Volume 15, No. 2 December 2018

JOURNAL OF

Islam in Asia

A Refereed International Biannual Arabic - English Journal

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA





Journal of Islam in Asia

EDITOR-in-CHIEF

Mohammed Farid Ali al-Fijawi

ASSOCIATE EDITOR

Homam Altabaa

EDITORIAL ASSISTANT

Kamel Ouinez

EDITORIAL ADVISORY BOARD

LOCAL MEMBERS

Rahmah Bt. Ahmad H. Osman (IIUM)
Badri Najib bin Zubir (IIUM)
Abdel Aziz Berghout (IIUM)
Sayed Sikandar Shah (IIUM)
Thameem Ushama (IIUM)
Hassan Ibrahim Hendaoui (IIUM)
Muhammed Mumtaz Ali (IIUM)
Nadzrah Ahmad (IIUM)
Saidatolakma Mohd Yunus (IIUM)

INTERNATIONAL MEMBERS

Zafar Ishaque Ansari (Pakistan) Abdullah Khalil Al-Juburi (UAE) Abu Bakr Rafique (Bangladesh) Fikret Karcic (Bosnia) Muhammad Al-Zuhayli (UAE) Anis Ahmad (Pakistan)

Articles submitted for publication in the *Journal of Islam in Asia* are subject to a process of peer review, in accordance with the normal academic practice.

This journal is indexed by ERA 2010 Journal Title List, Australian Research Council, Australian Government.

© 2018by International Islamic University Malaysia

All rights reserved. No part of this publication may be reproduced, translated, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the publisher.

Pendekatan ke Arah Mengintegrasikan Ilmu Pengetahuan: Satu Kajian terhadap Pandangan Al-Ghazali dan Alwani.

Sayyid Muhammad Yunus Gilani,* and Tazul Islam**

Abstract

This research aims to study the approaches to integrating scientific and Islamic knowledge based on the views of two selected Muslim scholar, namely Al-Ghazali and Alwani. A considerable amount of research has been produced on knowledge integration, yet there is still a lack of study in exploring the 'processes' of integration. Hence, this research highlights this particular aspect from both traditional and contemporary perspectives. Qualitative in nature, the data for this work was collected from the writings of the selected scholars and analyzed in order to find out how the integration is achieved. As a result, this study finds out two distinctive approaches to integration: Firstly, in al-Ghazali's view, integration is an external and complementary factor where Islamic knowledge and science maintain their own entity but the later complements the former as a supportive tool; secondly, Alwani sees the integration as an internal and essential matter where a knowledge evolves as a result of a mix of scientific reading of the Quranic texts as well as reading of the nature based on Quranic worldview.

Keywords: Generic skills, Integration of Knowledge, Islamization of knowledge, Al-Ghazali, Alwani, Islamic Worldview.

Abstrak

Kajian ini bertujuan mengkaji pendekatan untuk mengintegrasikan ilmu Sains dan Islam berdasarkan pandangan dua cendiakawan Islam iaitu Al-Ghazali dan Alwani. Sejumlah besar kajian telah pun dilakukan namun masih terdapat kekurangan kajian dari aspek proses integrasi ilmu pengetahuan. Oleh itu kajian ini secara khususnya akan memaparkan proses tersebut berdasarkan perspektif tradisional dan kontemporari. Disebabkan bersifat kualitatif, data-data kajian ini diperolehi daripada penulisan-penulisan para cendiakawan yang terpilih yang kemudiannya akan dianalisa untuk

^{*} Assoc. Prof., Kulliyyah of Islamic Revealed Knowledge and Human Sciences, IIUM.

^{**} Senior Lecturer, Faculty of Quranic and Sunnah Studies, Universiti Sains Islam Malaysia.

mengetahui proses bagaimana integrasi dapat dicapai. Hasil kajian mendapati dua pendekatan untuk tujuan integrasi, yang pertama menurut pandangan al-Ghazali, integrasi merupakan faktor luaran dan pelengkap dimana ilmu pengetahuan Islam dan Sains mengekalkan entiti tersendiri, namun Sains merupakan penyokong kepada ilmu pengetahuan tersebut. Kedua, Alwani melihat integrasi sebagai faktor dalaman yang penting untuk perkembangan ilmu hasil daripada pembacaan saintifik teks-teks al-Quran dan alam menurut perspektif al-Quran.

Kata Kunci: Kemahiran Generic, Pengintegrasian ilmu, Pengislaman ilmu, Al-Ghazali, Alwani, Pandang dunia menurut Islam.

Introduction

Generally, for discussing integration of knowledge, the terms used mostly refer to a multidisciplinary, interdisciplinary or transdisciplinary learning where a framework for an integrated curriculum is intended. In her schema, Susan Drake explains, multidisciplinary means that the same topic or theme is addressed by each of the separate disciplines, thus retaining the integrity of each discipline. Interdisciplinary, on the other hand, is defined as identifying specific skills, processes or ideas which are common to all disciplines and addressing those through the disciplines. Her final framework is trans-disciplinary where she relates curriculum planning to a 'life-centered approach'. However, integration of knowledge is a twin-sister concept of Islamization. Both 'Islamization' and 'integration' recognize the dichotomy of science. Islamization of sciences, integration and interconnection are methods and processes toward unity of sciences (wahdat al-'ulūm).² Abu Sulayman, a champion of Islamization, defines integration as a union between religious sciences and non-religious sciences.³ Sidek, however, asserts that the "integration is a process of harmonization between triadic concepts namely: Tawhīdic paradigm, values and human potentials in the educational system of contemporary Muslims." Interestingly, Othman and Mohammad describe this integration between Islamic and western secular knowledge as an

¹ Susan Drake *Planning for integrated curriculum: The call to adventure.* Alexandria, VA: Association of Supervision and Curriculum Development, 1993.

² Abdul Muhaya, Unity Of Sciences According To Al-Ghazali, Walisongo, Volume 23, Nomor 2, November 2015, p.326.

