



Journal of Arts & Humanities

Volume 09, Issue 01, 2020: 64-90

Article Received: 27-12-2019

Accepted: 13-01-2020

Available Online: 25-01-2020

ISSN: 2167-9045 (Print), 2167-9053 (Online)

DOI: <http://dx.doi.org/10.18533/journal.v9i1.1828>

Qur'anic Maps and the Theory of Multiple Intelligences: A Better Understanding of the Holy Qur'an

Mohammad Allibaih¹

ABSTRACT

The current study aims at presenting an in-depth coverage of the multiple human intelligences theorized by Howard Gardner in (Gardner, 1993a, Gardner, 1993b, Gardner, 1995, Gardner and Miller, 1999, Gardner, 2003) and their relationship to Qur'anic mapping method (concept and mind maps presenting a bilingual Qur'anic text) worked out in this proposed study. Furthermore, the study highlights numerous conceptual and congruence features between the way the Qur'anic maps present information and the way the nine types of learners absorb knowledge. Technically, the study utilized XMind 7 (v3.6.0.R-201511090408) software for creating the Qur'anic maps. The Arabic and English Qur'anic texts were extracted from <http://quran.ksu.edu.sa>. Regarding the topical classification and conceptual levels, the study depended on the exegetic opinions of Ibn Kathir in the book *Al-Misbah Al-Munir fi Tahdhib Tafsir Ibn Kathir* (Al-Mubarakpuri, 2013). Results showed that the Qur'anic maps proposed in this study are in total congruence with the nine frames of mind theorized by Howard Gardner. This study, as a new domain of research, recommends that similar studies shall present more rigorous investigations in the relationship between the current model of Qur'anic maps and learners' learning styles.

Keywords: Qur'an, Mind maps, Concept maps, Theory of Multiple Intelligences, Qur'anic maps.

This is an open access article under Creative Commons Attribution 4.0 License.

1. Introduction

The current study uses concept and mind maps - as advanced tools of investigation - in manipulating the Qur'anic text to check whether the resulting Qur'anic maps can respond to the needs of the nine intelligences or nine frames of mind theorized by Howard Gardner in (Gardner, 1993a), (Gardner, 1993b), and (Gardner, 2006). Furthermore, the textual and technical works that have been done on the Qur'anic text and the designing of the Qur'anic maps are based on the exegetic

¹ Sudan University of Science and Technology, Faculty of Languages and King Abdulaziz University, Faculty of Medicine, Medical Terminology Unit

commentaries, topical classifications, and the translation of its meanings. This harmonious linguistic, technical, and conceptual mixture led to saturating each type of intelligence needs.

2. Literature review

It is common to hear that human beings are only using a small fraction of their potential. Their lives are confined within a limited range of thoughts, emotions, sensations and other modalities of conscious existence, and yet in most cases they remain completely unaware of these limitations (Sagan, 2007).

In a wider sense, Gardner favors as much resources as possible to help learners comprehend and promote their own types of intelligence rather than devoting less resources to the purpose of testing, ranking, and labeling those learners (Moran et al., 2006). In this respect, for Gardner, assessing learners' deficiencies is a way to predict their difficulties and suggest other ways to achieve educational goals (Gardner, 1993b). So, this study works here as an extension for what has been done so far regarding addressing the capacities of the human mind through making diverse the ways of the representation of the Holy Qur'anic text. Hence, the Qur'anic concept and mind maps proposed here are a collection of interpretation, translation, linguistics, concepts, as well as an educational method.

2.1 The story and definition of the multiple intelligences

In 1979, an international non-profit institution in Netherlands dedicated to the favor of disadvantaged youth and children requested the Harvard Graduate School of Education to carry out an assessment of the state of scientific knowledge regarding human potential and its realization. The assessment resulted in a multi-layered approach to issues of human potentials. The first was *Frames of Mind* for Howard Gardner that studies human's intellectual potentials. It draws on both psychological research and biological sciences as well as different cultural findings concerning development and use of knowledge (Gardner, 1993a).

In opposition to what has been theorized regarding that human has only one type of intelligence that could be measured through the previous tools of assessment or tests, Gardner defines intelligence in his own way as a multifaceted mirror of concepts. He convincingly argues that "an intelligence is the ability to solve problems, or to create products, that are valued within one or more cultural settings" (Gardner, 1993a). Remarkably, he sought to widen the scope of human capacity beyond the limits of the Intelligence Quiz (Armstrong, 2009) and paved the way for his suggestion that intelligence is the capacity to solve problems of linguistic, logical, mathematical, spatial, kinesthetic, musical, interpersonal, intrapersonal, or naturalist natures.

Gardner on his way to form his new psychological concepts of intelligence, called for changing the way scientists had been theorizing human's potential, intelligence, and intelligence assessment. He gave the details of his how-to manual of understanding and asked to "try to forget that you have ever heard of the concept of intelligence as a single property of the human mind". Additionally, he argues that the way intelligence used to be assessed is not less important than what he considers intelligence to be. He made it clear directing others to forget also "that instrument called the intelligence test, which purports to measure intelligence once and for all" (Gardner, 1993a)

Howard Gardner thinks that the theory of Multiple Intelligences seems to resemble a death knell to formal education, because of the difficulties used to face educators when they were dealing with intelligence as a single entity. Now, with a variety of entities – nine intelligences – the teaching process is expected to be more than difficult where a reformation in all aspects of formal education is a must. Likewise, a well understanding of how individuals learn is a main issue in educational literature which came to reach a general consensus about that "people learn differently" and that "people conceive of learning in different ways is phenomenologically demonstrable" (Hay, 2007).

Remarkably, the idea of multiple intelligences aroused a universal discussion in its way to reform education, learning styles, tools, facilities, and the way learners are taught, assessed, or evaluated. Hence, one may find examples of total consensus regarding the applicability of Howard Gardner's thoughts. Away from that argument, recent literature adopted a new realm of research that shifts from rejecting the multiplicity idea of intelligence to discussing core issues regarding the MI theory. For example, Wróbel (2012) inquires "whether intelligence consists of various more or less

independent intellectual faculties” and considers the importance of human intelligence multiplicity and diversity.

2.2 The Qur'anic concept and mind maps and the theory of multiple intelligences

There is now a massive amount of evidence from all realms of science that unless individuals take a very active role in what it is that they are studying, unless they learn to ask questions, to do things hands-on, to essentially recreate things in their own mind and then transform them as is needed, the ideas just disappear. Gardner in (Edutopia, 2010).

Gardner’s words can conveniently be characterized as an expert’s technical introduction to the understanding, use, and implication of the mainstream of the characteristics of concept and mind mapping techniques. They are rather applicable thanks to the active role individuals take in the designing of the Qur'anic concept or mind maps as a way of recreation of another representational manner of the Qur'anic text they handle. Interestingly, the new representation of the Qur'anic text through the use of the Qur'anic maps is shown in a crystalloid visual format that is capable of addressing and challenging Gardner’s nine intelligences with ever-lasting and matchless source of information. Fortunately, it is psychologically evident that each learner’s intelligence is distinct from his/her other intelligences (Denig, 2004) which counts for properly addressing them in a rigorous scrutiny. Additionally, what makes this source of information (the Qur'anic maps) appealing and attractive is its richness in intelligent hints.

In that sense, in order for learners to learn today in the rapidly, ever-changing, and vibrant technological and digital world, they have vigorously and unintentionally shaken all previously set educational theories, strategies, and structures. Their current knowledge involves content and skills as its most strongly inter-linked apparatuses (Bates, 2015, Fraillon et al., 2014). Concisely, content here stands for the collection of inter-related components such as details of procedures and processes, principles, evidence, and ideas. These facts configure a new character of learners cut off to challenge all the previous platforms of knowledge conveyance tools. Consequently, skills for such learners are understood as their chief aptitude to acquire any sort of knowledge in the digital age. Likewise, in today’s digital world, digital competence is a principal requirement for learners to be functional (Fraillon et al., 2014) wherever and whenever that digital concept is applicable.

Rick Wormeli calls for the necessity of a coherent and meaningful presentation of study materials to learners stressing David Hyerle’s assumption that “society as a whole is predominantly visual in its orientation” (Hyerle, 2000a). Therefore, Wormeli prefers the visual presentation of concepts, facts, and skills whenever it was possible (Wormeli, 2005). Accordingly, being dependent on visual learning is not an acquired characteristic of learners rather than being their absolute visual nature as learners according to their predominant visual orientation.

Furthermore, enhancement of content presentation is a crucial requirement to keep that content in a constant alignment with learners’ skill development. Consequently, mind maps and concept maps stress that learning as a meaningful process translates for an effortless process that involves constructing the learner’s pre-existing knowledge and new knowledge (Ellis et al., 2004) and that “Meanings are the building blocks out of which complex structures and operations are constructed” (Staude, 2015). Besides, the way that the Qur'anic text is analyzed in the Qur'anic maps obviously matches the core concept of the constructivism theory as being a cognitive theory that examines the nature of learning processes (Hazzan et al., 2014).

The constructivism approach, according to Hazzan et al. (2014) allows learners to gradually construct the new knowledge they acquire based on the feedback they receive from the learning environment and on their mental structures. Moreover, learning the Qur'anic concepts and memorizing the Holy Qur'an itself as a challenge, do not fall out of the scope of what so called neuroplasticity: “every time you learn a new fact or skill you change your brain. It’s something that we call neuroplasticity” (Boyd, 2015). Correspondingly, the concept mapping technique matches the interest of any group of learners [or intelligences] due to its high flexibility and adaptability (Kinchin, 2000).

In a wider sense, as much resources as possible to help learners comprehend and promote their own types of intelligence rather than devoting less resources to the purpose of testing, ranking, and labeling those learners are favored (Moran et al., 2006). In this respect, assessing learners’ deficiencies is a way to predict their difficulties and suggest other ways to achieve educational goals (Gardner,

1993b). So, this study works here as an extension for what has been done so far regarding addressing the capacities of the human mind through making diverse the ways of the re-presentation of the Holy Qur'anic text. Hence, the Qur'anic concept and mind maps proposed here are a collection of interpretation, translation, linguistics, concepts, as well as an educational method.

3. Methodology

The current study involved visualization charts (concept and mind maps) designed through XMind 7 (v3.6.0.R-201511090408) to clarify the different levels and aspects of understanding within the bilingual Qur'anic text. Additionally, "Al-Misbah Al-Munir fi Tahdhib Tafsir Ibn Kathir" (Mubarakpuri, 2012) was used in this study as a unique and only source of exegesis, topical classification, and conceptual classification. It contains an organized topical classification accompanied with the verses associated with each specific topic. Moreover, a cultivated exegetic commentary extracted from Tafsir Ibn Kathir (Ibn-Kathir, d. 1373) was presented in a manner that matches the conceptual mapping technique proposed in this study.

The extracts of original Qur'anic text and its English translations were copied from the electronic Mushaf of King Saud University at <http://quran.ksu.edu.sa> and names of Qur'anic surahs were collected from <http://quran.com/>. Additionally, Sahih International translation was solely adopted to accompany the original Qur'anic text all through the Qur'anic maps.

4. Results

4.1 The nine intelligences

There appears a sort of agreement between the many features of the new developed design and implication of the concept and mind maps in the re-presentation of the Qur'anic text and Gardner's following statement:

While the recognition of different ways of representing and acquiring knowledge complicates matters in certain ways, it is also a hopeful sign. Not only are chances of acquiring understanding enhanced if multiple entry points are recognized and utilized, but in addition, the way in which we conceptualize understanding is broadened. Genuine understanding is most likely to emerge and be apparent to others, if people possess a number of ways of representing knowledge of a concept or skill and can move readily back and forth among these forms of knowing (Gardner, 1991).

Taken together, Gardner's nine intelligences and the Qur'anic concept mapping - discussed here in this study – they require a considerable and a careful extraction of the points of agreement. It is likely that concept maps and mind maps work as effective and inevitable teaching and learning tools for the generation of MI theory according to McKenzie (2005) that for an effective use of technology in classrooms, we should apply our technological knowledge to Gardner's theory of Multiple Intelligences. David Hay (2007) reported the use of concept mapping techniques to expose styles of student learning and measure surface, deep, and non-learning outcomes. He states that concept mapping has significant utility for tracking changes during students' learning. Hence, it could be understood here that the use of the Qur'anic mapping techniques is planned to reach the highest expectations such as acquiring unprecedented meaningful understanding and achieving invaluable comprehensive goals in a learning process. Those gains are mostly thanks to the capacity of the Qur'anic maps in addressing all the nine intelligences mentioned in Gardner's theory as explained later in this study.

The findings of Daley and Torre (2010) who reviewed the literature concerning the use of concept mapping and its effect on medical education, summarize that there are four main ways in which concept maps function and affect medical education. Those ways include enhancing meaningful learning, presenting themselves as an additional resource of learning, enabling instructors to offer feedback to learners, and facilitating learning and performance assessment. With a proper implication of concept maps a Qur'anic educational process while gaining the prementioned effects on it, outcomes will probably live up to Muslims' expectations of getting a far better understanding of the Qur'an. As simplicity in understanding the various meanings and topical classifications of the Holy Qur'an is a lofty goal to all Muslims and they will welcome concept maps thanks to their pre-mentioned features as a sophisticated tool in communicating such type of knowledge.

Remarkably, the nine intelligences discussed in Gardner's theory – being described previously as a crystalloid paradigm of learning - are almost addressed one by one in any concept or mind map of a Qur'anic text as an advanced equivalent tool of text representation. Ultimately, that close consideration takes place thanks to the multiple concepts and interrelationships made clearer by the unique vertical and horizontal linear networks within any piece of a Qur'anic map. Hence, it is not accidental that a logical learner, for example, could find it very easy to discover the set of logical interrelationships unintentionally occurring in numerous Qur'anic maps in the current study. So, by representing the Qur'anic text in the way proposed in this study, every specific intelligence can serve both as a specific Qur'anic content and method for communicating that specific Qur'anic content. This goes in line with what Gardner has theorized in (Kassell, 1998) that “an intelligence can serve both as the content of instruction and the means or medium for communicating that content”. Kassell (1998) explains Gardner's statement as when a student has difficulties in comprehending a specific principle in math – the content (a Qur'anic text in our case) -, then the instructor alternatively provides him/her with another pathway or route to comprehending the said content. The other route has been linguistic in most cases in the past (Kassell, 1998).

