

Digital Islamic Studies and the Pedagogy: Non-Specialist Undergraduate Crossing into the Study of the Qur’ān

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Abstract

In acquiring knowledge and skills to practise medicine and health sciences integrated with Islamic studies, several courses are introduced in the Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia (USIM). The present paper documents one such course on the thematic study of the Qur’ān, undertaken by the second-year undergraduates of the second year in an introductory level on the science and medicine in the Qur’ān and Sunnah. Students in the course combined the traditional tools of Qur’ānic studies with computational tools to discover, depict, and develop new insights into the scientific, cultural, and educational exegesis of the Qur’ān. Also, the present paper has attempted to shed light on how the various methods and approaches emerging under the umbrella of digital Islamic studies hold great promise for any undergraduate students, faculty, and independent researchers in academic programmes. Although several factors may explain the insufficiency of the integrated approach, the primary hindrance for undergraduates in the Malaysian context is plain to see: the scarcity of digital sources in Malay and English. While this impediment remains a constraint for all but a few undergraduates who have a reading knowledge of the Arabic language, the recent publication of several Malay and English translations of the Qur’ān and key exegeses has begun to open the door for digital Islamic studies projects in the teaching of non-specialist undergraduate context. Finally, it seems optimistic to advance the study of the Qur’ān introduced by scholars of our generation and earlier through these digital tools to make sure that they are preserved and practised for the future.

Keywords: Qur’ān, Ontology, USIM, Digital Islamic Studies, Pedagogy, Undergraduate, Medicine.

Introduction

At all stages of education, the learning of the Qur’ān should be about providing the appropriate surroundings and opportunities to optimise individual understanding with the fewest possible barriers. Since intelligence varies across people and evolves through time, instructors or educators must accommodate various developmental stages and diverse demands. All pupils can learn, regardless of their capabilities, which may include learning facilities, ‘rural’ or ‘city’, different religious backgrounds, and so on. There must be responsive, unique instruction that considers who is being taught, what is being taught, where it is being taught, and how it is being taught (Ghazi, A. 2012). At this stage, numerous methods have been developed for acquiring knowledge about the Qur’ān. In recent years, academics, charitable trusts, and national and international initiatives have supported creating websites and digitising the Qur’ān. Several Muslim countries have launched projects to make significant portions of the Qur’ān digitised and accessible via the internet. Thus, the various digitisation projects reflect the multiple approaches to the Qur’ān. Several of the digital Qur’āns allow users to search for verses that relate to different Qur’ānic themes using user-supplied keywords (Abbas, N. H., 2009). KSU Quran, The Quran, the Noble Quran, Tanzil, Islam web, and Surah.My are just a few examples of online web applications that enable users to read, listen to, and search the Qur’ān in various languages.

In terms of attempting to formulate a deliverance, the divide between digital Qur’ānic studies and Qur’ānic studies has been complicated by the advent of information and communication technologies. The speed of Qur’ānic studies research accelerated through the database, electronic journals, and online archives, making

Manuscript Received Date: 15/02/22

Manuscript Acceptance Date: 24/03/22

Manuscript Published Date: 01/04/22

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Islamicists “digital” long before digital Qur'ānic studies. Under these circumstances, digital Qur'ānic studies do engender differences in methodologies and outcomes for Qur'ānic knowledge, raising questions of method, subject and labour; How must teaching efforts of the study of Qur'ān to be understood differently in light of the collaborative nature of the analysis of digital Qur'ānic studies? Are digital scholarship and other digital products of research commensurate with classical or medieval Qur'ānic studies references? To begin with, we should never limit the Qur'ān to its expressions on specific concerns or elements of human life. The Qur'ān is more than just a collection of verses.

Above all, there are two aspects that the Muslims of the globe agreed upon. First, the introductory part covers general orientation, text, content, interpretation and application of the Qur'ān in the contemporary Muslim world. Second, technical assistance to readers. Thus, the definition of Qur'ānic Studies as an “independent discipline” has been widely contested. Understanding the core courses, engaging with their cultural and civilisational wisdom, and observing interconnections between them roughly defines the traditional scope of Qur'ānic studies. Regarding the study of the Qur'ān as an academic field, it has foundations in worldview, being (in this context) the study of metaphysics, epistemology, cosmology, teleology, theology, anthropology, and axiology of the Qur'ān, encompassing the Muslim world and 1400 years (Abu Sulayman A. H., 2013). Qur'ānic studies' grounding in Islamic studies heritage can be seen as a discipline with its methodologies, core subjects and key texts. It focuses primarily on the recitation, memorisation, and interpretation, particularly the study of key Islamic texts, including the hadith and other classical works of literature and the acquisition of the Arabic language. There are, however, scholars contributing to Qur'ānic studies located outside the in-depth textual model. For instance, these studies may approach the subject of the Qur'ān from a sociological and educational perspective.

