

Investigation on the Mystery of the Qur'an's Disjointed Letters^(*)

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ABSTRACT

Disjointed letters, also called disconnected, opening, or muqattaat letters, (in Arabic: الحروف المقطعة) are characters that are put in the beginning of some chapters of the holy Qur'an, and which are pronounced discontinuously, such as acronyms or abbreviations. For a long time, there has been no clear explanation of their significance or at least no unanimous interpretation. In fact, different attempts to explain them were done, but no clear proofs of their interpretations were presented. This situation prompted us to make a text mining investigation in order to see if it is possible to find any explanation for this mysterious enigma. Hence, seven different approaches of text analysis are made: size based analysis, character frequency based analysis, lexical analysis, philosophical analysis, character N-gram based analysis, Qur'an based analysis and arithmetic analysis. The different quoted investigations did not give a clear explanation of the enigma, but they led to several interesting conclusions.

Keywords: *Disjointed letters, Muqattaat letters, Text Mining, Religious Texts, Qur'an, Computational Linguistics.*

I. INTRODUCTION

An old enigma that attracted the curiosity of many theological researchers, for a long time, is the significance of the disjointed letters (*also called disconnected, opening, or muqattaat letters*), which are present in some surahs (*chapters*) of the Holy Qur'an (Nguyen, 2012) (Massy, 1996).

In fact, the Qur'an contains 114 different Surahs (*chapters*) and there exist 29 Surahs that begin with a combination of some specific Arabic letters known as "muqattaat letters" (*disjointed letters*) (Massy, 1996). For example, Surah Al-Baqara (*the cow chapter*) begins with the following 3 characters "Alif", "Lam" and "Meem" (ا.ل.م). There are fourteen of such letters in total: exactly half the Arabic letters.

In the overall, those 29 chapters are organized as follows:

- There are 3 Surahs that begin with 1 disjointed letter (*character-monogram*);
- There are 10 Surahs that begin with 2 disjointed letters (*character-bigram*);
- There are 13 Surahs that begin with 3 disjointed letters (*character-trigram*);
- There are 2 Surahs that begin with 4 disjointed letters (*character-tetragram*);
- There is 1 Surah that begins with 5 disjointed letters (*character-pentagram*).

There exist several interpretations among the scholars regarding the mystery of such letters (Islahi, 2000) (Nguyen, 2012), however for a reason of size limitation, in this article, the author will cite only three important ones (Qadhi, 1999), which are described as follows:

- The first interpretation states that these letters are from the Mutashaabihat parts (*text with different possible meanings*) of the Qur'an and only God knows their meanings. AbubakrAsiddeeq (*may God be pleased with him*), the best friend and companion of the Prophet, said: "Every book has secrets in it, and the secret of the Qur'an is in the beginning of the surahs (*ie. in the muqattaat letters*)" (Al-Halawani, 2009). Even though this is a wise interpretation, it does not discard the possibility that these letters have some purposes and meanings. Furthermore, FakhraddeenArrazee said: "It is not possible that Allah (*God*) would include something in his book that his creation would not understand, because Allah is the one who has commanded us to reflect over this Book, and seek guidance from it. This cannot be achieved except by understanding its meanings" (Arrazee, 2004) (Abedin, 2010).
- The second interpretation claims that the 14 characters (أ، ح، ر، س، ك، ص، ط، ع، ق، ل، م، ن، ه، ي) that are employed in the disjointed letters are a reference to the main Arabic alphabet and represent the principal constituents of the Qur'an, since the number of Arabic characters is 28 (namely the double). In other words, Arabs are being reminded that even though the Qur'an is composed of these few Arabic letters, it cannot be imitated in style and in prose. To support this opinion, scholars mention that in almost all Surahs where these letters occur, the very next verse mentions the divine book (Abedin, 2010). However, the author is not very convinced by this interpretation.
- The third interpretation stipulates that these characters are used to attract the attention of the reader and listener (Al-Halawani, 2009). It seems that some Arab poets, before the beginning of Islam, occasionally used disjointed letters at the beginning of their poetry to attract attention. Persons who hold this point of view explain that during the revelation of the Qur'an, the first

Muslims never asked the Prophet about the muqattaat letters (*disjointed letters*), despite their thirst for knowledge. It seems that they were not puzzled by these letters and that they were accustomed to use them in some Islamic poetries (Abedin, 2010). So, according to this opinion, the muqattaat letters should have been employed in order to attract the attention of the reader/ listener.

