

# Investigation on the Ancient Quran Folios of Birmingham

Halim Sayoud

<http://sayoud.net>

## SUMMARY

In 2015, some scientists of the University of Birmingham discovered that four folios containing some ancient Quran manuscripts dated from the period of the Prophet's companions (*i.e. few years after the death of the Prophet*). In fact a radiocarbon analysis showed that there is a 95.4% chance that the parchment on which the Qur'an fragments were written can be dated sometime between the years 568 and 645CE. This means that the animal from which the skin was taken was living sometime between these dates. Furthermore, we know that the Prophet lived between 570 and 632CE, which makes this discovery quite interesting by showing that this manuscript could be one of the oldest manuscripts in the world, or at least dating from the first centuries after the Prophet death.

In this investigation, we are not going to confirm that discovery, but only checking whether the ancient text is similar to the present Quran or not.

The first results based on character analysis, word analysis, phonetic analysis and semantic analysis have shown that the Birmingham Quran manuscript is similar to its corresponding part contained in the present Quran (*Hafs recitation*). According to this investigation, it appears that the Quran has been safely preserved during the last 14 centuries without alteration.

## 1. Introduction on the Birmingham Quran manuscript

The Birmingham Quran manuscript consists in four pages made of parchment, written in ink, and containing parts of chapters 18, 19 and 20 of the holy Quran. The manuscript forms part of the University of Birmingham's Mingana Collection of Middle Eastern manuscripts, held in the Cadbury Research Library [Birmingham, 2015].

The manuscript was bought in the 1930s by Sir Alphonse Mingana. Mingana was building a world-class manuscript collection in Birmingham. Sir Cadbury (*the Birmingham-based Quaker philanthropist and businessman*) named this collection "the Mingana Collection" after its first curator [Hopwood, 1961]. The collection came to the University of Birmingham in the late 1990s.

Concerning the palaeographic aspect of the manuscript (*Titled Hejazi text*), the handwriting geometry suggests that it may have been created in the Hejaz area in the west of the Arabian Peninsula, which includes the sacred cities of Mecca and Medina. In fact there are several old manuscripts dating from the first centuries after the Hijra, where we can clearly see the difference in the palaeographic style [Awwad, 1982]. The palaeography can give a quite good estimation on the probable date of the manuscript, but the radiocarbon dating is usually more accurate. This last technique is widely used in archaeological dating [Taylor, 1997].

Thus, the radiocarbon analysis, made at the *Radiocarbon Accelerator Unit* of Oxford University [Ramsey, 2009], yielded the following technical dating results [Birmingham, 2016]:

- OxA-29418 Parchment,
- MS1572 Cadbury Research Library,
- $d^{13}C = -21.04 \text{ } 1456 \pm 21 \text{ BP}$ .

The resulting calibrated date range is as follows:

- OxA-29418
- R\_Date (1461,21)
- 95.4% probability 568 (95.4%) 645 calAD

The technical results are under publication in Datalist, Archaeometry journal of Oxford University.

Hence, the manuscript has been radiocarbon dated by the University of Oxford (*Radiocarbon Accelerator Unit*) to the date range of 568–645 CE with a 95.4% degree of confidence. The radiocarbon result means that the animal from which the skin was taken was living sometime between these specific dates. This places the discovered parchment close to the lifetime/death of the Prophet who lived between 570 and 632 CE.

Some researchers argued that the manuscript is among the earliest written textual document of the Quran known to survive, which was written few years after the Prophet death. They also claim that it should probably be the oldest Quran manuscript in the UK.

That is, in this investigation, we try to check whether the ancient text is similar to the present Quran or not by the mean of comparative analysis.

## 2. Notes on the ancient Arabic handwriting

In this section we will present a short overview on some particularities of the ancient Arabic text.

### 2.1. Notes on the ancient Arabic characters

The ancient Arabic characters are a bit different from what we are used to write nowadays. In fact, as displayed in figure 1, there is a correspondence between the ancient characters (*in the left column*) and the new corresponding ones (*in the right column*).

