Osman Bakar's contribution to renewing the Islamic classification of knowledge

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Summary

Amongst Prof. Osman Bakar's contributions to Islamic scholarship is his contribution to the Islamic classification of knowledge. The Aristotelian classification of knowledge is probably the most prominent classical influence of all classifications. Muslim scholars of the past who classified disciplines were impacted by Aristotle, albeit in different forms. Two streams could be identified, namely, classifications based on a modified Aristotelian approach, such as Al-Farabi's (d. 339H/950CE) and Ibn Sina's (d. 428H/1037CE), and classifications based on new non-Aristotelian approaches, such as Ibn Hazm's (d. 456h/1064CE) and Ibn Khaldun's (d. 808H/ 1406CE). Today, western academic disciplinization is most prominent, and has impacted the definition of disciplines, even within Islamic studies as well. Prof. Datuk Osman Bakar offered a unique and detailed discussion of classical Islamic classifications of knowledge, especially Al-Farabi, Al- Ghazali and Al-Shirazi, in his, *Classification Of Knowledge*, which is originally his doctorate thesis from Temple University, USA, 1988. Prof. Datuk Bakar in Based on this contribution and his later and many other studies contributed towards a more Islamic Quran-based approach to disciplinization of knowledge that transcends the current secular and Islamic classifications. In this article, Bakar's contribution will be analyzed in light of the need to develop an alternative classification for Islamic Studies today.

The need for an Islamic classification of knowledge

In his introduction of Osman Bakar's book on the classification of knowledge, Sayyed Hussein Nasr writes:[1]

> Islamization of knowledge [is] being carried out throughout much of the Islamic world today. How can one Islamicize knowledge without being concerned with the traditional Islamic classification of the sciences? How can an Islamic education system accept a situation in which there is no hierarchy between the knowledge of the angels and of molluscs or between the method of knowledge based upon reason wed to the external senses and knowledge which derives from the certitude (yaqin) derived from heart-knowledge? The views of classical Islamic thinkers ably analyzed by Dr. Bakar here speak very directly to the current debate on the Islamization of knowledge and in fact provide an absolutely necessary dimension without which talk of this subject cannot proceed much beyond mere chatter.

These statements summarize the significance of Bakar's contribution to the Islamization of knowledge project and - in my view - to the wider movement of renewal in Islamic thought in contemporary times. Currently, neither the dominant classifications of knowledge from a secular perspective nor the historical Islamic classifications of knowledge are adequate for the needs of current educational and research institutes of Islamic Studies. Bakar's writings on the

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[1] Sayyed Hussein Nasr, Introduction, Osman Bakar, Classification Of Knowledge In Islam A Study In Islamic Philosophies Of Science, Cambridge: Islamic Texts Society, 1998 (originally a doctorate thesis from Temple University, USA, 1988), p. xiv.

classification of knowledge, as well as his other contributions to Islamic thought, did not fall squarely under any of the current secular or Islamic classifications. In our analysis, he rather took a trans-disciplinary approach, in which the Quranic knowledge lies at the center and at the basis.[2] This was a significant step he took in the road towards a contemporary renewal in Islamic thought. The following sections explain.

Greek classifications of disciplines

The Aristotelian classification of knowledge is considered the most prominent classical influence. Muslim scholars who classified disciplines were impacted by Aristotle, albeit in different forms. Two streams could be identified, namely, classifications based on a modified Aristotelian approach, and classifications based on approaches that were consciously non-Aristotelian.[3] Bakar discussed many classification in his works, of which we will take Al-Farabi's (d. 339H/950CE) and Ibn Sina's (d. 428H/1037CE) as examples of the former, and Ibn Hazm's (d. 456h/1064CE) and Ibn Khaldun's (d. 808H/1406CE) as examples of the later.

Aristotle's classification of knowledge had a strong influence over many classical and contemporary classifications of disciplines/sciences, Islamic and non-Islamic, until today. His

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[2] Refer for a clear example to the approach he took in his: Quranic pictures of the universe: The Scriptural Foundation of Islamic Cosmology, as well as: Tawhid and Science.