Hence, after having seen all those interpretations, it seems difficult to opt for a particular interpretation without a rigorous scientific investigation on these mysterious letters. That is why; the author has explored different ways of text analysis to try to shed some light on this enigma. So, in section 2, a size based text analysis is presented; in section 3, a character frequency based analysis is presented; in section 4, a lexical analysis is conducted; in section 5, a philosophical (or logical) analysis is discussed; in section 6, a Qur'an based analysis is given and commented, in section 7, an arithmetic analysis is presented and finally a general conclusion is given at the end of the manuscript.

II. First investigation: Size based analysis

This section concerns the analysis of the Qur'an: Surah by Surah (*from the first one to the last one*) by displaying the size (*in byte*) of every surah (Moisl, 2009). The surahs beginning with discontinuous letters are denoted by the symbol "+" and the other surahs are displayed without any symbol.

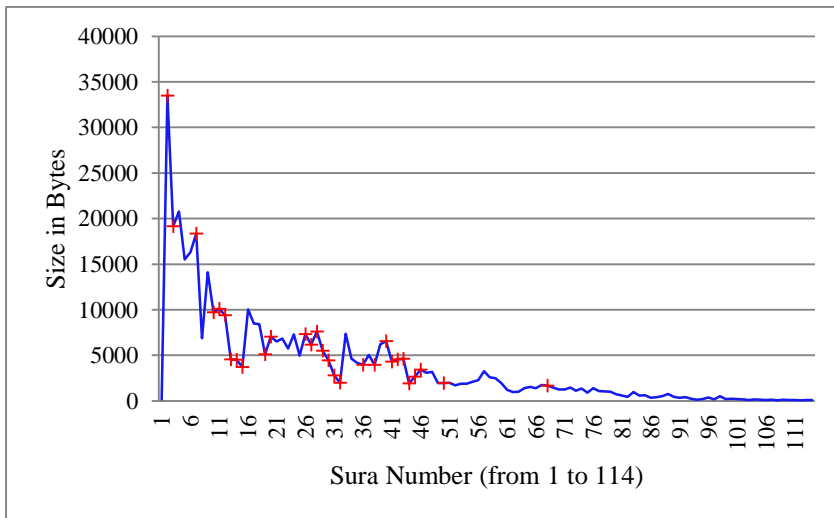


Figure 1: Size vs surah number.

Figure 1 shows that, in the overall, the medium size of the chapters decreases continuously over the time (*from the beginning to the end*). That is, the first

chapters possess a high dimension (*over 5000 bytes*), while this dimension tends to decrease continuously when the surah number increases.

On the other hand, we notice that the disjointed letters are most often used for high dimension chapters (*look at the symbols + and their concentration in the left area of the graph*).

By considering this function (*size vs surah number*) as a temporal signal, we have computed its spectrum by using a FFT (*Fast Fourier Transform*) transform. The corresponding FFT spectrum is represented in the following figure, where the high frequencies correspond to brisk transitions in size (*ie. great difference in size*) between consecutive chapters.

