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THE QUR'AN: A HOLY
MESSAGE DELIVERED
CALLIGRAPHIC DEVELOPMENTS
FROM THE 7TH UNTIL
THE 13TH CENTURY

MAY KADDAH

2000

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The American University in Cairo
School of Humanities and Social Sciences
Department of Arabic Studies

**The Qur'an: A Holy Message Delivered
Calligraphic Developments from the 7th until the 13th Century**

A Thesis Submitted to:

The Department of Arabic Studies

In Partial Fulfillment of the Requirements of

The Degree of Master of Arts in Islamic Art and Architecture

By

May Kaddah

Under the supervision of Dr. Bernard O'Kane

November/1999

2000/24

THE AMERICAN UNIVERSITY IN CAIRO

THE QUR'AN: A HOLY MESSAGE DELIVERED
CALLIGRAPHIC DEVELOPMENTS FROM THE 8TH THE 13TH CENTURY

A THESIS SUBMITTED BY MAY MOATAZ KADDAH

TO THE DEPARTMENT OF ARABIC STUDIES

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

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I would like to dedicate this thesis to my husband Sherif who tolerated inedible meals when deadlines were imminent, to my mother and father whose solid support, enthusiasm, encouragement and unending generosity, kindness and blessings made this thesis possible, to my brother Tamim and last but not least to my mother in law, Tant Mirvat, whose blessings always paved my way.

Wa al-hamdulilah rab 'l-alamīn wassalat wassalam 'ala sayidina wa mawlana Muḥammad wa 'ala ahliḥ wa ṣaḥibihī ajjma'in.

Abstract

The American University in Cairo
The Qur'an: A Holy Message Delivered
Calligraphic Developments from the 7th until the 13th Century
By: May Kaddah
Under the supervision of Dr. Bernard O'Kane

The objective of this thesis is to examine the changes that took place in the scripts of the Qur'an, and the effects of reading rules on its development. Revealed in an oral form rather than in a scriptural one, the Qur'an was memorized by heart and not through a written text. It was revealed in Arabia, where the oral tradition was stronger and more advanced than the written one. At the time of the revelation the Arabic script, compared to the sophistication of the Arabic language, was highly illegible: unclear as well as inexpressive. The Qur'an on the other hand was known for its eloquence (*balagha*) and had to be recited correctly to get its correct meaning. Hence, once the Qur'an was collected in written form at the time of 'Uthman many developments took place in the Arabic script.

The research methodology used in this thesis was based on examining different fragments of Qur'anic manuscripts. Religious and linguistic factors were examined to trace the changes that took place in Qur'anic writing. Linguistic factors include the development of orthographic marks and the different signs with which vocalization was indicated in the Qur'an. The reasons behind calligraphic developments are also discussed. They include the change of scripts from Hijazi to Kufic, the development of cursive scripts and the reforms of Ibn Muqla.

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Chapter One

Language and Background

This chapter aims to provide a literary and religious background surrounding the developments of the different scripts that were used to write the Qur'an from the time of the *ṣaḥāba*. Since the thesis aims to examine the changes that took place in Arabic scripts and the effects of reading rules on it, it has been necessary to examine linguistic developments, especially the reactions of the newly conquered territories such as Iraq and Iran. Furthermore, it has been necessary to understand the motivations behind many of the reforms or movements that took place in the first four centuries of Islam concerning Arabic calligraphy. To accomplish this I have examined religious and literary incentives.

While tracing calligraphic developments in Qur'anic manuscripts it has been vital to develop an insight within the Muslim frame of mind which led to so many initiatives and reforms in Qur'anic scripts. It is even more important to know certain characteristics of the language and literary styles of the Qur'an in order to understand the incentives for or against so many changes. Primary sources have many different and potentially confusing accounts of several hadiths and incidents. I have relied on hadiths with the most solid *isnads* and have drawn conclusions only from them. For example, in accounts of the writing of the Qur'an during the time of 'Uthman, the names of many companions and scribes appear interchangeably, all supposedly doing

the same job. It became clear that the heart of the story was essentially similar, as they differed only in minor detail.

The background for the calligraphic development of the Qur'an starts in the Hijaz. It is from there that the first generations of Moslems carried it to Baghdad, Kufa, and Basra, which became major centers for its study.

Background on Arabia

The period before Islam in Arabia is known as the *jahilliya*. The culture, even after the coming of Islam, was a nomadic one based on clan solidarity. A vast desert divides it into North and South. In the West, Arabia is bordered by the Red Sea and in the East by the Arabian Gulf. To the North there were border contacts with Byzantium. In the South it has borders with Yemen. With its prime location, it is not surprising that caravan trade was the major activity in the economy especially in the south. It is also not surprising that culture and tradition were also interchanged.

Arabic, like Hebrew and Aramaic, is a Semetic language. In Arabia there were many dialects of spoken Arabic; the most prominent being that of the Quraishis. The Bedouins of the North were especially known for their *balagha* or eloquence. They had a strong oral tradition in reciting poetry and took pride in its composition with sophisticated rhymes.

Writing was also developed. Ibn Nadim refers to many Qur'anic scripts that must have existed in Arabia before Islam. He names the Madani and the Makki as scripts of the *maṣāḥif*. These scripts probably existed in Arabia long before the

revelation, then were used for writing the Qur'an thereafter. It was thought earlier that the *naskh* script of the Arabic writing that exists now and most of the other kinds of scripts were developed out of Kufic. However, this is incorrect. The Makki, Madani and Hijazi scripts seem more similar to *naskh*. The view is confirmed by the number of papyri found dating to the early centuries of Islam¹. Therefore, to suppose that reading and writing originated after the revelation is not at all correct². They were simply developed to suit the requirements of the Qur'an and its reading rules as well as of governmental needs.

It should be noted that in Arabia, at the time, a strong oral tradition existed in which literary forms were transmitted by word of mouth and memorized by heart. The Qur'an, when it was revealed was passed on in the same manner.

The Language of the Qur'an

When the Qur'an was revealed it offered a challenge to all literary standards in Arabia. It is neither prose nor poetry but unique in its own composition. Its language and method of recitation meant to offer divine proof of Islam to the Quraishis and to any non-believer. To later Muslim generations it holds the doctrines and wonders of their faith.

Reciting is a direct order in the Qur'an to any Muslim. The first *aya* that was revealed to the prophet was a direct order to recite³, and throughout the text *ayas*

¹De Goeje, "Arabia," 1: 381.

²Blachere, *Introduction*, 102.

³96:1.

stressed in direct orders the importance of reciteing⁴. Also significantly is the direct oath made by God in *surat al-Qalam* giving writing and writers a special honor⁵. It is not surprising therefore, that reciteing and writing were of equal importance to the Muslim community.

Collecting the Qur'an

The narrative of the first collection and writing of the Qur'an has been related in many different sources such as the *Kitab al-masahif* by Ibn Abi Dawud al-Sijistani and *al-Fihrist* by Ibn al-Nadim⁶. Although there are some minor differences, the main events of the story are the same⁷. The Qur'an was written at the time of the prophet on stone, parchment and palm stalks. Not all of the text was assembled; however it was memorized by heart. After the death of the Prohphet, the *Ridda* wars took place and many of the *huffaz* (those who knew the Qur'an by heart) died in the battle of the *Yamama*. 'Umar then urged Abu Bakr, who was caliph at the time, to collect the Qur'an before it was lost. This was done and the *suhuf* were kept with Abu

"اقرأ باسم ربك الذي خلق. خلق الإنسان من علق. اقرأ و ربك الأكرم. الذي علم بالقلم."
⁴73:20; 17:106.

"فاقرءوا ما تيسر منه."
 "و قرآنا فرقناه لتقرأه على الناس".

⁵2:282; 68:1.

"نون والقلم و ما يسطرون".

⁶Ibn Abi Dawud, *Masahif*, 4-25; Ibn Nadim, *Fihrist*, 38.

⁷The differences may occur in mentioning some names or certain *ayas* that the others does not mention. For example, Ibn Nadim does not mention the name of Zaid ibn Thabit who was the scribe of the prophet while Ibn Abi Dawud mentions him along with 'Abdallah Ibn Mas'ud.

Bakr, then with 'Umar when he became caliph and after the death of 'Umar with his daughter Hafsa.

Collecting the Qur'an at the Time of 'Uthman

It is said that Huzaifa b. al-Yaman who had just come from Iraq went to the caliph 'Uthman and urged him to codify the Qur'an before the *umma* differed in it the way Jews and Christians differed with their holy books⁸. He had heard two different versions of one *aya* in *surat al- Baqara*⁹. One read:

"واقيموا الحج و العمرة لله"

And the other one read:

"واقيموا الحج و العمرة للبيت"

'Uthman then according to the advice of his companions sent for the *suhuf* at Hafsa's and had them copied in one *musḥaf*. He then ordered that it be written "*bilisan Quraish*" or in the dialect of the Quraishis¹⁰. The end result was that 'Uthman canonized the Madinan text tradition. He then sent a copy to Mecca, Yemen, al-Sham, Bahrain, Basra, Kufa and Madina and ordered that all other copies be burnt.¹¹

However, this does not mean that in practice it was the only one followed in terms of recitation methods. Other reading traditions flourished in Kufa, Basra and Syria and they were all based on different recitations of companions of the prophet.