ل	ا
ب	ب
ت	ت
ث	ث
ج	ج
ح	ح
خ	خ
د	د
ذ	ذ
ر	ر
ز	ز
س	س
ش	ش
ص	ص
ض	ض
ط	ط
ظ	ظ
ع	ع
غ	غ
ف	ف
ق	ق
ك	ك
ل	ل
ن	ن
م	م
ه	ه
و	و
ي	ي

Figure 1: Ancient Arabic characters (*in the left*) and their correspondance (*in the right*)

## 2.2. Note on the "Diacritics and rasm dots"

Another particularity of the ancient Arabic manuscript, is the fact that the text was not vocalised and did not contain Rasm dot marks.

For example let us look at the word *Alaiba* (عليها):

- Ancient text of the word *Alaiba*



Figure 2: Ancient text of the word *Alaiba*

- Present text of the word *Alaiba*



Figure 3: Recent text of the word *Alaiba*

## 2.3. Note on the "silent alif"

The Ancient Quran text was not vocalised and often not accompanied by elongation marks.

The natural prolongation, called: *Al-Madd Al-tabeee*, is the act of prolonging or “stretching” the sound of the three *madd* letters [Muqith, 2011].

For instance, in English, instead of saying "*ARE*", we may pronounce "*AARE*" by prolonging the "*A*" duration.

All *huroof al-madd* are silent, which means that they have no diacritic on them.

For the case of the vowel A (*fatha* in Arabic), the *fatha* must be present on the letter before a silent *alif* (*elongated A*). The elongation mark for the *fatha* is called “silent *alif*”.

We notice that in the ancient manuscripts, the silent *alif* (*elongated A*) was not very used as it is the case in the recent Arabic text.

Here is a concrete example on that fact: in the modern Arabic script the verb (**HE**) **SAID** is written *qaala* (قال), while in the ancient Arabic it was often written *qala* (قال) without silent *alif*.

So, it is not surprising to see the ancient Quran manuscript without diacritics or without elongation marks, since most of these marks were invented several centuries afterward.

Even for the ancient English script some nonexistent marks (*no more used at present*) were employed such as the upper macron diacritic (*straight bar placed above the letter*), which represented an elongation of the vowel (*long vowel*). However, the modern English does not employ them anymore. Here is an example: The ancient elongated U in English was written Ū while in the modern language it is simplified to a simple U character.

## 3. Analysis of the Birmingham Quran

In this section we will make a comparative analysis of the four ancient folios with regards to their corresponding verses in the present universal Quran (*Recitation of Hafs*).

### 3.1. Analysis of Folio 1

The following table consists of two columns; the left one contains the first Birmingham Quran folio and the right one contains the corresponding verses in the present universal Quran, as written in the Saudi holy book (Hafs rasm without vocalisation). The diacritics and modern writing rasm have been removed to put the two texts in the same writing conditions.