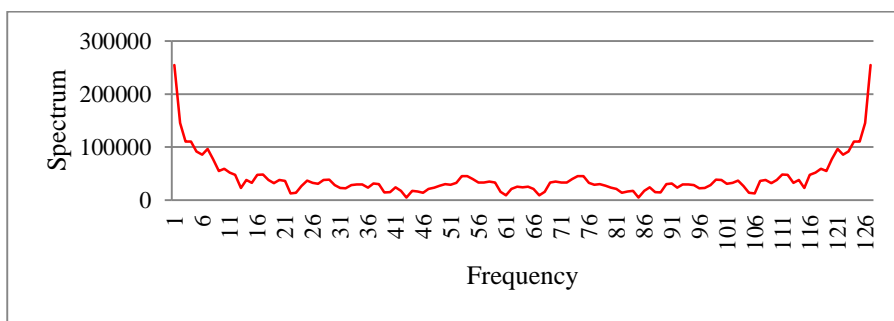


Figure 2: FFT based spectrum corresponding to the “Size vs surah number”.

Figure 2 shows that the highest energy is localized in the low frequency area. This fact implies that there are no brisk transitions, in general, between the sizes of consecutive chapters.

This analysis does not give a clear interpretation to the muqattaat letters, but it shows that these specific characters are used for long-text chapters only.

III. Second investigation: Character frequency based analysis

In this experiment, we have computed the normalized frequency of all Arabic characters in each surah (Sayoud, 2012) (see figure 3). A special interest is given for characters that are often used as discontinuous letters (*for example: م, ا, ج*).

We notice that the character Alif (ا) is the most frequent character in the Qur'an, followed by the character Lam (ل), which is the 2nd most frequent character in the Qur'an. The 3rd most frequent character is sometimes Meem (م) and sometimes Noun (ن). Furthermore, the character -trigram “Alif-Lam-Meem” (*in Arabic: الم*) represents one of the most important disjointed letters n-gram (*present in the beginning of 8 different chapters as a trigram or the first 3 letters of a tetragram*). The particularity of this trigram is that the first character

Alif (ا) has the highest frequency in the Holy Qur'an, followed by the second character Lam (ل), which has the second highest frequency and then the last character Meem (م), which has often the third (or sometimes the fourth) highest frequency in the Qur'an chapters.

One important rising question is: why were these 3 letters arranged in this way (the 3 most frequent letters put in a descending order Alif-Lam-Meem)?

The author doesn't find an explanation to this strange particularity.

However, in other discontinuous letters, we do not retrieve this regularity: for instance in the character-bigram "Ha-Meem" (in Arabic: حم), which is present in the beginning of 7 different chapters as a bigram, the previous particularity is not respected since the letter Ha (ح) is less frequent than the letter Meem (م). The same observation is made with the character-bigram "T'ha-Seen" (in Arabic: طس).

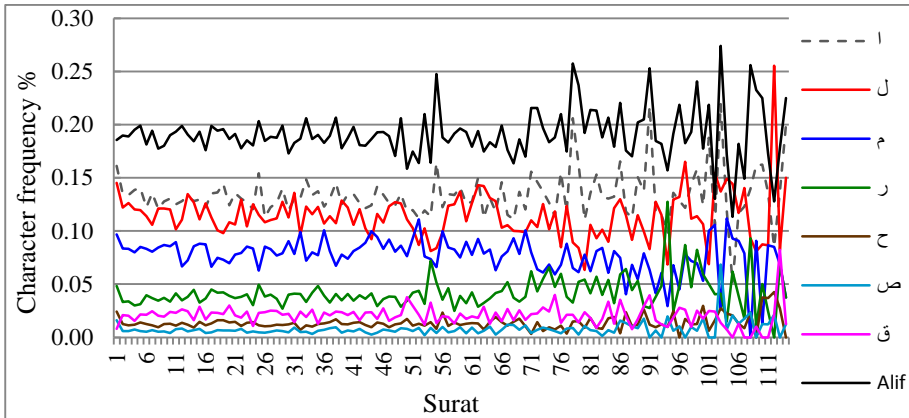


Figure 3: Character frequency of some muqattaat letters

According to these observations, it is not sure that the character frequency could bring an explanation to the disjointed letters.

