not play a significant role in determining world history (Bakar, 2005).

After Muslims became aware of the decline and stagnation of their civilization, especially after their military defeat and political, economic and cultural dependence at the hands of Western colonial powers, they have attempted to identify the root causes, analyze major problems, and seek appropriate solutions. effective for these adverse situations. Debates and discussions about this issue still continue today, at both popular and academic levels (Assyaukanie, 1998).

In formulating their responses to modern Western civilization and its imperialist designs, many Muslim figures were greatly influenced not only by the situation that existed in the Muslim world at that time but even more so by the situations that existed in the West. One of the important issues that they were trying to resolve at that time was the problem of backwardness in the fields of science and technology as well as the problem of Muslims' response to modern science. But many radical changes have occurred both in the Islamic world and in the Western world since figures such as Jamaluddin Al-Afghani, Muhammad Abduh, Muhammad Rasyid Ridha, Zia Gokalp, Muhammad Iqbal gave their intellectual and political responses to Western thought and culture, including in deep in science (Bakar, 2005).

The development of science, especially from the West, to date is an inevitability that cannot be avoided. Science can be a bridge to change for a better life for humans. In line with globalization, scientific products are developing rapidly and are used easily by every level of society from different countries, continents, religions and other origins. The rapid dynamics of science have received a response from all groups, including religious groups in the world, both the Abrahamic religion and others. In fact, today there are still groups of people in the world who ignore the dynamics of science, if not reject the presence of science, even though some scientific products are used every day (Mawa, 2013). The rejection by some Muslims of science originating from the West is one of four typologies of the relationship between science and religion mapped by Ian G. Barbour. Barbour mapped out views on the relationship between science and religion in four typologies, namely conflict (opposition), independence (separation), dialogue (discussion), and integration (unification) (Barbour, 2002). Conflict is a relationship that is hostile and in extreme cases perhaps even hostile. Separation means that science and religion go their separate ways with their respective fields of cultivation, methods and goals without interfering with or caring about each other. Conversation is an open and respectful relationship, because both parties want to understand their similarities and differences. Unity is a relationship that rests on the belief that basically the area of study, approaches and objectives of science and religion are the same and unified (Azhari, 2007). Somewhat different from Barbour, John Haught maps the relationship between science and religion into conflict, contrast, contact, and confirmation (Barbour, 2002).

If we look at history, the arrival of Greek philosophy and science into the Islamic world did not cause major upheavals in society. It even brought Muslims to reach the peak of their glory in the Middle Ages. However, recently, the development of science in the Islamic world has stopped because Muslims have been lulled by the greatness of the faqihs, theologians and scientists during that era of Islamic greatness. The political situation of Muslims does not support the development of renewed thought and scientific research. Over time, the teachings of the ulama crystallized within Muslims. This crystallization does not only occur within individuals or groups, but also in regions, such as India, which is known for its Hanafi school of thought and Indonesia for its Syafi'i school of thought. This phenomenon makes Muslims no longer creative, they even experience stagnation because they just take what has been discussed by the sect's imams and make very few changes. This situation does not only occur in the field of jurisprudence, but also in various fields,

such as theology and science (Bakhtiar, 2000).

The conflict between religion and science then occurred again in the Renaissance era. The church in the Middle Ages was very powerful and dominant, not only in the religious field, but also in the scientific field. Scientific traditions that are actually non-standard and static have become sacred and cannot be changed. Therefore, when Nicolaus Copernicus and Galileo discovered the theory that the earth was not the center of the universe, but the sun was the center of the universe, church circles were very angry because this theory conflicted with the church's 'scientific' doctrine. This tension produced the embryo of secularism in the West. Religionists walk according to truth and church doctrine, while scientists walk according to rational and empirical structures and measurements. As a result, there is no intersection between religion and science, so that science in the West does not recognize religion. From here comes the scientific motto for science, or value-free science (Bakhtiar, 2000).