[3] Refer to the detailed discussion of theirs and other classical Islamic classifications of knowledge, especially Al-Farabi, Al-Ghazali and Al-Shirazi, in: Osman Bakar, Classification Of Knowledge In Islam A Study In Islamic Philosophies Of Science, Cambridge: Islamic Texts Society, 1998 (originally a doctorate thesis from Temple University, USA, 1988). Also refer to: Al-Farabi, *Ihsa al-'ulum*, ed. U. Amin, Cairo: Dar al-Fikr al-Arabi, 1949; Ibn Sina, *Risalah fi aqsam al-ulum al-`aqliyah*, manuscript, ketabpedia.com; Ibn Hazm, *Maratib al-ulum*, manuscript, al-maktaba.org/book/1038/924, Ibn Khaldun, *The Muqaddimah: An Introduction*, trans. Franz Rosenthal, Princeton Classics, 2015.

main categories were: theoretical, productive and practical sciences.[4] Theoretical sciences are "knowledge for its own sake", in his words, which included metaphysics, mathematical sciences and natural sciences. This is the category that some Muslim philosophers, such as Al-Farabi, adopted while interpreting "metaphysics" to mean theological or Godly sciences (*`ilm ilahi*).[5] Productive sciences aim at the creation of a product through craftsmanship. This is also a category that Muslim philosophers adopted such as Al-Farabi who included in it the Islamic philosophy of religion (*kalam*), and Al-Ghazali who included in it logic as a "tool" science (*'ilm aalah*).[6] Aristotle's practical sciences covered the knowledge of action, which included ethics, judgement, politics and arts. This category impacted classical Islamic classifications as well, including Al-Farabi's.

Al-Farabi categorized sciences into: (1) science of language (*'ilm al-lisan*), (2) logic (*`ilm al-mantiq*), which was divided similar to Aristotle's books on logic, (3) mathematical or propaedeutic sciences (*'ulum al-ta`alim*), including arithmetic, theory of numbers, practical science of numbers, geometry, optics, stars, music, weights, ingenious devices, (4) natural science (*al-`ilm al-tabi`i*), (5) metaphysics or theology (*al-`ilm al-ilahi*), (6) practical sciences, including civil science (*al-`ilm al-madani*), jurisprudence (*`ilm al-fiqh*), and Islamic philosophy of religion (*`ilm al-kalam*).[7] Bakar's analysis demonstrated the strong impact of Aristotle's

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[4] Jonathan Barnes, 'Introduction' to Aristotle, The Nicomachean Ethics, Harmondsworth: Penguin, 1976.

[5] Bakar, Classification, pp. 128-132.

[6] Al-Ghazaly, *Al-Mustasfa fi `llm Al-Usul*. 1st ed. Beirut: Dar al-kutub al-'ilmiya, 1413 AH.

[7] Bakar, Classification, chapters 5-6.

classification on Al-Farabi,[8] despite the "Islamic" categories added such as *fiqh* and *kalam.* For one example, he analyses the categorization of logic give by Al-Farabi as follows:[9]

> Logic (ilm al-mantiq). This is divided into eight parts that deal with the following:
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> (1) Rules governing simple intelligibles or ideas and simple expressions which signify these intelligibles, corresponding to Aristotle's Categories
>
> (2) Rules governing simple statements or propositions composed of two or more simple intelligibles; and composite expressions signifying the composite intelligibles, corresponding to Aristotle's On Interpretation.
>
> (3) Rules of the syllogisms which are common to the five syllogistic arts - the demonstrative, the dialectical, the sophistical, the rhetorical, and the poetical, corresponding to Aristotle's Prior Analytics
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> (4) Rules of demonstrative proof and the special rules by which the philosophic art is constituted, corresponding to Aristotle's Posterior Analytics
>
> (5) The means of discovering dialectical proofs, questions and answers, and the rules by which the art of dialectic is constituted, corresponding to Aristotle's Topics
>
> (6) Rules governing matters which are such as to turn man away from truth to error and to lead him to deception, corresponding to Aristotle's On Sophistic Refutations
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> (7) The art of rhetoric. It deals with the rules by which rhetorical statements may be examined and evaluated, corresponding to Aristotle's Rhetoric
>
> (8) The art of poetry, corresponding to Aristotle's Poetics

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[8] Bakar, Classification, pp. 10-19.

[9] Bakar, Classification, pp. 120-121.