IV. Third investigation: Lexical analysis

In this section, we will observe the words and verses that come just after the disjointed letters in order to see if there exists a lexical correspondence (Thurmair, 2012) between them.

The 29 surahs containing the Muqattaat letters and their first verses are listed below:

- 1- الم [١] ذَلِكَ الْكِتَابُ لَا رَيْبَ فِيهِ هُدًى لِّلْمُتَّقِينَ [البقرة:2]
- ٢- الم [١] اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ [٢] نَزَّلَ عَلَيْكَ الْكِتَابَ بِالْحَقِّ مُصَدِّقًا لِّمَا بَيْنَ يَدَيْهِ وَأَنزَلَ التَّوْرَةَ وَالْإِنْجِيلَ [آل عمران:٣]
- ٣- المص [١] كِتَابٌ أَنْزَلَ لِنَبِيِّكَ فَلَا يُكُن فِي صَدْرِكَ حَرَجٌ مِّنْهُ لَتُنذِرَ بِهِ وَذَكَرَى لِّلْمُؤْمِنِينَ [الاعراف:2]

- ٤- الرتلك آيات **الْكِتَابِ الْحَكِيمِ** [يونس :١]
- ٥- الر **كِتَابٌ** أُحْكِمَتْ آيَاتُهُ ثُمَّ فُصِّلَتْ مِنْ لَدُنْ حَكِيمٍ خَبِيرٍ [هود:١]
- ٦- الرتلك آيات **الْكِتَابِ الْمُبِينِ** [١] إِنَّا أَنْزَلْنَاهُ قُرْآنًا عَرَبِيًّا لَعَلَّكُمْ تَعْقِلُونَ [يوسف:٢]
- ٧- المرثلك آيات **الْكِتَابِ** وَالَّذِي أُنزِلَ إِلَيْكَ مِنْ رَبِّكَ الْحَقُّ وَلَكِنَّ أَكْثَرَ النَّاسِ لَا يُؤْمِنُونَ [الرعد:١]
- ٨- الر **كِتَابٌ** أَنْزَلْنَاهُ إِلَيْكَ لِتُخْرِجَ النَّاسَ مِنَ الظُّلُمَاتِ إِلَى النُّورِ بِإِذْنِ رَبِّهِمْ إِلَى صِرَاطِ الْعَزِيزِ الْحَمِيدِ [إبراهيم:١]
- ٩- الرتلك آيات **الْكِتَابِ** وَقُرْآنٍ مُبِينٍ [الحجر:١]
- ١٠- كهيعص [١] ذُكِرْ وَحْمَةٌ رَبِّكَ عِنْدَهُ زَكْرِيَّا [مريم:٢]
- ١١- طه [١] مَا أَنْزَلْنَا عَلَيْكَ الْقُرْآنَ لِتَشْقَى [طه :٢]
- ١٢- طسم [١] تِلْكَ آيَاتُ **الْكِتَابِ الْمُبِينِ** [الشعراء:٢]
- ١٣- طس تِلْكَ آيَاتُ الْقُرْآنِ وَكِتَابٍ مُبِينٍ [النمل :١]
- ١٤- طسم [١] تِلْكَ آيَاتُ **الْكِتَابِ الْمُبِينِ** [القصص:٢]
- ١٥- الم [١] أَحْسِبَ النَّاسَ أَنْ يُتْرَكُوا أَنْ يَقُولُوا آمَنَّا وَهُمْ لَا يُفْتَنُونَ [العنكبوت:٢]
- ١٦- الم [١] غُلِبَتِ الرُّومُ [الروم:٢]
- ١٧- الم [١] تِلْكَ آيَاتُ **الْكِتَابِ الْحَكِيمِ** [لقمان:٢]
- ١٨- الم [١] تَتَرَى الَّذِينَ لَا رِزْقَ فِيهِمْ مِنْ رَبِّ الْعَالَمِينَ [السجدة:٢]
- ١٩- يس [١] وَالْقُرْآنَ الْحَكِيمِ [يس:٢]
- ٢٠- ص وَالْقُرْآنِ ذِي الذِّكْرِ [ص:١]
- ٢١- حم [١] تَتَرَى الَّذِينَ لَا رِزْقَ فِيهِمْ مِنْ رَبِّ الْعَالَمِينَ [غافر:٢]
- ٢٢- حم [١] تَتَرَى الَّذِينَ لَا رِزْقَ فِيهِمْ مِنْ رَبِّ الْعَالَمِينَ [غافر:٢]
- ٢٣- حم [١] عَسَىٰ [٢] كَذَلِكَ يُوحَىٰ إِلَيْكَ وَإِلَى الَّذِينَ مِنْ قَبْلِكَ اللَّهُ الْعَزِيزُ الْحَكِيمُ [الشورى:٣]
- ٢٤- حم [١] وَالْكِتَابِ الْمُبِينِ [الزخرف:٢]
- ٢٥- حم [١] وَالْكِتَابِ الْمُبِينِ [الدخان:٢]
- ٢٦- حم [١] تَتَرَى الَّذِينَ لَا رِزْقَ فِيهِمْ مِنْ رَبِّ الْعَالَمِينَ [الجاثية :٢]
- ٢٧- حم [١] تَتَرَى الَّذِينَ لَا رِزْقَ فِيهِمْ مِنْ رَبِّ الْعَالَمِينَ [الاحقاف:٢]
- ٢٨- ق وَالْقُرْآنِ الْمَجِيدِ [ق:١]
- ٢٩- ن وَالْقَلَمِ وَمَا يَسْطُرُونَ [القلم:١]