The fact that cannot be denied is that after the Renaissance, philosophical and scientific thought in the West developed very rapidly. Along with the progress of science and technology in the West, religious values have gradually shifted and even come into conflict with science. For scientists in the West, religion is an obstacle to progress. Because of this, they think that if they want to progress, religion can no longer deal with issues related to the world, such as politics and science. Thinkers and scientists often express minor concerns about religion, both at the beginning of the industrialization era and in recent decades. Karl Marx is famous for his statement that religion is the opium of society. August Comte said that religion is only suitable for societies that are still primitive and backward. According to Comte, now is the era of positivism where all events can be measured and explained using ratios. Even scientists once argued that the search for truth would lead to an overriding tendency to worship science over religion. This trend culminated in the secular "God is dead" philosophy expressed by radical theologian Thomas Altizer in the 1960s and 1970s. The process of secularization continued throughout the 20th century in line with the rapid development of industrialization caused by advances in science and technology and increasingly widespread economic competition. (Bakhtiar, 2000).

The implication of secularization in the West is that Muslims tend to abandon philosophy and science so that they become a people left behind in the fields of science and technology. The Qur'an and hadith as sources of religious teachings are only understood to be sources of religious knowledge but are no longer used as sources of science or knowledge. The text of the Koran is often interpreted and understood partially and ideologically. This makes the text seem dead and no longer relevant to the progress of the times (Mustaqim, 2012). This has an impact on all Islamic sciences such as the science of interpretation, the science of hadith, and including fiqh, becoming irrelevant. If Islamic sciences such as fiqh are linked to science, it seems to be "invalid" or "apostate" because science comes from the West. Several cases of Muslims' refusal to link fiqh with science also often occur. It is against this background that this research aims to explain how science actually contributes to the renewal of contemporary jurisprudence?

RESEARCH METHODS

This research is library research with a qualitative approach because the location or place of research is in libraries, documents, archives and the the other (Prastowo, 2011). This research is descriptive-analytical in nature to provide as precise data as possible about people, conditions or other symptoms. The aim is primarily to confirm hypotheses, so that they can help in strengthening old theories, or in order to develop new theories (Maman Kh., 2001). In this context, it describes the concepts of jurisprudence and science and how they contribute to contemporary jurisprudence

thinking. Data sources in this qualitative research include words, documents, etc. The data analysis technique used to obtain conclusions is content analysis (Moleong, 2001). The documents that are the source for this research are writings that originate from literature that is related to jurisprudence, science and contemporary jurisprudential thought.

RESULTS AND DISCUSSION

A. The Concepts of Fiqh and Science

The word fiqh linguistically means deep understanding. This is in accordance with the meaning of fiqh in a hadith of the Prophet SAW "man jurid allah bih khairan yufaqiqh fi al-din". According to the term, Fiqh originally meant religious knowledge which included all religious teachings, both in the form of creeds, worship and morals. In this sense, fiqh is the same as the meaning of sharia. Abu Hanifah as the oldest figure of the four main Sunni schools of thought defines jurisprudence as knowledge of rights and obligations. Then adjectives are used to sort out the objects of scientific study which are increasingly important and widespread. Fiqh which is related to what must be believed and denied is called fiqh akbar (great fiqh), while that which is related to what must be done and done is called fiqh amali (fiqh of actions) (Gibtiyah, 2016). In subsequent developments, this second jurisprudence was interpreted as part of sharia, namely the science of sharia laws of an amaliyah nature which were explored and discovered from detailed arguments. There are many other definitions of fiqh conveyed by scholars. Some interpret it as a set of propositions that underlie the provisions of Islamic law. There are also those who emphasize that fiqh is sharia law taken from its propositions (Syafe'i, 2001).

In the definition of fiqh above there are several limitations. The word "law" in this definition explains that fiqh is talking about law. This means that if what he is discussing is not matters relating to law, such as substances, properties and events, he is not fiqh in this sense. The use of the word "syar'iyah" in this definition explains that fiqh concerns provisions or rules that are syar'i in nature, namely something that originates from the will of Allah. This word also explains that something that is 'aqli, such as the rule that two times two is four, or that is hissi, such as the rule that fire is hot, is not in the field of jurisprudence. The word "amaliah" contained in the definition above explains that fiqh only concerns external human actions. Thus, things that are not charitable in nature, such as matters of faith or aqidah, are not included in the realm of fiqh in this sense. For example, the provision that God is One and that God can be seen in the afterlife. The use of the words "excavated and discovered" implies that fiqh is the result of excavation, discovery, analysis and determination of legal provisions. Therefore, if it is not in the form of the result of an excavation, as Allah clearly and clearly says, it is not called fiqh, like pork is haram. Fiqh is the result of mujtahid discoveries in matters that are not explained in the texts. The word "detailed" in this definition explains the postulates or instructions used by the mujtahid in his excavations and discoveries. Therefore, knowledge obtained by ordinary people from a mujtahid which is independent of the propositions is not included in the meaning of fiqh (Syarifuddin, 2003).