Ibn Sina's classification of sciences is even closer to Aristotle's and he did not even include *fiqh* or *kalam* in his classification of knowledge.[10] He strictly followed the theoretical-practical classification, and included under them: nature, arithmetics and theology; and ethics, governance of the household, and civil politics - respectively.

"Knowledge for its own sake", however, is not Islamic. There is a web of objectives that is tied to knowledge (*`ilm*) in the Islamic worldview, as Bakar elaborates in his, *Tawhid and Science*.[11] Therefore, it is obvious that the above two Islamic classifications, and many others similar to them,[12] are not relevant to a much needed renewal of classification of disciplines for the sake of renewal of contemporary Islamic thought.

Ibn Hazm and Ibn Khaldun, amongst others, introduced classifications of disciplines that were significantly different from Aristotle's and the rest of the peripatetics (*masha'un*) and those who were influenced by them from the Asharites and Mutalizites.[13] However, Ibn Hazm and Ibn Khaldun were influenced by the dichotomous logic of the Greeks in general, including the theoretical-practical and physical-metaphysical categories. They also did not consider *fiqh* nor *Shariah* to be related to the sciences that they considered "common amongst nations", in the words of Ibn Hazm, or "not specific to any faith", in the words of Ibn Khaldun. However, Ibn Hazm included in this latter category philosophical sciences, whereas Ibn Khaldun included metaphysics. They both included in this "neutral" category: medicine and engineering (mathematical shapes).

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[10] Bakar, Classification, pp. 9, 14, 25, 27, 29.

[11] Osman Bakar, Tawhid and Science: Islamic perspectives on religion and science, Shah Alam: Arah Publications, 2008. Part 1: Epistemological Foundations of Islamic Sciences.

[12] Such as those offered by: Al-Kindi, Al-`Amiri, Ibn Rushd, Al-Tusi, A-Shirazi, Al-Ghazali, etc. Refer to: Bakar, Classification.

[13] Bakar, Classification, pp. 9, 11, 57, 174, 184, 215.

However, the Islamic worldview based on the revelation does not consider any science to be "neutral", valueless or unrelated to faith - philosophy, "metaphysics", medicine, engineering and "all spheres of life", according to Bakar. He writes: " … in Islam, the idea of hierarchy of human needs and of values of human acts in all spheres of life is based upon the ethico-legal teaching of the Shari'ah".[14]

Ibn Hazm also divided sciences into useful (*nafi`*), in which he included Shariah, language, *fiqh* and history, and detested/blameworthy (*madhmum*), in which he included chemistry, magic and astrology. Al-Ghazali has a similar category, which Bakar referred its blameworthiness to causing harm. He writes:[15]

> Al-Ghazzali's three types of blameworthy knowledge may be described as corresponding to three different degrees of blame-worthiness. These degrees are understood not in a qualitative but quantitative sense. What I mean by "quantity" refers to the number of people who are subject to the harmful effects of each of the above three types. The first type, exemplified by the science of magic, produces the greatest degree of harm in the sense that no one, not even a prophet or a saint, is immune from the evil of magic. The second type, exemplified by astrology, corresponds to a lower degree of blameworthiness because there is a group of people, namely those "who are well grounded in knowledge" for whom the science is harmless although useless. As for the third type, exemplified on the one hand by trivial sciences and on the other by the science of divine mysteries, it is associated with the least degree of blameworthiness in the sense that it is harmful to the least number of people.

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[14] Bakar, Classification, pp. 47.

[15] Bakar, Classification, pp. 216.

Ibn Khaldun divided knowledge into rational (*`aqli*), in which he included chemistry, magic, geometry, and music, and transferred (*naqli*), in which he included exegesis, hadith, *fiqh, kalam,* sufism, and the Arabic language. It is interesting how "chemistry" and "magic" were considered one and the same at that time. Chemistry is now a standard science, but the concept of "magic" (*sihr*) (Quran 2:102, 7:116, 10:81, 15:14-15, 20:66, 28:48) does require critique and re-definition, since some scholars simply included in it any unexplained phenomenon or invention, such as chemical reactions according to Ibn Hazm, and even telephones and bicycles according to the jurists of Arabia a century ago.[16]

The impact of Ibn Hazm, Al-Ghazali and Ibn Khaldun's categorizations, especially the categories of useful (*nafi`*) versus detested (*madhmum*), and rational (*`aqli*) versus transferred (*naqli*), has been everlasting. However, it is also obvious that both of these classifications of disciplines, and similar classical classifications cannot meet the needs of the desired contemporary Islamic scholarship to deal with all disciplines of knowledge.