Table 1: Comparative analysis of Folio 1

Birmingham Quran	Present Quran (old rasm without vocalisation)
فَلَمَّا كَانَ الْمَهْدُ وَمَوْبِدُ وَقَوْدُ وَلَعْلِيَّهُ سَطَادُ وَسِيدُ كَسْمَادُ وَكَلِيَّهُ سَطَادُ دَسَهُ تَالُوْضَادُ لَوْأَطْلَسُ سَلِيَّهُ لَوْلَهُ صَنَهُ قَرْدَادُ لَعْلِيَّهُ صَنَهُ دَسَهُ وَكَلِيَّهُ سَلِيَّهُ لَتَسَا لَوْأَسَدَهُ فَلَقْلَهُ صَنَهُ كَهْ لَسَهُ فَلَوْالْبَشَا بُوْمَا وَسَرْبُومَهُ فَلَوْأَدَنَهُ أَسَلَهُ لَهَا لَسَهُ فَأَلْقَنَوْأَدَنَهُ كَهْ بُوْدَهُ فَكَهْ مَهْدَهُ أَلَمَ الْمَهْدُ لَهُ فَلَسَهُ أَبَهَا دَهْ طَهَّا فَلَنَهُ كَهْ بُوْدَهُ صَنَهُ وَلَسَطَهُ وَلَسَدَهُ كَهْ أَدَنَهُ أَنَهَا رَنَكَهُ وَلَعَلِيَّهُ لَوْحَمُوْهُ وَسَكَوْهُ كَهْ فَمَنَهُ وَلَعَلِيَّهُ أَدَنَهُ أَكَهُ وَكَلِيَّهُ كَهْ بَاهَهُ لَعْلِمُوا أَرْوَهُ اللَّهُ حُوْ وَأَلْسَادَهُ لَادَهُ فَهَا أَكَلْنَهُ سَوْلَهُ سَهَهُ أَمَدَهُ فَعَالَلَهُ أَبَنَوْأَكَلِيَّهُ لَسَنَهُ دَلَهُ أَسَلَهُ وَفَالَّكَهُ سَلَوْأَلَهُ أَدَهُ لَسَحَرَهُ هُ بَعْلُوْرَهُ سَهَهُ سَكَهُ كَلِيَّهُ لَهُ وَلَعْوَلَوْرَهُ سَلَهُ وَلَهُهُهُ وَفَادَهُ أَسَلَهُ بَعْلَهُ لَهُ ماَلَهُهُهُ لَلَّهُ أَنَهُ عَلَهُ أَلَدَهُ أَدَهُ طَهَّهُ هُ فَنَهُهُ صَنَهُ أَدَنَهُ وَلَهُهُهُ	الله من يهد الله فهو المهتد ومن يضل فلن تخد له ولها مرشدنا (17) وتحسبهم ايقاظا وهم رقود ونقلبهم ذات اليمين وذات ا لشمال وكلبهم بسط ذراعيه بالوصيد لو اطلعت عليهم لوليت منهم فرارا و ملشت منهم رعا (18) وكذلك يغثتهم ليتسا لوا بينهم قال قائل منهم كم ليشم قالوا ليشا يوما او بعض يوم قالوا رحكم اعلم بما لشتم فابعثوا احدكم بورقكم هذه الي المدينة فلينظر ايها ازكي طعاما فيلاتكم بزرق منه وليتألف ولا يشعرن بكم احدا (19) اخمن ان يظهرها عليكم يرجوكم او يبعديكم في متنه ولن تفلحو ا اذا ابدا (20) وكذلك اعثروا عليهم لعلموا ان وعد الله حق وان الساعة لا رب فيها اذ يتزرون بينهم امرهم فتقالوا ابتووا عليهم ببنينا رحكم اعلم بهم قال الذين غلبوا على امرهم لستخذن عليهم مسجدا (21) سيقولون ثلاثة رابعهم كلبهم ويقولون خمسة سادسهم كلبهم رجا بالغيب ويقولون سبعة ثامنهم كلبهم قل ربى اعلم بعدكم ما يعلمه الاقل فلا تمار فيهم الا مراء ظهرا و لا تستفت فيهم منهم احدا (22) ولا تقولن

By comparing the two sets of verses in folio 1, we have obtained the following statistics.

## Statistics of folio 1:

- Number of lines: 24
  - Number of verses: 6
  - Number of words: 158
  - Number of Characters: 678
  - Difference in words: 0%
  - Difference in characters without considering the “silent *alif*”: 0%

- Difference in characters by considering the “silent *alif*”: 1.92%
- Semantic Difference: 0%
- Phonetic Difference: 0%

### 3.2. Analysis of Folio 2

The following table consists of two columns; the left one contains the second Birmingham Quran folio and the right one contains the corresponding verses in the present universal Quran, as written in the Saudi holy book (Hafs rasm without vocalisation). The diacritics and modern writing rasm have been removed to put the two texts in the same writing conditions.