Following such concerns, it is vital to evaluate our duties as authors, researchers, instructors, or educators of academic scholarship of the Qur'ān (Shah, M., & Haleem, M. A., 2020). The majority of individuals engaged in academic work are both educators and members of larger communities. According to the distinct audiences, each place has a specific objective in conveying the Qur'ānic thought. While the precise difference that might make is irrelevant at the moment, it should serve as a reminder that academic scholarship of the Qur'ān is not what one reads in the newspaper or popular magazines, nor is it that one might hear in a public forum such as an open talk at a mosque, and so forth. Such difference is, of course, one of the key issues facing the higher education of Islamic studies, as it grapples with the balance between exclusivity and inclusivity in an environment where publicly supported institutions meet increased responsibility and access requirements.

The first academic faculty of the Qur'ān in Malaysian public universities was created in Universiti Sains Islam Malaysia (USIM) in 2000. By 2021, increasing link with the higher education and national interest saw an expansion in the provision and interest in Qur'ānic studies. This development grew in 2005 when the study of the Qur'ān was seen as fundamental for medical doctors, engineers, lawyers, etc., of USIM graduates (Jamilah J. et al., 2014). Hence the development of Qur'ānic studies continues to be influenced by the social context within which it finds itself. With the backdrop of established faculties in the USIM, disciplinary approaches to Qur'ānic studies are evolving and expanding. While the teaching of Islamic studies remains within the legacy of Islamic intellectual heritage, the study of the Qur'ān also takes place on a multidisciplinary level. A particularly important development in Qur'ānic studies has been the growth in al-Qur'ān being taught from within an Islamic studies tradition from the beginning.

Method and Scope

For medical undergraduates in USIM, acquiring knowledge and skills to practise medicine and health sciences integrated with Islamic studies, several courses are introduced in the Faculty of Medicine and Health Sciences. The present paper documents one such course on the thematic analysis of the Qur'ān, undertaken by the second-year undergraduates in an introductory level, namely the “Science and Medicine in the Qur'ān and Sunnah (SAMIQ)”. Students in the course combined the traditional tools of Qur'ānic studies with computational tools to discover, depict, and develop new insights into the scientific, cultural, and educational exegesis of the Qur'ān. Thus, to contextualise the basic perspective of practice, performance, experience and appreciation of these future physicians to the Qur'ān, this paper also attempts to shed light on how the various methods and approaches emerging under the umbrella of digital Qur'ānic studies hold great promise for other Muslim graduate students, faculty, and independent researchers in an academic atmosphere. The following is the order in which the paper is organised. After a glimpse of the relation between Islam and science in the contemporary Muslim world discourse, this paper highlights the conceptual model of studying the Qur'ān for non-specialist students of Islamic studies. The introductory part will be followed by an overview of the Science and Medicine in the Qur'ān and Sunnah

(SAMIQ) course, the typical 14-weeks teaching and learning activities, the utilisation of digital Qur'ān, development, and assessment of the ontology for the Qur'ān. Likewise, the opportunity of utilising these digital initiatives, this paper draws special attention to several websites to support structured learning activities for non-specialist students.

Science and Medicine in the Qur'ān and Sunnah Course for Medical Undergraduates

Theoretically, it is simple to explain the relationships between curricular integration and knowledge disciplines. However, this act does not settle the conflict over how those relationships function in the Qur'ānic studies of higher education courses (Malkawi, F. H., 2014). Part of the explanation is that the issue is not with the disciplines of Qur'ānic studies but rather with how they are represented in the separate-subject approach to modern science. The question is not whether Qur'ānic disciplines are a treasure but how they may be effectively integrated into the lives of young students. Do they, furthermore, encompass all that could be useful in the search for personal and societal meaning? For Muslims, a study of the Qur'ān is a field of inquiry about the whole aspect of life. The Qur'ān present a lens through which to view the world – the flow of historical events over time, the physical world, and so on. An integrative discipline of the study of the Qur'ān offers a lens through which to view the world with a specialised set of techniques or processes to interpret or explain various phenomena (Abu Sulayman A. H., 2013).