³ Abu Sulayman, A. H. Islamization of knowledge: Reforming contemporary knowledge. International institute of Islamic thought: Virginia: USA, 1994.

⁴ Sidek Baba. (2009). The Integrated Approach in Malaysian Education: The International Islamic University as a Model. Journal Pedidikan Islam 13.2, p.87-99.

eclectic model⁵ of which al-Alwānī was an exponent of this multi-disciplinary eclecticism.⁶ Surly, Alwani discussed this subject in several pieces of his writings on Islamization. Yet, he provided a detailed framework for this eclecticism in one of his latest books named "al-Jam'u bayna al-Qira'atayn" (1st published in 2006). Though there is a significant focus being made on the integration of knowledge in contemporary Islamic scholarship, traditional Muslim scholars too had done their part to address the issue. Al-Ghazali (1111CE) could be seen as a significant champion in this regard. This study aims to explore the frameworks for integration of knowledge from both contemporary and traditional point of views. It therefore selects two representative scholars, namely Abu Hamid al-Ghazali and Taha Jabir Alwani.

Integration of Knowledge in Al-Ghazali's View

Knowledge in al-Ghazali's view: Al-Ghazali views education as a technique or skill, rather than a science in itself, and that its purpose is to give humans the knowledge and dispositions they need to follow divine guidance so that they can worship God and achieve salvation and happiness in the life to come. Knowledge is at the heart of education and the noblest kind of knowledge is the knowledge of God, his attributes and his deeds. Al-Ghazali is widely considered to be the first person in Islam to write in depth about the education of children and to provide it with a scientific basis (Attaran, 1989). The noblest knowledge or science, according to al-Ghazali, is where Reason and Tradition are coupled. This nobility relies upon two foundations: (a) outcome and benefit of knowledge and (b) certainty of knowledge and soundness of its evidences.

⁹ Ahmad Zaki Mansur Hammad, (1987). Abu Hamid al-Ghazali's Juristic Doctrine in Al-Mustasfa min Ilm al-Usul with Translation of Volume One, United States: Chicago, The University of Chicago. P. 303.

⁵ Othman, N., & Mohamad, K. A. "Eclectic Model in the Malaysian Education System," *International Education Studies*, 4, no. 4, (2011): p. 111–117.

⁶ Surajudeen, A. T., & Mat, M. Z. A. Classification and Integration of Knowledge: The Qur'ānic Educational Model. *Revelation and Science*, 03, no. 02, (2013): p. 11.

⁷ Hamid Reza Alavi (2007) Al-Ghazāli on Moral Education, Journal of Moral Education, 36:3, 309-319, DOI: 10.1080/03057240701552810. P.311-12

⁸ Attaran, M. (1989) Trends of educational culture and history in Iran and Europe (3rd edn) (Tehran,

Negah).

¹⁰ Al-Ghazali, Ihya Ulum al-Din, p. 46-47.

For knowledge, al-Ghazali provides different shades of definitions of which each is unique in nature. To him, knowledge is a process of knowing as he mentions "knowledge is that through which one knows." Again differently he sees it as "cognition." In a broader perspective he argues that "knowledge is the perception (*tasawwur*) of things through thorough understanding (*tahaqquq*) of quiddity and definition and apperception (*tasdiq*) with regard to them through pure verified (*musaddaq*) certainty." Having discussed knowledge, he says in his *al-Mustasfa* that it is a matter of firmness (*jazm*) above hesitation and no hidden aspect in it. It is distinguished from ignorance which is related to the unknown.

However, the above definitions clearly manifests that the use of knowledge (*'ilm*) in al-Ghazali's writings is not restricted to any particular knowledge such as natural and physical sciences or Islamic sciences. Yet, it covers all subjects of knowledge including those of the *Shari'ah*. ¹³

As per "religious sciences," al-Ghazali defines, "I mean by religions sciences, which have been prescribed by the Prophets and reason or experimentation or audition cannot show the path to them as they could do in arithmetic, medicine and linguistics." Seemingly, this definition makes an explicit distinction between religious and other sciences as the first part affirms that if sciences are derived from a divine source through the prophetic media, it is then called religious. Since rational knowledge is one of the duo in knowledge integration, al-Ghazali's definition of reason ('aql) appears unique as he asserts that the reason is "the qualification which enables the qualified [person] to perceive knowledge and to think about the cognizable."

¹¹ Franz Rosenthal, (1970), Knowledge Triumphant: The Concept of Knowledge in Medieval Islam (Leiden: E.J. Brill, UK, p. 334.

¹² Al-Ghazli, Abu Hamid Muhammad bin Muhammad, (1413H). Al-Mustafa fi 'Ilm al-Usul, Dar al-Kutub al-Ilmiyyah, Beirut. P. 21.

¹³ Mustafa Mahmoud Abu-Sway, (1993). The Genetic Development in Al-Ghazali's Epistemology. University Microfilms International A Bell & Howell Information Company 3 0 0 North Zeeb Road. Ann Arbor. USA. p. 69.

¹⁴ Abu Hamid al-Ghazālī, *Revitalization of the Sciences of Religion*, trans. by Ahmad A Zidan (Egypt, Cairo: Islamic Inc, 1997, Vol. 1), p.16.

¹⁵ Tazul Islam & M.Y. Zulkifli, (2015) A Forgotten Theoretical Connection if Al-Ghazali's Classifications of Religious Sciences: A Critical Analysis, al-Shajarah, Vol.20, No.1. IIUM Press, ISTAC, Kuala Lumpur, Malaysia, p. 90.

¹⁶ Al-Ghazali. *Al-Mankhul*. p. 44-45.