Table 2: Comparative analysis of Folio 2

Birmingham Quran	Present Quran (old rasm without vocalisation)
اللَّهُمَّ إِنْ فَعَلَ لَكَ مَا شَاءَ فَلَا تَرْسَأْنَا	لشاي ابي فاعل ذلك غدا (23) الا ان يشا الله
وَإِذْكُرْ رِبَّكَ إِذَا نَسِيْتَ وَقُلْ عَسَىٰ أَنْ يَعْلَمَ	واذكر ربك اذا نسيت وقل عسى ان
يَهْدِينَ رَبِّي لِاقْرَبِ مِنْ هَذَا رَشْدًا (24) وَلَبَّيْتُ	يهدين ربلي لاقرب من هذا رشدا (24) ولبني
فِي كَهْفِهِ ثَلَثًا مَائَةَ سِنِينَ وَازْدَادَ	في كهفهم ثلث مائة سنين وازدادا
سَعَا (25) قَلْ اللَّهُ أَعْلَمُ مَا لَبَّيْتُ لَهُ غَيْرَ	تسعا (25) قل الله اعلم بما لبني له غير
السَّمَوَاتِ وَالْأَرْضِ إِبْصَرْ بِهِ وَاسْعَ مَا	السموات والارض ابصر به واسع ما
لَهُمْ وَنَهْمَهُمْ وَلَمْ يَلْسُطْ فِي حَمْمَةِ	لهم من دونه من ولی ولا يشرك في حكمه
أَحَدٍ (26) وَاتَّلَّ مَا أَوْحَى إِلَيْكَ مِنْ كِتَابٍ	احدا (26) واتل ما اوحى اليك من كتاب
وَلَكَ لَامِدٌ لِكَلْمَهِ وَلَكَ حَمْدٌ وَنَهْمٌ	ربك لا مبدل لكلمته ولن تجد من دونه
مُلْكُكَمْ وَأَصْبَحَ لَعْنَكَ مِنْ الْكَرْمَكَمْ	ملتحدا (27) واصير نفسك مع الذين يدعون
لَدِيلَهُ سَالِكَوْهُ وَالسَّسَّهُ لَوْلَكَ زَيْنَةَ الْحَيْوَ	ن رحيم بالغدوة والعشي يريدون وجهه
وَلَلَّادُسَ سَعَكَ سَلَهُ لَوْلَكَ ذَرَّهُ الْحَمْوَ	ولا تعد عيناك عنهم تزيد زينة الحيو
وَالْكَمَهُ سَعَهُ وَلَا نَطَعْمَ أَسْعَلَهُ فَلِيَهُ سَرَدُهُ	ة الدنيا ولا تطلع من اغفلنا قلبه عن ذكر
نَا وَالْمَهْمَهُ هُوَهُ وَكَمَاهُ وَفَطَاهُ وَفَلَ	نا واتبع هوبه وكان امره فرطا (28) وقل
الْجَوْمَ دَلَكَهُ قَمَرَ سَافَلَوْمَ وَمَسَافَلَهُ	الحق من ربكم فمن شا فليؤمن ومن شا فليكفر
أَنَّمَانَكَنَّنَا لَلَّاتِلَمَنَّنَادَهُمْ أَنْجَاهُهُمْ	انا اعتدنا للظالمين نارا احاط بجم
سَوَكَ قَهَاهُ وَسَنَقَهُ شَنَوَهُ بَهَاهُ كَالْمَهُ	سرادتها وان يستغثوا يغاثوا بما كاملهل
سَوَهُ لَوْحَاهُ لَلَّسَهُ لَسَبَهُ وَسَبَاتُهُ	يشوى الوجوه بقى الشراب وسات مر
نَفَعَهُ أَلَكَرَهُ أَمْنَوَهُ وَعَلَوَهُ	تفقا (29) ان الذين امنوا وعملوا الصالحة انا
لَا لَسَهُ دَهُمَهُ لَسَرَهُ لَهُلَهُ لَا لَهُ	لا نضيع اجر من احسن عملا (30) اولئك لهم
هُنَّهُ سَكَرَهُ لَهُهُ وَلَسَوَهُ شَهُهُ	جنت عدن تجري من تحthem الآخر يخلون فيها
وَلَسَبَهُ وَهَكَهُهُ وَلَسَوَهُ شَهُهُ	من اساور من ذهب ويلبسون ثيابا خضراء من سنديس
وَلَسَبَهُ وَهَكَهُهُ وَلَسَوَهُ شَهُهُ	واسترىق متkickين فيها

By comparing the two sets of verses in folio 2, we have obtained the following statistics.

#### Statistics of folio 2:

- Number of lines: 23
- Number of verses: 9
- Number of words: 164
- Number of Characters: 632
- Difference in words: 0%

- Difference in characters without considering the “silent alif”: 0%
- Difference in characters by considering the “silent alif”: 1.26%
- Semantic Difference: 0%
- Phonetic Difference: 0%

### 3.3. Analysis of Folio 3

The following table consists of two columns; the left one contains the third Birmingham Quran folio and the right one contains the corresponding verses in the present universal Quran, as written in the Saudi holy book (Hafs rasm without vocalisation). The diacritics and modern writing rasm have been removed to put the two texts in the same writing conditions.