⁸Ibn Nadim, *Fihrist*, 38; Ibn Abi Dawud, *Masahif*, 18-19.

⁹2:196.

¹⁰Ibn Abi Dawud, *Masahif*, 34.

¹¹ Ibid.

For example 'Abdallah Ibn Mas'ud was one of the secretaries of the prophet and had learned seventy *suras* directly from him. He was appointed as one of the first teachers of Qur'an recitation by the prophet. Later, he was appointed by 'Umar in an administrative post in Kufa where he became a leading authority on Qur'an recitation and hadiths. When the 'Uthman copy was made official it is said that he refused to destroy his copy and his way of reading was practised long after his death, causing a schism in the community there. In Syria, Ubbay Ibn Ka'b, who was another secretary of the prophet and who was often asked to recite certain *ayas* concerning legal matters, followed another way of reading. Unlike Ibn Mas'ud he destroyed his copy when the 'Uthmanic one was made official. In Basra Abu Musa al-Ash'ari, who was a Yemenite known for his eloquent reading of the Qur'an, followed a third way. When the 'Uthmanic copy was made official he did not destroy his but added to it what was missing¹².

'Uthman was not unaware of these different readings. Ibn Abi Dawud mentions that later he allowed the Qur'an to be read in many ways¹³.

Sab'at Aḥruf

The different ways in which Ibn Mas'ud, Abu Musa, and Ubbay read were not random or developed separately by each individual. The prophet said:

"أنزل القرآن على سبعة احرف"¹⁴

¹²Welch, "al-Kur'an," 406.

¹³Ibn Abi Dawud, *Masahif*, 36.

"إنما أنزلتكم لأني خفت عليكم الاختلاف فاقرأوا على أي حرف شئتم."

The word *ḥarf* literally means letter and many of *ḥuruf* al-Qur'an differed in the different *qirā'āt*. For example: the word *sirat* in the *fatīḥa*¹⁵ is read with a *sīn* and written with a *sīm* (سراط) in the *qirā'a* of Ibn Kathir. In the rest of the *qirā'āt* it is read and written with a *ṣad* (صراط)¹⁶.

According to a hadith the purpose of the different *qirā'āt* is to facilitate the way of reading for people with a different linguistic background than the Quraishis¹⁷. The meaning of the *āya* doesn't differ because of the differences of the lettering. Ibn al-Zahri in his definition of the *sab'at al-ḥuruf* says that they could be considered one because there is no conflict over right or wrong or what is permissible and what is not.¹⁸

In another definition Blachère states about the word *sab'*: "Ce mot est enigmatic...Il paraît signifier ici 'système de lecture'. Il est souvent employé à côté du *qura'a* mais avec une nuance différente, celle de variante de lecture affectant le vocalisme. Quand au nombre sept outre la valeur magique qu'il a chez les Semites et

¹⁴Ibn Kathir, *Fada'il*, 94. He lists all possible sources for this hadith.

¹⁵1:4.

¹⁶Ibn Khaluwaih, *I 'rab' al-qira'at*, 49.

¹⁷Ibn Kathir, *Fada'il*, 100.

"أتاني آت من ربي فقال إن الله يأمرك أن تقرأ القرآن على حرف واحد، فقلت ربي خفف عن أمي. ثم أتاني الثانية فقال إن الله يأمرك أن تقرأ على حرفين فقلت: ربي خفف عن أمي. ثم أتاني الثالثة فقال مثل ذلك، وقلت مثل ذلك، ثم أتاني الرابعة فقال: إن الله يأمرك أن تقرأ القرآن على سبعة أحرف، ولك بكل ردة مسألة"

There are many versions of this hadith but all have the same conclusion. Ibn Kathir lists all the different versions.

¹⁸Ibid., 95.

"بلغني إن تلك السبعة احرف إنما هي في الأمر الذي يكون واحدا، لا يختلف في حلال أو حرام."

qui en explique particulièrement l'emploi ici, il n'a, dans cette expression, qu'un sens vague, celui du français 'plusieurs'.¹⁹ His generally defines the *sab'at aḥruf* as a vague 'several' or 'many'. In a general sense this definition is correct. However, he never explains the connection of the number seven to the Semetic language. A context more suitable for the significance of the number seven is found within the Qur'an.

The number seven has been repetitively mentioned :

"تسبح له السموات السبع و الأرض...²⁰"، "فقاظهن سبع سموات في يومين...²¹"، "سخرها عليهم سبع ليالٍ...²²"، "ولقد آتيناك سبعا من المثاني و القرآن العظيم...²³"، "لها سبعة أبواب لكل باب منهم جزء...²⁴"

Furthermore, some hadiths explain the number seven as a heavenly number²⁵.

Whatever their significance²⁶, there were not just seven different ways of writing the Qura'n; even during the Abbasid reforms when they tried to narrow down the numbers of the different *qirā'āt* to *sab'a*, they remained as high as fourteen.

¹⁹Blachere, *Introduction*, 124-5.

²⁰7:44.

²¹41:12.

²²69: 7.

²³15: 87

²⁴15:44.

²⁵Ibn Kathir, *Fada'il*, 98. He also lists the *isnad*.

"...فأمرني أن أقرأه على سبعة احرف من سبعة ابواب الجنة، كلها شاف كاف."

²⁶ See Schimmel, "Sab '," 127-128, for more details on the significance of seven in the Semitic language and in Islam.

Other Problems than the Qirā'āt

There were other problems besides those of the Qirā'āt existing in the Arabic language and that is its contamination by foreign pronunciation. This is known as *talhīn*. It is defined as the faulty reading of the Qur'an and the lack of precision in the *tilāwa* or recitation²⁷.

Talhīn is of two kinds. In the first kind, known as *al-laḥn al-jalī*, certain mispronounced letters may change the meaning of the word or *aya*. For example pronouncing the *ṭa*, *ta*. It also includes reading the wrong orthographic marks at the end of the word such as changing a *damma* to a *fatha*. In the other kind, known as *al-laḥn al-khaṭī*, wrong vocalization occurs during recitation. It directly contradicts an *aya* which orders reading the Qur'an and vocalizing it correctly²⁸:

"و رتل القرآن ترتيلاً".

Therefore it was imperative for the Muslim community to develop a way to maintain correct recitation of the Qur'an and solve *talhīn* problems.

Action was taken in the 4th/ 10th century to solve these problems, not only concerning the Qur'an but all general uses of the Arabic language.

²⁷ Mi 'bid, *Ilm al-tajwid*, 14.

"اللحن هو الخطأ في قراءة القرآن الكريم. و الميل عن الصواب في التلاوة".

²⁸ 73:4; Ibid., 15. When the imam 'Ali was asked to explain the meaning of the *aya* he said:

"تجويد الحروف و معرفة الحروف"

or to read the letters with *tajwid* and know the rules of each letter.

The Abbasid Reforms

Three principle elements constituted the reforms that took place during the Abbasid period:

1. Preserving the language
2. Creating a concrete science of Arabic grammar
3. Developing the Arabic script to reflect and maintain the above.

With regard to the first point Kufa , Basra and Baghdad took the lead in preserving the language and establishing rules for Arabic grammar. The Basri *madhhab* was the most renowned. Its *ulama* journeyed to get the language from its original birth place, i.e. mainly from the tribes of Qays, Tamim and Assad²⁹. The Kufi *madhhab* was not as renowned because its *ulama* did not seek the language from Arabia but depended on what was available to them which was sometimes distorted due to *talhīn*.³⁰ The Baghdadi school was at first more partial to the Kufi *madhhab* but then became neutral. The differences between the schools never lay in the fundamental principals. It was from the Kufan and Basran schools that the present day systems of orthography were developed.

²⁹Ibn Nadim, *Fihrist*, 67. Al-Sayed, *Madrasat al-Basra al-nahawiyya*, 3. He quoted al-Farabi:

"كانت قريش اجود العرب انتقاء للانصح من الالفاظ واسهلها على اللسان عند النطق و احسنها مسموعا و ابينها ابانة عما في النفس والذين عنهم نقلت اللغة العربية وبهم اقتدى و عنهم اخذ اللسان العربي من بين قبائل العرب هم : قيس و تميم و اسد".

³⁰Qasim, *Al-nahw al-bughdadi*, 5.

Once the language was collected it was natural to develop a science of analysis for it. Arabic grammar is divided between *nahw* and *ṣarf*. *Nahw* deals mainly with the structure of a sentence, grammatical position of a word and accordingly the word is given orthographic marks whether *fatha*, *damma* or *kasra* etc. Orthographic signs helped in vocalizing the Qur'an, or in reflecting to the reader some of the *tajwid* rules, however it did replace the oral tradition³¹. The oral tradition was mainly concerned with the different *qirā'āt*, and even when reading with the different *qirā'āt*, *tajwid* is needed to recite with correct reading rules and vocalization. *Ṣarf* on the other hands deals with the construction of the word itself and its root. *Nahw* was not known before Islam and it was mainly Abbasid linguists who turned it into a concrete science.