We notice that these disjoined letters are very often followed by the word Qur'an or book (*see the words الْقُرْآنُ and الْكِتَابُ in red bold*). The term book comes just after the disjoined letters in 20 surahs among 29 surahs that contain such characters. Also, the term Qur'an comes just after the disjoined letters in 8 surahs among 29 surahs that contain such characters. Note that sometimes the words book and Qur'an are put simultaneously.

We should recall that the term **الْكِتَابُ** means "the Book" (*holy book*) and the term **الْقُرْآنُ** means "the Qur'an" in Arabic.

Why in most of the chapters concerned with the disjointed letters, the term Qur'an or holy book is quoted in its beginning? In fact 24 chapters among 29 present this particularity...

The most likely interpretation could be a strong relationship between the disjointed letters and the holy book. Furthermore, we do know that the elementary constituents of the holy book are the 28 Arabic letters.

That is why, it could exist a certain form of link between these mysterious letters and the structure of the Qur'an chapters. However the mystery still remains unsolved.

V. Fourth investigation: Logical (or Philosophical) analysis

Herein, we will look for a philosophical interpretation (Gut, 1998) of the disconnected letters: why are they utilized? What is their purpose? What could be their significance?

If we assume that they are useless, then why are they placed in the beginning of 29 important and big chapters?

From a philosophical point of view, this assumption is insignificant, because it is unconceivable to think that God could put any useless term or character in his holy book (*in vain*). So, from this strong principle, we can state that it should exist an important reason for putting such characters in the Qur'an.

The problem, then, is not on the existence of a valid reason or not, but on their real interpretation.

In an English text such as: "*P.S. instructions of use are inside the box*", the letters P.S. are not written in vain, but they are employed as abbreviations with a meaning of "Post Scriptum".

Also, in an encrypted text such as: "HLL MSTR EO IE", the encryption method decomposes every word into two sets of characters: Consonants and Vowels, so that the letters HLL should be mixed with the letters EO in order to produce a meaningful word, which is "HELLO" and by completing this rule, we should get the sentence "Hello Mister".