Table 3: Comparative analysis of Folio 3

Birmingham Quran	Present Quran (old rasm without vocalisation)
	دعوا للرحمٍ ولدا (91) وما ينبغي للرحمٍ ان يتخذ ولدا (92) ان كل من في السموات وا لارض الا ابي الرحمن عبدا (93) لقد احصهم وعدهم عدما (94) وكلهم اتباه يوم القيمة فردا (95) ان الذين امنوا وعملوا الصالحة سيجعل لهم الرحمن ودا (96) فاما يسرنه بسنانك تبشر به المتقين وتذر به قوماً لدا (97) و كم اهلكنا قبليهم من قرن هل تحس منهم من احد او تسمع لهم رثى (98) ***** ***** سورة طه
	بسم الله الرحمن الرحيم طه (1) ما انزلنا عليك القرآن لتشققى (2) الا تذكرة ملن يخشى (3) تزيلا من خلق الارض والسموات العلي (4) الرحمن على العرش استوى (5) له ما في السموات وما في الارض وما بينهما وما تحت الشري (6) وان تجهر بالقول فانه يعلم السر واخفي (7) الله لا اله الا هو له الاماء اذ لحسنى (8) وهل اتكل حديث موسى (9) اذ رءا نارا فقال لاهله امكنا اي انت نا را العلي اتيكم منها بقبس او احد على ا نوار هدى (10) فلما ائما نودي موسى (11) اني انا زيك فالخلع نعليك انك با لحاد المقدس طوى (12) وانا اخترتك

By comparing the two sets of verses in folio 3, we have obtained the following statistics.

#### Statistics of folio 3:

- Number of lines: 23
- Number of verses: 20
- Number of words: 156
- Number of Characters: 600

- Difference in words: 0%
- Difference in characters without considering the “silent alif”: 0%
- Difference in characters by considering the “silent alif”: 0.33%
- Semantic Difference: 0%
- Phonetic Difference: 0%

#### 4.4. Analysis of Folio 4

The following table consists of two columns; the left one contains the fourth Birmingham Quran folio and the right one contains the corresponding verses in the present universal Quran, as written in the Saudi holy book (Hafs rasm without vocalisation). The diacritics and modern writing rasm have been removed to put the two texts in the same writing conditions.