The developments of the Arabic language was not only a needed process for writing and understanding the Qur'an but it was also vital for governmental and administrative purposes. Starting with 'Umar ibn al-Khattab who ordered the arabization of all newly islamicized territories, the need for a concrete and clear language and script increased especially under the caliph 'abd'l-Malik ibn Marwan (65-86\ 684-705). He Arabized the *diwans* or departments of the state and official mints. The state chancery also became a sophisticated entity with numerous scribes

³¹ Brockett, *Two Transmissions*, 143. Mi'bid, *ʿIlm al-tajwid*, 15. Mi'bid explains that when al-imam 'Ali was asked about the meaning of this *aya* he said:

"هو تجويد الحروف و معرفة الوقوف".

i.e "the *tajwid* of letters and knowing when to stop."

and established secretaries.³² Islamic state letters offer proof to this quick arabization and development. Al-Qadi, in her article on state letters, connects the increase in literacy in Arabic with the reforms of 'abd'l-Malik which encouraged the knowledge of Arabic from both Muslims and non-Muslims and rendered the training of scribes and letter writers into a government sponsored activity.³³

Conserving the language and developing grammar rules are directly related to solving the problems of the *qirā'āt*. It was grammarians of Kufa and Basra in the 2nd/8th century who were responsible for solving the problem of the *qirā'at*. This was accomplished when Ibn Mujahid, the imam of the *qurra'* in Baghdad recognized only seven readings set by imams from the 8th century and based this recognition on the hadith by the prophet that the Qur'an was revealed in seven *ahruf*. He also banned all uncanonical readings and made the 'Uthmanic text obligatory.

The choice of Ibn Mujahid was not random. The seven *qirā'āt* were all based on readers from the 2nd/8th century who were renowned philologists or had learned the Qur'an from a companion of the prophet. Blachere further points out that the grammar of the Arabic language originates in the *qirā'āt*³⁴. In most cases then the word *qari'* and linguist and grammarian were united in one person.

These *qurra'* are:

³²Al-Qadi, "State Letters," 217.

³³Ibid., 218

³⁴Blachere, *introduction*, 109; "La science des "lectures," sont a l'origine de la grammaire arabe".

1. Nafi' al-Madani (d.169/ 785)
2. 'Abdallah b. Kathīr al-Makki (d.240\ 854)
3. Abu 'Amr b. al-'Ala' al-Basri (d.153/ 770)
4. Ibn 'Amr (d.242/ 856)
5. Ḥamza al-Kufi (d.229\ 843)
6. al-Kisa'i al-Kufi (d.240/ 854)
7. 'Asim al-Kufi (d.190\ 805)

More readings were added to the seven of Ibn Mujahid. At first three were added:

8. Yazid b. al-Qa 'qal Abu Ja 'far al-Makhzumi from Madina (d.130\ 747)
9. Ya'qub b. Ishaq al-Hadrami from Basra who taught the readings of Kisa'i, 'Asim, and Ibn al-'Ala' (d.238/ 852)
10. Khalaf from Kufa who transmitted Ḥamza's reading (d.229\ 843)

Then four more were added:

11. Muḥammad b. 'Abd al-Raḥman b. Muḥsin from Mecca (d.123\ 740)
12. Yahya b. Mubarak al-Yazbazi from Baghdad (d.202/ 817)
13. al-Ḥasan al-Basri (d.110/ 728)
14. al-A'mash, one of whose disciples was Ḥamza (d. 148\ 765)

They became known as "The Three after the Seven" and "The Four after the Ten"³⁵. However, these later additions never received the same standing as the original seven. Up to this day the *qirā'a* of 'Asim is used in the Eastern part of the

³⁵ Al-Dani, *al-Taysir*, 4-10. Blachere, *Introduction*, 118-123.

Islamic world including Egypt. It was the one made official by King Fouad in 1924. This *qirā'a* was transmitted by Hafs who was the son-in-law of 'Asim. He taught the readings of his father in law in Baghdad and Mecca and hence it became known as the *qirā'a* of Hafs 'an 'Asim. In North Africa with the exception of Egypt and its western neighbors the *qirā'a* of Nafi' is used and it is known as that of Warsh 'an Nafi'³⁶.

The most distinguished characteristic of these *qurra'* is their linguistic background. For example al-Kisa'i was responsible for the establishment of the Kufan school of *nahw* along with his most prominent student al-Khalil ibn Ahmad al-Farahidi (d.175\ 791) who developed the system of orthographic marks used until today. Together Ibn Ahmad and Sibawaih laid concrete scientific foundations for the Arabic language. Sibawaih wrote *al-Kitab* which is a book that defined the rules of Arabic grammar upon which all later studies in the Arabic language are based. As a result of their work, Arabic *nahw* was taught in different schools and their method of grammatical analysis survives until today.

These *qirā'āt* and linguistic developments were generally accepted and adopted by wazirs of the time such as Ibn Muqla who also happened be a calligrapher. As a result the written form of the Arabic language was naturally developed to reflect the above changes. This became apparent in graphic form through orthography and calligraphy.

³⁶Paret, "Kira'a," 127-128.

To conclude, two separate movements took place and resulted in calligraphic changes. The first is the codifying of the language and the second is the codifying of the Qur'an. The Qur'an has been transmitted and taught orally since the day it was revealed. The written text of the Qur'an simply served as a visual aid and reminder to its reciters. This was not unusual because in Arabia oral transmission and memorization was a popular practice. Furthermore, the development of writing was not only important for writing the Qur'an but it was vital for governmental, administrative as well as literary purposes.

Chapter 2

Orthography

It was not until Ibn Mujahid set the seven *qirā'āt* and the schools of *naḥw* laid the basic foundations for Arabic grammar that much attention was given to developing orthographic signs. Orthographic signs are the signs that appear on top of the letters in a written word indicating the grammatical position of a word in the sentence³⁷. Even though orthography is vital for correct understanding of the Qur'an, it was very crudely reflected in the written script during the first centuries of Islam.

It is important to understand that the Qur'an requires a specific way of recitation which includes timing and special vocalization depending on the order and nature of the letters in a word. This science of recitation is specific to Qur'an reading and it is called *tajwīd*³⁸. According to the *aya*:

"و رتل القرآن ترتيلا." ^{٣٩}

It is a *fard* or an imperative order on all Muslims to abide by these rules when reading, as was explained in chapter one. *Tajwīd* is partially reflected through orthographic signs. To teach it, oral and written guidance is needed. Actually, in most *muṣḥafs* published today there is a glossary at the back explaining some of these rules.

³⁷Sharabi, *Mu'jam al-shawarid*, 15.

³⁸Mi'bid, *Ilm al-tajwid*, 10.

التجويد هو "إعطاء كل حرف حقه و مستحقه، من مخرج و صفة، و غنة، و ترفيق، و تفخيم، و غير ذلك من أحكام التجويد."

³⁹73:4.

In assessing the development of vocalization and factors that led to its development, Brockett states: "The problem of foreigners' pronunciation may have contributed to the birth of vocalization⁴⁰." What Brockett refers to as "the problem of foreigners' pronunciation" is probably *talhīn*. Adding orthographic marks, which served as the means with which correct vocalization was transmitted, to the written words of the Qur'an certainly helped in correct reading and pronunciation. However, it is important to note that to teach correct pronunciation of any kind of language oral guidance is needed.

In discussing the origins of orthographic marks, Brockett states that "There is also some indication that the move for vocalization came from the wider culture of Iraq, from the Nestorian Christians and their system of dot vocalization."⁴¹ This view can not be confirmed with direct evidence because, even though the Nestorian Christians used a Semetic language, Brockett does not provide a copy of a text that portrays the usage of a system of dots for vocalization. However, more indirect evidence may confirm Brockett's suggestion. The seat of the Nestorian bishop was located in Hira, the capital of the Lakhmid dynasty. Due to its geographical location, Hira was the meeting point of three different cultures: the Persian, Arab, and Byzantine, which was represented mainly by the community of the Nestorian Christians⁴². The Nestorians were also centered in al-'Anbar, and both Hira and

⁴⁰ Brockett, *Two Transmissions*, 142.

⁴¹ Ibid., 142.

⁴² Shahid, "al-Hira," 462.

‘Anbar were well known intellectual centers and are believed to be the birthplace of the Arabic script. Therefore connecting the origins of orthography to the birthplace of the Arabic script is not far fetched although more direct physical evidence is needed for confirmation.

Brockett also believed that because the first system of vocalization was adopted from the Nestorian Christians then “Vocalisation would here be coming from foreigners, not for them.”⁴³ This however is not true. Foreign pronunciation may have caused the problem of *talhīm* but those who adopted the system of vocalization into the Arabic language could by no means be described as foreigners. These “foreigners” who adopted the first orthographic system happened to be experts in the Arabic language and in different *qirā’āt*. In other words, they were native Arabic speakers and Muslims even if they were not from the Hijaz where the Qur’an was revealed. Because the problem of recitation existed in their community, they made use of the available Nestorian Christian system of dots in order to facilitate and clarify to the public Qur’an recitation. Needless to say, the system was not used for long and eventually completely discarded because another system was developed by Ibn Ahmad which was much easier, clearer and less confusing in reading.

In another statement Brockett claimed that vocalization was developed for “the need for beautification rather than for clarification.” and “to bring the written

⁴³Brockett, *Two Transmissions*, 142.

form of the revelation up alongside the perfection of the oral form.⁴⁴ This also is not true, as well as contradictory. The need for beautification rather than clarification came at a much later stage when Ibn Ahmad developed the present day system of orthography and it was widely adopted by the different calligraphers, who were not grammarians nor linguists but only aimed to perfect the written form of the language. Furthermore, in order to bring the written form of the revelation up alongside the perfection of the oral form, clarification of pronunciation had to be accomplished. Why else would grammarians adopt the Nestorian system of dots? These dots were not meant for aesthetic appeal but to reflect certain pronunciation that is required in the Qur'an under the rules of *tajwīd*.