Today, western academic disciplinization is most prominent, and it has impacted the definition of sub-disciplines within disciplines as well. However, none of the above categories of classifications is compatible with the disciplinization needs for a contemporary Islamic scholarship, hence the need to propose an alternative classification. Inspired by Bakar's analysis of both, western academic as well as traditional Islamic classifications of knowledge, we propose the following critique of secular and Islamic classification.

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[16] Hassan Al-Saffar, `Aqliyat al-tahrim wal-tanfir min al-din (The mentality of prohibition that made people reject religion), www.saffar.org/?act=artc&id=4072, 17.3.2018.

Contemporary classifications of disciplines - secular and Islamic

Currently, the western academic classification of disciplines is prevalent worldwide. The dominant classification is: (1) Humanities, which typically includes: arts, history, languages, literature, law, philosophy, and theology; (2) Social Sciences, which typically includes: anthropology, economics, geography, politics, psychology, and sociology; (3) Natural Sciences, which typically includes: biology, chemistry, earth science, astronomy, physics, and (4) Applied Sciences, which typically includes: business, engineering, health, computer Science, and perhaps mathematics.

From the perspective of Islamic Studies, the above classification does not put "theology" - in this case Islam - in the right place as the fundamental basis of all sciences. Bakar writes in his, *Classification of Knowledge*:

> The term "science" ('ilm) is used in this study in the comprehensive sense of an organized body of knowledge that constitutes a discipline with its distinctive goals, basic premises, and objects and methods of inquiry. I am therefore referring to a philosophy of science which embraces a far wider meaning and domain of study than does the modern discipline of the same name.[17]

Therefore, the integrated nature of knowledge ('ilm) in Islam requires systematic ways of combining disciplines and not treating them as silos, especially across the four categories, i.e. across humanities, social, natural and applied sciences, which is typically inadmissible and would discredit scholars and scholarship. Finally and most significantly, many of the basic

[17] Bakar, Classification, pp. 5.

premises of the above sciences require critique from the Islamic point of view and therefore have to be part of a bigger picture of the classification of disciplines.

Islamic Studies today, on the other hand, is divided into three broad classifications, which we can call: (1) historical Islamic Studies, (2) contemporary Islamic Thought and (3) Islamic Studies in secular academia.

Under (1) historical disciplines, students specialize primarily in the history of one of the inherited Islamic branches of knowledge, such as exegesis (*tafsir*), narrations (*hadith*), jurisprudence (*fiqh*), philosophy (*falsafah/kalam*), history (*tareekh*), shariah-based governance (*siyasah shar`iyah*), etc. Students study the fundamentals (*usul*) associated with each of these disciplines as the methodology or approach to it.

Under (2) contemporary Islamic thought, students learn about an Islamic approach to a modern academic discipline, such as finance, psychology, art, law, education, or architecture. The approach is usually historical, while attempting to answer current questions in these disciplines based on the current literature in Islamic thought. There is a growing reference to Maqasid Al-Shariah in these programs, albeit generally manifesting the limitations mentioned earlier.

(3) Islamic Studies in secular academia is a spectrum of programs that range from theology, religious studies and philosophy to political science, history and social studies. A few of these studies are still following the old orientalist approach, i.e. studying Islam's original texts with a pre-assumption of their "biblical origins" and within the colonialist purposes of the old orientalist school.[18] Some of these studies moved from orientalism to what we can call a "neo-

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[18] Compare for example: Joseph Schacht, "Foreign Elements in Ancient Islamic Law," *Comparative Legislation and International Law* 32, 1950; and Mohammad Al-Azami, On Schacht's Origins of Mohammadan Jurisprudence, Riyadh: King Saud University and John Wiley, 1985.

orientalism" approach, in which Islam is defined via its social, political or historical manifestations and studied through one of the typical secular social sciences approaches. The general purpose also moved from a colonialist agenda to a neo- or post-colonialist agenda.[19] However, over the past decade, we have observed a growing number of "confessional" projects for Islamic Studies within secular academia, east and west, in which professors and students are searching for an "Islamic approach" that is both genuine and commensurate with the complexity and demands of today's questions and challenges. Islamic "law" is offered as an alternative in this search for an Islamic approach, although there is a general awareness of the insufficiency of the Islamic classical schools of jurisprudence to answer today's questions in all disciplines.