Structure of Integration of Knowledge in al-Ghazali's Views:

Al-Ghazali finds integration of knowledge in its structural integrality¹⁷ which could be seen in the best manner through his classifications of knowledge. In other words, how he build relations between different classes of knowledge or how one class bonds with other classes or how the classes qualify each other. Al-Ghazali presents two types of integration of knowledge: integration between Islamic sciences; and integration between Islamic sciences and non-Islamic sciences.¹⁸

a) Integration Between Islamic Sciences

For Islamic sciences, he divides into two categories: Basic and branches. The basic of Islamic sciences is Islamic theology (*al-kalam*)¹⁹ which undertakes establish the principles of all the religious sciences. Therefore, all Islamic sciences are relative to it and it is the highest ranking science, for arriving to these details one must start with it.²⁰

On the basis of these sources, it is clear that al-Ghazali views education as a technique or skill, rather than a science in itself, and that its purpose is to give humans the knowledge and dispositions they need to follow divine guidance so that they can worship God and achieve salvation and happiness in the life to come. Knowledge is at the heart of education and the noblest kind of knowledge is the knowledge of God, his attributes and his deeds.²¹

He also famously states his opinion that of the three disciplines—*kalam*, canon law *(al-fiqh)*, and medicine—canon law is the most important because it is needed by the well and the sick, doubter and believer alike.²²

¹⁷ Malkawi, Fathi Hasan. Manhajiyyah al-Takamul al-Ma'rifi, 2011. The International Institute of Islamic Thought, Herndon, USA. P. 53.

¹⁸ Al-Ghazali, Abu Hamid Muhammad bin Muhammad. (1993). Al-Mustasfa. Beirut: Dar al-Kutub al-Ilmiyyah, p. 4.

¹⁹ Al-Ghazali, Abu Hamid Muhammad bin Muhammad. (1993). Al-Mustasfa. Beirut: Dar al-Kutub al-Ilmiyyah, p. 4.

²⁰ Hammad, Ahmad Zaki Mansur, (1987), Abu Hamid al-Ghazali's Juristic Doctrine in al-Mustasfa min Ilm al-Usul with a Translation of Volume One, USA: University of Chicago, Illinois, p. 313.

²¹ Hamid Reza Alavi (2007) Al-Ghazāli on moral education, Journal of Moral Education, 36:3, 309-319, DOI: 10.1080/03057240701552810. P.311-12

²² Dennis Morgan Davis Jr., *Al-Ghazali on Divine Essence: A Translation from the Iqtisad F La L -Ictiqad with Notes and Commentary* (ProQuest Information and Learning Company 300 North Zeeb Road, 2005), p.17.

b) Classification of Religious Knowledge

Integration of knowledge in al-Ghazali's view could be seen in the best manner through his classifications of knowledge. In other words, how he built relations between different classes of knowledge or how one class bonds with other classes or how the classes qualify each other. Al-Ghazali provides variant classifications of knowledge in his various writings. In *Ihyā 'Ulūm al-Dīn*, he classifies knowledge into two as the following:

Classification of Science

- 1. Fundamentals (usūl)
- a) The Book of God (the Qur'ān)
- b) Sunnah of the Prophet (pbuh)
- c) Consensus (ijmā') of all Muslims
- d) Traditions relating to the Companions (āthār al-saḥābah)
- 2. Branches (furū')
- a) Sciences that are understood from "sources" ($us\bar{u}l$)
- 3. Introductory (muqaddimāt)
- a) Linguistic science and syntax
- 4. Supplementary (mutammimāt)
- a) The Qur'anic sciences including the science of interpretation
- b) The sciences of prophetic traditions such as transmission of *hadiths*
- c) The science of principles of jurisprudence (usūl al-Fiqh)
- d) Biography of the Prophets, the Companions and illustrious men²³

In *Ihyā 'Ulūm al-Dīn*,²⁴ knowledge was classified based on the well-known concept of *maṣlahah* (well-being) and *maṣsadah* (harmfulness). According to this theory, some knowledge is praiseworthy and some other are blameworthy. It depends on their nature and alignment. *Al-Ghazali* asserted that religious sciences are all praiseworthy, unless

-

²³ Al-Ghazālī, Revitalization of the Sciences, 16-18.

²⁴ The book, *Iḥyā ʿUlum al-Dīn* (Revival of the Religious Science) is the encyclopedic work of al-Ghazālī recognized as his most famous composition.

there are sciences which are mistaken for religious sciences.²⁵ These are four types: 'fundamentals' ($us\bar{u}l$), 'branches' ($fur\bar{u}$ '), 'auxiliary' (muqaddimāt) and 'supplementary' (mutammimāt). He observes integration between them through their mutual links. For example, the 'branches' (furū') links to the 'fundamentals' as "they were drawn from the fundamentals" in order to "promote a comprehensive understanding of what could bring mundane as well as other worldly well-beings."²⁶ Similarly, the third category of Islamic sciences is, according to him, the instruments that help understand the first category, i.e. fundamentals. He names them 'auxiliary' (muqaddimāt) which "act as the instrument for the religious (shar'iyyah) sciences" because of their being linguistic science and syntax and are designed to be "instruments for the knowledge of the Book of God and the usage (sunnah) of His Prophet."²⁷ Finally. 'supplementary' (mutammimāt) as the last category of science refers to the science of the Qur'an which is also concerned with the 'fundamentals' as evidently the science of the Qur'an is solely devoted to understanding the Qur'an. In addition, this category supplements role of the third category of science on the ground that "language alone cannot treat exposition or its technicalities." Thus, auxiliary science becomes necessary for the pronunciation of the Qur'anic text such as "learning the different readings and the enunciation of the different letters, and what pertains to exposition which also rests on authoritative transmission."²⁹

In Al-Risālah al-Laduniyyah, Al-Ghazali's classification of religious sciences is as follows:

²⁵ Al-Ghazālī, *Iḥyā* (vol. 1), 16.

²⁶ Ibid., 17.

²⁷ Ibid.

²⁸ Ibid., 18.

²⁹ Ibid., 18.