Nowadays, some unicode symbols that are used as emotional icons (*emoticons*), are employed in the text to express some emotions of the author, since the text does not reveal the author emotion generally. This interpretation could also be interesting if we suppose that the disjointed letters are used to attract the reader attention or to produce in him a certain ability to listen/read more carefully.

Even with this philosophical analysis, it seems not very clear what could be the real interpretation of the mystery. However, an important conclusion would be: it should exist an important reason for putting such letters in the Qur'an, even if we do not understand it clearly.

VI. Fifth investigation: Character N-gram based analysis

There are 30 N-grams (Cavnar, 1994), corresponding to 29 chapters, in the holy Qur'an (*there exists only one N-gram by chapter, except the Shura chapter, which contains 2 different N-grams at its beginning*). These N-grams are organized as follows:

- 3 monograms, which are: ص (cited 1 time), ق (cited 1 time) and ن (cited 1 time);
- 10 bigrams, which are: طه (cited 1 time), طس (cited 1 time), يس (cited 1 time) and حم (cited 7 times);
- 14 trigrams, which are: الم (cited 6 times), الر (cited 5 times), طسم (cited 2 times) and عسق (cited 1 time);
- 2 tetragrams, which are: المص (cited 1 time) and المر (cited 1 time);
- 1 pentagram, which is: كهيعص (cited 1 time).

Thinking that it could exist a relationship between the N-grams of the disconnected letters and their frequencies in the corresponding chapters, the author did some experiments to evaluate the frequency of some such N-grams (*like المص or كهيعص*). See table 1, for instance.

Table 1: Example of some N-gram statistics made on the surah of Maryam

N-gram	Number of occurrences
كهيعص	1
كيع	1
كي	1
كه	1
هيعص	1
يعص	1
عص	3
ك	137
ع	117
ص	26

However, these experiments did not lead to a clear interpretation. For instance, the frequencies (*number of occurrences*) of the tetra-gram المص and the pentagram كهيعص are, respectively, 2 and 1 in the corresponding chapters.

These frequencies are so low, with regards to the chapter's sizes, that the previous assumption (*of this paragraph*) appears to be inconsistent.

VII. Sixth investigation: Qur'an based analysis

An interesting analysis method is the exploration of the Qur'an interpretation itself (Khan, 1999). Hence, by looking at the 7th verse of the 3rd Qur'an chapter (*Surah Al-Imran*), one finds the following Arabic verse:

﴿هُوَ الَّذِي أَنْزَلَ عَلَيْكَ الْكِتَابَ مِنْهُ آيَاتٌ مُحْكَمَاتٌ هُنَّ أُمُّ الْكِتَابِ وَأُخَرُ مُتَشَابِهَاتٌ فَأَمَّا الَّذِينَ فِي قُلُوبِهِمْ زَيْغٌ فَيَتَّبِعُونَ مَا تَشَابَهَ مِنْهُ ابْتِغَاءَ الْفِتْنَةِ وَابْتِغَاءَ تَأْوِيلِهِ وَمَا يَعْلَمُ تَأْوِيلَهُ إِلَّا اللَّهُ وَالرَّاسِخُونَ فِي الْعِلْمِ يَقُولُونَ آمَنَّا بِهِ كُلٌّ مِنْ عِنْدِ رَبِّنَا وَمَا يَذَّكَّرُ إِلَّا أُولُو الْأَلْبَابِ﴾

This verse can be translated into:

“It is He (Allah) who has sent down to you (to Muhammad), the Book; in it are verses that are precise – they are the foundation of the Book – and others unspecific. As for those in whose heart is deviation (from truth), they will follow what is unspecific, seeking discord and seeking interpretation. And no one knows its interpretation except Allah (God). But those firm in knowledge say: « We believe in it. All (of it) is from our Lord.» And no one will remember (grasp the Message) except those of understanding.”* [Chapter 3, Verse 7]

**Those which are stated in such a way that they are open to more than one interpretation or whose meaning is known only to Allah, such as the opening letters (disjointed letters) of certain surahs.*

If we give more attention to the phrase: *« And no one knows its interpretation except Allah (God). »*, we will see that this verse confirms what has been stated by some religious scholars (*first interpretation of the introduction*): they stated that these letters are from the Mutashaabihat parts of the Qur'an (*text with different possible meanings*) and only God knows their true meaning.