The development of orthography in Iraq sheds light on a different point: the question of why all the linguistic and calligraphic developments took place mainly in the areas of Basra, Baghdad, and Kufa and not in Mecca or Madina. The first reason is that it was in Iraq that most of the language problems were found, i.e. the problems of *talhin* and the mixing up of *qirā'āt*. In Arabia these problems did not exist. Indeed, as mentioned above, to solve this problem linguists from Iraq sought the correct language by going to the Bedouin tribes in Arabia⁴⁵. Furthermore, it was in Iraq that all the grammar schools were established and therefore, all linguistic developments, including orthography, originated there and then spread to other regions either

⁴⁴ Idem.

⁴⁵ 'Abd al-Qadir, *Tarikh al-Qur'an*, 12. He quotes al-Suyuti:

"اعتنى قوم بضبط لغات القرآن و تحرير كلماته و معرفة مخارج حروفه و عددها".

through written texts or through travelling ulama and their pupils. It was not an uncommon practice that scholars seeking knowledge would travel to study under a famous teacher and in turn travel to spread their knowledge in the different regions. This is how the different *qirā'āt* of Hafs and Nafi' spread. Furthermore, the political center of the Islamic power was Baghdad under the Abbasids, and it was where major developments and reforms took place, as mentioned earlier in Chapter One.

Different Stages of Orthographic Developments

Diacritical Points

These are the points that distinguish similar looking letters from each other. Arabic was written in the *scriptio defectiva* in which identical looking letters such as the *ba'*, *ta'* and *tha'* or the *ha* and *kha* were not differentiated. There were no diacritical marks and vocalization was left completely to the reader⁴⁶.

Different fragments from the first centuries of Islam reflect the different stages of development. Abbott discusses some fragments of papyri dating to the second half of the first century Hijra that show that the *ba'*, *ta'*, *tha'* and *ya'* were dotted and that the *qaf* had one dot on top and the *fa'* one below⁴⁷. However it was not until the 2nd/8th century that Yahia b. Ya'mar⁴⁸ completed a diacritical system in which little

⁴⁶Welch, "al-Kur'an," 409.

⁴⁷Abbott, *Rise of the North Arabic Script*, 38-39.

⁴⁸Ibn Nadim, *Fihrist*, 69. He mentions Yahia b. Ya'mar as one of the students of Abu'l-Aswad.

strokes were used instead of dots. This system was not used consistently although it eventually gained popularity (Pl. 8).

Orthographic signs

As has been mentioned before, orthographic signs are the signs that appear on top of the letters in a written word indicating the grammatical position of the word in the sentence. It is the means by which some of the *Tajwīd* rules and vocalizing of the Qur'an are transmitted.

According to Ibn Nadim, Abu'l-Aswad al-Du'ali (d.69/ 688) was one of the earliest people who knew of *qawa'id al-naḥw* which he had learned from al-imam 'Ali⁴⁹. He supposedly never talked about it with anyone until he heard an *aya* from *surat al-tawbah* wrongly cited and giving a contradictory meaning:

"ان الله برىء من المشركين ورسوله"

Instead of reading *rasūluhu* with the *damma* at the end of the word it was read, *rasūlihi* with a *kasra* at the end which contradicts the meaning of the *aya* or as a matter of fact the whole faith. When correctly read, it means that God and his prophet are innocent of disbelievers. However, when wrongly recited it means that God is innocent of disbelievers and of His prophet⁵¹. Therefore, he developed a system of dots to distinguish orthographic signs from each other (Pls. 12-5):

- A dot on top of the letter is a *fatha*

⁴⁹Ibid., 67.

⁵⁰9:3.

⁵¹Sharabi, *Mu'jam al-shawarid*, 11.

- In the middle of the letter is a *damma*
- And under the letter is a *kasra*

Ibn Abi Dawud further explains this dot system saying that if there is no *tanwīn* then there would be one dot. However if there is *tanwīn* then two dots would be applied⁵²(Pl. 15, as shown in line 5 in the word مَبِينَا). He also mentions that dotting the *muṣḥaf* was not necessarily a popular practice among Qur'an writers and there was a group who disliked dotting the Qur'an with orthographic marks whereas another group had no objection to it⁵³.

Al -Khalil Ibn Ahmad al-Farahidi (d.175\ 791) was a student of al-Kisa'i who established one of the seven *qirā'āt* and the school of *naḥw* in Kufa. Ibn Ahmad promoted the already existing grammatical concepts in the Arabic language and hence he is considered the founder of Arabic *naḥw*. The first systematic book on Arabic *naḥw* written by Sibawaih is largely based on his teachings. He derived the signs of *i'rab* or *tashkīl* from the shapes of the original letters in the alphabet (Pls. 23, 24):

- Small *waw* is a *damma*
- The *yaa* ' or a small stroke under the letter is a *kasra*
- A small *alif* or a small stroke on top of the letter is a *fatha*

⁵²Ibn Abi Dawud, *Masahif*, 144.

⁵³Ibid., 141-143.

He is also credited with introducing the *hamza* and *shadda*⁵⁴. This system of orthography eventually replaced the system of dots because it was much easier and clearer to interpret when reading the Qur'an⁵⁵.

Development of *shadda*, *sukūn*, *hamza*, and *tanwīn*

These signs may have been applied in secular documents or literature, however they did not require the same vocal interpretation that Qur'anic recitation required. As Cohen explained, "the orthography always compromises an element of interpretation by the reader, an ideographic one"⁵⁶. This element is a vocal interpretation set by the rules of *tajwīd*. The *shadda*, *sukūn*, *hamza* and *tanwīn* are of the signs that require such interpretation.

The *shadda*


The *shadda* is applied on many letters of the alphabet, however when applied on the *mīm* and *nūn* it requires *ghuna*.⁵⁷ Literally, *ghuna* originates from the verb to sing. In the rules of *tajwīd* when the *shadda* is applied on the *mīm* and *nūn*, *ghuna* is defined as a nasal humming sound that emphasizes the letters and requires certain

⁵⁴Abbott, *The Rise of the North Arabic Script*, 39.

⁵⁵Ben Cheneb, "al-Khalil," 962.

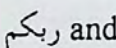

⁵⁶Fahd, "Khatt," 1113.

⁵⁷Mi'bid, *Ilm al-tajwid*, 50.

timing⁵⁸. It was portrayed in different stages: at first it was a red semi circle or (Pl. 20). Then it took its present shape of the teeth of the *sīn*, i.e. . (Pl. 21).⁵⁹

Sukun

Like the *shadda*, *sukūn* is also applied to many letters of the Arabic alphabet. When applied on the *mīm* and *nūn* certain vocal interpretation such as *ghunna*, *iqlab*, *ikhfa'* and *izhār* are required depending on the following letters⁶⁰. It also was portrayed through different signs⁶¹.

Abbott mentions that it was portrayed as a wedge > or < but this was a rare indication of it and there is no illustration available to me.⁶² It was portrayed as a colored dot when the system of dots was in use. In pl. 15 it is indicated by a green dot beside the letter as shown in line 3 after the *ḥ* and in lines 5 and 6 after the *mīm* in the words . It was also indicated below the letter if the letter that required a *sukūn* was in the middle of the word as indicated in line 2 in the word . The *sukūn* is below the *nūn*. However, it was not always portrayed as a green dot in the different


⁵⁸Ibid, 52. *Ghunna* is also applies with other *tajwid* rules not just on the *mim* and *nun* with *shadda*.

⁵⁹Abbott, *The Rise of the North Arabic Script*, 40.






⁶⁰Mi'bid, *Ilm al-tajwid*, 34-49. The details of these requirements are discussed by Mi'bid in details. Check glossary in thesis.




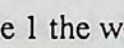
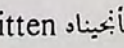
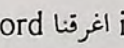
⁶¹Al-Dani, *Muqni'*, 137. Al-Dani mentions that it was at first a horizontal stroke above the letter however I have found no example of this description of the *sukun*.

⁶²Abbott, *The Rise of the North Arabic Script*, 40.

manuscripts. Finally it took its present shape which is  (Pl. 21, in the *basmala* on top of the *ha'* and *ya'*).

The *hamza*

The *hamza* is of two kinds and has many rules: the first kind is *hamzat al-wasl*. In *tajwīd* the rules of its pronunciation depend on its position in the sentence. The sign for it is . If it is in the middle of a sentence, or at the beginning of a sentence connected to a previous one then it is usually bypassed⁶³. In pl. 30 it is indicated in the first line of *surat al-Falaq* in the word  and in the first line of *surat al-Nas* in the word , always on top of the alif. It is indicated in pl. 35 in *surat al-Sajdah* in line 3 in the word . It should not be confused with the sign for *madd* which is .