Al-Amidiy provides a different understanding of fiqh from the definition above, namely the science of a set of sharak laws which are furu'iyah in nature which can be obtained through reasoning or istidlal. The word furu'iyah in al-Amidi's sense explains that the knowledge of propositions and their various forms as proof is not fiqh in the sense of fiqh experts, even though what is known is law of a nazari nature. The use of the words

"reasoning" or "istidlal" provides an explanation that fiqh is the result of reasoning or istidlal. Knowledge obtained not in this way, such as the Prophet's knowledge obtained through revelation, is not called fiqh. By looking at the two definitions mentioned above, it can be formulated that the essence of fiqh is the knowledge of God's law, what is discussed are things that are amaliyah furu'iyah, the understanding of God's law is based on detailed arguments, and fiqh is explored and discovered through reasoning. and istidlal is a mujtahid or faqih (Syarifuddin, 2003).

From the definition of fiqh and shari'ah above, it can be seen that there is a very close relationship between fiqh and shari'ah. Sharia is defined as Allah's laws which are established based on the arguments of the book and the Sunnah as well as the arguments related to both such as ijmak and qiyas, while fiqh is the science related to practical conclusions of religious law accompanied by postulates. detailed. According to al-Jurjani, jurisprudence is a science resulting from logical conclusions and ijtihad which requires study. Therefore, Allah cannot be called a fakih or expert in jurisprudence because He is all-knowing of everything, and Shari'a is the goal while Fiqh is the way or method (Qardhawi, 2003).

All human actions in the world in achieving a good life must be subject to the will of Allah and His Messenger. Some of the wills of Allah and the Messenger are written in his book called the Shari'ah, while most of the others are hidden behind or outside what is written. To fully understand what Allah desires regarding human behavior, there must be a deep understanding of the Shari'ah, so that the Shari'ah can be implemented in any condition and situation. The results of this understanding are stated in the form of detailed provisions. The detailed provisions regarding the behavior of themukallaf human beings which are mixed and formulated as a result of understanding the sharia are called "fiqh" (Syarifuddin, 2003).

The word science in the Indonesian dictionary means science in general; systematic knowledge of botany, physics, chemistry, geology, zoology, etc.; natural science (Tim Penyusun, 2008). Science which means science is also called science (English and French), wissenschaft (German), and wetenschap (Dutch) (Anshari, 1987). Meanwhile, what is meant by the definition of science, -without further information-, is natural sciences or natural sciences. Natural sciences are sciences that study the phenomena of the universe and all its contents. Included in natural sciences (hereinafter referred to as science) are basic sciences, also known as pure sciences, such as biology, chemistry, physics and astronomy, with all their branches. A derivative of basic sciences is applied sciences or applied sciences, namely pharmacy, medicine, agriculture, dentistry, optometry, etc. (Janie, 2003).

The word science in Indonesian comes from the Arabic Ilmun which is a coined word from 'alima which means to know or know. Rahardjo noted the opinion of the orientalist Franz Rosethal, that the roots of the word 'a-l-m in Arabic have nothing in common with the roots of other Semitic languages, even though Arabic belongs to the Semitic language family. The root word 'a-l-m in Semitic languages means sign or verse. This gives the impression that there is a connection between knowing and signs in Arabic. Therefore, the word 'ilm in Arabic can be interpreted as knowledge of signs or knowing verses. What is meant by signs or verses in the context of knowledge are natural phenomena with all their content (Janie, 2003).

According to Achmad Baiquni, the definition of science is a consensus reached among experts as the conclusion of rational reasoning based on the results of critical

thinking and analysis of data collected from measurements of quantities from observations of natural phenomena (Baiquni, 1995). According to Ziauddin Sardar, science is an organized, systematic and orderly model of inquiry based on experimentation and empiricism which creates results which can then be tested and reproduced and are universally applicable to all cultures (Guessoum, 2014). According to Christopher Morris, science is the systematic observation of natural events and conditions in order to discover facts about them and to formulate laws and principles based on these facts (Morris, 1992). Meanwhile, Frank R. Spellman defines science as any systematic field of study or body of knowledge that aims, through experiment, observation and deduction, to produce reliable explanation of phenomena, with reference to the material and physical world (Spellman, 2009).