In dealing with the relationship between the theory of Multiple Intelligences and the Qur'anic Maps, one should consider Fleetham's summarization of the cornerstones of the MI theory. That is, each individual is intelligent in his or her own way, intelligence has at least eight ways, individual's own intelligences combine and work together, and everyone has all types of intelligence (Fleetham, 2006). This is excellently concluded by the argument of Wise (2005) that “students are motivated when they believe they are able to succeed at a given task and when they understand and value the outcome of the task”. Moreover, if these special qualities of students are addressed, goals are achieved, and considerable outcomes are gained, then satisfaction about the tools used – the Qur'anic maps - will call for spreading, prevalence, and celebration. This celebration may be joyous to the extent that motivation is reached as it is defined by Cook and Artino (2016) as “the process whereby goal-directed activities are initiated and sustained”.

Amazingly, in the current Qur'anic maps, it was not meant to address each and every type of intelligence individually. Instead, learners classify themselves according to the many features and aspects they can distinguish, get attracted with, and extract from any piece of a Qur'anic map. Hence, the multi features unintentionally included in the maps have their strength and methods of appeal that attract their proper match from a focusing learner's intelligences. Therefore, for example, only receives a split-second glimpse, an observer could easily distinguish linguistic learners attracted by the miraculous textual, lexical, and stylistic features that mark the Qur'anic text. Although differentiating between the learners' multiple intelligences was a hard job according to Howard Gardner's statement in (Sternberg and Kaufman, 2011), but an appeal of linguistic features, coloration, and logic in the presentation of topical classification were decisive in the process of disengagement and determining the type of intelligence being dealt with.

It is found that the Holy Qur'an tends to mention numerous stories in different locations through different styles throughout the holy book while keeping giving the same meaning. That style of storytelling is well-known to Muslim scholars as the conceptual chaining or intertextual relatedness which translates to intertextuality which in its turn means “the property that texts have of referring, implicitly or explicitly, to other texts” and that “involves the dependence of one text as a semiotic entity upon another” (Abdul-Raof, 2003). The direct purpose behind the conceptual chaining may be for attaining a better understanding of a given Qur'anic text with “the conceptual and intertextual relatedness ...” and “the conceptual and intertextual allusions ...” in the macro and micro levels (Abdul-Raof, 2003). It is also expected that the Qur'an indirectly means to address the human's multiple intelligences through various inter-related texts and styles.

4.1.1 The verbal/linguistic learner

This type of learners as described by Thomas Armstrong, have the capacity to use oral and written language aspects, and manipulate linguistic features such as syntax, phonology, semantics, and pragmatics in an effective way. Additionally, the linguistic learner is also capable of having an extended knowledge of using rhetoric (the use of language to convince), mnemonics (the use of language to remember any set of information), explanation (the use of language to inform others), and

metalanguage (the use of language to study the structure of language) Armstrong (2009). The linguistic learner has the ability to use language, communicate in spoken and written forms effectively (Jiang, 2013), construct, and understand language (Nkobi and Weaver, 2011). Similarly, for Grow (1995), well-developed linguistic learners demonstrate attention to words and their overtones, relations among words, and the stylistic beauty and substance.

It is noticeable that the linguistic and the logical-mathematical intelligences are “the two most prized in school and the ones central to success on standard intelligence tests” (Gardner, 1993a). On the other hand, this valuable recognition is probably because language acquisition is an essential topic among cognitive sciences that requires a special kind of intelligence – linguistic intelligence – to deal with (Wróbel, 2012) and because individuals have various “cognitive strengths and contrasting cognitive styles” (Christison, 1998) among which the linguistic strength plays a central comprehensive role.

The concept of the Qur'anic mapping is to facilitate meaning conveyance, embody concepts, and re-present the Qur'anic discourse in an understandable and comprehensible manner. Therefore, thinking of how the Qur'anic reader will absorb the new representation of the Qur'anic discourse, was the main issue in the Qur'anic mapping process. (Allibaihi, 2019)

The Qur'anic concept maps and mind maps are advanced tools used in this study to manipulate the highly sophisticated linguistic features of the Holy Qur'anic texture as well as to convey its various messages, which are sent by Allah to convince man. Moreover, Qur'an is the word of Allah (Haleem, 2005) and it is well known that Qur'an is the greatest Prophetic miracle of Prophet Mohammad (Peace and blessings be upon him) parallel to those of the other prophets (Moses, Jesus, David, and Solomon, etc. (Peace and blessings be upon them all)). Once this pragmatic perspective was considered, that the Qur'anic discourse is characterized by its “prototypical linguistic, rhetorical, textual, and phonetic features” (Abdul-Raof, 2013), and that it comprises great study fields of semantic literary patterns, phonological, and syntactical domains (Mohammadpour and Nikoopour, 2017), highly skillful linguistic learners find themselves called to enormous challenging and intelligent linguistic features. Those features are enormous enough to address not only the linguistic intelligence, but also all the remaining types of human intelligence discovered so far.

The Qur'anic maps in this project contain a set of technical and textual characteristics that support the linguistic and non-linguistic features. Regarding the linguistic features, the Qur'anic maps highlight a wide range of linguistic phenomena that are capable of attracting the linguistic learners' attention thanks to the many technical tools available in the software such as the colorful text boundaries, summarization tools, and level-based networks of horizontal and vertical lines, etc. Those non-linguistic capacities may encompass visual outlook, interrelationship connections through the conceptual vertical and horizontal network of lines, and an effective presentation of topical classification and conceptual coherence.

More interestingly, any piece of the Qur'anic text could aptly be a field of interest and operation for at least one or more types of intelligence. This interconnected textual field of work is one of the remarkable features of the Holy Qur'an that meets the proposal of Nicholson-Nelson (1998) that “people who are smart in an intelligence learn best through methods associated with that intelligence”. For example, linguistically intelligent people will be very delighted to work with highly sophisticated texts and readings where they can explore and enrich their linguistic skills. In that sense, Grabe and Kaplan (1996) list seven components interacting in text construction which linguistic learners will seem quite comfortable when being exposed to: “syntactic structure, semantic senses and mappings, cohesion signaling, genre and organizational structuring to support coherence interpretations, lexical forms and relations, stylistic and register dimensions of text-structure, and non-linguistic knowledge bases, including ‘world knowledge’”.

Hence, the following text is Surat Al-Kawthar – the shortest surah in the Holy Qur'an - consists of three verses only with a total of 10 words and contains some vivid challenges for linguistic and logical learners in the following respects:

The great surah revealed the connection between three main topics: a reward to Prophet Mohammad (Peace and blessings be upon him) “Indeed, We have granted you, [O Mohammad], al-Kawthar”. Al-Kawthar is defined according to what has been reported by Anas who said, “When the

Prophet (Peace and blessings be upon him) was taken to the heaven, he said, ((“I came to a river whose banks had domes of hollowed pearl. I said: “O Jibril! What is this?” He replied: “This is Al-Kawthar.”))”, a command to thank that said reward “So pray to your Lord and sacrifice [to Him alone]”, and a condolence message upon the death of one of his sons “Indeed, your enemy is the one cut off.”

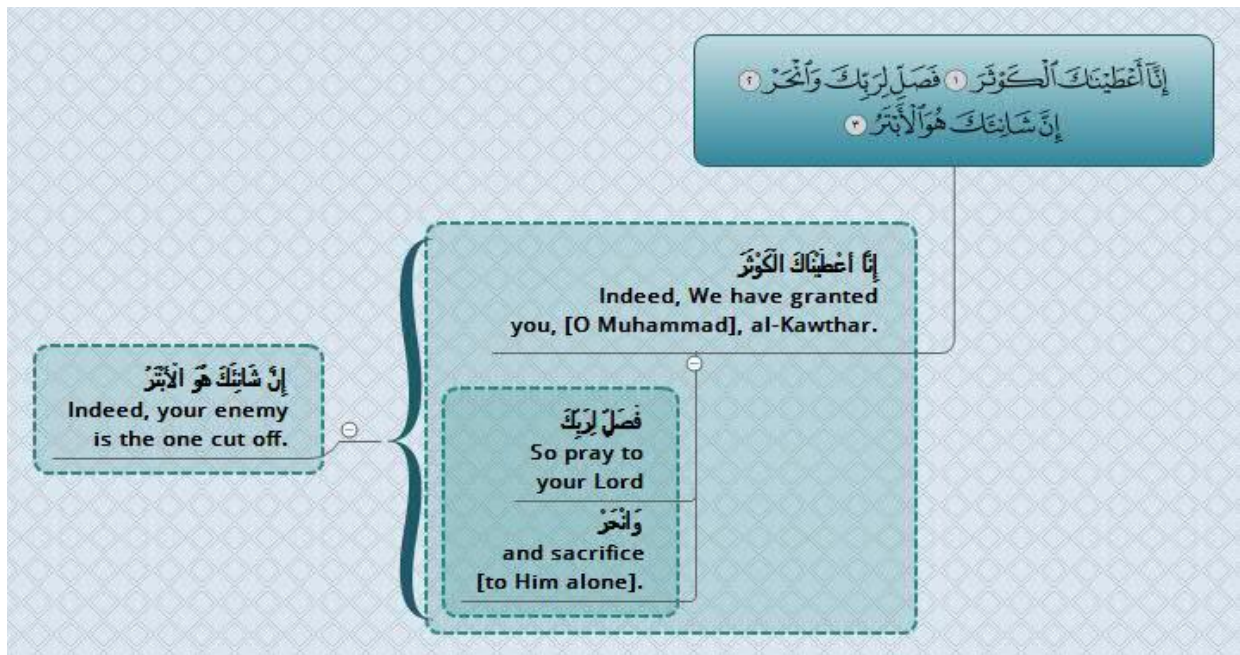


Figure 1. Surat Al-Kawthar (Q108)

Other challenges include that each verse of the three verses of the surah ends with the Arabic letter (ر) which ranks tenth in the Arabic alphabet. Likewise, the number of the surahs ending in the letter (ر) in the Qur'an is ten. Additionally, the Arabic letter (ل) was repeated 10 times as the most repeated letter in the surah. So, number 10 is a substantial element in the linguistic, topical, and conceptual framework of the surah when remembering that the day of sacrifice is the tenth in the month of Dhul-Hijjah in every Hijri year. These interesting facts should be obtained by the Qur'anic readers to have a full understanding of its great meanings miraculous linguistic and conceptual designing. In the Qur'anic map, those meanings were brought in a way that brings readers' attention and thinking of the designing and classification of topics and linguistic elements.

4.1.2 The logical/mathematical learner

Logical or mathematical learners are individuals with a distinguished and strong ability to do things with data such as collecting, organizing, analyzing, interpreting, concluding, predicting (Giles et al., 2003), handling long chains of reasoning, and discerning numerical or logical patterns (Armstrong, 2009). It is highly distinguished that those learners elegantly find their way in any data-jeweled contexts and pick out unseen relationships and patterns where others hardly can.

Bringing about the purpose of the Qur'anic mapping proposed in this study is not that hard when calling the sorts of activities to be implemented in order to strengthen this type of intelligence (logical/mathematical intelligence). Giles et al. (2003) recommended “critical-thinking activities, linear outlining, ..., [and] logic puzzles” which are issues deeply rooted in the Qur'anic text and observable through numerous Qur'anic maps. Challenging numerical and logical phenomena lie behind topics such as the different shares of inheritance in Surat An-Nisa (Q4:11, 12, and 176) as an example (Figure 3).

Yet, shares of inheritance are one of the very critical issues in Islam that require an accurate knowledge about the many cases mentioned in only three verses in the Holy Qur'an located in Surat An-Nisa. Learning shares knowledge is encouraged according to the hadith of Ibn Uyyaynah who said; “Knowledge of Al-Fara'id (Inheritance) was called half of knowledge, because it effects all people.”²

² AL-MUBARAKPURI, S.-R. 2003b. *Tafsir Ibn Kathir (Abridged) Volume 2*, Riyadh, Darussalam. Page: 388

The Qur'anic map in (Figure 3) makes things very clear according to any of the cases in verse (Q4:11) such as “But if there are [only] daughters, two or more, for them is two thirds of one's estate.” and “And if there is only one, for her is half.”.

Regarding the Qur'anic maps, the contents that appear in both logical and mathematical platforms give obvious clues and hints to the logical/mathematical learners for understanding and memorizing in their specific way. They, therefore, find themselves surrounded by helpful organized patterns of repetition, logical textual connections, and logical summarization and concluding semiological tools. Interestingly, these technical logical and mathematical features will not be limited to the logical/mathematical learners. They rather are helpful in enhancing the other types of intelligence of the non-logical/non-mathematical learners thanks to the attractive presentation of the Qur'anic textual features and interesting visual guidance and organization they communicate. This help is remarkably proved, because learners are expected to acquire a critical method to sources that “requires a full understanding of written texts” (Bailey, 2014).