For more concreteness, let us give a contemporary example in English: so, in an abbreviation such as “CAD”, it is difficult to understand its real meaning without more explanation from the writer. In fact, as we can see in table 1, the abbreviation CAD has a lot of meanings: at least 25 different meanings corresponding to several domains (*see table 2*).

Table 2: Example of an acronym with multiple definitions

Acronym	Definition
1. CAD	Computer-Aided Design
2. CAD	Canadian Dollar
3. CAD	Cadillac
4. CAD	Coronary Artery Disease

5.	CAD	C'est A Dire (<i>French: That Is to Say</i>)
6.	CAD	Commercial Affairs Department (<i>Singapore</i>)
7.	CAD	Ctrl Alt Del
8.	CAD	California Association of the Deaf
9.	CAD	California Academic Decathlon
10.	CAD	Center for Advanced Diagnostics
11.	CAD	Contact Allergic Dermatitis
12.	CAD	Control and Debug
13.	CAD	Cash Against Delivery
14.	CAD	Concept Advanced Development
15.	CAD	Combined Arms Division
16.	CAD	Call Denial
17.	CAD	Centre d'Archives et de Documentation (<i>French</i>)
18.	CAD	Cable Air Dryer
19.	CAD	Calling Area Database
20.	CAD	Central Accounting Division
21.	CAD	Catholic Anti-Discrimination (<i>Northern Ireland</i>)
22.	CAD	Coherent Amplitude Detector
23.	CAD	Combat Arms Division
24.	CAD	Control Authority Domain
25.	CAD	Cultural Affairs Department (<i>various locations</i>)

Moreover, if somebody wants to invent a new acronym, represented by the letters CAD, which is not present in the previous table, it will be very difficult or maybe impossible to understand its real interpretation, without any further explanation of that acronym.

This example appears to be interesting for understanding the enigma that is investigated in the present paper. That is why the author of this paper is particularly more interested in this last interpretation on the disconnected letters.

VIII. Seventh investigation: Arithmetic analysis

An amazing analysis method, based on some arithmetic properties, has recently been utilized by the author. Even though the technique was already published in 1982 by Rashad Khalifa (Khalifa, 1982), the author has thought that it could be useful to mention some of its results in this investigation. In fact, he conducted a long and thorough research work on the numerical occurrence number of some letters and words in the holy Qur'an. He discovered that most

of these numbers are multiple of 19. For instance, the number of letters contained in the Bismalah verse, which prefixes every Qur'an chapter (*except one chapter*) is equal to 19, he also discovered that the occurrence number of some words are multiple of 19 and he mentioned that the number of Qur'an chapters (*114 chapters*) is a multiple of 19 too. The different related discoveries can be found in his book (Khalifa, 1982).

Concerning the opening letters (*disjointed letters*), he reported an amazing fact about their numeral cumulative occurrences: he noticed that a common divisor of most of their cumulative combinations is the number 19.

So, in a purpose of verification, we repeated some experiments he already conducted and we got the following same results:

- Chapter 50 is entitled Q (ق), initialed with the opening letter Q (ق), and contains 57 Q's ($57=19 \times 3$) in the text. The only other chapter initialed with the disjointed letter Q (ق), which is chapter 42, also contains amazingly the same number of Q, namely: 57 Q's ($=19 \times 3$) also multiple of the number 19. The letter Q could stand for "Qur'an," and the total occurrence of Q in the two Q-initialed chapters equals the number of chapters in Qur'an, namely: $57+57=114$.
- Chapter 68 is initialed with the disjointed letter N (ن) and contains 133 N's in the ancient text; or 19×7 , which is a multiple of 19.
- Chapters 7, 19, and 38 are initialed with the opening letter "Sad" (ص), and the total frequency of occurrence of this letter in these three chapters is 152, or 19×8 (multiple of 19).
- Chapter 36 is initialed with the two disjointed letters "Y" (ي) and "S" (س) and the total frequency of these two letters in this chapter is 285, or 19×15 .
- The seven successive chapters: 40, 41, 42, ... 46 are initialed with the two opening letters "H" (ح) and "M" (م). The total frequency of these two letters in the seven chapters is 2147, or 19×113 (multiple of 19).
- Chapter 42 is also prefixed with the three disjointed letters "'A" (ع), "S" (س) and "Q" (ق) and the total occurrence of these three letters in this chapter is 209, or 19×11 .
- Chapter 19 is initialed with five disconnected letters, namely "K" (ك), "H" (ه), "Y" (ي), "'A" (ع) and "Sad" (ص) and the total frequency of occurrence of these five letters in this chapter is 798, or 19×42 (multiple of 19).

This harmony seems to be present for all the disjointed letters (*according to Khalifa research reports*). That is why it could exist an arithmetic signature inside the holy Qur'an, which may be thoroughly and perfectly arranged thanks to those mysterious opening letters.

Hence, this new analysis method leads to three main conclusions:

- First, it confirms that the Holy Qur'an could not be written by a human being (14 centuries ago), but it should result from a perfect super power, which was able to incorporate all this complex harmony on the Holy Book;
- Second, it shows that the holy Qur'an has probably remained unchanged over the 14 previous centuries, since any change (additive, subtractive or permutation) on the holy text should lead to a destructive collapse of that strong harmony;
- Maybe, these mysterious letters were employed as a signature for the authentication of the holy Qur'an.

IX. Discussion

The seven different text analyses that have been described in this paper: size based analysis, character frequency based analysis, lexical analysis, philosophical (or logical) analysis, character N-gram based analysis, Qur'an based analysis and arithmetic analysis did not give a very clear interpretation (*for the author*) regarding the secret of the Muqattaat letters. Furthermore, the author cannot claim giving any explanation to this enigma.

However, this investigation (*especially the philosophical analysis*) has led to an important conclusion, which states that it should exist an important reason for putting such letters in the Qur'an, even if we do not understand it (*the reason*) clearly.

The Qur'an explanation based analysis was interesting (*in the opinion of the author*), since the Almighty Allah put a key verse that shed light on some incomprehensible phrases. In fact the sentence “وَمَا يَعْلَمُ تَأْوِيلَهُ إِلَّا اللَّهُ” meaning “no one knows its explanation except Allah (God)”, when speaking about incomprehensible - or with several possible interpretations - sentences, shows that no one can know the exact interpretation of such Qur'an verses. Maybe, it is a secret information that could not be understood by us (*human beings*) without further decryption knowledge. The author does not affirm that the opening letters belong to this type of verses, but he does believe that if it is the case, then it would be impossible to decrypt them -A-

On the other hand, the arithmetic analysis has shown very amazing discoveries on the harmony of these letters and how they all obey to a unique number

structure (*based on number 19*). This analysis gave us an idea about the powerful skills and infinite abilities of the Qur'an author (*i.e. Allah*) to handle the Arabic letters in such a way that was impossible to realize 14 centuries ago. Finally, as mentioned in the beginning of this discussion, the philosophical (logical) analysis has led to an important conclusion, which is: "it should exist an important reason for putting such letters in the Qur'an". Maybe it is a sort of divine signature to show that the holy Qur'an has remained unchanged since its first Revelation (al Wahyu) and that this book could not be the invention of a human being.

Acknowledgements

The author thanks all the persons who helped him further understand this research field. He also welcomes all suggestions and comments of the readers. Finally, he apologizes for any unintentional mistake that could appear in the present paper.

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