The second is *hamzat al-qat'*, the sign for which is . In *tajwīd* it requires *izhār* if the word before it has *tanwīn*. *Izhār* means clarification or to make obvious. In this *tajwīd* it means the absence of *ghunā*⁶⁴. An example is in pl. 23, line 4, the words  and in line 5 the words . In some instances the *hamza* was not written at all (Pl. 27). In line 1 the word  is missing the *hamza* on top of the *alif* after the *fa'*, it should be written . In line 2 the word  is only written with a

⁶³Ibid, 150-157. These rules are mentioned in an extremely simplified form. Further details are discussed such as the *tashkil* of the *hamza* and its situation when two *hamzas* follow each other in a word.

⁶⁴Ibid., 24-28. Again this rule is mentioned in a very simplified form. But the rule of *Izhar* also applies with the letters, '*ain*, *ghain*, *ha*, *kha*, *ha'*', and *hamza*.

fatha on top of the *alif* where as it should be written أغرفنا. The *hamza* was only written when its position was in the middle of the word not at the beginning as seen in line 3 in the word مؤمنين and in line 5 in the word استلکم.

The indication of the *hamza* in the system of dots was varied and confusing⁶⁵. It was placed in relation to other diacritical marks such as the *fatha* or *damma* or *kasra* (Pl. 29). In plate 29, line 1 in the word أفلا the *hamza* and the dot are drawn next to each other indicating that the *hamza* should be pronounced with a *fatha*. It is also indicated with *tanwīn* as shown in line 10 in the word شيء. It is written with two red dots below the *ya'* indicating that there is *tanwīn* and also a *kasra*. In plate 15, line 5, the word أعلم is written with a red dot on top of the *alif*, however it is difficult to say whether it is meant as a *fatha* or as a *hamza*.

Tanwīn

This is defined as an extra *nūn* at the end of the word, however it is not indicated by the letter *nūn* but by two *fathas*, two *dammās* or two *kasras* on top of each other⁶⁶. Nasr b. 'Asim at first introduced the double dots of *tanwīn* together with Yahia b. Ya'mar and Hasan al-Basri. Its sign also changed many times. It was

⁶⁵Abbott, *The Rise of the North Arabic Script*, 39-40. She mentions that like vowels it was indicated by a red dot or two red dots on top of each other when used with *tanwin*. She also mentions that Ibn Abi Dawud indicated the *hamza* by two red dots as in قرآن or مرون. The dot on the right was for the *hamza* while the one on the left was for the orthographic sign.



⁶⁶Deroche, *Abbassid Tradition*, 23.

indicated by two dots on top of each other as shown in Plate 15, line 5 in the word مَبِينًا. Then it was indicated by its present form of two *fathas*, *dammās* or *kasras* on top of each other, as indicated in line 3 in the word قَلِيلًا. The *tanwīn* strokes in this case should not be confused with diacritical marks, which are also indicated by two strokes, except they are a little shorter. This was further developed because *tanwīn* requires certain vocal rules. For example, depending on the first letter of the following word either *idgham* with *ghuna*, *idgham* without *ghuna* or *izhār* are applied⁶⁷. In 13th century Qur'ans these rules are especially apparent in the *damma*. In the line before the last of Pl. 34, the words رَسُولِ امِينَ فَاتَقُوا are written with different *tanwin* forms: 'د/ر'. That is because the *hamza* after *rasūl* is one of the *izhār* letters, whereas the *fa'* after *amīn* is not, therefore different methods of writing the *damma tanwīn* were applied. This was not as apparent in the two strokes of the *fatha* and *kasra* which in modern day Qur'ans are either the same length or the top one is slightly shorter than the other. This indication of *tanwīn* however came much later as the two strokes were always written in the same length, and interpretation was left to the knowledge of the reader.

Madd

Madd is to prolong. In *tajwīd* it is the prolongation of one of the three letters of *madd* which are: *alif*, *waw* and *ya'*. It is of many kinds and it is always indicated by the same sign which is —.

⁶⁷Mi'bid, *ʿIlm al-tajwīd*, 24, 28-32.

At the beginning *madd* was not indicated in early Qur'anic manuscripts. For example in Pl. 24, in line 3 the word *shitā'* is supposed to have a *madd* sign on top of the *alif* but it does not. The same sign is missing in the fourth *aya* in line 4 in the word *aladhi*; the *ya'* at the end of the word is also supposed to have a *madd* sign but does not. In 8th/ 14th century manuscripts *madd* was indicated with this sign , however it should not be confused with *hamzat al-wasl* which is  (Pl. 36).

The vocal interpretations of these signs in Qur'an reading rendered them important. They were indicated only in some early Qur'ans. Some of the previous examples show that the *hamza* was not used at all (Pl. 27). Sometimes the *sukūn* was indicated by different colored dots, such as green (Pl. 15) and in different manuscripts the color may have varied. Sometimes it was difficult to tell which sign is indicated by the colored dot, e.g. in the word *أعلم* in line 5 of Pl. 15.

Furthermore, the system of dots was not easily accepted in the Islamic world. Ibn Abi Dawud mentions briefly that some people were not supportive of dotting the Qur'an. 'Abdallah b. Tahir (d. 230/ 844), governor of Khurasan, when he was presented with an inscription explained that it would look much better if there was no coriander seed scattered all over it. He was referring to the orthographic dots⁶⁸. Furthermore, Hajji Khalifa, in the 5th/ 11th century, discouraged the use of

⁶⁸Abbott, *The Rise of the North Arabic Script*, 41.

orthographic marks and diacritics because when addressing people of high rank it implied that they were ignorant and did not have knowledge of the written language⁶⁹.

The Question of Dating

It is important to notice that although it was in the 2nd/ 8th century that Ibn Ahmad developed the modern system of *tashkīl*, it took many centuries for it to completely replace the system of dots. The reasons behind that may be, as mentioned above, the slow acceptance of all orthographic signs. In theory there should be two different criteria for dating a manuscript, the first being the script and the second orthographic signs. Unfortunately however, there were no set rules that combined any system of orthography with any kind of script. To confuse matters further, Pl. 16 is an example of a fragment dating to the first half of the 10th century in which the orthographic signs were added later. Déroche mentions that the diacritical strokes are contemporary with the manuscript while the dots are additions.

This brings up another point: that some signs were used before others. For example, the *shadda* and *hamza* were used before the strokes of the *damma*, *fatha* and *kasra* of Ibn Ahmad. Until the 5th/ 10th century dots were still used to indicate the *fatha* etc. along with the present form of the *shadda* (Pl. 19). It was not till the 5th/ 11th century that Ibn Ahmad's system was used to write Qur'ans resembling *muṣḥafs* published today by discarding the use of dots (Pls. 21-22). Again, the use of Ibn

⁶⁹Ibid., 41.

Ahmad's system was not necessarily consistent. Although there are some 6th/ 12th century manuscripts using dots (Pl. 29), it can be said that they became rarer. Furthermore, a manuscript with the dotted system of orthography could be modified with newer forms of *hamza* and *shadda*. Plate 29 brings up the question of how many later additions could have been made to it. It is written in the *sunbuli*.⁷⁰ and Deroche dates it to the 6th/ 12th century. He mentions that some of the diacritics may have been later additions. Red dots are used here to indicate *fatha* etc.; however in line 9 there are two *dammas* while the *shaddah*, *sukūn* and *hamza* are all in their present shape. Obviously changes from one system to the other did not happen overnight and scribes may have updated their manuscripts with new signs such as the two *dammas* in line 9 of Pl. 29.

Furthermore, an important element needed in order to assign specific dates to manuscripts would require a close examination of linguistic developments in Iraq as well as in other parts of the Dar al-Islam where the Qur'an was written, such as India and the Maghrib. An example is a fragment of the Palermo Qur'an (Pl. 20). It is written in *sunbuli* and shows simultaneous use of the system of orthographs. The *shadda* is indicated by both its modern shape and as a semi-circle. The *hamza* is indicated by a yellow dot and Deroche mentions that when its use coincides with the *sukūn*, it is indicated by a blue dot. *Fatha*, *damma* and *kasra* were indicated by red

⁷⁰ This same script is called the New Abbasid Style by Deroche. The term is discussed in more details in chapter three.

dots. It shows a resemblance to what was happening simultaneously in Iraq and Iran, which means that linguistic developments had reached the western outskirts of the Dar al-Islam. However, a closer analysis of regional Qur'anic developments remains out of the scope of this thesis because of difficulties in determining the provenance of early Qur'ans and because of the limited availability of material that is published and available.

The Effects of Orthographic Signs on Letter Shapes

Since Qur'anic writing is always accompanied by orthographic signs, how much did orthographic signs influence letter shapes? This is difficult to determine since there were no rules governing the use of the system of dots or the later orthographic system with a special kind of script. Both systems could be used simultaneously in the same manuscript (Pl. 16). The diacritical strokes in this manuscript are contemporary with the manuscript while the dots were added later, as was the case with many other manuscripts. It is also noticeable that as these signs took their modern form. The script became more and more "cursive". *Sunbuli* is increasingly used with the modern systems of orthography and when the reforms of Ibn Muqla took place, the cursive style eventually took over completely. Plates 21-4 are examples dating to the 5th/ 11th century showing full orthography and vocalization all in modern form written in the *sunbuli*⁷¹. Eventually Kufic was discarded and what

⁷¹Mi'bid, *Ilm al-tajwid*, 156.

remained in use was the system of orthography of Ibn Ahmad and the cursive scripts refined by Ibn Muqla and his successors.