These helpful technical issues pave the way for the learners of this type of intelligence to generate their particular mnemonic principles and strategies developing new mapping basics for extra impetus regarding memorizing the Holy Qur'an. There will emerge a set of linguistic remarks such as printed word frequency models which translate for the “counts of the frequency of occurrence of a given word in selected visual media” as well as meaningfulness models that mean “a metric of the number of meanings generated to a given target” (Balota et al., 2006). Surely, the printed word

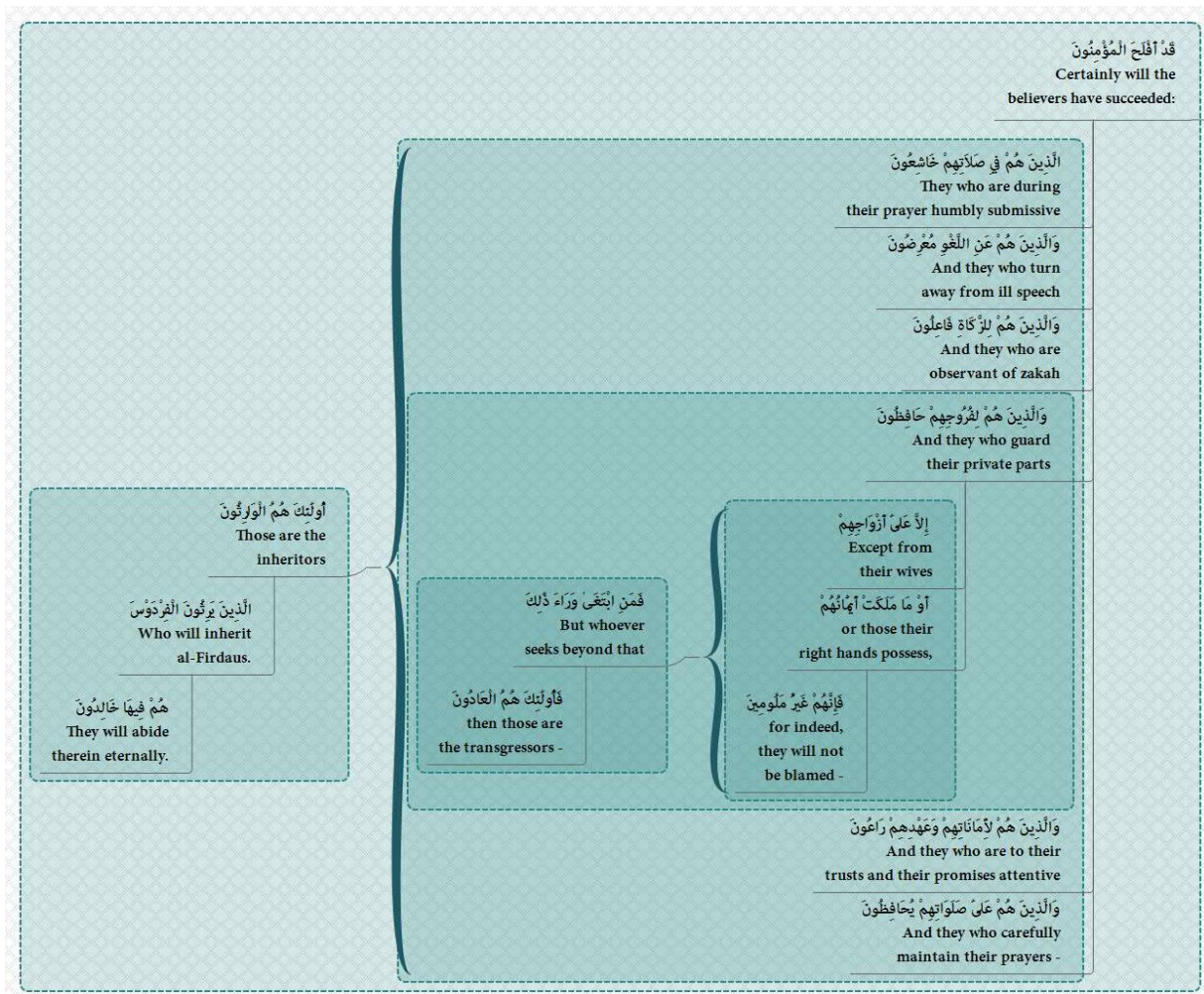


Figure 2. Surat Al-Mu'minun (Q23: 1-11)

frequency models can be helpful in giving the logical and mathematical learners a vivid logical and mathematical guidance through their memorizing work, while the meaningfulness model will be helpful for them in building their easy-to-follow exegetic explanation for the given Qur'anic texture.

The example of (Figure 2) below witnesses the repetition of the word (الذئب), meaning they who - for six times as a consequence occurrence. The word appears as a description of the "... believers who have succeeded". Therefore, it is found easy to count six descriptions for the believers who will succeed in the hereafter organized, easy to count, easy to follow, and accompanied by their English translation of their meanings.

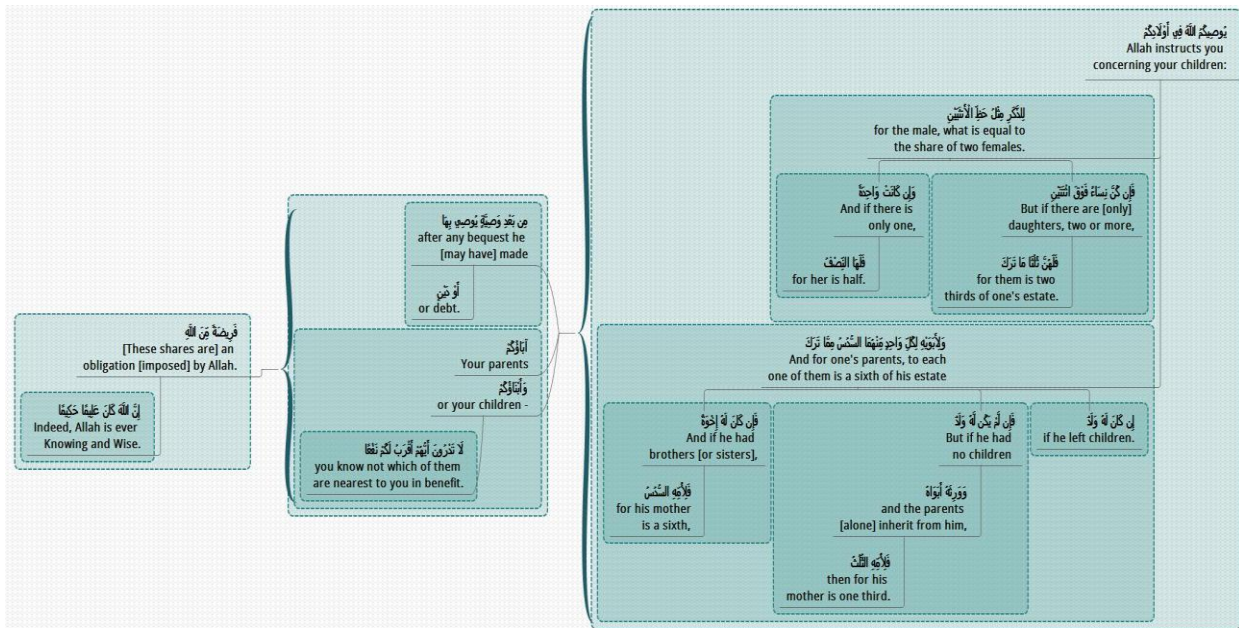


Figure 3. Inheritance Shares. Surat An-Nisa (Q4:11)

4.1.3 The spatial/visual learner

Generally speaking, our brain has the ability to absorb 36,000 images every minute and 80% to 90% of the information our brain receives is through our eyes (Hyerle, 2000b). This indicates that our visual mode is the dominant one among all other modes. Additionally, all of us are naturally visual learners and that individuals still process more information through their visual modalities (Hyerle, 2000b). So, a host of reasons lies behind the dominance and preference of visual learning tools over other tools. Strikingly, many approaches tend to make thoughts, concepts, results ... etc. visible with drawings, diagrams, and maps because of their ability to show relationships between the different regions of the map and highlight the important thoughts (Michalko, 2011). Michalko (2011) goes on enumerating the advantages of using maps as a design on paper which resembles the way our minds cluster concepts in our brains which "more readily accepts the information contained in a map". He concludes that "once your ideas are clustered, you can move from the viewpoint of the creator to the viewpoint of the critic who is seeing the ideas for the first time".

Interestingly, learners with visual or spatial aptitudes depend on their visual thinking strength and have the habit of learning from visual presentations (Giles et al., 2003) or from images (Vincent and Ross, 2001a). They use their visual sense, and their best learning environment is reading and watching where they can restructure or visualize the given learning material (Kanar, 2013). Moreover, visual learners have the habit of developing attitudes that can help in promoting the use of technology to apply knowledge in different new ways and to enhance the quality of life McKenzie (2005). Furthermore, visual or spatial individuals have good perception of the visual/spatial realm most accurately and are sensitive to colors, lines, shapes, forms, spaces, and the interrelationships created with these elements (Armstrong, 2009). They, therefore, tend to learn most readily from concept maps as highly sophisticated hybrid visualizations that combine visual structures created with colorful and linear elements along with the concepts and thoughts they present. But when these presentations contain visual conceptualizations and are themselves constructed in high visual formats, visual learners' gains and outcomes will be immensely considerable.

The following Qur'anic map of Surat Al-Ghashiyah (Q88:1-16): (Figure 4) may provide a closer understanding of this hypothesis. Surat Al-Ghashiyah figures out the Day of Judgement and the

incidents that will take place during it. It names two communities: the people of the Fire and the people of the Paradise as humbled faces and joyful faces respectively. Hence, visual learners will find themselves exploring a portrayal of two parallel incidents that happen simultaneously on one day with a clear short-story style. Strikingly, the two separate descriptions obligate the map designer to accept the logical separation because of its stark contrast and obvious parallelism. Besides, the selective tools that highlight those portrays take the burden of reflecting the visual dimensions that attract the visual learners' attention and acceptance. The reason behind this admiration is that they like working out their ideas and expressing their feelings through art such as drawing, painting, and sculpting. Also, they are good at visualizing, imagining, reading chart, map, and diagram formats, and solving puzzles and mazes (Giles et al., 2003, Denig, 2004).

What makes it challengeable for the visual learners when working with the Qur'anic maps is that “the Qur'anic discourse is characterized by prototypical linguistic, rhetorical, textual, and phonetic features. These are Qur'anic-specific features.” (Abdul-Raof, 2013). The Qur'anic-specific features are demonstrated through the Qur'anic maps as non-escapable colorful presentations which visual learners find themselves obliged to stop by and gain full understanding of. Stimulatingly, all that is known as features in the Qur'anic maps will probably mean more than software features. Surely, they mean shifts of understanding, highlights of meanings, reflections of concepts, techniques of categorization, layers of explanation, and sophisticated visual comprehensive tools of conceptualization. Among these features are summarization tactics, conceptual

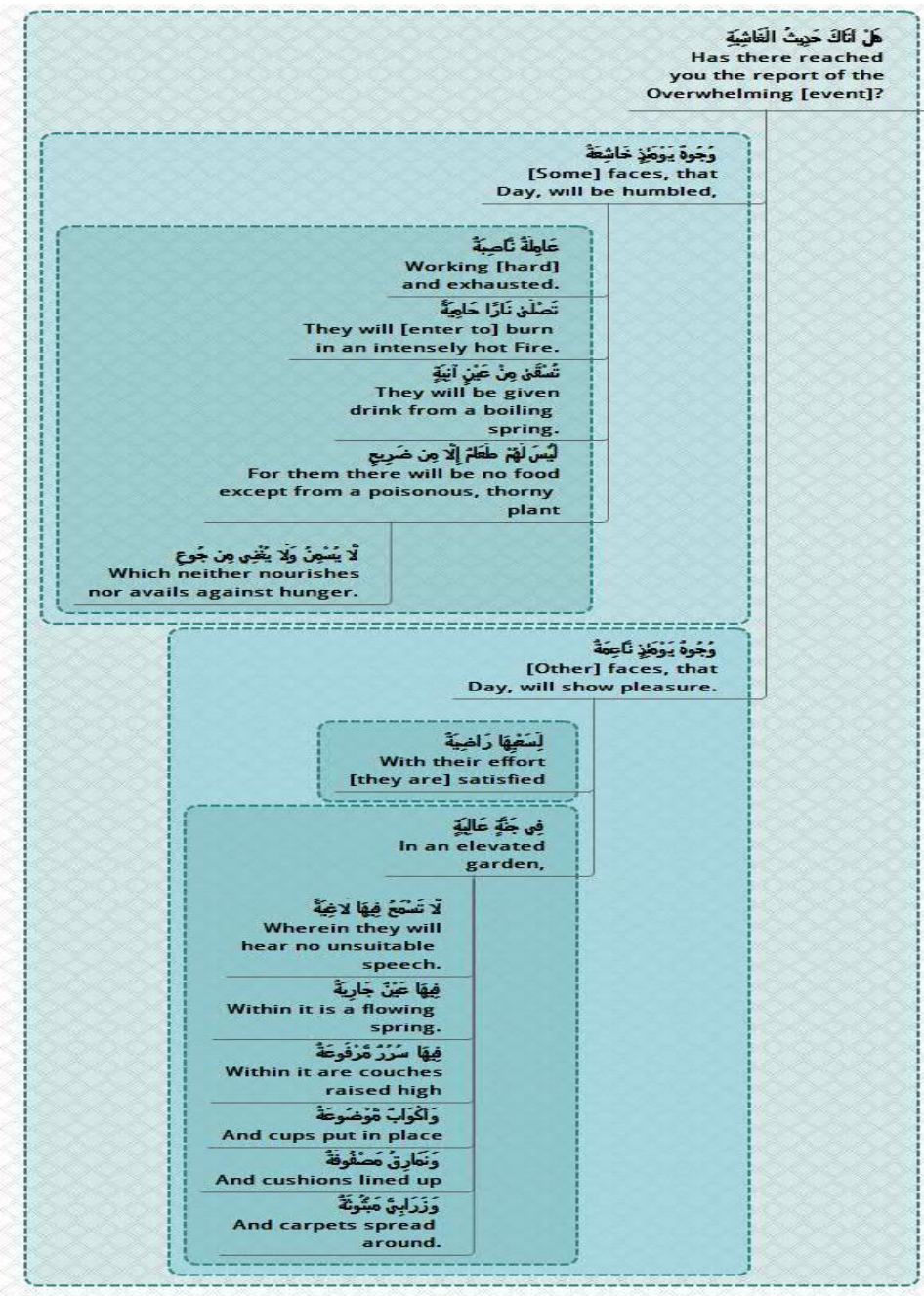


Figure 4. Surat Al-Ghashiyah (Q88:1-16)

boundaries, coloration, and numerous mapping designs from which map designers select their suitable formats and outputs (Figure 3) and (Figure 4).

Visual learners are then confronted with even more challenging tasks such as mastering the linguistic abstracts being reflected through their beloved presentation methods; visualization methods. Their sensitivity to shape and coloration (Gardner, 1993a) is their reliable guide to understanding and comprehending the Qur'anic content in harmony and flexibility. Actually, these coloration methods are utilized to simplify and reflect the Qur'anic linguistic content in a most absorbable doses for learners' visual perception. So, values such as the topical classification of the Qur'anic texture in all levels (Ayah level or Surah level), rhetoric features, and mnemonics can take their specific shapes and constructions in any given Qur'anic map according to each specific exegetic opinion (Figure 4).