The fact that these two disciplines (modern science and Qur'ānic studies) are housed under one roof, unlike the curriculum structure of other local universities, is a reflection of USIM's philosophy (USIM, 2018). Indeed, designing curriculum integration accords a challenge since there is little current interdisciplinary or curriculum integration practice. Therefore, to create an integrated academic course that will enhance students' understanding of modern sciences and Islamic science, a selection of universal weekly topics should be within the course developer's consideration (USIM, 2020). Inevitably, it is a synthetic window for post-secondary education students of the science stream in Malaysia, who can extend and explore their learning opportunities of classical studies of the Qur'ān and Sunnah. In general, the discourse of integration of knowledge in much of the Malaysian educational and cultural sphere focuses upon advancing the Islamisation legacy to adapt and further extend toward the worldview of Muslims. As such, modern educators and scholars paid great attention to their articulations of concepts and ideas, and in their quoting of relevant Qur'ānic verses and hadith (prophetic tradition) to amplify the Muslim community by showing how Islam approaches natural phenomena and scientific concepts (Hassan, M. K., 2017).

Those on the front edges of the Qur'ānic studies know that disciplinary boundaries are adaptable and often link with other disciplines to generate interdisciplinary topics or projects. Hence, to offer non-specialised students, or in this case, Muslim medical undergraduates, essential holistic texts exploring the nature, character, and subject matter of Qur'ānic studies are urgently needed. Important texts of the Qur'ān have to be told, for growing extensive Islamic studies translate into information overload for new students of any field. Nevertheless, introducing primary texts is not an easy task given various approaches to Islam and science relation in the Muslim world (Muhammad Yusoff, M. F., & Ab Razak, N. I., 2020). Contemporary thought in the Muslim world may be defined as an ensemble of methods, practices, and understanding and connection to the identification, reading and interpretation of Qur'ānic studies. Hence the Science and Medicine in Qur'ān and Sunnah (SAMIQ) course introduces students to the science in Qur'ānic interpretations across the twentieth century for initial exposure. The introduction was intended to portray traditional and modern tafsir (exegesis) trends and how modern science has influenced the contemporary understanding of the Qur'ān. Some class time was required to help instigate students to correctly understand the postmodern direction of the relationship between Islam and science.

Nevertheless, it is challenging to draw a line dividing the understanding of written revelation from the constructed universe as a knowledge source. A plethora of Muslim scholars have commented on the cosmic component of the Qur'ān throughout the years, referring to *al-Qur'ān al-Takwīnī* (the cosmic or ontological Qur'ān) as separate from and complementing *al-Qur'ān al-Tadwīnī* (the composed or "written" Qur'ān) (Nasr S. H., 2005). Quite clearly, the "two readings" of written revelation or the Qur'ān and cosmos are extensively discussed among classical, medieval, and modern Muslim scholars to obtain the wisdom and guidance that people need.

Speaking in more general terms, the long postmodern history of Islam-Science discourse can be approached from three perspectives unique to the school of thought, time, place and circumstances of the era they authored, as generally concluded by Ibrahim Kalin (n. d.). The study of Muslim's attitudes toward science has been widely classified by Leif Stenberg (1996), Ahmad Dallal (2010), Stefano Bigliardi (2014), Usamah Hassan (2016) and many others. However, the SAMIQ course introduces Kalin's writing as it suits the needs of a general audience and is freely accessed on the Oxford Islamic Studies Online website. Working with these three

perspectives of Islam-Science relation as depicted by Kalin can help formulate an all-inclusive appreciation for non-specialist students in defining what we mean by the position of the Qur'ān in contemporary debate. The epistemological dimension of this topic, which deals with the theoretical acumen towards the student's understanding, is concerned with making correct distinctions between the different levels of thought, namely facts, ideas, principles, and theories when recognised from a wide-ranging Islamic viewpoint.