Classification of Religious Sciences in al-Risālah al-Lā'duniyyah

- 1. Fundamentals (usūl)
- a) 'Ilm al-Tawhīd
- b) 'Ilm al-Tafsīr
- c) 'Ilm al-Akhbār

- 2. Branches (furū')
- a) Religious rites
- b) Jurisprudence
- c) Ethics and morals ³⁰

Similar to *Ihva*, al-Gazali classifies Islamic sciences in *al-Risālah* with 'ilm al-usul' (sciences of fundamentals) and 'ilm al-furu' (sciences of branches). Yet, the sub-classes are not entirely similar in both books. However, the 'fundamental' are concerned with three basic fountainheads of the entire Islamic discourse, namely God's self and attributes, His word or revelation, and His Prophet. Under this head, al-tawhīd, derives its existence from God's self and attributes, the situations of the prophets, their companions, conditions of life and death, events of Resurrection and the Day of Judgment, seeing Him by means of God's signs in the Our'an, Prophet Muhammad's reports, intellectual and analogical evidences. 31 Al-Ghazali explains why the sciences of God's Unity ('ilm al-tawhīd) should be placed in the most exalted position in religious sciences. According to him, "the honor (or nobility) of a science depends on the honor of its subjects (ma'lūm); the rank of the learned depends on the rank of the knowledge. There can be no doubt that the most excellent, the highest, the most noble and the most exalted of things to know is God, the Creator, the Real, the One. Thus, knowledge of Him, which is the science of His Unity, tawhīd, will be the most excellent, most glorious, and most perfect branch of knowledge."32

Al-Ghazali considers that this science, though excellent in essence and perfect in itself, does not dispense with the other types of knowledge. Indeed, one cannot attain knowledge of this branch of science unless he gathers knowledge in some antecedents like the science of the heavenly bodies and the spheres and things that God has made.³³ The second category, science of $tafs\bar{\imath}r$, is considered one of the fundamentals

³² Al-Ghazālī, *al-Risālah*, 240.

³⁰ Al-Ghazālī, *al-Risālah*, 245-247.

³¹ Ibid, 244.

³³ Al-Rabe, *Muslim*, 135.

of religious sciences as the entire concern of this science is to understand the Quran which is, according to al-Ghazali, the loftiest, most eloquent and admirable subject and contains all sorts of sciences. Ilm al-akhbār, in al-Ghazālī's view, is the third fundamental science as it deals with understanding the reports of Prophet Muhammad (pbuh) who is the most eloquent among human beings and the master inspired by God. Moreover, he has physical and metaphysical knowledge.

Al-Ghazali defines Branches ($fur\bar{u}$) as the secondary sciences. In his observation these sciences are practical and include three issues firstly, fundamental religious rites which include cleanliness, prayer, alms giving, pilgrimage, jihad, eulogy, etc., which are the rights of Allah; secondly, jurisprudence such as transactions and contracts the subject matters of which are purchase, debit, credit, capital punishments, blood money, wedlock, divorce, emancipation of slaves etc. and designated as the rights of people and finally, ethics and morals which are classified as the rights of the soul. ³⁶

d) Integration between Revealed and Rational sciences

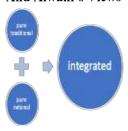
In *al-Mustasfa*, an integrated type of knowledge for al-Ghazali is the one bridges between pure science and religious science. Explaining this integration, as in other books, he briefs three types of sciences. Firstly, one is the pure rational, which the shari'ah neither incites nor invites to, such as, arithmetic, geometry, astronomy, etc. Secondly, purely traditional sciences like *hadith* (prophetic traditions), and *tafsir* (Quranic commentary). He claims that all these knowledge could be learnt sufficiently by anyone because all that is required in traditional knowledge is the power of memory, where there is no role for reason. Yet, the third is the noblest knowledge where reason and tradition are coupled, where rational opinion and the *shari'ah* are in association. To him the sciences of jurisprudence and its principles are the noblest because it is born through integration between the pure rational and pure traditional knowledge.

³⁵ Abū Ḥāmid al-Ghazālī, "Al-Risālah al-Laduniyyah," in *Majmuah Rasāil al-Imām al-Ghazālī*, ed. Ibrahim Amin Muhammad (Cairo: al-Tawfiqa Bookshop, N. D), 245.
³⁶ Ibid 246

³⁴ Al-Ghazālī, *al-Risālah*, 244.

³⁷ Hammad, Ahmad Zaki Mansur, *Abu Hamid al-Ghazali's Juristic Doctrine in al-Mustasfa min Ilm al-Usul with a Translation of Volume One* (USA: University of Chicago, Illinois, 1987), p. 303-304.





Integration between revealed and rational knowledge lies upon the competency of a learner. Al-Ghazali writes that "most revealed knowledge is rational for those who know [through study] ('ālim) and most rational knowledge is revealed for those who have intuitive knowledge ('ārif)."³⁸

Pedagogical role in Integration of Knowledge in al-Ghazali's Views

It is because al-Ghazali views education as a technique or skill that he places great emphasis on teaching methods and on the teacher-student relationship.³⁹ With regard to the curriculum, al-Ghazali gives the highest priority to religious learning. He has a developmental approach, in which younger children are encouraged to memorise the Qur'an and learn the fundamentals of the faith and of moral behaviour without explanation or understanding. At a later stage they should receive explanations and clarifications of the beliefs, so that their emerging commitment can be rooted in rational conviction (al-Ghazali, 1898, Vol. 1, p. 45).

Al-Ghazali sees little point in the inclusion of music, singing, dancing, drawing, painting or poetry in the curriculum, except perhaps in very restricted circumstances, since these are unlikely to enhance children's faith and may indeed lead them astray. In terms of higher education, al-Ghazali distinguishes between the obligatory sciences (religious fundamentals, the Qur'an, Arabic and religious texts), which are to be studied by everyone, and the optional sciences (the whole apparatus of the revealed sciences, together with non-revealed sciences like medicine and mathematics), which students can choose to study if they wish. ⁴⁰

³⁸ al-Ghazali, Abu Hamid, (1986), AI-Risaiah al-Laduniyyah," in Majmuah al-Rasa'il aI-Imam al-Ghazali (Beirut: Dar al-Kitab al-Arabi), vol. 4, p.96.