The meaning of technology is the collection of human knowledge about the processes of utilizing nature obtained from the application of science, within the framework of productive-economic activities. Meanwhile, Oetarjo Diran provides a definition of technology as the purposeful application of science to meet human needs or to solve problems (Janie, 2003).

B. The Contribution of Science in Contemporary Fiqh Thought

There is no doubt that ijtiḥad as a method in exploring fiqh is highly recommended in Islam. There are many arguments indicating this recommendation. First, for example in Surah Al-Nisa verse 83 "and when news comes to them about security or fear, they then broadcast it. and if they hand it over to the Rasul and ulil Amri among them, surely those who want to know the truth (will be able to) find out from them (Rasul and ulil Amri). If it were not for Allah's grace and mercy towards you, you would certainly follow Satan, except for a small number (among you)." Surah al-Shura verse 38 "and (for) those who accept (obey) the call of their Lord and perform prayers, while their affairs are (decided) by deliberation between them; and they spend part of the sustenance that We have given them." What is meant by deliberation is seeking the truth in cases that arise according to sharak arguments, whether there are arguments in the text or not. This search for law cannot be achieved except with the ijtiḥad of experts.

Second, several hadiths of the Prophet also recommend carrying out ijtiḥad as a method of extracting jurisprudence, such as "If a judge decides the law by making ijtiḥad and then it is right then he gets two rewards, and if he decides the law by making ijtiḥad and then it is wrong then he gets one reward." Another hadith such as "It was narrated from a resident of Homs, a friend of Muadz ibn Jabal, that the Messenger of Allah. When he intended to send Muadz to Yemen, he asked: if faced with a legal case, how would you decide?, Muadz answered: I will decide based on the Koran. The Prophet asked again: "If you don't find that case in the Qur'an?" Muadz answered: I will decide based on the Sunnah of the Prophet. The Prophet further asked: If the case is not contained in the Sunnah of the Prophet and the Koran?, Muadz answered: I will perform ijtiḥad carefully. Then the Messenger of Allah patted Muadz's chest with his hand, saying: Praise be to Allah who has guided the messenger of the Messenger of Allah to the path that is acceptable to Him."

Third, the recommendation for ijtiḥad is also an ijmak or agreement among Muslims from various schools of thought that has been practiced. The result is quite extensive fiqh laws as a result of the ijtiḥad of ulama from the past until now. Our reason also requires ijtiḥad to be carried out because most of the practical sharia laws are dzanni in nature which accept several interpretations of opinion so that it requires ijtiḥad to obtain a strong

or strongest opinion (Qardhawi, 1987).

With many recommendations for carrying out ijtiḥad as a method of exploring fiqh, it can be understood that the existence of fiqh as a form of implementing law or sharia is highly recommended. Jurisprudence as part of the implementation of Islamic law, apart from faith and morals, is a unit that must be carried out by a Muslim as an embodiment of his faith.

Islam provides a clear concept of human existence on earth. The existence of humans on this earth is as caliphs of Allah fi al-ardh, or as representatives of Allah on earth as in surah al-an'am verse 165 "and He is the one who made you rulers on earth and He exalted some of you above some (other) degrees, to test you regarding what He has given you. Indeed, your Lord is very quick in His punishment and indeed He is Most Forgiving, Most Merciful." Therefore, if Allah SWT. is the Creator of the entire universe, so as God's representatives on earth, humans are obliged to care for, preserve and civilize all of God's creation. We are not allowed to destroy all of this divine creation. With what can humans carry out the duties of the caliphate? In Surah al-'Alaq verses 1-5, it can be read explicitly that humans are required to read. Iqra' written in verse 1 and verse 3 of the surah must be interpreted more broadly, namely 'reading', 'seeing', 'observation', or 'researching'. What should be read and observed or researched? What must be read are all of Allah's verses, whether written in the Al-Quran, which are known as 'qauliyyah verses', such as the Al-Quran, the Gospel, the Zabur, and the Torah; as well as the verses of Allah scattered throughout the universe, which are natural phenomena, known as kauniyyah verses. Thus, verses 1 to 5 of Surah al-'Alaq above, are orders to all mankind, especially Muslims, to seek knowledge (Janie, 2003).