According to Kalin, the first school of thought is that science is a transcultural endeavour that is neither "Islamic" nor "Western." In simple terms, science is the study of nature and serves as a tool for improving people's lives. This idea was widely maintained in the nineteenth century by people such as Jamal al-Din Afghani and Sayyid Ahmad Khan and is still supported by many Muslim scientists today (Iqbal, M., 2007). A variant of this approach has been developed to demonstrate the Qur'ān's compatibility with science in a devout religious environment. The proponents of this viewpoint, such as Farid Wajdi, Said Nursi, Fethullah Gulen, who has popularised the study of science among their followers, give the duty of understanding the signs of God in the cosmos to the natural sciences. Also, some Muslim scholars have interpreted Qur'ān based on current natural science findings due to the creation of science to solve God's messages in the cosmos. This approach has led to what is known as "scientific exegesis" (*al-tafsīr al-'ilmī*, *al-tafsīr al-fannī*) of the Qur'ān, as best represented by Maurice Bucaille, Abdul Majeed al-Zindani, Zaghoul el-Naggar and others.

The "epistemic perspective," which we may call the second view of science in the Muslim world, is based on modern science philosophy and emphasises the social and historical foundations of scientific theories. Its proponents utilise postmodern critiques of natural sciences and their philosophical claims to challenge current Western science on epistemological grounds. Some Muslim academics and intellectuals, notably Ismail Faruqi, Ziauddin Sardar, Zaki Kirmani, and M. Ahmad Anees, have thoroughly developed the epistemic and methodological critique of contemporary science and its exclusivist claims of epistemic superiority. And the third view of Islam-Science relation is a more comprehensive critique of the secular-materialist orientation of the natural sciences and the philosophical claims of scientism, in addition to the neutral and epistemic-cultural views earlier. The proponents of this view, led primarily by Seyyed Hossein Nasr, Syed Naquib al-Attas, and defended by Osman Bakar, Alparslan Açıkgenç, Mahdi Golshani, and Muzaffar Iqbal, aim to analyse and deconstruct the metaphysical and philosophical foundations of modern science to propose a view of science-based on sacred teachings of Islam on nature and the cosmos. They agree with the epistemic viewpoint that all scientific endeavours are conducted within a set of principles, ideas, and assumptions about the cosmos. These are not just methodological ideas, though they speak to the core nature of the scientific endeavour. The scientific descriptions of physical reality come after our basic assumptions about existence. As a result, a meaningful conception of the relationship between Islam and science must begin with identifying these guiding ideas and assumptions.

On the whole, the introductory part, in this case, the three perspectives of Islam-Science relation in the postmodern era, are invaluable in encapsulating scientific wisdom in Islamic intellectual tradition. For any specialist and non-specialist students of the Qur'ān, this exposure is an important step to build a comprehensive overview of the several projects or legacies initiated in the twentieth century. Most importantly, the many schools of thought must be observed in the inclusivity and appreciation of diversity. Since undergraduate studies deal very largely with the general subject matter, necessarily far removed from the highly specialised ability of graduate students, there must be an understandable approach to simplify and easy to follow the topic.

Qur'ān Ontology for Group Project

Two learning outcomes have been constructed to incorporate the SAMIQ course into the acquisition of these future physicians. One is to categorise the aspect of human knowledge and sciences in the Qur'ānic verses and Prophetic ḥadīth. The other is to integrate information and knowledge from several sources, i.e., the Qur'ān, ḥadīth, human knowledge and sciences. The focus of SAMIQ is not only emphasised at the epistemological discourse level as discussed in the introductory part of the relation between Islam and science, but also at the methodological dimension involved with the searching concept of natural science in the Qur'ān. The following section details some teaching and learning activities of SAMIQ attended by the second-year medical undergraduates of USIM. While sparked by the digital Islamic studies project, this following topic helped unlock broader themes in the conception of natural science and medicine in the Qur'ān and taught beginning students how better to understand certain approaches in the traditional Qur'ānic studies. Students or readers may choose to engage in certain interpretative activities to further their knowledge of the Qur'ān as holistic guidance, whether on their own, in a class, or a reading or discussion group.