³⁹ Hamid Reza Alavi (2007) Al-Ghazāli on moral education, Journal of Moral Education, 36:3, 309-319, DOI: 10.1080/03057240701552810. P. 312

⁴⁰ Hamid Reza Alavi (2007) Al-Ghazāli on moral education, Journal of Moral Education, 36:3, 309-319, DOI: 10.1080/03057240701552810. P. 313

Premises for Integration of Knowledge in al-Ghazali's Views 1. Concept of Maṣlaḥah (public interest) and mafsadah (public harm)

In *Ihvā 'Ulūm al-Dīn*. 41 the author categorizes the classification into two, praiseworthy and blameworthy. The theoretical basis of al-Ghazālī's classification of Islamic sciences into praiseworthy and blameworthy sciences is the concept of well-being (maslahah) and harmfulness (mafsadah). It seems that the classification of Islamic sciences would not have been needed as al-Ghazali asserted that the "religious sciences are all praiseworthy," unless there are sciences, according to him, which are confused with religious sciences. 42 Because of this mixture of non-Islamic sciences, the Islamic sciences are divided into two: praiseworthy and blameworthy. 43 However, as far as the praiseworthy sciences, which are truly Islamic, are concerned, it seems that the category of 'fundamentals' is not in itself a class of Islamic science but the fundamental source from which the Islamic sciences could be understood. More specifically, for example, the Book of Allah (the Qur'ān) itself does not represent a science of Islam but it is the main source of it. The situation is almost the same for other elements of 'fundamentals.' For this category of science, al-Ghazali did not mention its source, yet a source is a must for a science to be a science. However, he asserted sources for other categories of Islamic sciences and all of them are referred to as the 'fundamentals.' For example, he said that the attachment of the 'branches' ($fur\bar{u}$ ') with the 'fundamentals' ($us\bar{u}l$) is "what has been drawn from the fundamentals" in order to "promote a comprehensive understanding of what could bring mundane as well as other worldly well beings."⁴⁴ Similarly, the third category of Islamic sciences is, according to him, the instruments that help to understand the first category, i.e. fundamentals. He named them 'auxiliary' (muqaddimāt) which "act as the instrument for the religious (shar'ivvah) sciences" because they are linguistic science and syntax which are "instruments for the knowledge of the Book of God and the usage (sunnah) of His Prophet."⁴⁵ Finally, the fourth category which is entitled 'supplementary' (mutammimāt) and refers to the science of the Our'an is also concerned with the 'fundamen-

⁴¹ The book, *Iḥyā 'Ulum al-Dīn* (Revival of the Religious Science) is the encyclopedic work of al-Ghazālī recognized as his most famous composition.

⁴². Al-Ghazālī, *Ihvā 'Ulum al-Dīn* (Beirut: Dār al-Ma'arif), vol. 1: 16.

^{43.} Al-Ghazālī, Revitalization of the Sciences of Religion, Vol. 1, p. 16.

⁴⁴. Al-Ghazālī, Revitalization of the Sciences of Religion, Vol. 1, p. 17.

^{45.} Abu Hamid al-Ghazālī, Revitalization of the Sciences of Religion, Vol. 1, p. 17.

tals' as evidently the science of the Qur'an is solely devoted to understanding the Qur'ān. In addition, this category comes under supplementary role with the third category of science because, according to al-Ghazali, "language alone cannot treat exposition or its technicalities." Thus, for the pronunciation of the Qur'anic text such as "learning the different readings and the enunciation of the different letters, and what pertains to exposition which also rests on authoritative transmission," a supplementary science which incorporates 'auxiliary' science is deemed necessary.

From the above discussion, it should be understood that the first category of science, i.e. 'fundamentals' is not in fact a science. Revelation is, without any qualification, a source of knowledge about God. More specifically, it is only the primary, ultimate and authoritative source. It is the final standard by which the adequacy of any other source is judged. It is also the source of the rest of the categories of sciences, i.e. branches, auxiliary and supplementary. While it takes a pivotal role, other categories revolve around it.

In regard to blameworthy category, al-Ghazali mentioned three reasons whereby a science could be blameworthy. They are: when it leads to any harm whether it befalls its doer or somebody else; when for most of the time it is harmful; when the pursuit of that kind of knowledge does not give the doer a scientific advantage.⁴⁹

The theoretical roots of the first category of Islamic sciences, namely 'fundamentals' in *al-Risālah*, are concerned with three basic fountainheads of the entire Islamic discourse, namely God's self and attributes, His word or revelation, and His Prophet. The first category of religious science, *al-tawhīd*, is derived from God's self and attributes, the situations of the prophets, their companions, conditions of life and death, events of Resurrection and Day of Judgment, and seeing Him by means of God's signs in the Qur'an, Prophet Muhammad's reports and intellectual and analogical evidences. Al-Ghazali explained why the sciences of God's Unity ('ilm al-tawhīd) should be in the most exalted position in religious sciences. According to him, "the honor (or nobility) of a science depends on the honor of its subjects (ma 'lūm); the rank of the learned on the rank of the knowledge. There can be no doubt that the most excellent,

⁴⁶. Ibid., Vol. 1, p. 18.

^{47.} Ibid., Vol. 1, p. 18.

⁴⁸ . Fadlou Shehadi, *Ghazālī's Unique Unknowable God*, p. 55.

⁴⁹. Al-Ghazālī, Revitalization of the Sciences of Religion, Vol. 1, p. 38-39.