It cannot be said that the development of orthographic signs directly influenced calligraphic changes. The only apparent relation is that orthographic signs are not angular the same way the Kufic script is. When the cursive scripts became more widely used, the writing of orthographic signs on top of the letter seemed more harmonious. Orthographic signs therefore complemented the letters of the cursive scripts by filling spaces more harmoniously.

Orthography, therefore did not influence the shapes of individual letters. Letter shapes were defined long before the development of Ibn Ahmad's *tashkīl*. Their influence however is clearly seen in the final balance of a word. This is best portrayed in the hands of prominent calligraphers. The orthographic marks became the final touches that gave a word or sentence its perfect balance (Pl. 31). The *hamzas* and *tanwīn* are all in perfect harmony and their positioning is in perfect accordance with the letter shapes. The slanting of the *hamzas* and the shapes of the *dammās* were drawn with equal care to the words of the text. Hence, after many trials calligraphers managed to combine two important factors in writing the Qur'an: a clear way for instructing pronunciation and aesthetic perfection.

Chapter Three

Arabic Calligraphy

It has been suggested that the Arabic script was undeveloped or deficient during the first centuries of Islam⁷². Did the deficiency apply to religious as well as secular documents? What was the extent of the deficiency? Was the drawback in the lack of orthography, or in the poor representation of the letters? Some of these questions cannot be fully answered because so many scripts are known to have existed but no trace of them is left for us today.

There is no concrete evidence to back up the origins of the Arabic writing tradition except from some vague accounts given by Ibn Nadim⁷³. The general consensus however, is that the Arabic script originated in Mesopotamia in the regions of 'Anbar and al-Hira in Iraq then spread to the Hijaz at the end of the 6th century AD⁷⁴. It has been suggested that the prototypes of the Arabic characters are derived from symbols used by the Christian Arab kingdoms of lower Mesopotamia around the intellectual centers of al-Hira and al-'Anbar. This suggestion agrees with Brockett's view that the early orthographic system of dots originated from the scripts of the

⁷²T. Izutsu, "al-Kur'an," 408.

⁷³Ibn Nadim, *Fihrist*, 11. Ibn Nadim gives an account which connects the Arabic script with a group of people whose names were Abjad, Hawas, Hutty, Kalmun, Sa'fas and Qarisat. These letters are known as the *ravadiif* and were used for later calligraphic and computational practices (Pl. 42).

⁷⁴Deroche, "Islamic Art," 277; Safadi, *Islamic calligraphy*, 7, King Faisal Center, 36.

Nestorian Christians in Iraq⁷⁵. However, it has been doubted because of the lack of physical evidence. The most general hypothesis connects the shapes of Arabic letters with Nabatean, which is derived from Aramaic⁷⁶.

Therefore, at the time of the advent of Islam, there were many scripts in use. Schimmel mentions evidence of Arabic writing dating between 642-647 AD⁷⁷. These scripts developed with great speed as the new faith grew. The changes that took place were governed by many factors. The evolution of the letter shapes, for example, was governed by technical factors such as the scribe's material, social factors such as the different patrons and linguistic factors such as legibility and clarity. Furthermore, different needs required different kinds of scripts. For example writing practised by government scribes was not the same as that of a calligrapher aiming for aesthetic perfection nor of a pious Qur'an writer⁷⁸.

In the *Fihrist* the *Makki* and *Madani* scripts are mentioned. In the 19th century Amari identified them and in the 20th century they were renamed *Hijazi* by Abbott⁷⁹. These scripts existed before Islam and were used for utilitarian purposes⁸⁰. It is these

⁷⁵ Brockett, *Two Transmissions*, 142.

⁷⁶ Deroche, "Islamic Art," 278. Safadi, *Islamic calligraphy*, 7; Whelan, "Word of God," 114; De Goerje "Arabia," 1:382.

⁷⁷ Deroche, "Arts of the Book: Calligraphy," 278.

⁷⁸ Fahd, "Khatt," 1113.

⁷⁹ Whelan, "Word of God," 114. However, she doubts Abbott's identification because the description in the *Fihrist* is not necessarily exclusive to *Hijazi*.

⁸⁰ Deroche, *Abbasid Tradition*, 27.

Hijazi, Kufic and the later scripts reformed by Ibn Muqla that constitute the basis of Arabic calligraphic studies today.

Hijazi

The Hijazi script was used in the 1st-2nd/ 7th- 8th century. It has always been identified with the leaning of its *alifs* and *lāms* to the right and exhibits a less regulated hand in writing than Kufic (Pls. 9-10). Unlike Kufic the letters and ligatures are curved. There are a small number of Hijazi manuscripts surviving today that exhibit a considerable variety of style and writing materials. It is difficult to determine what governed the format of the manuscript. Whether written on parchment or paper, there are examples in both the vertical and horizontal format. The oldest Hijazi manuscripts and some later ones have the vertical format (Pl. 3) whereas later ones are mainly horizontal (Pls. 5, 7)⁸¹. It is difficult to say whether the verticality or horizontality of the letters combined with the medium of writing influenced the format or vice versa. There is not a set rule. Diacritical marks were applied in Hijazi Qur'ans, but not consistently. For example, in the Hijazi Qur'an in Pl. 6 line 10 (starts with the *basmala* and goes on to *surat al-Najm*⁸²), some diacritics are indicated, such as the dot for the *ba'* in *bism*, and in line 11 the *ḍaḍ* in *ḍal*, the *ba'* in *ṣahibikum* and the *nūn* in *yanṭiq* are all dotted. However, there are others not indicated such as the dot for the *ghain* in *ghawa* and the *ya'* in *yanṭiq*, both in line 11.

⁸¹Ibid., 29.

⁸²5:26.

The *hamza* was also not used. In line 20 *illa asma'* is written with no *hamza*. The vertical strokes in between words indicate divisions between *ayas*.

Taking a general look at 1st-2nd 7th-8th century Qur'ans, the Hijazi script slowly showed more and more Kufic characteristics (Pls. 8-9). This is a transitional phase that has later parallels because eventually Kufic takes on more and more rounded characteristics that characterize the early "cursive" scripts. One suggestion for the eventual dominance of Kufic has been that Kufic became the main architectural script, an early example being the inscriptions of the Dome of the Rock⁸³. It has been suggested that this was of significance because the Dome of the Rock symbolizes the early triumph of the new faith and it is a revered center amongst all Muslims. Therefore, it is suggested that the type of script used in its inscriptions may have inspired many of the scribes. This view, however, cannot be proven. It is more likely that Kufic was at first used in manuscripts then was used in architecture. The use of Kufic, therefore, in the Dome of the Rock did not cause calligraphic changes but only reflected the spreading of a new trend and proves that Kufic was accepted in the calligraphic as well as the epigraphic traditions during the Umayyad period⁸⁴.

⁸³San'a, 50\53

⁸⁴Blair, *Islamic Inscriptions*, 77. She gives a more detailed description of the Dome of the Rock inscriptions and discusses comparisons made by Kessler between the writing of the Dome of the Rock and early Qur'ans.

Kufic

This term causes many problems. Deroche defines it as the term used to describe the Early Abbasid scripts⁸⁵. However when examining early fragments of the Qur'an, an Umayyad fragment was written in Kufic (Pl. 11). Furthermore, the term Kufic associates all the different scripts with the town of Kufa in Iraq, a connection that lacks evidence. Finally there are many variations of scripts that are listed under the word Kufic. It is misleading to use it as a general term⁸⁶.

There are many speculations as to why Hijazi was abandoned and replaced by Kufic. One of them, as has been mentioned before, is its use in the inscriptions of the Dome of the Rock. However, there are other reasons more concerned with the legibility of the text. Because the writing of Kufic was based on mathematical calculations, it was naturally characterized by symmetry and precision. The origins of Kufic are said to be *al-khatt al-mabsūt*, which is a broad angular script that was written with the aid of mathematical instruments⁸⁷ (Pl. 39). On the other hand, there is no indication that Hijazi was based on any mathematical tradition. Therefore, it is not surprising that Kufic was adopted for architectural purposes and Hijazi was not.

Early calligraphers therefore, adopted this precision and angularity to reform the early texts of the Qur'an. Hence, the letters were written on a constant base line

⁸⁵Deroche, *Abbasid Tradition*, 34.

⁸⁶Ibid., 132. Deroche mentions Eastern Kufic, Eastern Persian Kufic, Broken Kufic, *Naskhi* Kufic and Western Kufic, all variations of the same script.

⁸⁷Zayid, *Tarikh al-khatt al-'arabi*, 12.

and the lines were more evenly spaced. Naturally the letters lost their fluidity or became more defined until eventually they became fully angular (Pls. 9-10).

Ironically, this does not mean that Kufic was more legible than Hijazi. Up to the 4th 10th century the letters of Kufic were very similar to each other and still offered a challenge to the reader in differentiating the different letters.

Development of Kufic

Various kinds of this script have been identified such as Eastern Kufic, Eastern Persian Kufic, Broken Kufic, *Naskhi* Kufic, Western Kufic and *mashq*⁸⁸. Deroche summarized them as the Early Abbasid, and the New Style (the equivalent of *Sunbuli*) but these divisions included other sub-divisions⁸⁹. However, these divisions seem exaggerated because letters would naturally differ from one scribe to the other. These Qur'ans were handwritten and two scribes would not have the same handwriting, therefore minor changes in letters does not indicate that a new style of Kufic was being developed.