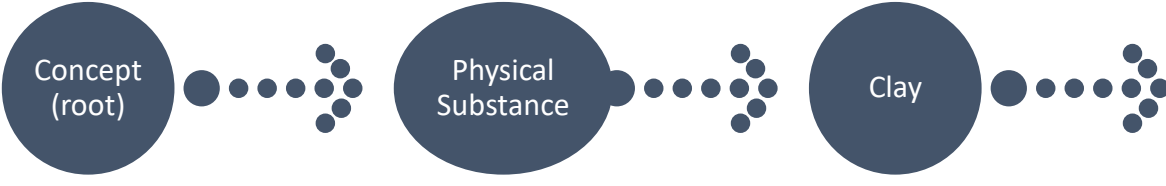
Accordingly, this SAMIQ course utilises the Qur'ān ontology in its teaching and learning method, particularly the group project in which several themes related to natural science and medicine concepts were selected. SAMIQ asserts a thorough overview of the ontology of Qur'ānic concepts centred on context-based search tools, along with reading suggestions for these suras in light of the unfolding of Qur'ānic principles. In the introductory phase of the group project, the students will restrict themselves largely to the Qur'ānic verse to let the Qur'ān speak for itself and minimise authorial intervention, distortion, manipulation and interpretation. Before students could use the ontology of the Qur'ān to gather data, the instructor analysed several websites to figure out which tools would be best for the project. Initially, the instructor suggested that students utilise the Quranic Arabic Corpus (<https://corpus.quran.com/>) to complete the learning process and analyse data for the group project. Originally, Qur'ānic Arabic Corpus (QAC) provides morphological and syntactic annotations for any researchers who plan to study the language of the Qur'ān. What makes this website stand out is that it allows for well-thought-out, easy-to-browse linguistic data in a format that is suitable with a computer or other programme browsing, word-by-word Qur'ānic translation based on accepted English sources, English translation of the Qur'ān including Sahih International, Mohammed Pickthall, Yusuf Ali and several other features. Other systems employ the ontology method to represent ideas' structure and appearance in various Qur'ān verses.

As was pointed out by the QAC team on the website's introduction page, the Qur'ānic Ontology uses knowledge representation to define the Qur'ān's key topics and predicate logic to explain their connections. The ontology's core ideas are derived from conventional sources of Qur'ānic study, including prophetic hadith and Qur'ānic interpretation. As part of named entity tagging, verses' named entities are associated with ontology concepts, such as the names of an astronomical body, weather phenomena, physical substance referenced in the Qur'ān. The ontology collects a list of essential ideas found in the Qur'ān and establishes semantic linkages between them. The QAC asserts that the most fundamental set membership relationship is "*instance*," which defines one idea as an instance or individual member of another group. For example, the relation "Jibril is an angel" communicates in the Qur'ān that individuals known as Jibril are a member collection of sentient entities. Other ontology concepts are logically classified according to the shared qualities. For instance, the Cloud, Lightning, Rain, and Thunder are subsumed under "Weather Phenomena".

In the QAC, technical Qur'ān terminology is listed in the index, along with references to the Qur'ān and commentary parts that discuss the terms. Often, the simplest way to illustrate a word or the relationship between a family of concepts is to refer to similar Qur'ānic verses; the students will have included them in their group project. These features of the Sacred Text must be kept in mind when reading the Qur'ān to derive maximum advantage from the encounter. In that instance, the preparation stage for these medical undergraduates would have simply consisted of introducing seven steps to indicate what information we wanted — (1) Qur'ānic concept (root), (2) subcategories, (3) list of verses (4) word order, (5) the use of transliteration, (6) Qur'ānic translation, (7) interpretation - and students would have directly entered the relevant data into a table. As mentioned earlier, since the theme of SAMIQ is natural sciences and medicine, seven subcategories, i.e. (1) astronomical body, (2) event, (3) living creation, (4) location, (5) physical attribute, (6) physical substance, and (7) weather phenomena have been chosen from Quranic Arabic Corpus page concept (<https://corpus.quran.com/ontology.jsp>).

The suggested steps design of the exercise seeks to build a knowledge base that can be utilised to broaden students' questions and offer quick access to accurate information from the Holy Qur'ān. To obtain Qur'ānic text, an ontology-based query expansion is applied. Students utilise the proposed system to seek data; the request is then semantically expanded using the Qur'ān ontology, and the search results and suggestions are retrieved and ranked. The first stage will extract concepts from the Holy Qur'ān that will serve as the basis for building the domain-specific ontology. The fundamental objective of word extraction is to reduce duplicates (approximately 1140 duplicated words out of 69389 total Qur'ānic words). It is worth noting that some nouns, such as clay, have two or more written spellings that correspond to the same meaning yet differ in various explanations of the Qur'ān.