⁵⁰ . ibid, p. 244.

the highest, the most noble and the most exalted of things to know is God, the Creator, the Real, the One. Thus, knowledge of Him, which is the science of His Unity, *tawhīd*, will be the most excellent, most glorious, and most perfect branch of knowledge."⁵¹

The secondary sciences are practical and includes three: firstly, fundamental religious rites such as cleanliness, prayer, alms giving, pilgrimage, jihad, eulogy, etc., which are the rights of Allah; secondly, jurisprudence such as transactions and contracts such as purchase, debit, credit, capital punishments, blood money, wedlock, divorce, emancipation of slaves etc. which are the rights of people; finally, ethics and morals which is the rights of the soul. 52

In *Jawāhir*,⁵³ al-Ghazali classified the religious sciences into two: "essential" ('ulūm al-lubāb) and "peripheral" ('ulūm al-ṣadaf). The former is again categorized into higher and lower grades. The higher grade of the sciences of the core [of the Qur'an] consists of those important sciences which are the precedents and roots of the three sciences: knowledge of God,⁵⁴ knowledge of the Last Day and knowledge of the straight path and of the manner of traversing it. The lower grade includes three sciences: the knowledge of the stories [narrated] in the Qur'ān, God's argument with the infidels and His dispute with them [the science of theology ('ilm al-kalām)⁵⁵ stems from this division], and the knowledge of the legal bounds⁵⁶ (hudūd).⁵⁷

In Jawāhir al-Qur'ān there is a strong emphasis upon employing what the author considered to be the correct method of apprehending the Holy Book, i.e. upon penetrating into the depth of the inner, hidden pearls and treasures. A very clear-cut and complete, but brief theory concerning the aims (Maqāṣid) of the Qur'ān is given in this book - a theory which is recognized as important and is often quoted by al-Suyūṭī (d. 911 A.H.) and other later scholars of the Qur'ān. (Muhammad Abul Quasem, *The Jewels of the Qur'ān: al-Ghazālī's Theory*, Kegan Paul International, London, first published in 1983, reprinted in 1989, pp. 11)

⁵¹. Al-Ghazālī, *al-Risālah*, p. 240.

⁵² . Ibid., p. 246.

⁵⁴. In English, the phrase "knowledge of God" can suggest that God is "either the subject or the object of knowing". This ambiguity of language (in addressing the matter) is less possible in Arabic, for it has particular terms for God as either the subject or object of knowing. The term "marifah Allah" is employed to refer to man's knowledge of God, in the meaning of "the knowledge God bestows upon mankind of Himself or the like. Andi Nurbaethy, Development of al-Ghazālī's Concept of the Knowledge of God in His Three Later Works: Ihya, al-Munqidh, and Iljam al-'Awamm, MA thesis, 1998, Institute of Islamic Studies, McGill University, p.29.

^{55 .} Kalām is defined by al-Ghazālī simply as the study of God, and it has four principle topics: the existence and fundamental nature of God, His attributes, His actions, and His

The question of how a person knows that God is such and such may be understood as a question about various ways of knowing. On the basis of a pre-analytic glance at al-Ghazali's thought, there are four ways of knowing which are *naql* (transmission) or *taqlīd* (literally, imitation), 'aql⁵⁸ (intellect), dhawq (immediate experience), or ilḥām (inspiration), or mukāshafah (intuitive knowledge) and wahyi (Revelation).⁵⁹

Integration of Knowledge in the View of Taha Jabir Alwani:

Alwani stresses the need to bring to light the "logic" of the Qur'an and what he terms "the cosmic Qur'anic methodology." This methodology is distinguished by a set of Qur'anic methodological determinants of which he details three: 1) al-tawhid as the pivotal element of the Qur'anic worldview, 2) combining the "two readings," that is, our reading of the Qur'an and of the created universe, and 3) the structural unity of the Quran and the cosmic truths it encapsulates. Alwani then links these three Qur'anic methodological determinants with construction of an epistemological integration methodology. ⁶⁰

To Alwani, integration between the revealed and scientific knowledge firstly entails to the way of reading of the duo. 61 On the Quranic side, he suggests, for integration, reading of the Quran should undergo the following approaches:

prophets and revelation. [al-Ghazālī, al-Iqtiṣād fī al-ʿItiqād, ed. Cubukcu and H. Atay (Ankara, 1962), p. 4.] Kalām is most general and architectonic religious science, which determines the sphere of each of the more specialized religious sciences. [George F. Hourani, Ghazālī on the Ethics of Action, Journal of the American Oriental Society, vol. 93, Issue 1 (Jan.-Mar., 1976), p. 69.]

⁵⁶. This is the normative religious science that deals with the legal limits of the man's actions in this world.

⁵⁷. The Jewels of the Qur'ān, p. 37-40.

The term 'aql, as al-Ghazālī himself points out, is ambiguous. It refers commonly in the usage of theologians to demonstrative reason. It is the activity or faculty that proves, defends, elicits conclusions implied by premises. In more general sense, aql is man's basic apprehending faculty which distinguishes him from animals, and by which he has theoretical knowledge. But the term also refers to the sūfī, "light of inner perception" or "light of certainty (yakin). Al-Ghazālī maintains that "aql" as man's basic reasoninstinct refers to the same thing denoted by the sūfī terms just mentioned. [Fadlou Shehadi, Ghazālī's Unique Unknowable God (Leiden: E.J. Brill, 1964), p. 55.]

⁵⁹ Shehadi, *Ghazālī's Unique*, 53.

⁶⁰ Fathi Hasan Malkawi, Epistemological Integration: Essentials of an Islamic Methodology, International Institute of Islamic Thought (IIIT), London, Washington, p. 59.

⁶¹ Alwani, p.33.

A. Readers should bring the Quran to his heart: ⁶²Allah (swt) says in this regard: Say to them, "Whoever is enemy to Gabriel, should understand that he has, by Allah's command, revealed to your heart the Qur'an which confirms what was revealed before it, and brings Guidance and glad tidings to the Believers" (Al-Bagarah: 97).

The Qur'an was lodged in Muhammad's 'heart', a term used frequently in the Qur'an to indicate a non-physical part of the human personality that receives and understands. It does not refer to the physical human organ known by that name. The heart, according to the Qur'an, is the centre of human perception. The effect of divine revelations on the believing heart is uniquely uplifting. The simple recitation of the Qur'an fills the heart with tranquility and solace, and opens up new vistas of meaning and knowledge. The study of this revelation can also be very inspiring, uncovering wider horizons of understanding and, therefore, guidance and achievement. 63

- **B.** Belief in the structural unity of the Quran and reading it in the light of this aspect: A reader should focus on the relational networks of the contents he finds in a particular verse of the Quran. ⁶⁴
- **C.** Belief in the unity of a surah (chapter) of the Quran: He believes that every surah of the Quran has a pivotal subject of which the whole content revolves around, illuminates its meaning and elaborates. ⁶⁵
- **D.** Understanding the supreme values of the Quran (tawhid, tazkiyah and civilization): He believes that this value trinity form Quranic axis on which all the verses and chapters of the Quran revolve and correspond each other ⁶⁶.