Spatial/visual readers of the Holy Qur'an are called in numerous parts of the Qur'an for proofs and signs of God existence such as the example in (Figure 15): "Then do they not look at the camels – how they are created? And at the sky – how it is raised? And at the mountains – how they are erected? And at the earth – how it is spread out?" Surat Al-Ghashiyah (Q88:17-20). These questions are posed to the visual learners to use their visual aptitudes in reaching the fact that Almighty Allah is the unique creator of the whole universe and these creatures are signs of His greatness. These questions are big and require the meditation of visual learners and the thinking of existential learners. Such integration may be found in various places and examples in the Holy Qur'an such as in the example presented in (Figure 5):

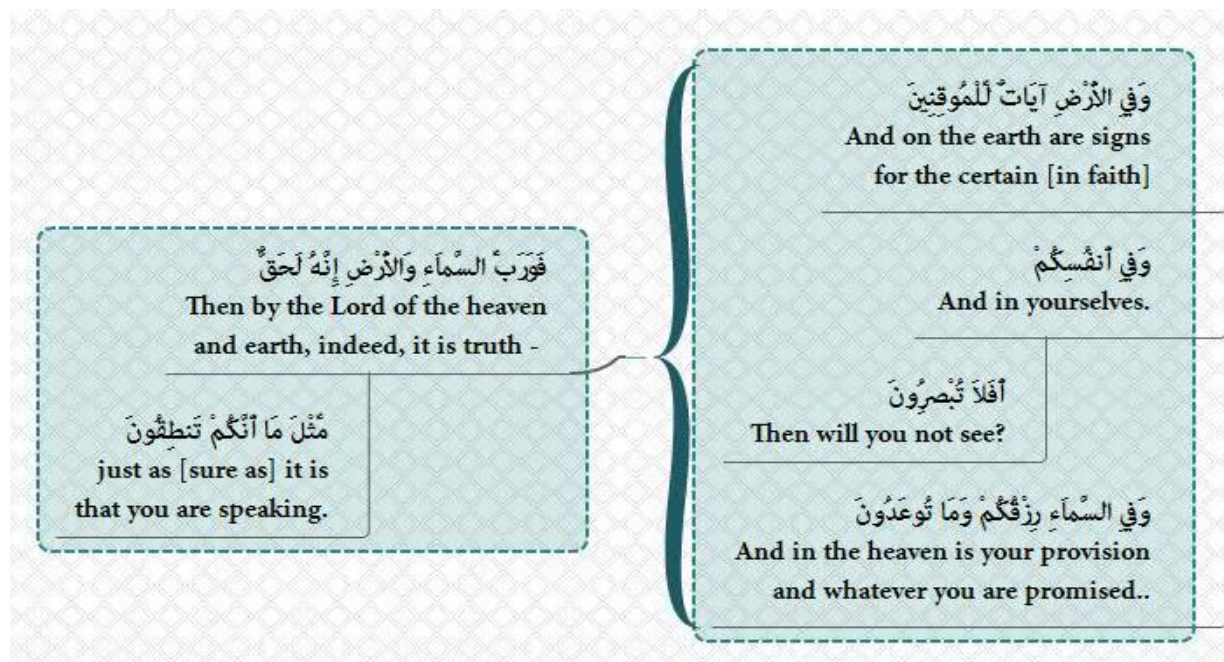


Figure 5. Surat Adh-Dhariyat (Q51:20-23)

The recent progress in the re-presentation of the Holy Qur'anic text is an indirect response to the visual learners' distinctive call for the development of their preferred means of learning and understanding. They have shaken all the existing theories of teaching and learning until things reached this sort of eye-catching design and visualization so far. This aptitude is built on the insight of Hyerle (2000a) that "society as a whole is predominantly visual in its orientation". It could be concluded that visual intelligence is the key to the other intelligences where successful efforts to building a more comprehensive content should pass through.

4.1.4 The bodily/kinesthetic learner

Learners of this type of intelligence have the potential for using their body (Denig, 2004, Kezar, 2001) to achieve their various types of work and their community involves athletes, dancers, actors, workers, etc. Additionally, Denig (2004) argues that it is evident for experimental psychology that the bodily/kinesthetic intelligence is distinct from the other intelligences. As according to (Ribatsky, 1998) this distinction is in using all of one's body to achieve remarkable goals such as performing, creating objects, and developing solutions. The bodily/kinesthetic learners learn more effectively when they combine study with some physical activities (Kanar, 2013). Similarly, for Vincent and Ross (2001b),

kinesthetic learners can process and remember whatever they learn about when they touch and feel it, because they learn best by doing and express their emotions through their physical aptitude.

It is also expected that not each and every designing feature involved in the Qur'anic maps will be welcomed by the kinesthetic learners as merely bodily or kinesthetic learners. That may be because their understanding is linked to touching or feeling things and because they lack the internal visualization of organization and neatness (Vincent and Ross, 2001b). Gardner (1993a), nevertheless, states that some relationship exists between the different intelligences, as for example, a musical learner who is attracted to and not successful in the musical domain requires other intelligences such as the personal intelligence and the bodily/kinesthetic intelligence. So, they will look between the lines for the content that deals with their special characteristics; the bodily-kinesthetic Qur'anic stories and materials while being attracted by the special features of the Qur'anic maps according the proportional characteristics of the othe other intelligences they enjoy. Fortunately, the Holy Qur'an is immensely rich in the bodily/kinesthetic type of literature and tells them as miraculous, historical, or descriptive stories, etc. in various parts of its context.

In truth, the bodily/kinesthetic learner's relationship to the Qur'anic maps communicates another type of cinematic point of view. In this sense, numerous Qur'anic stories carry the learning qualities of kinesthetic learners such as prophets, fellows, or regular people. They have been addressed through the best way they understand with clear kinesthetic messages and proofs. Once bodily/kinesthetic people learn through their whole-body experiences (Vincent and Ross, 2001b) and hands-on activities (Kanar, 2013), it is also expected that they accept logical explanations that best address their minds through hands-on or physical activities and practices. Consequently, the calls of Vincent and Ross (2001a) invite instructors to provide language materials that involve action, which will contribute to helping bodily/kinesthetic learners in their journey from features to meaning, understanding, and comprehension. Likewise, Armstrong (2003) cites Shakespeare's works as found to be filled with bodily-kinesthetic expressions and images. Interestingly, the following mind-mapping examples translate further explanations of how their distinguished kinesthetic aptitude converts their deep negative beliefs into positive convictions such as faith and satisfaction, where some address the bodily/kinesthetic minds through a set of vey advanced educational techniques. One could recognize brainstorming activities, problem-based learning, peer-to-peer strategies, and other forms of teaching and learning strategies in the kinesthetic instructions provided by the Holy Qur'an. The following figure (Figure 6) a prototypical educational example:

(Figure 6) below tells us about a bodily-kinesthetic learner who receives a lesson from the Almighty Allah by means of an extra-ordinary and unexpected visual educational method who re-enacts the crime in an attempt to let the son of Adam [Qabil] assimilate the burial procedure. Ibn Kathir reported that;

As-Suddi said that the companions said, "when his brother died, Qabil left him on the bare ground and did not know how to bury him. Allah sent two crows, which fought with each other until

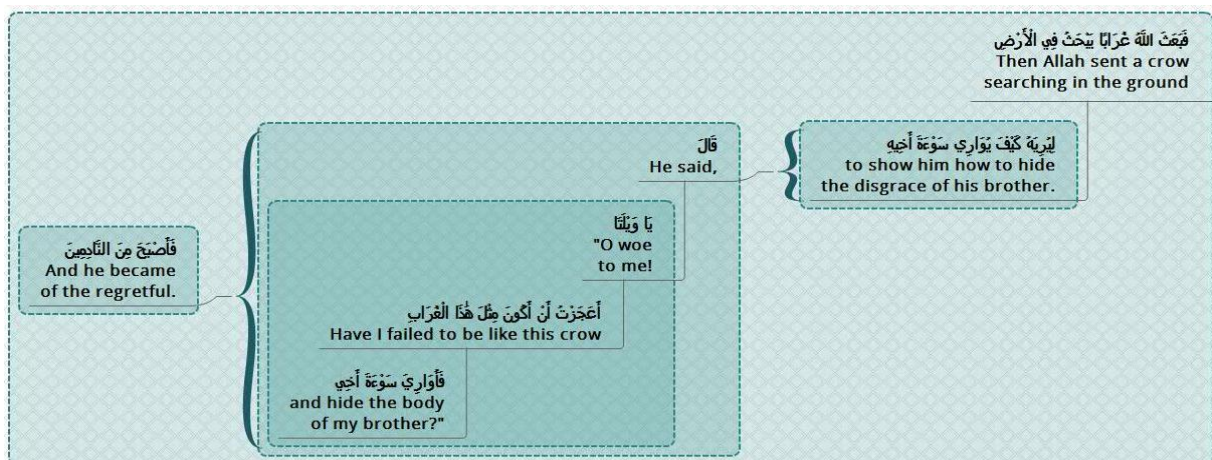


Figure 6. Surat Al-Ma'idah (Q5:31)

one of them killed the other. So, it dug a hole and threw sand over the dead corpse (which it placed in the hole). When Qabil saw that, he said, "O woe to me! Have I failed to be like this crow and hide the body of my brother?" Al-Mubarakpuri (2003c)

There were no verbal instructions, but a technical manual through a hands-on activity with a clear step-by-step message. Because this was the first killing incident ever on earth, and because the lesson was so comprehensible, the lesson continued to be understood by all sons of Adam from then on.

Gardner extends the bodily-kinesthetic intelligence to include the body language as a language other than words (Gardner, 1993a). The language that encompasses semiotics, physical actions, and gestures or body moves. For example "And his wife approached with a cry [of alarm] and struck her face and said, "[I am] a barren old woman" meaning she struck herself by hand on her forehead (Al-Mubarakpuri, 2003e).

It is worth mentioning here that the work of the concept map is to simplify the reading of the story for the kinesthetic learners - through its add-ons and technical features - in a comprehensible manner. Moreover, the topical classification method used in its two levels; the macro and the micro ones and marked by a distinctive coloring system keeps the learner strictly limited to a guided conceptual chaining process. So, summarization, text boundaries, coloration, lining, and bilingual texting are responsible for embodying the exegetic opinions on which the concept map is based. Additional role the Qur'anic maps play is re-presenting the Qur'anic text and contributing through their many features [coloration, network of lines, summarization tools, linguistic phenomena, etc.] to facilitating, organizing, and simplifying each secondary intelligence's work in getting its full message from the Holy Qur'an. Those specific characteristics are then made possible for the kinesthetic learners to grasp the intended message(s) by help of the other intelligences they [kinesthetic learners] have beside their strongest bodily/kinesthetic aptitude. The Qur'anic maps may also contribute to the enhancement of the other intelligences through the kinesthetic learners' search for their matching traits in the manipulated piece of the Qur'anic texture. That is according to Wróbel (2012) who argues that if programs are built based on the theory of Multiple Intelligences, they will have the possibility to involve learners having combinations of intelligences.

4.1.5 The musical learner

The recitation proceeds, the intensity grows. A man hides his face in his hands, another weeps quietly. Some listeners tense themselves as if in pain, while, in the pauses between phrases, other shout appreciative responses to the reciter. Time passes unnoticed (Nelson, 2001).

In this regard, Nelson's commentary on the Egyptian traditions on Qur'anic recitation conveyed the incident as admired by incomparable popularity, prestige, and authority all over the Islamic world. Her statement is most fitting to that of Hoerr et al. (2010) that "Musical Intelligence involves an understanding of pitch, rhythm, and the timbre or texture of a sound" and "The truth is, we are all (even those with hearing impairments) musical beings with definite musical abilities and intellect". Additionally, Nelson (2001) argues that the Qur'an is characterized by its oral nature in transmission and social existence as its rhythm and assonance confirm that it has been meant to be heard. Likewise, she states that the oral nature of the Qur'an transcends euphony where its significance is carried more by the sound than by its semantic information.

Gardner states that the musical intelligence appears as encompassing several sub-intelligences labeled by the many dimensions of music, which include melody, rhythm, harmony, and timbre (Gardner, 2006). Rather, for Armstrong (2009), musical learners are distinguished by their aptitude to perceive, criticize, express, compose, and perform musical forms. Additionally, Armstrong (2009) argues that they tend to express their intelligence as sensitive to "rhythm, pitch, or melody, and timbre or tone color of a musical piece". Likewise, the development of the musical ability may be thanks to that rhythmic organization is accompanied by other music aspects existing apart from the pure auditory realization along with synergistic interaction of a collection of other intelligences may be significant as well (Murphy, 1999). Similarly, Kreitner (1981) supports the idea that musical learners are likely to be kinesthetic because they feel both the music and rhythms.

Interestingly, the Holy Qur'an has its own distinguished musical system that is controlled by the Tajweed rules and recitation as the only way to read the Holy Qur'an according to an order revealed

from the Almighty Allah; "... and recite the Qur'an with measured recitation" (Q73:4). This genius mixture between a high-level language and a metrically accurate musical system that considers presenting the Qur'anic discourse as a means of communication between the Almighty Allah and His servants. This linguistic-musical feast falls under the argument of Gardner (2006) as "arisen from a common expressive medium" and as been taught through separate courses over a long time (years) and been used now for different purposes.

Qur'an is linked to its style of recitation and it is enjoyable for all Muslims thanks to an order by Prophet Mohammad (Peace and blessings be upon him);

It was narrated that Al-Bara' bin Azib said: "The Messenger of Allah (ﷺ) said: 'Make your voices beautiful when you recite Quran.'"³

'Aishah (May Allah be pleased with her) reported: The Messenger of Allah (ﷺ) said, "The one who is proficient in the recitation of the Qur'an will be with the honourable and obedient scribes (angels) and he who recites the Qur'an and finds it difficult to recite, doing his best to recite it in the best way possible, will have a double reward."⁴

The Qur'anic musical system on both levels (Tajweed and Tarteel) where Tajweed cares for the correct articulation of letters and phonological aspects of the Qur'anic text whereas the other (Tarteel) cares for the musical techniques of the Qur'anic text according to the orders mentioned above. So, the process of recitation enjoys two main features; following the techniques of recitation and enjoying lots of musical compositions that encompass semi-poetic musical pieces with selective linguistic elements of eye-catching structures. Interestingly, Gardner argues that individuals with musical aptitude are sensitive to the phonological features of a language besides their sensitivity to pitch relations (Gardner, 2006). So, the Qur'anic maps convey the rich Qur'anic texture with all its technical features along with the accompanying features to present a highly comprehensible text.

Qur'anic maps care for the stops marked in Mushafs along with other pauses created according to the exegetic commentaries aiming at providing a comprehensive Qur'anic discourse. Additionally, Tajweed instructions are everywhere in the Mushaf helping in introducing its hard and easy phonological and musical shifts for the Qur'anic readers. Therefore, the Qur'anic maps are found to be musically prepared for the reciters and readers and supported by a fully revised exegetic opinion. The musical learners are then expected to enjoy their new Qur'anic musical compositions decorated with high technical accessories such as the network of lines, colors, summarization tools, and purposeful boundaries and pauses or stops.