Additionally, students' discussion groups may accept or assume the role of Qur'ānic guardians for one or more surah. This consequential task that the student is responsible for is the organisation of the surah's text and transliteration. To enhance interest, a student may choose one Meccan and one Medinan surah and then compare and contrast the two in a subsequent exercise. Instructors or discussion leaders who conduct this activity should distribute surah randomly, excluding the shortest and longest surah, to guarantee that everyone receives a text of at least five verses but no more than ten verses. The table below shows the suggested first five steps of exercise toward selecting a Qur'ānic concept (root), identifying subcategories, listing related verses, locating word order, and applying transliteration.



List of verse	Ontology of Qur'ānic Concept	Location and Transliteration
أَبَى أَلْقَى لَكُمْ مِنَ الطِّينِ كَهَيْئَةِ الطَّيْرِ	[the] clay	(3:49:15) <i>l-tīni</i>
وَإِذْ تَخْلُقُ مِنَ الطِّينِ كَهَيْئَةِ الطَّيْرِ بِأَذْنِ	the clay	(5:110:30) <i>l-tīni</i>
هُوَ الَّذِي خَلَقَكُمْ مِنْ طِينٍ ثُمَّ قَضَى أَجَلًا	clay	(6:2:5) <i>tīnin</i>
قَالَ أَنَا خَيْرٌ مِنْهُ خَلَقْتَنِي مِنْ نَارٍ وَخَلَقْتَهُ	clay	(7:12:17) <i>tīnin</i>
مِنْ طِينٍ		
وَأَمْطَرْنَا عَلَيْهَا حِجَابًا مِنْ سِجِّيلٍ مُنْصَوِّدٍ	baked clay	(11:82:11) <i>sijjīlin</i>
وَلَقَدْ خَلَقْنَا الْإِنْسَانَ مِنْ صَلْصَالٍ مِنْ حَمَإٍ	sounding clay	(15:26:5) <i>ṣalṣālin</i>
مَسْنُونٍ		
إِنِّي خَالِقٌ بَشَرًا مِنْ صَلْصَالٍ مِنْ حَمَإٍ	clay	(15:28:9) <i>ṣalṣālin</i>
مَسْنُونٍ		

Table 1

Existing work on Qur'ān ontologies, on the other hand, is restricted in breadth, capacity, and knowledge, necessitating the need to fill this void and the above structure is based on componential analysis of word senses and semantic field theory. A written description of ontology classes is provided, i.e., the students classify the words in the hierarchical structure by tiers with distinct classification: the concepts at the top, followed by category or generic meaning and so on (this structure could be extended to the semantic domain for advance level). Thus far, this paper section provides a basis for 5 of 7 steps (Qur'ānic concept (root), subcategories, word order, transliteration, and list of verses) of students' exercise. It has been explained that Qur'ān ontology is a fundamental approach for teaching and learning SAMIQ course. The following section elaborates on the last two steps (translation and interpretation) and considers some related issues.

The Completion of Structured Interpretive Exercises

The translation and interpretation exercise here provides the extension of the earlier five steps of Qur'ān ontology into categorising the aspect of the English translation of the Qur'ān, standard exegesis, along with the integration of modern scientific concepts. This approach also aims to discuss the translation of the Qur'ān and its practical contribution to students' understanding. As anyone who undertakes the endeavour will attest, teaching and learning the Qur'ān translations is a particularly difficult assignment (Abdul-Raof, H., 2013). There are, of course, certain problems of contemporary concern of an understanding the Qur'ān translation, such as inconsistencies between translations. Devin J. Stewart (2000) reflected that he has struggled with the complexities inherent in developing and reading an English translation of the Qur'ān while teaching it to American pupils, both Muslims and non-Muslims.

In explaining English translations of the Qur'ān, Abdullah Saeed (2007) proposed three types of translators. He indicates that certain translators make an effort to convey the meanings of the Qur'ān as they interpret it. While someone may believe they are neutral, their word choice will still be impacted by their worldview. For example, many orthodox translators may be unconcerned with gender equality and often read the text in ways that highlight patriarchal understandings and gender inequity. By contrast, some translators strive to minimise the effect of their viewpoints by offering a precise translation and conveying their interpretation of the text in a separate commentary. Although their final choice of words will be impacted to some part by their understandings, these translators are often more aware of this. Thirdly, some translators include phrases and terms representing their viewpoints but bear little resemblance to the text's true content. This style is likely the simplest way to characterise it: professing to translate the text but delivering a translation containing a commentary inside the text itself.