Sayyed Qutb, In the Shade of the Quran, vol. 1-2, p. 103-4.

⁶² Alwani, p.34.

⁶⁴ Alwani, p.35.

⁶⁵ Alwani, p. 36.

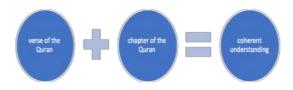
⁶⁶ Alwani, p. 37.



E. Understanding trilateral relations between Allah, human and universe: in this trio-relation, it is explored how things happen, and examined how they interact with what have discussed in the Quran. Having observed this, a person can develop his consciousness and capacity of pondering on the Quran. Thus, he can understand the reality surrounds him.⁶⁷



- F. Thematic study of the Quran: the author suggests that some important issues in the Quran should be identified first. And then all the relevant verses about a topic must be gathered together for an induction process so that the structural unity of the Quran is perfectly reflected⁶⁸.
- G. Exploring coherence between verses and chapters of the **Ouran:**



⁶⁷ Alwani, p. 39. ⁶⁸ Alwani, p. 39.

Approaches to reading the universe

As there are approaches to reading the Quran, there are approaches to reading the universe as well.

- a. Approach to creation: this entails believing firmly that the universe is God's creation and originates from His will and develops under His guardianship. And it was not a random creation, therefore not aimless. It was not accidental, meaningless or aimless. Behind every single creation, there is a cause and purpose. Alwani requires a reader to have an understanding and consciousness of the creation which underpin the performance of duty of vicegerency, fulfilling our promise to Allah (SWT), and standing with responsibility. ⁶⁹ He added that the Quran does present itself as a source of natural science. Instead, it calls upon human being to observe the nature and creation in order to reach out to the knowledge of the Creator and His oneness as well as understanding His sublime attributes. 70 These help in developing human capacity of understanding, enriching intellectual competencies and readiness for educational pursuit. Also, these could run all the powers of consciousness in him. Thus, the observation of natural phenomena helps human being to earn competencies for civilizational development.⁷¹ Under this approach there are some sub-issues as follow:
 - Knowledge of principles of creation:
 - Absolute and firm belief that the universe is a creation of Allah (SWT) and manifestation of His Will.
 - The universe follows a sustainable system and not an aimless creation. ⁷²
 - The Quran does not represent itself as source of natural science. Yet, it calls upon pondering on creature and nature to reach out to His knowledge, Oneness and Guardianship. These would help human being to develop capacity of understanding, his intellectual competencies, educational preparedness, and building capacity to carry out his civilizational duty.⁷³
 - Human being can develop his worldview of the universe, life and man based on minute order and system that regulate the universe.

⁷⁰ Alwani, p. 44.

⁶⁹ Alwani, p. 44.

⁷¹ Alwani, p. 44.

⁷² Alwani, p. 45.

⁷³ Alwani, p. 44.

- Human being discovers through his pondering on creation that the perfect universal system is destined to an end one day.
- Pondering upon creatures enables human being to understand the intertwined relationship between science and belief.
- If science is separated from belief, it can cause harms more than it causes benefits.⁷⁴
- Human relation with nature is friendly and man is responsible for its development.⁷⁵
- **b. Prudence:** Prudence leads to discover divine creativity. It is a type of thinking that develops rationality in human mind. Consequently, it trains him for rational thinking of what surrounds him. By this quality, he would understand that the universe is not an isolated creation. Yet, it functions in a unique system. This gives him a worldview for understanding the universe, man and life.⁷⁶
- c. Overview on external subjective reality: Anything has an imaginary as well as real existence. If an external reality does not prove the imagination, it means that that imagination is unrealistic.⁷⁷

Conclusion: How integration of knowledge is achieved

According to Alwani, the issue of integration between scientific and Islamic knowledge is a methodological issue in education that triggers civilizational outcome. The fundamental approach in integration begins with discovering the methodological relation between methodological coherence in Our'anic verses reflected in Ouran's structural and its inimitability; and natural law. The Quran is a Divine Revelation by which we understand the creation. The more knowledge we gain on revelation, and universe, the more we grow our capacity to integrate between revelation and science. We therefore may be able to discover methodological relation between methodology of revelation and methodology of universe, which are interconnected.

Therefore, the foremost duty for a contemporary Muslim reader of the Quran is to share methodology between revelation and natural sci-

⁷⁴ Alwani, p. 47.

⁷⁵ Alwani, p. 47. ⁷⁶ Alwani, p. 49.

⁷⁷ Alwani, p. 53.

⁷⁸ Alwani, p. 54.

ences.⁷⁹ This methodological integration between the Quran, universe and man could only be understood by a person who has sufficient knowledge of the Quran and science.⁸⁰

The foundations of Quranic methodology are the following:

- 1. Reconstruction of Islamic educational worldview based on the pillars of belief and the principles and characteristics of the Quranic worldview. Thus, building an independent capacity of educational criticism and the capacity of generating knowledge and methodology are achieved.⁸¹
- 2. Exploring and reconstructing the Islamic methodology for different fields in the light of the "Quranic educational methodology". The existing crisis of Islamic methods developed as a result of a one-sided reading of the Quran. This reconstruction could enable the Muslim mind to understand the relation between physics and meta-physics, revelation and reason, cause and effects.⁸²
- 3. Revisiting methodology how to approach the Quran and sciences of its reading. It requires the reconstruction of theories of the "sciences of the Quran." In the context of globalization when contemporary minds search for objective conclusion for their investigations, rationality, methodological understanding, investigating relations between things in analytical and critical way are dominant. Thus, there is a need for a new approach in understanding the text and a new approach of reading that combines revelation with universal context. 84
- 4. Developing a method of how to approach Sunnah based on methodological perspectives of Quran. This could be developed considering Sunnah as a source originated from the Quran and the living example of the Quranic precepts. 85
- 5. Revisiting Islamic tradition which requires a critical and analytical reading and analogy to methodology of justification so

80 Alwani, p. 59.

⁷⁹ Alwani, p. 54.