The holy Qur'an is fabulously rich in interesting stories about musical events rather than being rich in pure musical compositions with lovely structures enjoyable for the Qur'anic readers. The Qur'anic map in (Figure 7) below gives the example of Prophet Dawud (David), peace be upon him, and what Almighty Allah gave him of great bounty as prophethood, knowledge, kingship, the holy book, large numbers of troops, ...etc. On top of all that bounty almighty Allah blessed him with a beautiful voice (Al-Mubarakpuri, 2003d). Birds going out in the morning and coming back in the evening as well as mountains were ordered by Almighty Allah to repeat with him when he glorifies Allah (Al-Mubarakpuri, 2003d, Nelson, 2001). Additionally, it was recorded in the Sahih that the Messenger of Allah, peace be upon

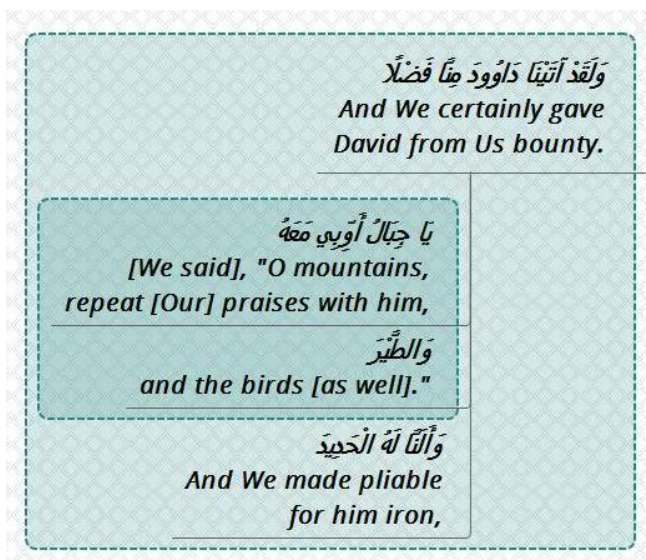


Figure 7. Surat Saba (Q34:10)

³ Sunan An-Nasa'i 1016 Book 11, In-book reference: Book 11, Hadith 141 English translation: Vol. 2, Book 11, Hadith 1017

⁴ [Al-Bukhari and Muslim]. Sunnah.com reference: Book 9, Hadith 4, Arabic/English book reference: Book 9, Hadith 994

him, heard the voice of Abu Musa Al-Ash'ari, may Allah be pleased with him, reciting at night, and he stopped and listened to his recitation, then he said: "This man has been given one of the sweet melodious voices of the Prophet Dawud."⁵

The Qur'anic map above presents Prophet Dawud, peace be upon him, as a musical individual – with a fabulous voice that is admired and repeated by birds and mountains - and as a bodily/kinesthetic individual – who has the gift of dealing with iron without fire or hammers (pliable iron) with direct directions from Almighty Allah. Ultimately, his example supports the arguments of Kreitner (1981), Murphy (1999), and Wróbel (2012) in that musical intelligence may be accompanied by a collection of other intelligences.

According to Gardner (2006), "Music can serve as a way of capturing feelings, knowledge about feelings, or knowledge about the forms of feeling, communicating them from the performer or the creator to the attentive listener". This psychological role enjoys the possibility of orchestrating a set of intelligences a Qur'anic reader and listener may have besides being a musical learner when being exposed to their beloved musical textures. The personal intelligences are actually meant with this harmonical integration when it comes to an accurate musical and linguistic piece of the Qur'anic text saturated with all musical and linguistic techniques and presented with a beautiful voice. These feelings are well described by Nelson (2001) as mentioned above "A man hides his face in his hands, another weeps quietly. Some listeners tense themselves as if in pain, while, in the pauses between phrases, other shout appreciative responses to the reciter".

Yet, the work of the Qur'anic maps includes both readers and listeners. The Qur'anic maps motivate readers to convey their full image, design, and details of the given text aiming at reflecting full understanding. So, reciters should consider the topical classification and exegetic commentaries mentioned in the maps through its network of lines, boundaries, summarization tools, and coloration. Ultimately, the musical characteristics provided by the work of the Qur'anic maps will make the required difference in understanding and conveyance of concepts. In view of that, Gardner (1993a)

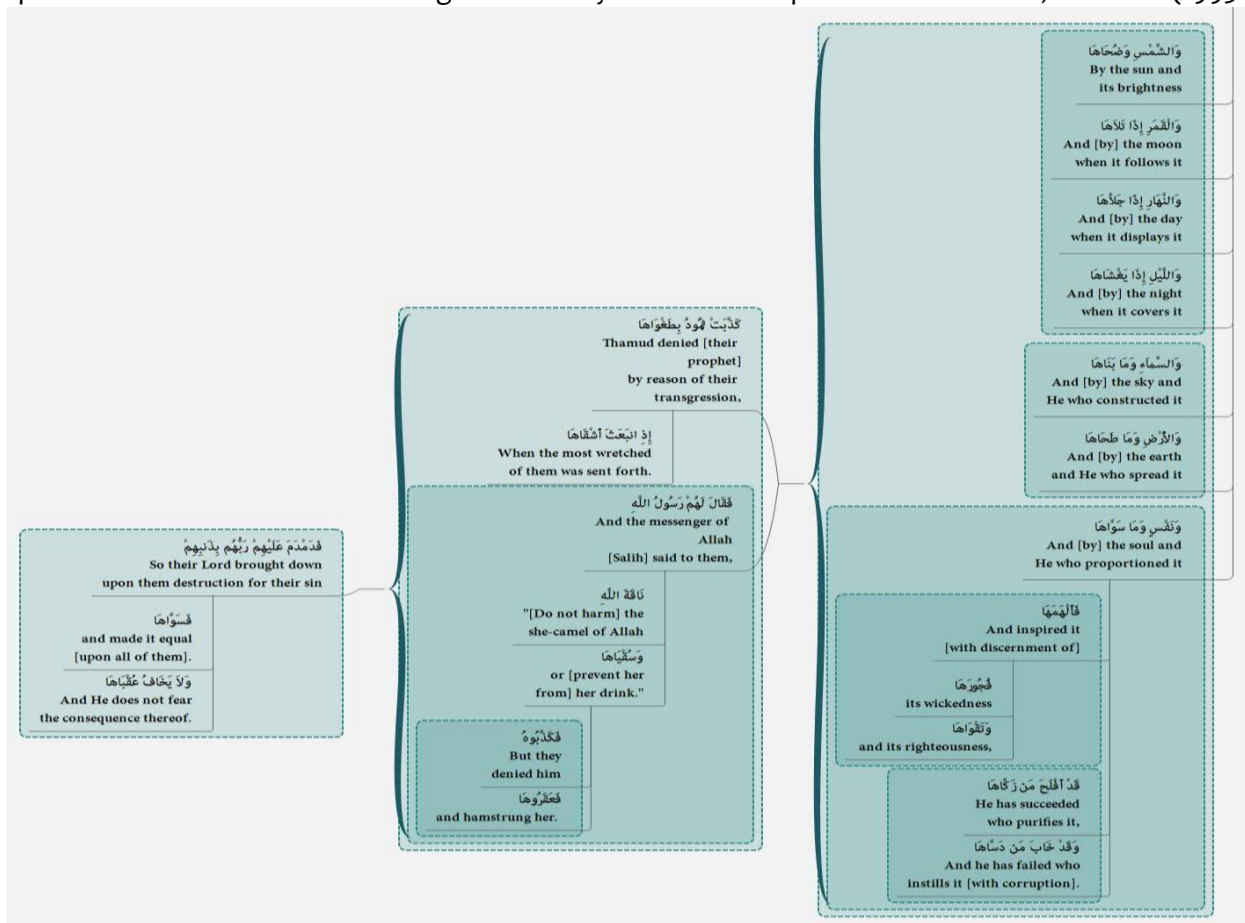


Figure 8. Surat As-Shams (Q 91:1-15)

⁵ Muslim 1: 546

argues that having thorough understanding of a topic is the key to thinking of it in several ways. Rather, one's understanding is likely to be tenuous if being restricted to a one mode of presentation and conceptualization. Therefore, even within the limits of the musical intelligence, reciters should accompany the many features of the Qur'anic maps because they are deliverable through sound and expected to make the required change in the way of listening to the Holy Quran.

The Qur'anic map in (Figure 8) below introduces an example of the Qur'anic lovely musical compositions with ready-made musical structures which conveys splendid views from nature mixed with poetry-like endings of verses. Hoerr et al. (2010) describe some features of musical learners as having ways other than performing such as "identifying patterns in sounds, recognizing subtle inflection in language, reviewing music other have produced, or simply selecting music for enjoyment" through which they can exhibit their intelligence. Additionally, Hoerr et al. (2010) argue that all of us connect with music in some way and when the opportunity comes, benefits such as learning about culture, history, thoughts, emotions, and about each other through music.

Consequently, the Qur'anic map below in its three parts (the first: oath, the second: story, and the third: a conclusion) provides a very simple sentence style where each sentence ends in one euphonic sound (ﻻ) although the surah. This integration of a flowery language and sounds that touch the very soul of listeners carries clear messages to musical learners and provides them with the opportunity to explore ancient societies' culture and history.

The Qur'anic map here preserves the musical content of the Qur'anic extract accompanied by the English translation of its meanings and the other technical features such as the boundaries, color highlighting, summarization tools, ... etc. So, readers are exposed to an acoustic musical composition – as a universal language according to (Hoerr et al., 2010) – supported by what makes them get full understanding of the given Qur'anic extract.

4.1.6 The interpersonal learner

For Armstrong (2009) and based on Gardner's theory (Gardner, 1993a), interpersonal learners have the quality of making distinctions and perceiving other individual's feelings, motivations, intentions, and moods. They are able to read facial expressions, voice tones, and body language; in addition to having the required aptitude to respond to these psychological cues in an effective pragmatic manner such as influencing a group of people to follow some action. Therefore, Gardner makes a slight comparison between the intrapersonal and the interpersonal intelligences based on the individual's own psychological inward or outward readings.

Gardner (1993a) argues that interpersonal intelligence, as the second type of personal intelligences (interpersonal and intrapersonal), turns outward to other persons. He states that intrapersonal and interpersonal intelligences are formed according to the cultural symbol systems of a given society. Therefore, interpreting experiences depend on that especial society's distinctive system of meaning. Accordingly, these systems of meaning and distinctive features are readily identified across miscellaneous cultures. Remarkably, characteristics of each of the personal intelligences are integrated and could be observed as "intimately intermingled in any culture" (Gardner, 1993a).

The Holy Qur'an provides numerous cultural hints to identify the systems of meaning across a number of the old societies and presents real-life stories rich in interpersonal distinctive features. And as a common system of meaning for Prophet Mohammad, peace be upon him, to follow when dealing with the society around him. It is worth mentioning here that the first four ayas of Surat Al-Baqarah (Q2:1-5) mentioned the believers and the ayas (Q2: 6-7) mentioned the disbelievers. (Figure 9) and (Figure 10) below provide an example of how the Holy Qur'an describes people with internal and external characteristics that nobody could reach because they are sometimes critical intrapersonal issues.

So, in (Figure 9) the Holy Qur'an provides five characteristics and attributes of the believers concerned with their creed and deep faith and their type of award as guidance and success provided to them by the Almighty Allah. Therefore, the believers are described here as guided by the Holy book, believe in the Ghayb (the unseen), perform Salah (prayer), and spend out of what Almighty Allah has provided them.

The following ayas (Q2: 8-16) in (Figure 10) talk about hypocrites where Almighty Allah provides a detailed description of them (the hypocrites) since their reality is hard to discover because they

“show belief and hide disbelief” (Al-Mubarakpuri, 2003a). Likewise, a hypocrite was defined by Ibn Jurayj that “His actual deeds are different from what he publicizes, what he conceals is different from what he utters, his entrance and presence are not the same as his exit and absence.”⁶

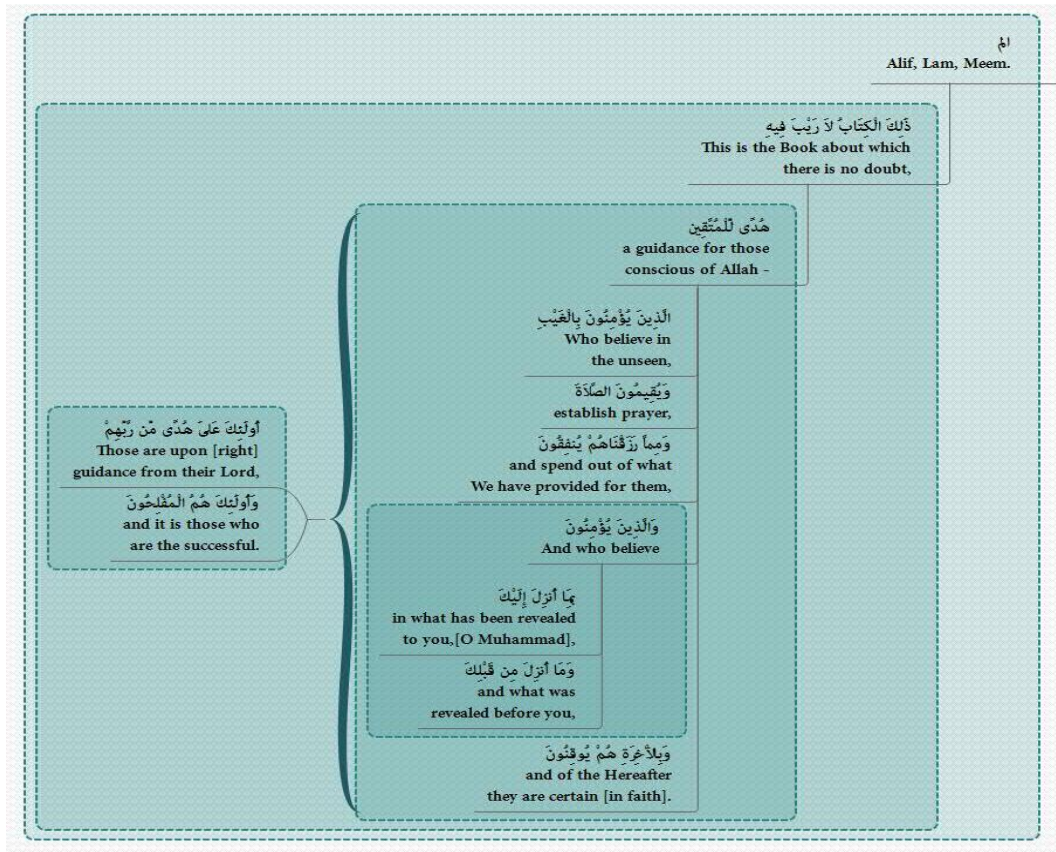


Figure 9. Surat Al-Baqarah (Q2:1-5)