Nevertheless, the study of the Qur'ān should be completed by reading the different translations with which contemporary Muslims are advantageously accessed on the websites. The character of digital translation of the Qur'ān is not, and it is important to clarify, shaped merely by the advancements in the digital world. For students of the SAMIQ, it is usually advisable to utilise multiple translations and make outlines of each verse as they read, noting recurring words and formulae as a reference to the text's structure. Historically, the first type of Qur'ān English translation is semantic translation, which uses archaic language and some literal word order, such as the Qur'ān translations by Richard Bell, Marmaduke Pickthall, A. J. Arberry, Muhammad Asad, and Yusuf Ali (Abdul-Raof, H. 2013). Welch (1990) states that these literal translations "took an approach to translation that enabled the source language to have control over the target language." The second style, such as the translations of M. Akbar, T. B. Irving, and Colin Turner, gives a communicative translation and introduces the Qur'ān in a communicative modern English. Hence, students are invited to do their comparative analyses of the online translations, which are not to be used in lieu of the published originals. Certain terms may have been altered significantly, or words may have been incorrectly duplicated in certain online versions (Abdullah Saeed, 2007).

From a traditional Islamic point of view, it is widely agreed this Sacred Text demonstrates various levels of meaning and engages a variety of literary forms, including parables, similitudes, exaggeration, holy narratives, direct exhortations and others. Likewise, non-specialised students rarely have access to the study of the Qur'ān in its original Arabic, including the presence of a pedagogically valuable array of exegetical traditions resulting from the many encounters Muslims have had with the scripture throughout history. The extensive examples from the Qur'ān, their translational problems, and their linguistic features are presented in a stimulating discussion to make students appreciate Qur'ān's unique language. This discussion will also familiarise the beginner in translation with the sophisticated nature of Qur'ānic discourse as a special and sensitive genre and its prototypical linguistic and rhetorical characteristics.

While it is undoubtedly possible to teach the Qur'ān in English on its own, the instructor has always felt obligated to direct the students' attention to these numerous interpretive discourses and introduce them to at least some of the hermeneutic issues shared by these scholars. In short, the course wishes to educate students about Qur'ānic exegesis in addition to the Qur'ān itself. The SAMIQ aims to make the present topic a starting point for the thematic exegesis of the applied group project. The difference between *tafsīr bi al-ma'thūr* (tradition-based exegesis) and *tafsīr bi al-ra'y* (reason-based exegesis) should also be introduced in its brevity and as it developed throughout Islamic history. This introduction should, however, also include the apparent divide between these schools of thought; (1) Tradition-based exegesis of the Qur'ān place a premium on interpretation by the Qur'ān, the Prophet, and the first generation of Muslims, and restrict subsequent Muslims from engaging in independent thinking; (2) Reason-based exegesis enable greater use of independent thinking while yet considering crucial parts of tradition-based interpretation (Abdullah Saeed, 2007). The fact that there were many interpretations rather than just one should not be presented to pupils as a sign of disorder or weakness, but due to the richness of Islamic tradition in accommodating various intellectual paradigms and retaining a diverse range of human beings. Establishing a holistic approach and harmonised fashion to the exegesis of the Qur'ān is one part of some essential procedures that should be followed and practised in this course.