Generally speaking, contemporary Islamic Studies experience a number of methodological drawbacks. The most significant are the following three:

(1) There is a general lack in studying the original sources of Islam, i.e. the Quran and Sunnah themselves, in all of these contemporary trends. The majority of attention is given to what scholars have said – past and present – while attention to the Quran and Sunnah is virtually subordinated except when these scholars make occasional references. A cursory look at what a student of jurisprudence studies today in a "Shariah College", for example, reveals the limited a portion that Revelation forms in their studies. To study the Revelation means to study the Quran and Sunnah directly, not what scholars have said about it. Even when students are required to memorize parts of the Quran and Sunnah, they are rarely taught to use what they memorize as criteria for evaluation of what they study. A similar problem manifests in al other branches and projects of Islamic Studies.

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[19] Refer to the discussion in: Jasser Auda, Maqasid al-Shariah as Philosophy of Islamic Law: A Systems Approach, London: IIIT, 2008, Section 5.5.

(2) Contemporary Islamic thought is largely apologetic for methodologies, outcomes, and organizations of modern academia. As such it lacks critique of the boundaries of modern disciplines that are adopted as they manifest in western institutions. Yet, the ideological and philosophical foundations of these disciplines and the organizations that house them stem from a reality and worldview that contradicts with Islam in some aspects. For example, Islamic economics emerges from the same philosophies, theories, and organizations of western economics and does not seriously challenge neoliberal capitalism, which is the current trend, but rather on the whole attempts to accommodate it. Likewise, Islamic political theory is by and large a product of the philosophy, theory and institutions of modern western academia. The original contribution of Islamic political thought is still nascent and Islamic methodologies have been incapable of participating in critical discussions and offering real alternatives.

(3) The pedagogic division of disciplines into Islamic and non-Islamic reinforces the secular ideology in the Muslim mind and society more broadly. It is a division that diminishes the domain and function of Islam - as a *din* - from its all-encompassing concept in the Revelation as applicable to more than theology, spirituality and ethics. The average person will then live their entire life based on the philosophies, definitions and organizations that define the world by materialistic measures. Some Muslims even apologize for this serious methodological flaw by arguing that Islam is a rational religion that encourages ‘pure’ and ‘factual’ sciences and that the worldly sciences are value neutral, which is obviously a view that lacks sufficient analysis.

The future of Islamic classification of knowledge

Based on Bakar's contributions towards an Islamic classification of knowledge, as well as our above critique of the current dominant "Islamic" and "secular" classifications, we find that the essence of Bakar's approach in his seminal works is promoting what we can call a trans-disciplinary approach. The rectification of contemporary disciplines and sciences, as they are classified in today's academic and educational systems, does not mean rejecting them *in toto,* nor denying the major contributions that they offered humanity since modernity. However, trans-disciplinary studies involve studying phenomena from all of its dimensions based on an Islamic framework. Commenting on Al-Farabi's approach, Bakar writes:

> In al-Farabi's account of natural science and political science, there is some overlapping between the two disciplines with respect to their subject-matters. This overlapping pertains mainly to psychology. Al-Farabl's natural sciences discusses the different faculties of the human soul and establishes the conclusion that man's final perfection is intellectual in nature, namely the perfection of the theoretical intellect. Political science incorporates this idea of man's final perfection into its body of knowledge and makes it the central theme of its inquiry. For natural science does not deal with the question of how man, in the context of his terrestrial existence, may attain that perfection. To conclude, it may be asserted that the subject-matter of al- Farabl's political science occupies a kind of intermediate ontological position between the subject-matters of natural science and metaphysics. Being an intermediate science, political science shares certain things in common with the highest science (metaphysics) and with the lowest

> science (natural science). However, the greater part of the subject-matter of political science clearly lies, ontologically speaking, between the subject-matters of natural science and metaphysics".[20]

This trans-disciplinary and integrating approach is where the future of Islamic classification of knowledge occurs, and this is one of the primary contributions that Osman Bakar has made to the wider project of a contemporary renewal in Islamic thought.

[20] Bakar, Classification, pp. 106.