⁸¹ Alwani, p. 59.

⁸² Alwani, p. 59.

⁸³ Alwani, p. 60.

⁸⁴ Alwani, p. 61.

⁸⁵ Alwani, p. 61.



- that we can come out from the practice of total rejection, or total acceptance, or something un-methodological. 86
- 6. Developing a methodology to approach current human tradition (contemporary civilization) which could be called "Arabic tradition" and "western thought." To avoid the above mentioned three practices, we need to follow approaches to building bridge, comparison, refutation and disagreement.⁸⁷

If the Quran was as book of theology, it would have encouraged making one-dimensional reading. Yet, we are recommended to have an integrated reading. Thus, Islam does not fight against science. The contemporary applied science and its outcomes led to different ideologies to overcome traditional circumstances. Therefore, redirection of these ideologies and purifying and employing them to serve the text of the Ouran may lead to achieve the integration between science and Islamic knowledge.88

According to al-Ghazali, each type of knowledge—Islamic and scientific—is independent. However, when it comes to the Question of mutual relation, scientific knowledge has only a supplementary or complementary role where it is used as a complementary tool to strengthen the Islamic point of view.

BIBLIOGRAPHY

Abdul Muhaya. "Unity Of Sciences According To Al-Ghazali." Walisongo, Volume 23, Nomor 2, November 2015.

Abu Hamid al-Ghazālī, "Al-Risālah al-Laduniyyah," in Majmuah Rasāil al-Imām al-Ghazālī, ed. Ibrahim Amin Muhammad (Cairo: al-Tawfiga Bookshop, N. D).

Abu Hamid al-Ghazālī, Revitalization of the Sciences of Religion, trans. by Ahmad A Zidan. Egypt, Cairo: Islamic Inc, 1997, Vol. 1.

⁸⁶ Alwani, p. 65.87 Alwani, p. 65.

⁸⁸ Alwani, p. 67.

Abu Sulayman, A. H. *Islamization of knowledge: Reforming contemporary knowledge*. International institute of Islamic thought: Virginia: USA, 1994.

Ahmad Zaki Mansur Hammad, *Abu Hamid al-Ghazali's Juristic Doctrine in Al-Mustasfa min Ilm al-Usul* with Translation of Volume One. United States, Chicago: The University of Chicago, 1987,

Abu Hamid al-Ghazālī, *Al-Mustasfa*. Beirut: Dar al-Kutub al-Ilmiyyah, 1993.

Abu Hamid al-Ghazālī. "Al-Risaiah al-Laduniyyah." In *Majmuah al-Rasa'il al-Imam al-Ghazali*. Beirut: Dar al-Kitab al-Arabi, 1986, vol. 4.

Abu Hamid al-Ghazālī, *al-Iqtiṣād fī al-ʿItiqād*, ed. Cubukcu and H. Atay. Ankara, 1962.

George F. Hourani. "Ghazālī on the Ethics of Action." *Journal of the American Oriental Society*, vol. 93, Issue 1 (Jan.-Mar., 1976).

Andi Nurbaethy, Development of al-Ghazālī's Concept of the Knowledge of God in His Three Later Works: Ihya, al-Munqidh, and Iljam al-'Awamm, MA thesis, 1998, Institute of Islamic Studies, McGill University.

Attaran, M. *Trends of educational culture and history in Iran and Europe* (Tehran, Negah), 3rd edn. ,1989.

Dennis Morgan Davis Jr. *Al-Ghazali on Divine Essence: A Translation from the Iqtisad F La L -Ictiqad with Notes and Commentary.* ProQuest Information and Learning Company 300 North Zeeb Road, 2005.

Fadlou Shehadi. *Ghazālī's Unique Unknowable God.* Leiden: E.J. Brill, 1964.

Fathi Hasan Malkawi, *Epistemological Integration: Essentials of an Islamic Methodology*. International Institute of Islamic Thought (IIIT), London, Washington.

Franz Rosenthal. Knowledge Triumphant: The Concept of Knowledge in Medieval Islam. Leiden: E.J. Brill, UK, 1970.

Hamid Reza Alavi. "Al-Ghazāli on moral education." *Journal of Moral Education*, 36:3, 309-319, 2007, DOI: 10.1080/03057240701552810.

Malkawi, Fathi Hasan. *Manhajiyyah al-Takamul al-Ma'rifi*,. The International Institute of Islamic Thought, Herndon, USA. 2011

Muhammad Abul Quasem. *The Jewels of the Qur'ān: al-Ghazālī's Theory*. London: Kegan Paul International, first published in 1983, reprinted in 1989.

Mustafa Mahmoud Abu-Sway. *The Genetic Development in Al-Ghazali's Epistemology*. USA: University Microfilms International A Bell & Howell Information Company, 1993

Othman, N., & Mohamad, K. A. "Eclectic Model in the Malaysian Education System." *International Education Studies*, 4, no. 4, (2011): p. 111–117.

Sidek Baba. "The Integrated Approach in Malaysian Education: The International Islamic University as a Model." *Journal Pedidikan Islam* 13.2, 2009, p.87-99.

Surajudeen, A. T., & Mat, M. Z. A. "Classification and Integration of Knowledge: The Qur'ānic Educational Model." *Revelation and Science*, 03, no. 02, (2013)

Susan Drake. *Planning for Integrated Curriculum: The call to adventure*. Alexandria, VA: Association of Supervision and Curriculum Development, 1993.

Tazul Islam & M.Y. Zulkifli, "A Forgotten Theoretical Connection if Al-Ghazali's Classifications of Religious Sciences: A Critical Analysis." *Al-Shajarah*, vol. 20, no. 1, 2015.