The Qur'an contains a lot of information about natural phenomena, all of which match scientific phenomena. Agus Purwanto said that the Koran contains 1108 verses related to nature as a source of knowledge. These verses contain words for parts of nature such as water, clouds, iron, stars, birds, light, blood, gold, ships, lightning, sky, and zarrah (Purwanto, 2015). There are those who argue that the number of verses relating to natural phenomena is 756 (five times) the number of sharia verses which is only around 150 verses. This can be seen, for example, in Maurice Bucaille's explanation through his book The Bible, the Qur'an and Modern Science, such as the creation of heaven and earth, astronomy, the earth, plants and animals, and human reproduction. (Bucaille, 2001).

In connection with the need for humans to know the natural surroundings well, Allah SWT commands in Surah Yunus verse 101 "Say (O Muhammad): Look with your maind at what is in the heavens and on the earth." The aim of this command is for humans to know the properties and behavior of the natural world around them, which will be a place to live and a source of materials and food throughout their lives. In the verse above, the word examine with nazhar or intizhar is used for the words unzhuru because according to Baiquni the meaning of this verse. is that the command to see is not just to look with an empty mind, but with attention to the greatness and power of God Almighty, and the meaning of the observed phenomena. This will appear even more clearly if we look at the warnings of Allah SWT in surah Al-Ghasiyah verses 17-20 "Then did they not do nazhar and pay attention to the camel, how it was created. And langit, how he was lifted. And the mountains, how they are erected. And the earth, how it was spread out." From the five verses that I mentioned last, it is clear that Allah S.W.T. provides further guidance in the Qur'an, on how humans can understand the verses relating to the universe, which broadly

describe the natural processes that occur in it. (Baiquni, 1996).

The first verse of Surah al-'Alaq explains to us how we must seek knowledge, namely in the name of your Lord, the Creator. This implies that in seeking knowledge, Muslims must always believe that Allah is the Creator. Thus, Surah al-'Alaq verse 1 shows that there is no separation between science and religion, including jurisprudence in it, and this verse also constitutes an Islamic paradigm in seeking and developing knowledge. Seeking knowledge must be closely related to belief in the existence of Allah the Creator; and with that knowledge we can carry out the duties of the caliphate (Janie, 2003).

If we look at history, the Koran and Sunnah were the driving force for Muslims to achieve scientific progress in the golden era of Islamic civilization. Just mention the scientists who emerged at that time, such as al-Kindi, al-Razi, Ibn Haitsam, Ibn Rushd, Ibn Sina, al-Ghazali, al-Biruni, al-Khwarizmi, it is proof that they really paid attention to the progress of science. (Baiquni, 1996, Dallal, 2011). In the Qur'an, surah al-Jatsiyah verse 13, Allah Swt. has given a hint of the usefulness of nature for mankind "And He has subjected to you everything that is in the heavens and everything that is on the earth, (as a mercy) from Him. Indeed, in this there are truly signs of Allah's power for a people who think." It is clear that verse 13 states that the entire contents of the heavens and the earth will be subdued by al-Khaliq for mankind through science applied with technology, given to those who are willing to involve their minds and use their minds. There are many more verses in the Koran that command and encourage Muslims to seek knowledge (Janie, 2003). From the description above it is clear that Islam encourages its people to seek and develop science or science and technology (science and technology) for the welfare of the people, both physically and mentally.

Apart from the verses of the Qur'an above, there are several hadiths of the Prophet SAW. which contains encouragement to Muslims to explore science or knowledge. Like; Seeking knowledge is obligatory for every Muslim. Seek knowledge even if you go to China. Whoever goes out of his house to seek knowledge, except the angels will spread their wings because they are satisfied with what he has done. Whoever goes to seek knowledge then he is like in the state of jihad in the way of Allah, Scientists are the inheritors of the duties of the Prophets, Knowledge is the lost property of the believer, wherever he gets it, then he has more right to have it than others.

Whoever dies while developing knowledge to revive Islam, then in heaven he is equal to the Prophets. Seek knowledge from the cradle to the grave. So, it seems clear that the actual role of Islam in the development of science and technology is to provide insight and active encouragement, as can be seen in the verses of the Al-Quran above, as well as the words of the Prophet. It was this insight and encouragement that aroused Muslim scientists in the Golden Age (VII to XIV centuries AD). The encouragement that comes from the Koran and the Sunnah of the Prophet has been able to give rise to Islamic Civilization in its golden era. Apart from being able to give birth to great scholars and philosophers such as Ibn Rushd, al-Ghazali, Ibn Khaldun, and others, Islamic civilization was also able to give birth to natural science pioneers such as al-Khwarizmi (in the field of Mathematics, Algebra), Ibn al-Haytsam (Physics-Optics), al-Biruni (Physics-Astronomy), Ibnu Sina (Medicine) whose work is recognized by the world.