Since the thematic exegesis of the applied group project was semester-long, the workloads for both the students and the instructor were very manageable with the diversification of the digital world. The number of websites devoted to disseminating the Qur'ānic thought would likewise be in the millions. However, it is necessary to keep in mind that even if a website has the greatest information and knowledge on the Qur'ān, its utility would be diminished if a user cannot access it. Before students could collect data from the exegesis of the Qur'ān, the instructor analysed which websites would be most appropriate for the project. Initially, the instructor proposed that students utilise two websites to collect the data on Qur'ānic exegesis. In that case, *al-tafsir.com* and *alim.org* websites would have primarily referred to the data of verses to indicate what information we wanted – *asbāb al-nuzūl* (contexts of revelation), interpretations of scholars – and students would have entered the appropriate information directly into the last section of the seven steps. *Al-tafsir.com* (<https://www.al-tafsir.com/>) provides access to essential exegeses like *Tafsir al-Jalalayn*, *Asbab al-Nuzul* by al-Wahidi, and other standard classical and modern exegeses on the Qur'ān. Through enormous scholarly labour and religious hereditary trust (*waqf dhurri*) of Royal Aal al-Bayt Institute for Islamic Thought, Jordan, all these exegeses have been translated into English and searched cross-reference individual words or groups of terms, hadiths, or Qur'ānic passages across the website's database. At the same time, *The Alim* (<https://www.alim.org/>) furnishes readers with the famous *Tafsir Ibn Kathir* (<https://www.alim.org/Qur'an/tafsir/ibn-kathir/>) and *Tafhim-ul-Quran* by Syed Abul Ala Maududi (<https://www.alim.org/Qur'an/tafsir/maududi/>) in English translation. For both websites, the users can select a specific tafsir, and these programmes return surah and verses that contain commentaries related to the query verse.

Furthermore, to illustrate the heterogeneity involved in attempting to understand the meanings of the Qur'ān, the students will look at a current discourse among Muslims today regarding the interpretation of some Qur'ānic verses. Another inventive and emerging website that offers reference work in English on the Qur'ān based entirely on primary sources is the *Integrated Encyclopaedia of the Qur'ān* - IEQ (<https://iequran.com/>). IEQ is a unique reference work in seven volumes covering fourteen centuries of Islamic scholarship on the Qur'ān as a partial open access online project. IEQ asserts that the project presupposes a commitment to learning but no previous understanding of Arabic or the Qur'ān on the description page. Likewise, IEQ derives its entries from the Qur'ān's theme framework, combines fourteen centuries of Muslim scholarship, and gives a range of authoritative information about the Qur'ān, encompassing all ideas, individuals, places, events, and objects referenced in the Qur'ān. Therefore, the SAMIQ course would then choose several entries from IEQ that correlate with the course's theme or subject. For instance, in the case of the Qur'ānic verse 22:5, Muzaffar Iqbal (n.d.) supplied free access and discussed an article about *'alaqa*, defined as "a thing that clings" and mentioned six times in the Qur'ān as a stage of embryogenesis. This article consists of four sections divided structurally into definition and usage, exegetical reflections, *'alaqa* in classical and contemporary discussions and bibliography. The merit of this article lies in its amalgamation of contemporary Islam-Science discourse, which provides students with a brief exposure between schools of thought mentioned earlier in this paper. All the bibliographies provided can help students further explore the concept of *'alaqa* for the group project.

Conclusion

Suppose we fully benefit from the opportunities that digital Islamic studies present for improving Qur'ānic teaching and learning. In that case, we must first define what we mean by "Qur'ānic worldview" for ourselves and our students and then provide rich learning opportunities that encourage them to see the Qur'ān as we do. What do we mean when we state that we want students to think "Qur'ānically"? Therefore, if we are to provide our students with rich digital Islamic studies experiences, to teach them how to be true Muslim medical doctors in the fourth industrial revolution, or how to think Qur'ānically using both digital and analogue media, we must be much more specific about what we mean by Qur'ānic worldview. The most effective method of teaching our students to see the Qur'ān as we see it is to create learning opportunities that enable them to comprehend the Qur'ān in the Islamic intellectual tradition - to practise it as we experience it - and assist them in deciphering it through their creative impulses. Undeniably, digital projects in Qur'ānic studies have enormous potential to improve undergraduate teaching and learning activities. Although Izutsu's semantic approach is well-established, the available Qur'ānic Arabic Corpus (QAC) is preparatory for non-specialist students as they are not well exposed to the complex debate of linguistics in the Qur'ān. In some respect, the ontology of the Qur'ān is well suited for it since it is replete with simple terms and network channels of concepts. Furthermore, as more exegesis like the *Tafsīr Ibn Kathīr* and other works are translated into English, an increasing number of data collection and integrated projects will become accessible to and manageable by non-specialist undergraduates in Islamic studies. We hope that these websites of the Qur'ānic studies, created by several groups, may someday be integrated and freely available for other scholars and the general public to interface with online. Thus, larger audiences may get new insights into the intricate interconnections of digital Islamic studies and the Islamic intellectual tradition included in these works.

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