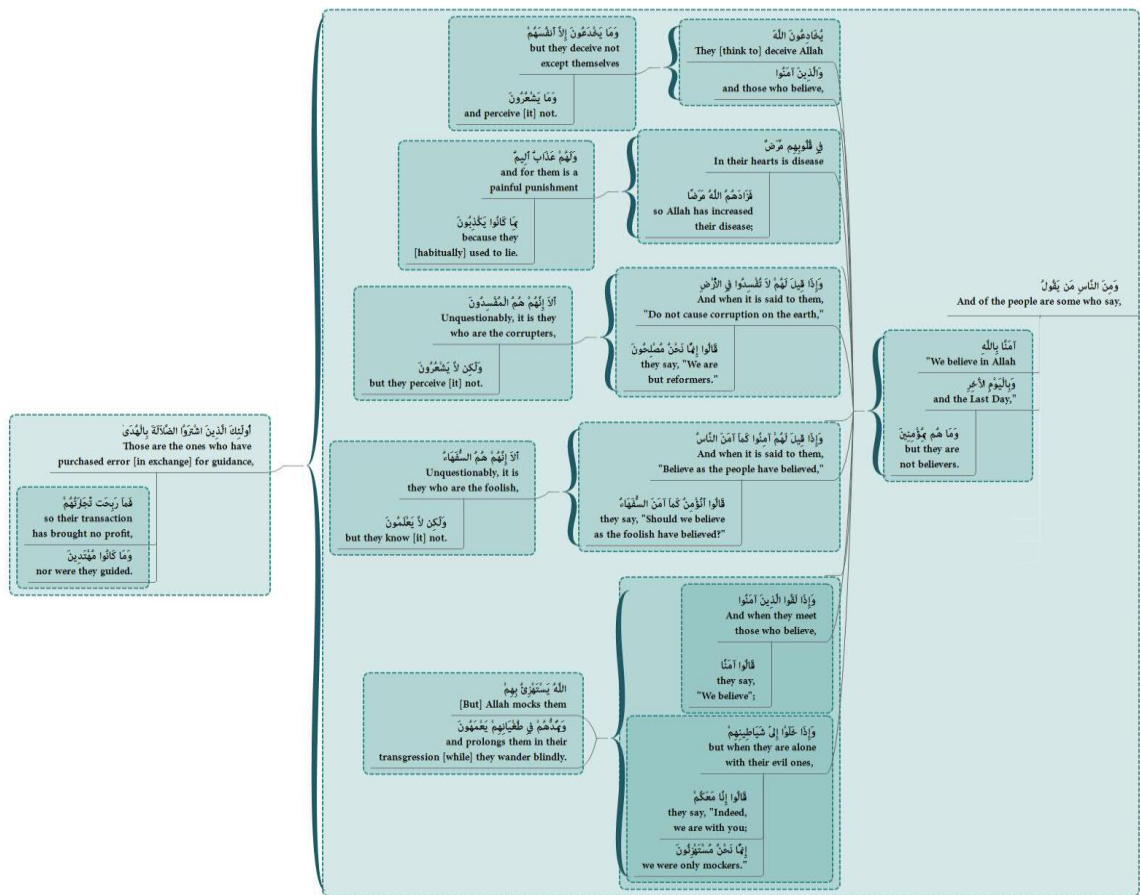


Figure 10. Surat Al-Baqarah (Q2:8-16)

⁶ At-Tabari 1: 270

The work of the Qur'anic maps then is to categorize these details in an absorbable manner where all descriptions of the hypocrites are clear for every Qur'anic reader. Strikingly, the interpersonal learners as well as the intrapersonal learners would find it as eye-catching detailed psychological descriptions supported by the many technical features of clarity and topical classification the Qur'anic maps enjoy. What helps presenting these characteristics of the hypocrites in submissive categorization is the fact that most of them appear as conditional clauses in different levels of formal structures that require especial kind of linguistic care and exegetic commentary.

Other features such as topical classification and topical relatedness also take place in the given piece of Qur'anic texture. The same topic of hypocrisy is found to be mentioned in other chapters of the Holy Qur'an such as in Surat At-Tawbah (Q9), Surat Al-Munafiqun (Q63), Surat An-Nur, and other surahs (Al-Mubarakpuri, 2003b). This reality assures the fact that the Holy Qur'an perfectly adopts the art of storytelling in different ways hopefully to saturate the needs of the different types of intelligence the Qur'anic readers have.

4.1.7 The intrapersonal learner

The core capacity at work here is access to one's own feeling life—one's range of affects or emotions: the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one's behavior. (Gardner, 1993a)

Intrapersonal learners have the ability to understand and distinct their own strengths and limitations, and others' feelings (Denig, 2004, Giles et al., 2003, Hoerr et al., 2010). They enjoy self-knowledge and act according to that knowledge reaching "awareness of inner moods, intentions, motivations, temperaments, and desires" (Armstrong, 2009). They learn best when working alone, doing self-paced projects, having space and choices (Giles et al., 2003) and when they value and understand the outcome of the given task (Brophy, 2013). Therefore, as the Qur'anic maps are a self-study bilingual reference based on the interpretation of the Holy Qur'an, intrapersonal learners are expected to put forth less efforts in the comprehension, memorization, and absorption of the extracted Qur'anic concepts included in these maps and gain huge outcomes.

Hoerr et al. (2010) describe intrapersonal learners as capable of identifying and labeling feelings, an aptitude that is required to distinguish numerous examples in the Holy Qur'an such as the following examples:

The situation here bears a reaction of two types of learners; the interpersonal learner as in "But Joseph kept it within himself and did not reveal it to them." That is when Yusuf's brothers accused him to theft saying that "If he [Yusuf's brother] steals – a brother of his [They mean Yusuf himself] has stolen before.", and the interpersonal learner as in "He said, [within himself] 'You are worse in position, and Allah is most knowing of what you describe.'". Although, both situations remain as internal issues and self-limited feelings and talks, but Allah has unveiled them possibly because of their highly important role in the incidents of Yusuf's story that was described as "We relate to you, [O Muhammad], the best of stories in what We

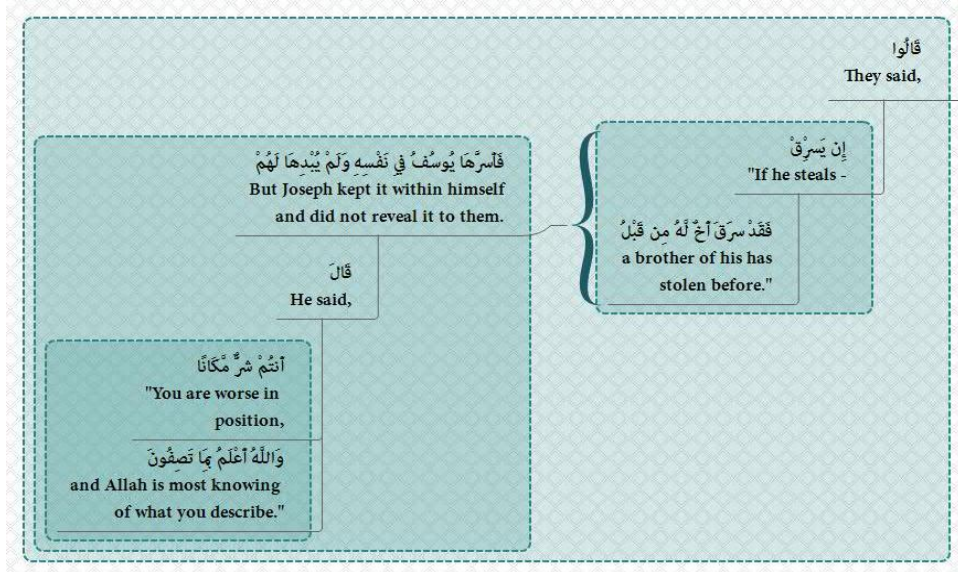


Figure 11. Surat Yusuf (Q12:77)

have revealed to you of this Qur'an

although you were, before it, among the unaware.” Surat Yusuf (Q12:3).

Worthwhile, numerous extracts from the Holy Qur'an bear the same sort of such descriptive characteristics of the nine types of intelligences. Foreexample, the following extract from Surat Al-Anbya (Q21:87) represented in (Figure 12) which picturizes a very deep investigation of internal feelings in an environment surrounded by loneliness (alone inside the sea), fear (swallowed by a whale deep in the sea and afraid of being a wrongdoer), and darkness (within three layers of darkness: night, deep in the sea, deeper in the stomach of the whale). “And [mention] the man of the fish, when he went off in anger and thought that We would not decree [anything] upon him. And he called out within the darkneses, "There is no deity except You; exalted are You. Indeed, I have been of the wrongdoers.” Surat Al-Anbya (Q21:87).

The concept map dedicated to this story is meant to re-present these feelings in an absorbable manner so interpersonal learners or readers of the Holy Qur'an can realize the situation and be guided accordingly. It is worth mentioning here that the same story is narrated in another style and with more details in another chapter of the Holy Qur'an which reflects the art of storytelling in the Holy Qur'an and its capacity of addressing different types of learners according to their way of thinking and faculty of understanding and comprehension.

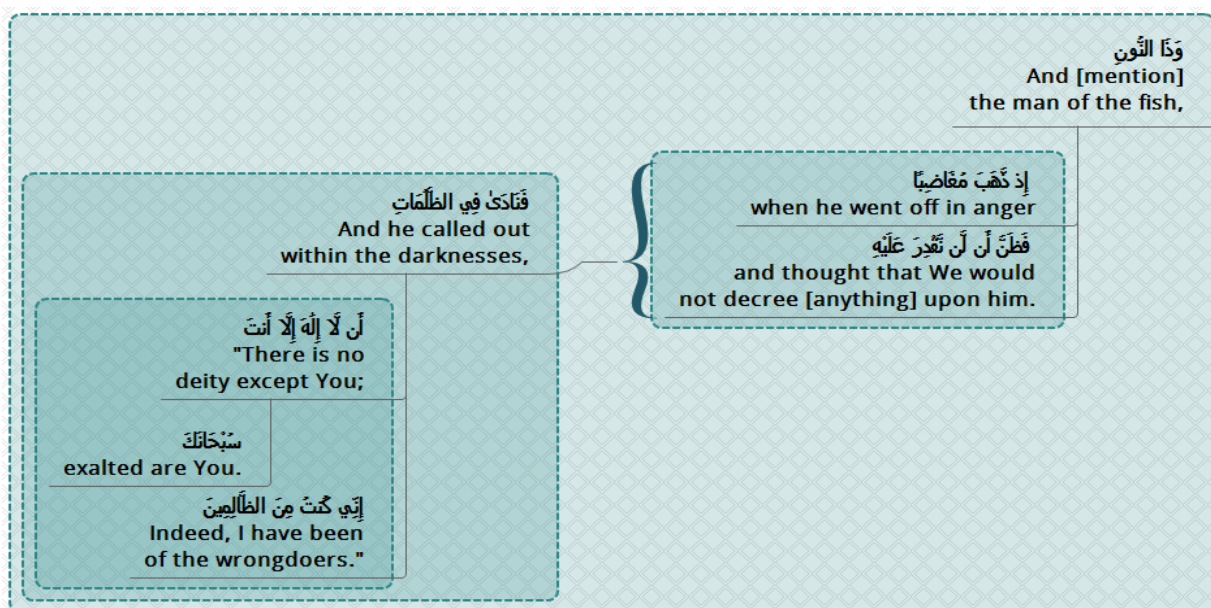


Figure 12. Surat Al-Anbya (Q21:87)

The Holy Qur'an moved beyond the limits of this life's incidents to extracted scences from the incidents of the hereafter. The Holy Qur'an describes a scene of disbelievers who were stopped at the fire with feelings of remorse and compunction (Figure 13). They wish they were returned to life on earth and given another chance to do better than their last time. Apparently, these feelings are reflected in a psychological way best to be understood by sefic

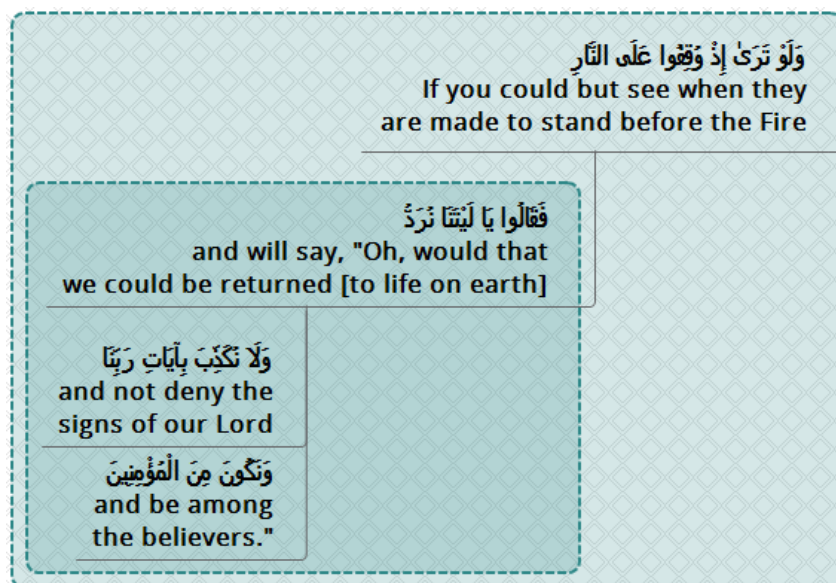


Figure 13. Surat Al-An'am (Q6:27)

interpersonal Qur'anic readers. And as it is the habit of the Holy Qur'an, stories of the hereafter are told in different ways possibly aiming at addressing the other types of intelligencies and learners' capacities.

4.1.8 The naturalist learner

“Indeed, in the creation of the heavens and the earth and the alternation of the night and the day are signs for those of understanding. Who remember Allah while standing or sitting or [lying] on their sides and give thought to the creation of the heavens and the earth, [saying], "Our Lord, You did not create this aimlessly; exalted are You [above such a thing]; then protect us from the punishment of the Fire.” (Q2: 190-191)

Gardner (1993a) defines the natural intelligence as “the ability to make consequential distinctions among organisms and entities in the natural world”. So, naturalistic learners have the habit of focusing on the recognition and classification of environmental phenomena (Kezar, 2001) and their most valuable learning sources are the natural settings (Armstrong, 2009). They work better when exposed to nature, learning about natural events and plants, exploring living things (Denig, 2004), dealing with sensing patterns, and establishing connections with elements in nature (Wilson, 1998).