According to Yusuf Qardhawi, there are two types of ijihad to explore fiqh that are needed nowadays, namely ijihad intiqai and ijihad insha'i. Ijihad intiqai is choosing one opinion from several of the strongest opinions contained in the legacy of Islamic

jurisprudence which is full of fatwas and decisions. Meanwhile, insha'i ijtiḥad is drawing a new legal conclusion from an issue where the issue has never been raised by previous scholars, whether it is an old or new issue. In other words, insha'i ijtiḥad covers some old issues, namely by means of a contemporary mujtahid to have a new opinion on the issue that has not been obtained from the opinion of Salaf scholars (Qardhawi, 1995).

Fathurrahman Djamil is of the opinion that people who carry out ijtiḥad intiqā'i must pay attention to several important factors, namely socio-cultural change factors, scientific and technological progress factors, and conformity factors with the demands of the times. Several factors can be taken into consideration when resolving the case at hand. Thus, in carrying out ijtiḥad intiqā'i, serious thought is required regarding the issues discussed. This thinking is not only related to the propositions or arguments put forward by previous jurists, but also has to be seen as relevant for today. (Djamil, 1999). In this case, according to the author, the exploration of jurisprudence really requires science and technology.

Likewise, in carrying out ijtiḥad insha'i, there is a need for a comprehensive understanding of new cases for which the law will be determined. If a person carrying out insha'i ijtiḥad does not know in detail the matters relating to the new issue or case, it will be difficult for the person carrying out insha'i ijtiḥad to be able to decide the law on the matter correctly. Therefore, in resolving completely new legal problems, a deep understanding of the problem is required, apart from of course knowledge of several things that are requirements for ijtiḥad itself. By looking at the problems facing mujtahids today, collective ijtiḥad consisting of several scientists is very necessary. This is because there are limitations in the knowledge that a person has in addition to the increasingly stringent scientific disciplines nowadays, so that ijtiḥad carried out individually needs to be avoided because it can lead to mistakes (Djamil, 1999).

In the case of collective ijtiḥad, the mastery of several mujtahids over science and technology is absolutely necessary so that laws on fiqh issues can be formulated through comprehensive consideration of various sciences.

There are many cases related to jurisprudence that require legal solutions through ijtiḥad insha'i, such as jurisprudence on medicine, jurisprudence on food and medicine, jurisprudence on astronomy, jurisprudence on the environment, jurisprudence on animal husbandry, and so on. (Yasin, 2001; Mubasyir, 2006; Djamiluddin, 2005; Yafie, 2006; Mubarak, 2003). In the jurisprudence related to these cases, according to the author, it is very necessary to have science which must be mastered by mujtahids. By conducting brainstorming and in-depth observations from each scientist, fiqh is obtained that is in accordance with maqāshid al-syariah.

Insha'i ijtiḥad also requires a good understanding of the method of determining the law. There are several methods that have been put forward by previous uṣhul fiqh experts. Among these methods are qiyas, istiḥsan, mashlahah al-murūlahah, and sadd al-dzari'ah. Another thing that needs attention from people who will carry out ijtiḥad insha'i is knowledge about the purpose of enacting Islamic law or maqāshid al-syari'ah, because basically the establishment of Islamic law boils down to this. (Djamil, 1999).

CONCLUSION

In an Islamic perspective, there is no separation between fiqh and science or science. More than that, science and technology are tools used by humanity in carrying out the duties of its caliphate. Since the beginning of human civilization, science itself has been bestowed on mankind

through its Prophets. Al-Qur'an and Sunnah of the Prophet SAW. contains many verses and hadiths that provide information about natural phenomena, and encourage humanity to carry out *ijtihad* as a method of exploring Islamic jurisprudence or law. Likewise, there are many verses and hadiths that encourage observation or observation of natural phenomena as objects of science. The history of Islamic civilization has given us information about how Muslims in the past were able to develop science and technology in building civilization. Therefore, there is no reason for today's Muslims to rise and re-develop science and technology in carrying out their *ijtihad* in order to formulate contemporary jurisprudence that fulfills the objectives of enforcing Islamic law.

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