Table 4: Comparative analysis of Folio 4

Birmingham Quran	Present Quran (old rasm without vocalisation)
فَاسْمَعْ لِمَا يُوحَى (13) انْتِي اَنَا اللَّهُ لَا إِلَهَ اَلا	فَاسْمَعْ لِمَا يُوحَى (13) انْتِي اَنَا اللَّهُ لَا إِلَهَ اَلا
اَنَا فَاعْبُدْنِي وَقَمِ الصلوَةَ لِكَمْ اَرَا	اَنَا فَاعْبُدْنِي وَقَمِ الصلوَةَ لِذَكْرِي (14) اَنْ
كَمْ اَحْمَدْنَا لِكَمْ كَمْ يَعْسُمْ	لِسَاعَةَ اِتِيَةً اَكَادْ اَخْفِيَهَا لِتَجْزِيَ كُلَّ نَفْسٍ بِمَا
كَمْ لَمْ يَعْلَمْنَا لِكَمْ لَمْ يَوْمَنْ بِمَا وَاسْ	تَسْعِي (15) فَلَا يَصْدَنُكَ عَنْهَا مِنْ لَا يُؤْمِنُ بِمَا وَاتَّبَعَ
كَمْ قَدْ مَا تَلَكَ سَمْكَ يَوْمَ سَمْ	هُوَ فَرْتَدِي (16) وَمَا تَلَكَ بِيَمِينِكَ مُوسَى (17) قَالَ
كَمْ كَمْ اَسْلَمْنَا وَاهْسَلْنَا لِكَمْ	هِيَ عَصَمِي اَتُوكَا عَلَيْهَا وَاهْشِ بِمَا عَلَى
كَمْ لَمْ يَعْلَمْنَا دَرْدَرَ لِكَمْ قَدْ اَفْهَمْنَا	غَنْمِي وَلِي فِيهَا مَارِبُ اَخْرَى (18) قَالَ الْقَهَا يَوْ
كَمْ لَعْنَمَا قَادَرَهُ حَمْسَهُ سَعْيَ وَلَدَدَ	سِي (19) فَالْقَهَا فَادَهُ هِيَ حَيَةٌ تَسْعِي (20) قَالَ خَذْ
وَلَدَدَ لَعْنَهُ سَمْكَهُ سَوْنَهُ اَلَّا اَوْلَى وَ	هَا وَلَا تَخْفَ سَمِيَّهَا سِرْقَهَا اَلَّا اَوْلَى (21) وَ
عَمَهُ لَعْنَهُ حَمْكَهُ حَمْكَهُ حَمْكَهُ حَمْكَهُ	اَضْمَمْ يَدُكَ الْجَنَاحَ تَخْرُجْ بِيَضَاءِ مِنْ
سَوْنَهُ لَعْنَهُ اَلَّا حَمْكَهُ لَعْنَهُ لَعْنَهُ اَلَّا حَمْكَهُ	غَيْرِ سَوْءَ اِيَّهِ اَخْرَى (22) لَنِرِيكَ مِنْ اِبْنِيَ الْكَبْرِيِّ (23)
كَمْ اَلَّا قَوْرَاهَ طَهَهُ قَدْ دَرَدَ	اَذْهَبْ اِلَى فَرْعَوْنَ اِنْهُ طَغَى (24) قَالَ رَبُّ ا
سَهْلَهُ لَعْنَهُ وَسَهْلَهُ وَسَهْلَهُ اَمْنَهُ وَأَخْلَلَ	شَرْ لِي صَدْرِي (25) وَسِرْلَي اِمْرِي (26) وَاحْلَلَ
سَهْلَهُ لَعْنَهُ لَعْنَهُ لَعْنَهُ لَعْنَهُ وَاحْلَلَ	عَقْدَةَ مِنْ لِسَانِي (27) يَفْقِهُوا قَوْلِي (28) وَاجْعَلْ
لَهُ وَدَدَهُ اَمْلَهُ اَمْلَهُ اَمْلَهُ اَمْلَهُ اَمْلَهُ	لِي وَزِيرًا مِنْ اَهْلِي (29) هَرُونَ اَخْرِي (30) اَشَدَّ
بَهُ اَدَدَهُ وَمَادَدَهُ اَدَدَهُ اَدَدَهُ اَدَدَهُ	بَهُ اَزْرِي (31) وَاشْرِكَهُ فِي اِمْرِي (32) كَمْ نِسْبَحُكَ
كَمْ اَمَدَهُ وَدَدَهُ اَمَدَهُ اَمَدَهُ اَمَدَهُ	كَثِيرًا (33) وَنَذَرَكَ كَثِيرًا (34) اَنْكَ كَتَبَ بِنَا
سَهْلَهُ لَعْنَهُ قَدْ حَمَاهَهُ سَهْلَهُ لَعْنَهُ	بَصِيرًا (35) قَالَ قَدْ اُوتَيْتَ سُولِكَ مُوسَى (36) وَلَقَدْ
سَهْلَهُ لَعْنَهُ مَدَهُ اَمَدَهُ اَمَدَهُ اَمَدَهُ	مَنَّا عَلَيْكَ مَرَّةً اَخْرَى (37) اَذْ اَوْحَيْنَا اِلَى
اَمَدَهُ مَدَهُ اَمَدَهُ اَمَدَهُ اَمَدَهُ	امَكَ مَا يُوحَى (38) اَنْ اَقْنَفَهُ فِي التَّابِوتِ فَا
وَيْهُ وَيْهُ وَيْهُ وَيْهُ وَيْهُ وَيْهُ وَيْهُ وَيْهُ	قَذْفِيَ فِي الْيَمِ فَلَيْلَقَهُ الْيَمِ بِالسَّاحِلِ يَا خَذْ
وَلَمْ وَنَدَهُ وَلَمْ وَنَدَهُ وَلَمْ وَنَدَهُ وَلَمْ	هَ عَدُوَ لِي وَعَدُوَ لَهُ وَالْقَيْتَ عَلَيْكَ
وَلَمْ وَنَدَهُ وَلَمْ وَنَدَهُ وَلَمْ وَنَدَهُ وَلَمْ	مَحْبَبِي مَنِي وَلَنَصْنَعَ عَلَى عَنِي (39) اَذْ تَمَشِي

By comparing the two sets of verses in folio 4, we have obtained the following statistics.