It is great for the Qur'anic maps that people with the naturalistic intelligence are uniquely able to “recognize, categorize, and draw upon certain features of the surrounding environment” (Michońska-Stadnik, 2012) armed with their unique naturalistic capacities. All through the Holy Qur'an, naturalistic learners are particularly invited and addressed in numerous occasions to practice profound reflection (giving thought) in order to discover the greatness of Allah through communing with nature and answering all the questions related to creation, creativity, and the Creator. Reflection, which translates for “Tafakkur” in Arabic, is a highly valued sort of worshiping practice and leads to deep faith.

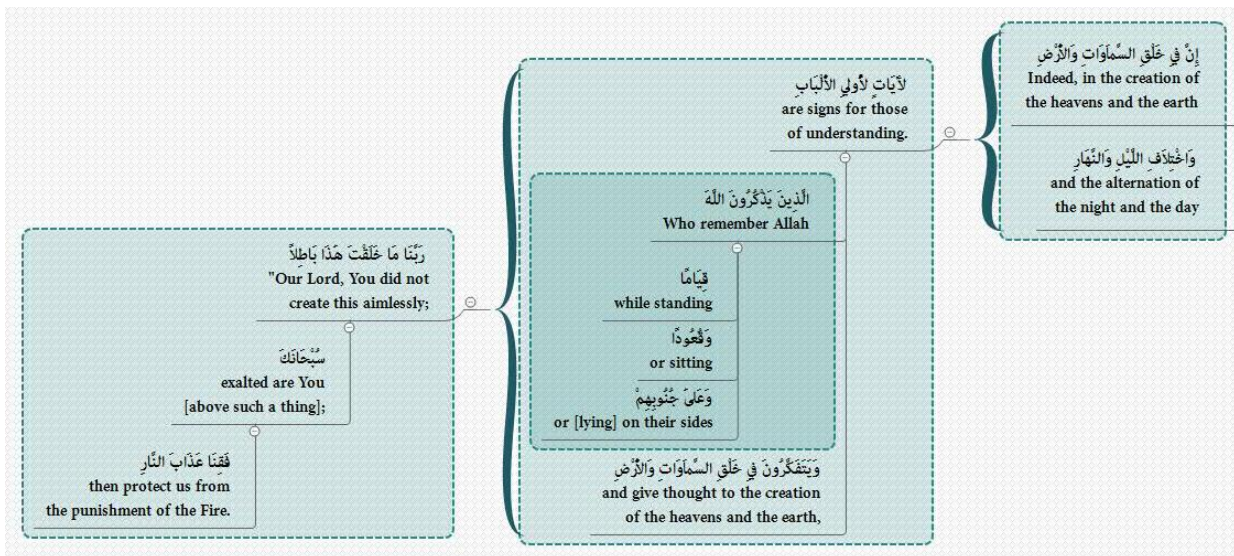


Figure 14. Surat Aal Imran (Q3: 190-191)

The Qur'anic map in (Figure 14) above embodies the two verses from the last part of Surat Aal Imran. It shows the proofs of Tawhid for the men of understanding and provides, in detail, the characteristics of their feedback when reached the end of their journey of thinking of the beloved realm (nature). Their deep thinking turned out into deep faith and concluded with that the Almighty Allah has not created those creatures aimlessly or without purpose. Indeed, there are signs that lead them to the creator of the universe “the Almighty Allah”. Nature and thinking in nature have put those people of understanding at the top of the nine intelligences because they are now the learners of big answers about the creation of the heavens and earth and about the alternation of the night and the day.

Consequently, naturalists' best way of learning appears when they work in nature, are exposed to living things, and learn about natural events and plants (Giles et al., 2003, Denig, 2004, Christison, 1998). Therefore, this atmosphere when provided to the naturalist learners, they learn best, think deeply, and come up with outstanding results and understanding. Because of that it is still obvious that the holy Qur'an sends calls for the naturalistic intelligent people to think in nature and its wide realm, which is always nearby, to get understanding of the hard questions they have no answer to. So, the Qur'anic map in (Figure 15)



Figure 15. Surat Al-Ghashiyah (Q88:17-20)

below highlights the natural areas where naturalistic learners could find answers for their questions: “at the camels – how they are created?”, “And at the sky – how it is raised?”, “And at the mountains – how they are erected?”, “And at the earth – how it is spread out?”

4.1.9 The existential learner

Since eternity man has always wanted to understand and probe into secrets of Nature; how and when creation began and his purpose in this world. This inquisitive man sought the help of civilizations, nature, old manuscripts, sometimes even the prophesies of saints and above all religions. (Saadat, 2009)

The existential learners who enjoy “the intelligence of big questions” (Gardner, 1993a) seem to brood on the nature and meaning of life (Akbari and Hosseini, 2008), utilize technology to secure better choices benefiting from the available data, and to make efficient solutions to problems in order to enhance the quality of life (McKenzie, 2005). This type of learners enjoys the capacity of contemplating beyond-sensory-data questions or phenomena such as the infinite and infinitesimal (TEMİZ, 2004) and engages large questions of a special nature about the meaning and purpose of existence (Armstrong, 2009). For Gardner and Miller (1999), existential learners are the learners who concern with ultimate issues of life such as aims of human endeavor, the problem of evil, and the meaning of life.

Existential and visual intelligences provide learners with the opportunity to embody solutions, ideas, and products they can use to enhance the quality of their lives (McKenzie, 2005). So, both intelligences require that learners have special sort of anticipation and accompany particular analytical and logical capacities in order to get their big distinctive picture of life. They are guided by big questions and a collection of distinguishing answers that put them at the top of the hierarchy of intelligences. Additionally, the Holy Qur'an invites these sorts of intelligence to explore the reality of life and the core content of creation through numerous interrogatory styles. Interestingly, it is not found strange that the Qur'anic textual and rhetorical structures are capable of addressing all sorts of learners with their diversity of intelligence and capacities. Therefore, the work of the Qur'anic mind and conceptual maps when the Qur'anic text addresses the existential learners is to facilitate the linguistic path and make clear the textual elements for a better understanding and utmost outcomes.

Nicholson-Nelson (1998) states that the ninth intelligence (existential intelligence) caused Howard Gardner to search the possibility of an intelligence that has to do with the individual's ability to ponder existence and its nature and find answers to the questions of life such as who we are, why we die, and how we got there. Interestingly, the following Qur'anic map (Figure 16) draws existential learners' attention toward the answer of their biggest and most critical questions in their beloved logical hierarchy of evidences and stages of creation or embryonic development.

The whole life span of an individual is immensely described in a way that does not contradict science and state-of-the-art technologies; rather, they proved the facts included in the verses in the Qur'anic map (Figure 16). Likewise, Saadat (2009) argues that “Man’s quest to know about his origin has led him to search his roots and the best source for him has been religious

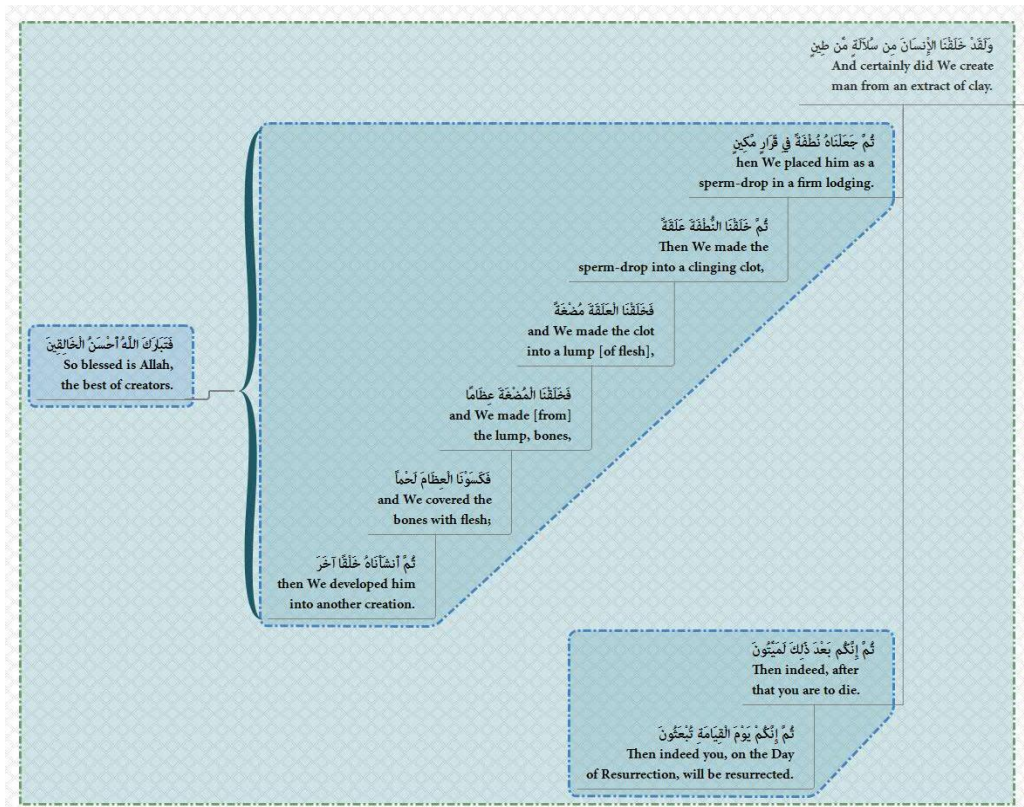


Figure 16. Surat Al-Mu'minun (Q23:12-16)

scriptures” and the greatest miracle was found in the Holy Qur'an where a description of step-by-step developmental stages of intra-uterine life exists. Man’s embryonic development has been discussed in a detailed manner in more than one chapter in the Holy Qur'an (Mahdi et al., 2012, Saadat, 2009).

The role of the Qur'anic maps is to simplify the Qur'anic answers for the questions raised by existential learners. The example above and the like embody very critical concepts about the creation of man for which scientists spared no time nor effort in searching for the way man is created in the uterine of his mother. Saadat (2009) and Mahdi et al. (2012) summarized the very long debate and results regarding this issue and listed the thoughts of Aristotle, the Greeks and the Europeans, Fabricus,

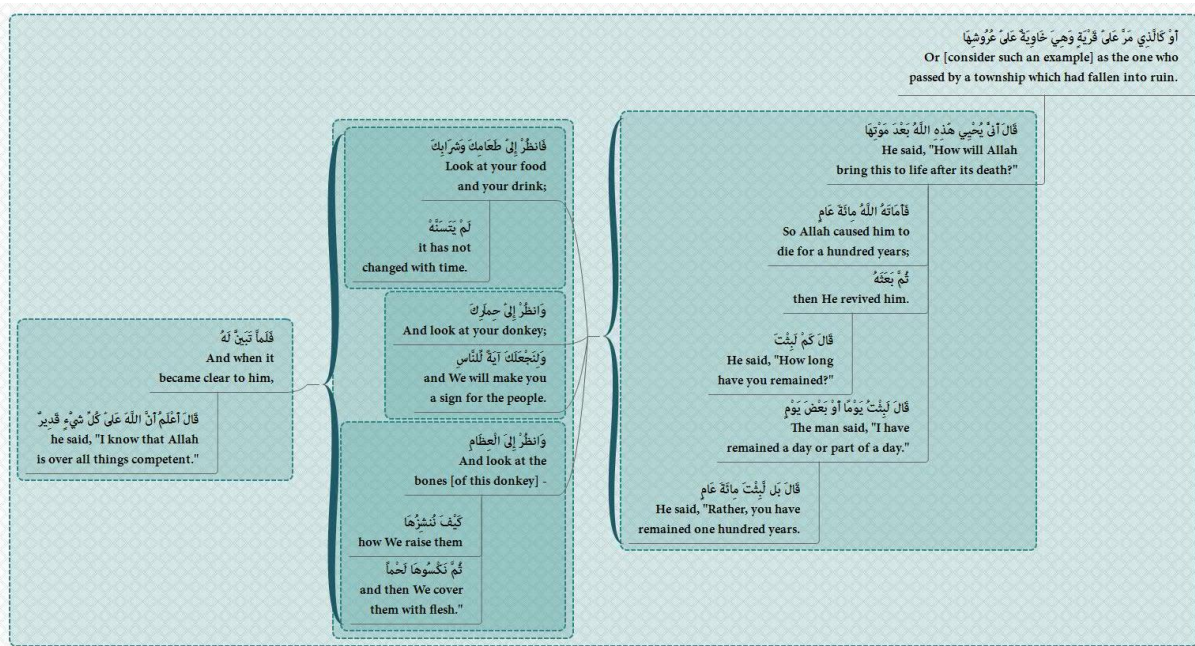


Figure 17. Surat Al-Baqarah (Q2:259)

Malphigi, Leeuwenhoek, Hartsoeker's, Spallanzani, Von Baer, Darwin and Haeckel, ... etc. Finally, the full reality of the developmental stages of the embryo was unveiled by the Holy Qur'an and the sayings of Prophet Mohammad, peace be upon him.

Big questions that distinguish existential learners from other learners appear in various sites in the Holy Qur'an with fascinating stories from the past. Next in (Figure 17) is the example Uzayr – a man from the Children of Israel – who passed by the city of Jerusalem after it has been ruined by Nebuchadnezzar who destroyed it and killed its people (Al-Mubarakpuri, 2003b). Many proofs were left for Uzayr to understand that his queries were answered in full such as leaving the city ruined then it turns into a rebuilt inhabited one, a dead body with scattered bones everywhere, and against all that his food was not affected by the long period of death.

Another example in which the type of intelligence – an existential-intelligence case - is considered in the Holy Qur'an is typically found in (Figure 18). Therein, the way that Prophet Ibrahim (Abraham), peace be upon him, finds a convincing answer to his question “Lord! Show me how You give life to the dead. ...” was considered through the experiment that best suits his inquiry and type of intelligence (existential intelligence). Abraham’s inquiry was a big question that requires an equivalent answer with

hands-on activity, clear instructions “... So take four of the birds, then wring them to you (and divide them); thereafter set a portion of them on every mountain; thereafter call them; ...”, and instant results “... they will come up to you with hasty diligence ...”. Ultimately, a very interesting benefit has been reached “... (and)

وَإِذْ قَالَ إِبْرَاهِيمُ رَبِّ ارْنِي كَيْفَ تُحْيِي الْمَوْتَىٰ
And as Ibrahim (Abraham) said, "Lord!
Show me how You give life to the dead."