Looking at the overall development of this script during the first four centuries it is clear that there is a consistent pattern. Kufic started out by influencing *Hijazi*, then eventually replaced it. For a long time it became the fundamental Qur'anic script. During this period the script was perfected in terms of aesthetic appeal and the letters were attached to each other in a harmonious way. In the 11th century there was a

⁸⁸Deroche, *Abbasid Tradition*, 132. The term *mashq* is used with elongated Kufic letters, it does not indicate different letter shapes.

⁸⁹*Ibid.*, 34-132.

return to more rounded scripts where the letters lost their sharp angularity and resembled more the earlier scripts of the 8th century. This time, the script was much easier to read. Deroche calls this kind of Kufic the New Abbasid Style while Tabbaa calls it Semi Kufic⁹⁰ while among calligraphers today it is referred to as *al-Khatt al-sunbuli* (Pl. 21-4). In this thesis the term *sunbuli* is used. Deroche's term implies that a new script was developed, but this was not the case. *Sunbuli* is a modified, less angular version of Kufic. Tabbaa's term is unnecessary because the script is already known by an existing name.

The *sunbuli* was used by the beginning of the first half of the 4th 10th century . It gained quick popularity because it was easily written and read. It also appeared at a time of considerable change when scribes were experimenting with format and material. Its use was not limited to Qur'anic manuscripts but appeared on monumental inscriptions as well⁹¹. Whether Ibn Muqla intended to further reform this script is unclear. However, the use of *sunbuli*, along with other existing scripts, was a prelude to the fully cursive scripts of Ibn Muqla in light of the fact that he did not invent any new script but reformed existing ones.

The Problems of Kufic

When comparing a fragment of the Qur'an written in Kufic with another written in cursive, the difference in legibility is quite obvious. There are many

⁹⁰Tabbaa, "Transformation," 127.

⁹¹Ibid., "Transformation,". He discusses in this article the change in the public text and the use of this new style of writing.

problems when reading a fragment written in Kufic. Whelan clearly identified some of these⁹².

The writing of early Qur'ans consisted of "groups of connected letters" which were not necessarily spaced as words. Isolated letters are followed and preceded by spaces, and so if a person does not know the text it is difficult to re-group them to comprehend the text. Words were also freely divided between lines without grammatical reasoning, e.g. in the Qur'an in Pl. 12, as seen in the last letter on line 4. The word مؤمنين is divided between the fourth and fifth lines. 'Ali b. Khalaf, a secretary in the *diwān* under the Fatimids, commented that Qur'an copyists customarily broke words at the end of lines and that a competent scribe would plan his work so that such breaks would be avoided⁹³. Furthermore, there was a striking similarity between the letters such as the *fa'* and *qāf* and the medial *kāf* and *dhal* and *dāl* and the *ḥa* and *'ain* (Pl. 40).

The problem of the division of words between lines has been connected with *mashq* (Pls. 12-3). *Mashq* is a member of the large family of Kufic scripts. In the *Fihrist* it is listed as one of the Qur'anic scripts. Its main characteristics are its horizontally elongated strokes. It was used to avoid dividing a word between two lines although it was disliked by many. That it solved the problem of the division of words was not necessarily true in all cases. In plate 13 *mashq* is used but the word

⁹² Ibid., 114.

⁹³ Ibid., 123.

مؤمنين is still divided in between the 4th and 5th lines. Furthermore if it was used to balance the spacing of words in a line, then it was still inefficient⁹⁴. For example in plate 12, line 9 ends with a *wāw* which is not grammatically correct because *waw* always comes in the middle of a sentence and it is usually written at the beginning of the line or in the middle of the line but not at the end. Perhaps the explanation is that the grammatical rules of the language were still not widespread and this was a stage when many experiments were happening simultaneously. The scribe in many cases had to use his own sense of judgement to balance the line⁹⁵. The rules and application of *mashq* in Qur'anic writing remains questionable⁹⁶.

Furthermore, there are questions about the intentions with which Kufic was written. In epigraphy, Ettinghausen raises the question of whether Kufic was for communication or symbolic affirmation. In textual writing, especially before the development of *sunbuli*, one wonders which purposes Kufic served. With the first couple of generations of Muslims Kufic may have served as an aid to what they already knew by heart. However, with time and with the increase of new converts Kufic could not have been such an easy way of communication. It needed much

⁹⁴Generally Arabic sentences do not end with the letter *waw* which always indicates mid-sentence and never ends a sentence or an *aya*. *Waw* is always written on the next line with the rest of its sentence.

⁹⁵Abbott, *The Rise of the North Arabic script*, 27. She also gives detailed accounts of some of the rules of *mashq*.

⁹⁶Hillenbrand, *The Qur'an Illuminated*, 121. He questions the purpose behind using *mashq* and its effect on the overall writing and layout of the text.

interpretation and knowledge on the part of the reader, therefore before the development of *sunbuli*, it may have served as a symbolic affirmation because of its obvious lack of communication. Later cursive scripts are more obviously for communication. *Sunbuli* and its later reforms are expressive ways of communication. This was due to two factors: the first is the shaping of letters and their ligatures, which became much easier and clearer to read than those of Kufic. The second was the application of Ibn Ahmad's orthography, which reached its epitome with the cursive scripts.

Pen and Paper

The role of the medium on which a calligrapher wrote cannot be overlooked. Paper provided a smooth surface and therefore facilitated a calligrapher's job by increasing practice materials and enabled experimentation. Parchment did not provide a smooth surface like paper, was more expensive and was not readily available while Papyrus on the other hand was of limited availability.

Schimmel mentions that due to the introduction of paper in 134\ 751, there was a "change in format, vertical letters became more elongated and the crouching lower letters more distinct from the slim taller ones⁹⁷." This is not necessarily correct. Paper provided a smoother surface for writing which may have given more fluidity to the hand of the scribe and ink flow from the pen. But this does not mean that the

⁹⁷Schimmel, "Calligraphy," 273; Fahd, "Khatt," 1114. Paper started to be manufactured in Islamic lands in the 9th century.

influence of the use of paper went to the extent of changing letter shapes. As was mentioned before the shapes of the letters and the format of the text were not governed by any special rule. Clarity and need for communication were incentives for experimenting while scripts and paper only served as an aid.

Furthermore, the direct means by which calligraphers developed new scripts or reformed old ones was accomplished by trimming the nib of the pen. For example, there are accounts of the earliest Arabic scripts such as the *mabṣūṭ* and the *muqawwar*. The *mabṣūṭ* script has a very similar description to Kufic: it was known for its angularity and was written with the aid of geometric instruments, whereas the *muqawwar* script was written with a pen and gave rounded rather than angular angles. It was a popular secular script because of its ease in writing. Today no examples of these scripts have survived however a similar description could be applied to the Kufic and Hijazi scripts which are reputed to have originated from them. For example, we have a reference to *al-Kufi al-mabṣūṭ* and *al-Kufi al-muqawwar*⁹⁸.

The trimming of the nib of the pen remained an important issue for early calligraphers as a way of attaining precision as well as aesthetic refinement for different curves in letters. For example, different scripts had different nib measurements. *Al-qalam al-jalīl*, its name indicating that it was a large and clear script, was measured with 24 horse hairs, the *thuluthain* with 16 hairs, and the *thuluth* with 8 hairs. Many calligraphers were recounted for their eccentricities concerning

⁹⁸Zayid, 14-19.

the trimming of their pen. For example al-Dahh ak b. 'Ajlan, a well known calligrapher, used to hide if he wanted to trim his pen and said "الخط كله قلم" or that writing is in the pen⁹⁹.

Therefore in assessing the influence of the pen and paper on the development of calligraphy, the pen could be considered the direct means by which letters changed. The incentives behind the different trimmings of the pen lay in the different everyday needs of scribes and their patrons- whether Qur'an writers or government officials. Paper on the other hand provided for calligraphers the means to express these developments.

The Role of Calligraphers

Calligraphy in its own right is an art and to be a calligrapher eventually required a certain level of talent and education. However, to achieve the final balanced form of a script or to work on beautifying it many factors had to be worked out- linguistic as well as calligraphic.

In the first century Hijra a person who could read and write was a "literate" person, and when 'Uthman wanted to make a copy of the Qur'an, Zaid b. Thabit was not known as a *khattat* or calligrapher but as the scribe of the prophet. With the increase of Qur'an writing, this changed. Specialization was needed in secular as well as religious documents. The development of Kufic, or the later scripts in general, resulted in the specialization of calligraphers. For example, Whelan remarks that

⁹⁹Ibid., 39. He quotes Qalqashandi, *Subh al-a'sha fi sina'at al-insha*, 3:456-7.

those who wrote in Kufic were religious scholars who specialized in copying the Qur'an on parchment and that another group of scribes who wrote in Broken Kufic used paper and served a variety of patrons¹⁰⁰. Ibn Durustayah, an Abbasid court secretary, also noted in the 4th/ 10th century that letters of the alphabet were given different shapes depending whether they were given to copyists of *maṣāḥif* or *warrāqūn*¹⁰¹.