#### Statistics of folio 4:

- Number of lines: 23

- Number of verses: 27
- Number of words: 169
- Number of Characters: 633
- Difference in words: 0%
- Difference in characters without considering the “silent *alif*”: 0%
- Difference in characters by considering the “silent *alif*”: 1.4%
- Semantic Difference: 0%
- Phonetic Difference: 0%

### 3.5. Statistical analysis of all the folios

Now, by taking the whole Birmingham Quran and comparing this last one with the present universal Quran (*Hafs recitation*), we obtain the following statistical results.

#### Statistics of all the folios:

- Number of lines: 93
- Number of verses: 62
- Number of words: 647
- Number of Characters: 2543
- Difference in words: 0% (i.e. similarity of 100%).
- Difference in characters without considering the “silent *alif*”: 0% (i.e. similarity of 100%).
- Difference in characters by considering the “silent *alif*”: 1.26% (i.e. similarity of about ~99%).
- Semantic Difference: 0% (i.e. similarity of 100%).
- Phonetic Difference: 0% (i.e. similarity of 100%).

Hence, the comparative analysis of all the folios can be summarised by the following table.

Table 5: Similarity between the ancient folios and the current holy Quran

Comparison between the ancient folios and the current holy Quran	Similarity in %
Similarity in terms of words	100 %
Similarity in terms of characters without considering the “silent <i>alif</i> ”	100 %
Similarity in terms of characters by considering the “silent <i>alif</i> ”	~99%
Similarity in terms of semantics	100 %
Similarity in terms of phonetic pronunciation	100 %

## 4. Conclusion

In this investigation, we conducted a comparative analysis between the Birmingham Quran folios and the corresponding verses of the present version of the Quran (*Hafs recitation*), based on characters, words, phonetics and semantics.

We also recall that the Birmingham Quran parchment, has been carbon-dated to the first century of Hijra (i.e. probably few years after the Prophet death).

According to this investigation, which made a statistical comparison between this ancient Quran folios and the present universal one (*Hafs recitation preserved by the Saudi authorities*), it appears two important

conclusions:

- The two analysed text documents are similar in terms of characters (*similarity of about 99~100%*) and similar in terms of words (*similarity of 100%*);
- The two analysed text documents are similar in terms of phonetics (*similarity of 100%*) and similar in terms of semantics (*similarity of 100%*);

Consequently, and since the ancient Birmingham scripture was found to be similar to the present holy scripture, it appears that the Quran has been safely preserved during the last 14 centuries without alteration. Hence, if the radiocarbon dating is quite accurate, we can say that this new discovery confirms that the present holy book represents an authentic copy of the first original Quran that was recited by the Prophet fourteen centuries ago.

Furthermore, in the verse (15:9): «إِنَّا نَحْنُ نَزَّلْنَا الْكِتَابَ وَإِنَّا لَهُ لَمَوْفِدُونَ» , it is clearly stated that the Holy Scripture is/will be protected and preserved by His Creator; which is in total concordance with this new scientific result.

## References

- K. Awwad, 1982. Aqdam al-makhtutat al-arabiyya fi maktabat al-alam (The Oldest Arabic Manuscripts in the World's Libraries), Baghdad, 1982.
- D. Hopwood, 1961. 'The Islamic Manuscripts in the Mingana collection', Journal of the Royal Asiatic Society XCIII/3-4.
- M. A. Muqith, 2011. Al-Madd Al-Tabee'ee. Heesbees : All for Quran and Tajweed. January 2011.  
<https://heesbees.wordpress.com/tag/short-and-long-arabic-vowels/>
- B. C. Ramsey, , T. F. G. Higham, , F. Brock, , D. Baker, , & P. Ditchfield, (2009). Radiocarbon dates from the oxford ams system: archaeometry datelist 33. Archaeometry, 51(2), 323-349. Archaeometry, 51(2), 323-349.
- R.E Taylor and M.J Aitken. (eds) 1997. Chronometric dating in Archaeology. Advances in Archaeological and Museum Science, volume 2. Oxford University, England. Buy this Book at Amazon.com.
- U. of Birmingham, 2016. About the Birmingham Qur'an, last access in july 2016. FAQs, [www.birmingham.ac.uk/facilities/cadbury/quran-manuscript/faqs.aspx](http://www.birmingham.ac.uk/facilities/cadbury/quran-manuscript/faqs.aspx)
- U. of Birmingham, 2015. Birmingham Qur'an manuscript dated among the oldest in the world. July 2015. <http://www.birmingham.ac.uk/news/latest/2015/07/quran-manuscript-22-07-15.aspx>