قَالَ أَوْلَمْ تُؤْمِنُ
He Allah) said, "And
have you not believed?"

قَالَ بَلَىٰ وَلَٰكِن لِّيَطْمَئِنَّ قَلْبِي
He (Ibrahim) said, "Yes indeed,
but that my heart be composed."

قَالَ فَخُذْ أَرْبَعَةً مِّنَ الطَّيْرِ
Said He, "So take
four of the birds,
فَصْرُهُنَّ إِلَيْكَ
then wring them to
you (and divide them);
ثُمَّ اجْعَلْ عَلَىٰ كُلِّ جَبَلٍ مِّنْهُنَّ جُزْءًا
thereafter set a portion of
them on every mountain;
ثُمَّ ادْعُهُنَّ
thereafter call them;
يَأْتِينَكَ سَعْيًا
they will come up to
you with hasty diligence

وَاعْلَمِ أَنَّ اللَّهَ عَزِيزٌ حَكِيمٌ
(and) know that Allah is
Ever-Mighty, Ever-Wise."

Figure 18. Surat Al-Baqarah (Q2:260)

know that Allah is Ever-Mighty, Ever-Wise.” (Q2:260).

Yet, the difference between the stories of Uzayr and Prophet Ibrahim, peace be upon him, is that in the first story of Uzayr has been part of the experiment “... So Allah caused him to die for a hundred years; then He revived him. ...”. Ibrahim, peace be upon him, however, was the one who follows the instructions, watches the incidents, and observes the results. Interestingly, both experiments take the model of what is so-called problem-based learning where the way of thinking – the existential intelligence – was considered and dealt with in an appropriate manner.

Apparently, individuals with existential intelligence require integrating a number of intelligences when solving any of their inquiries (big questions) as appeared in the stories of Uzayr (Figure 17) and Prophet Ibrahim, peace be upon him, in (Figure 18). For instance, one may note the need for the logical and visual intelligences in the first example and the visual, kinesthetic, natural, and logical intelligences

in the second. This reality supports the sense of Kreitner (1981), Murphy (1999), and Wróbel (2012) in that existential intelligence may also be accompanied by a collection of other intelligences.

5. Conclusion

Great mastering of the knowledge introduced to a learner through what is so-called overlearning [concept maps as an example] or gaining more practice with the material means a slow rate of memory decay (Farr, 1986). Relatively, Farr went on focusing on the relationship between memory - as largely reconstructive, and the teaching of concepts, rules, and principles to complement the teaching of facts or knowledge. On the other hand, Daley and Torre (2010) celebrate concept maps as a teaching and learning strategy that enables medical students to solve a variety of complex clinical problems, integrate critical thinking skills, and most importantly retain information.

The Qur'anic maps - proposed in this study in a bilingual format - depend mainly on the interpretation of the Holy Qur'an which is always a collection of scholars' explanations of the deepest Qur'anic meanings and concepts. Those interpretation attempts may extract their basics from the incidents, concerns, reasons of revelation, or Prophet Mohammad's (peace be upon him) explanations or interpretations. So, the Qur'anic maps work as a scaling-up tool that encompasses interpretation, topical classification, and representation of the text of the Holy Qur'an. They are in agreement with the definition of McDonald et al. (2006) for scaling-up as "introducing proven interventions into new settings with the goal of producing similarly positive effects in larger more diverse populations". They are there for an attempt to unify the expected outcomes of the efforts being done to simplify the understanding, memorization, and conceptualization of its numerous fields of study.

What was dominant in the field of Qur'anic conceptualization is general and does not go beyond the simplification of concepts through topical classification and Qur'anic concept maps. The part of Qur'anic maps only cared for highlighting the mere general concepts of the Qur'anic *surahs*. But for the present Qur'anic maps, learners are exposed to a hybrid mapping system that integrates the Qur'anic interpretation, textual analysis with all its linguistic features, topical classification, and a subsumption of concepts. All these features are accompanied by a colorful network of lines and summarization tools that provides a facility of logical interrelatedness helping learners to move fluently through the given Qur'anic piece of texture.

The human intelligences are personally invited through the current concept mapping technique to satisfy their interests in the understanding and comprehension of the Qur'anic teachings and messages. Sometimes stories are handled in different ways aiming at allowing the different types of learners with their different types of intelligences to absorb the lesson and reflect it the way they prefer. Consequently, the current style of concept maps does the same and rounds up the degree of clarity by shifting from a mere text presentation to a well-designed colorful text re-presentation accompanied by numerous helping features in an image-based setting.

References

- ABDUL-RAOF, H. 2003. Conceptual and Textual Chaining in Qur'anic Discourse. *Journal of Qur'anic Studies*, 5, 72-94.
- ABDUL-RAOF, H. 2013. *Qur'an translation: Discourse, texture and exegesis*, Routledge.
- AKBARI, R. & HOSSEINI, K. 2008. Multiple intelligences and language learning strategies: Investigating possible relations. *System*, 36, 141-155.
- AL-MUBARAKPURI, S.-R. 2003a. *Tafsir Ibn Kathir (Abridged) Volume 1*, Riyadh, Darussalam.
- AL-MUBARAKPURI, S.-R. 2003b. *Tafsir Ibn Kathir (Abridged) Volume 2*, Riyadh, Darussalam.
- AL-MUBARAKPURI, S.-R. 2003c. *Tafsir Ibn Kathir (Abridged) Volume 3*, Riyadh, Darussalam.
- AL-MUBARAKPURI, S.-R. 2003d. *Tafsir Ibn Kathir (Abridged) Volume 8*, Riyadh, Darussalam.
- AL-MUBARAKPURI, S.-R. 2003e. *Tafsir Ibn Kathir (Abridged) Volume 9*, Riyadh, Darussalam.
- AL-MUBARAKPURI, S.-R. 2013. *Al-Misbah Al-Munir fi Tahthib Tafsir Ibn Kathir* تَهذیب فی المذیر المصباح، Riyadh, Darussalam.
- ALLIBAIH, M. 2019. Presenting the Qur'anic Text in a Developed Mapping Technique and Reflecting the Related Theories of Linguistics. *Journal of Arts and Humanities*, 8.

- ARMSTRONG, T. 2003. The multiple intelligences of reading and writing: Making the words come alive, ASCD.
- ARMSTRONG, T. 2009. Multiple intelligences in the classroom, Ascd.
- BAILEY, S. 2014. Academic writing: A handbook for international students, Routledge.
- BALOTA, D. A., YAP, M. J. & CORTESE, M. J. 2006. Visual word recognition: The journey from features to meaning (a travel update). Handbook of Psycholinguistics (Second Edition). Elsevier.
- BATES, A. W. 2015. Teaching in a digital age: Guidelines for designing teaching and learning for a digital age, Tony Bates Associates Ltd.
- BOYD, L. 2015. After watching this, your brain will not be the same [Online]. YouTube: TEDx Talks. Available: <https://youtu.be/LNHBMFCzznE> [Accessed 06 April 2018].
- BROPHY, J. 2013. Motivating students to learn, Routledge.
- CHRISTISON, M. A. Applying Multiple Intelligences Theory in Preservice and In-service TEFL Education Programs. Forum, 1998. ERIC, n2.
- COOK, D. A. & ARTINO, A. R. 2016. Motivation to learn: an overview of contemporary theories. Medical education, 50, 997-1014.
- DALEY, B. J. & TORRE, D. M. 2010. Concept maps in medical education: an analytical literature review. Medical education, 44, 440-448.
- DENIG, S. J. 2004. Multiple intelligences and learning styles: Two complementary dimensions. Teachers College Record, 106, 96-111.
- EDUTOPIA 2010. Howard Gardner on Multiple Intelligences.
- ELLIS, G. W., RUDNITSKY, A. & SILVERSTEIN, B. 2004. Using concept maps to enhance understanding in engineering education. International Journal of Engineering Education, 20, 1012-1021.
- FARR, M. J. 1986. The long-term retention of knowledge and skills: a cognitive and instructional perspective. DTIC Document.
- FLEETHAM, M. 2006. Multiple intelligences in practice: Enhancing self-esteem and learning in the classroom, A&C Black.
- FRAILLON, J., AINLEY, J., SCHULZ, W., FRIEDMAN, T. & GEBHARDT, E. 2014. Preparing for life in a digital age, Springer.
- GARDNER, D. & MILLER, L. 1999. Establishing self-access: From theory to practice, Cambridge University Press.
- GARDNER, H. 1991. The unschooled mind. How children think and how schools should teach.
- GARDNER, H. 1993a. Frames of Mind: The Theory of Multiple Intelligences, New York, Basic Books.
- GARDNER, H. 1993b. Multiple intelligences: The theory in practice, New York, Basic Books.
- GARDNER, H. 1995. Reflections on multiple intelligences: Myths and Messages. Phi Delta Kappan, 77, 200-200.
- GARDNER, H. 2003. Multiple intelligences after twenty years. American Educational Research Association, Chicago, Illinois, 21.
- GARDNER, H. 2006. Multiple intelligences: New horizons, New York, Basic Books.
- GILES, E., PITRE, S. & WOMACK, S. 2003. Multiple intelligences and learning styles. Emerging perspectives on learning, teaching, and technology.
- GRABE, W. & KAPLAN, R. B. 1996. Theory and practice of writing: An applied linguistics perspective. Harlow: Pearson Education.
- GROW, G. 1995. Writing and the Seven Intelligences.
- HALEEM, M. A. 2005. The Qur'an, OUP Oxford.
- HAY, D. B. 2007. Using concept maps to measure deep, surface and non-learning outcomes. Studies in Higher Education, 32, 39-57.
- HAZZAN, O., LAPIDOT, T. & RAGONIS, N. 2014. Active Learning and Active-Learning-Based Teaching Model. Guide to Teaching Computer Science. Springer.
- HOERR, T. R., BOGGEMAN, S. & WALLACH, C. 2010. Celebrating every learner: Activities and strategies for creating a multiple intelligences classroom, John Wiley & Sons.
- HYERLE, D. 2000a. A Field Guide to Using Visual Tools, ERIC.
- HYERLE, D. 2000b. Thinking maps: Visual tools for activating habits of mind. Activating and engaging habits of mind, 46-58.
- IBN-KATHIR d. 1373. Tafsir Ibn Kathir.

- JIANG, H. 2013. Efficient Teaching Scheme Based on Multiple Intelligence Theory. *Informatics and Management Science VI*. Springer.
- KANAR, C. C. 2013. *The confident student*, Cengage Learning.
- KASSELL, C. 1998. Music and the theory of multiple intelligences: Gardner's theory has lent itself to classroom activities that exercise different intelligences, but some music activities supposedly based on this theory may be misguided. *Music Educators Journal*, 84, 29-60.
- KEZAR, A. 2001. Theory of multiple intelligences: Implications for higher education. *Innovative Higher Education*, 26, 141-154.
- KINCHIN, I. M. 2000. Concept mapping in biology. *Journal of biological education*, 34, 61-68.
- KREITNER, K. R. 1981. *Modality strengths and learning styles of musically talented high school students*. The Ohio State University.
- MAHDI, E., ABOLFAZL, F. & HAMID, S. 2012. Developmental biology in Holy Quran. *Journal of Physiology and Pathophysiology*, 3, 1-7.
- MCDONALD, S.-K., KEESLER, V. A., KAUFFMAN, N. J. & SCHNEIDER, B. 2006. Scaling-up exemplary interventions. *Educational Researcher*, 35, 15-24.
- MCKENZIE, W. 2005. *Multiple intelligences and instructional technology*, ISTE (Interntl Soc Tech Educ).
- MICHALKO, M. 2011. *Cracking creativity: The secrets of creative genius*, Ten Speed Press.
- MICHOŃSKA-STADNIK, A. 2012. The Relationship between Multiple Intelligences and Teaching Style. In: PAWLAK, M. (ed.) *New Perspectives on Individual Differences in Language Learning and Teaching*. Berlin, Heidelberg: Springer Berlin Heidelberg.
- MOHAMMADPOUR, S. & NIKOPOUR, J. 2017. Topicalization in English Translation of the Holy Quran: A Comparative Study. *Language and Translation*, 7, 21-33.
- MORAN, S., KORNHABER, M. & GARDNER, H. 2006. Orchestrating Multiple Intelligences. *Educational Leadership*, 64, 22-27.
- MUBARAKPURI, S.-R. 2012. *Al-Misbah Al-Munir fi Tahdhib Tafsir Ibn Kathir*, Dar al Salam.
- MURPHY, C. 1999. How far do tests of musical ability shed light on the nature of musical intelligence? *British Journal of Music Education*, 16, 39-50.
- NELSON, K. 2001. *The art of reciting the Qur'an*, American Univ in Cairo Press.
- NICHOLSON-NELSON, K. 1998. *Developing students' multiple intelligences*, New York, Scholastic Professional Books.
- NKOBI, T. & WEAVER, S. 2011. *Multiple Intelligences & Learning Styles*.
- SAADAT, S. 2009. Human embryology and the holy Quran: an overview. *International journal of health sciences*, 3, 103-109.
- SAGAN, S. 2007. *Awakening the Third Eye, Clairvision*.
- STAUDE, M. 2015. *Meaning in Communication, Cognition and Reality: Outline of a Theory from Semiotics, Philosophy and Sociology*, Andrews UK Limited.
- STERNBERG, R. J. & KAUFMAN, S. B. 2011. *The Cambridge handbook of intelligence*, Cambridge University Press.
- TEMİZ, N. 2004. Implications of multiple intelligences theory on 1st Graders' literacy education. Unpublished master's thesis, Middle East Technical University, Ankara, Turkey.
- VINCENT, A. & ROSS, D. 2001a. Learning Style Awareness. *Journal of Research on computing in Education*, 33.
- VINCENT, A. & ROSS, D. 2001b. Personalize training: determine learning styles, personality types and multiple intelligences online. *The Learning Organization*, 8, 36-43.
- WISE, P. 2005. Book Review: Brophy, Jere. (2004). *Motivating students to learn* (2nd ed.). *APA Division 16 School Psychology*, 59, 34-35.
- WORMELI, R. 2005. *Summarization in any subject: 50 techniques to improve student learning*, ASCD.
- WRÓBEL, S. 2012. The Concept of Linguistic Intelligence and Beyond. In: PAWLAK, M. (ed.) *New Perspectives on Individual Differences in Language Learning and Teaching*. Berlin, Heidelberg: Springer Berlin Heidelberg.