Furthermore, by the Abbasid period the calligrapher/scribe held high status.¹⁰² The reverence for calligraphers resulted from religious as well as political importance. Learning different scripts, perfecting them and developing new ones meant rising in the political and social hierarchy. It is not surprising that Ibn Muqla was a *wazīr*, and that the third *wazīr* of the caliph Ma'mun, Ahmad b. Khalid al-Ahwal was a well known calligrapher who developed a new kind of script. He trimmed the *jalil* pen and reduced it to half. He then called it the "half pen" or *al-qalam al-nisf* which was measured by the width of eight horse hairs. He also developed another script by trimming the pen of the *thuluth* script and called it "light *thuluth*" or *khafif al-thuluth*.

The Final Balance

Aesthetic appeal also played a part in calligraphic development. Ligature of letters is a basic feature of Arabic scripts and a major calligraphic challenge. It could

¹⁰⁰Ibid., 123-4.

¹⁰¹Whelan, "Word of God," 122.

¹⁰²By this time there was no differentiation in the term because the scribe had to be taught calligraphy as a profession and specialize.

not be achieved to perfection until the letters were individually perfected. The balance of one word is created by different components. The first is the "dimension" of the letter itself : how wide it is (like the a *ba'* or a *tha'*) or how long (such as an *alif* or a *lām*). The second component is its relation with the baseline, whether it is slanted or straight, or whether it is all partially under or on top of the line. The third point is the relation between the letters once they are put together to form a word. This depended on the nature of the shape of the individual letters, for example a *ya'* in the middle of a word differed in shape than at the end of a word. Therefore, each letter needed to be perfected individually in order to achieve the final balance.

Ibn Muqla (d. 329\ 940)

To modern day scholars Ibn Muqla is known as *sahib al-khatt al-manṣub* (or the master of the proportioned script)¹⁰³. He did not invent any new kind of script but reformed other scripts that were used for utilitarian purposes. The gradual result of this reform was not the reform of Kufic but its gradual replacement by the new set of standardized scripts.

The reforms carried out by Ibn Muqla consisted of standardizing the letters of the alphabet through a system of dots. All the letters were relatively proportioned to the letter *alif*. Robertson gives an account of this system: "Ibn Muqla invented a new process of measurements by dots...He made straight the Kufic *alif*... Ibn Muqla's next step was to modify the individual letters, taken from the Kufic, and bring them

¹⁰³Tabbaa, "Transformation," 122.

into accord with geometric figures. By this means they were easily measured and each letter was brought into relationship (*nisbe*) to the *alif*...¹⁰⁴

This quote by Robertson is a direct contradiction to Tabbaa's view which suggests that "Ibn Muqla's rules of proportions were not intended for Qur'anic Kufic but for the large variety of scribal scripts...the result of these reforms, therefore, was not the gradual softening of the angular Kufic script but its supplantation by the redesigned scripts of the chancery"¹⁰⁵. An important question to ask when evaluating the statements of Tabbaa and Robertson is what were the other scripts of the chancery? Some of the chancery scripts may have been variations of Kufic. Others may have been cursive and some we do not know anything about, such as most of the scripts mentioned by Ibn Nadim. Therefore to distance the reforms by Ibn Muqla from Qur'anic scripts is not fully valid. Furthermore, the fundamental principle of Ibn Muqla's reforms, which was geometry, was not a new or original one. Kufic, for example, has always been a mathematically calculated script.

Six different kinds of scripts emerged from this standardization and came to be known as *al-aqlam al-sittah*. They are *thuluth* (Pls. 32, 38), *naskh*, *muḥaqqaq* (Pl. 33), *riq'a*, *tawqi'* and *rayhan*. The *alif* in each of these scripts is drawn to scale with a different number of dots. For example in *tawqi'* the length of the *alif* is six dots, in *thuluth* it is seven, and in *muḥaqqaq* it is nine (Pl. 41). Also, there are a number of

¹⁰⁴Rice, *Ibn al-Bawwab Manuscript*, 6.

¹⁰⁵Tabbaa, "Transformation," 122.

dots specified for the bowls of the *ba'* or *tha'* etc. For example, in *Muḥaqqaq* the *ba'* takes seven dots horizontally and in *thuluth* six¹⁰⁶. The letters of these scripts have different relations with the base line. For example, the bowls of *thuluth* letters are written with a slant, part of which is written not touching the base line and another touching at a certain angle (Pl. 41). Qur'ans in *thuluth* are rare but sometimes it was used for *surah* headings (Pl. 35). Qur'ans written in *muḥaqqaq* were equally rare (Pl. 33).

Today there are many questions about the works attributed to Ibn Muqla¹⁰⁷. What he did, however, led to important results. The first was to canonize the alphabet. The second was to promote the cursive scripts to a standard with which they could be used for writing the Qur'an. The third was that having established concrete rules, the final balance of a word with its orthographic marks was accomplished which increased the legibility of Qur'ans and the clarity of their pronunciation.

Ibn al-Bawwab (d. 413/ 1022)

Ibn al-Bawwab led the second major reform after Ibn Muqla. Aesthetically he refined the letters already standardized by Ibn Muqla by adding more elegance and clarity. The Qur'an at the Chester Beatty is securely attributed to him. It is the earliest known cursive Qur'an written in *naskh* and *thuluth*.

¹⁰⁶Thackston, "Islamic Art: The Six Pens," 281.

¹⁰⁷Abbott, *Arabic Paleography*, 80.

The text shows a full use of the orthographic system of Ibn Ahmad very consistently, and vocalization marks such as the *tanwīn*, *madd*, *sukūn* and *shadda* are very clear. Furthermore, the text shows a high calligraphic skill (Pls. 25-6).

Other Reasons for the Transformation of Arabic Writing

Besides linguistic and religious factors that were behind the transformation of Arabic writing, Tabbaa mentions other political reasons. He views Ibn Muqla's reforms as politically motivated ones. Ibn Muqla may have been a calligrapher but he also served as a vizier under the caliph al-Muqtadir who canonized the text of the Qur'an and was involved in the trials of those who did not adhere to the canonized text. Also at this same time the caliphate and Sunni Islam were under attack from Shi'i groups such as the Qaramita, who were the closest to Baghdad and the Fatimids in North Africa, Egypt and Sicily. Tabbaa suggests that by establishing a canonical recension of the Qur'an and creating a new unambiguous script, the Sunni Islamic community was safeguarded.

Tabbaa also suggests that the work of Ibn al-Bawwab was as politically inspired as Ibn Muqla's. The Abbasid caliph al-Qadir started a theological fight in which he declared the Isma'ili Fatimids to be the enemies of Islam and issued an epistle, *al-risāla al-qadirīyya*, in which the nature of the Qur'an was explicitly discussed. It stated that the nature of the Qur'an was not created in time as the Mu'tazila believed but was a record of the eternal word of God and that it held only one meaning not two. Both the Mu'tazila and Fatimids believed that the Qur'an holds

a surface meaning (*zahir*) and a deeper meaning (*batin*). Hence, the Qur'an of Ibn al-Bawwab represents the creation of a clear cursive script which represents the explicit nature of the word of God¹⁰⁸.

These politically oriented explanations however seem too fabricated. The political situation may have increased the use of the new scripts but this does not mean that it was the direct reason behind the transformation. Tabbaa does not mention the fact that with the restoration of Sunni rule madrasas were built and great demands were made on Qur'an production. For these the cursive scripts were used as they were more legible and easier to write¹⁰⁹. Furthermore, Kufic was not necessarily connected with the Shi'i sects as it was used in Qur'ans commissioned by Sunni dynasties such as the Umayyads and the Abbasids. Therefore, calligraphic changes were not connected with dynastic ones. This was apparent not only in Qur'ans but also in architecture¹¹⁰.

Tabbaa also ignores linguistic and religious reasons which contributed to the transformation. In order to interpret the Qur'an, whether by Sunni or Shi'i, it had to be read correctly. For the first generations of Moslems the script was no more than an aid for what they already knew by heart. However as the first companions of the prophet and the generation after them passed away and the faith spread to new people

¹⁰⁸Tabbaa, "Transformation," 142-143.

¹⁰⁹D. James, *The Master Scribes*, 22

¹¹⁰Blair, *Islamic Epigraphy*, 57, Tabbaa and Bierman impose the same political motivations on monumental inscriptions which Blair rebutted strongly showing that epigraphic changes are not related to dynastic ones.

who were not familiar with the Qur'an, the script became more and more difficult to read. Therefore, the transformation was a needed process that stemmed from the necessity for communicating the vocal interpretation of the language of the Qur'an.

Qur'an, the Arabic language was propagated with linguistic and cultural language of the Arab-Islamic empire. Writing the Qur'an resulted in many developments in grammar and script.

During the Umayyad and the Abbasid periods, further developments took place in the Arabic script. Some major developments in the script resulted from the different writing traditions of the Umayyad and Abbasid by introducing the use of diacritical points and orthographic signs. The first use of orthographic signs has been generally attributed to Hisham and 'Abbas, which were two major figures for the Umayyad Caliphate. The records of the first introduction of the orthographic system of dots are unreliable. Some credit 'Abd al-Aziz al-Dawli and others credit al-Hajjaj ibn Yusuf al-Asadli who was governor of Iraq. By the 4th 10th century, another system of orthography was established by the Abbasid and its signs resemble the ones in use until the present day.

During the 7th 10th centuries the developments in Qur'anic calligraphy were related to the communication developments of the written language. Major linguistic developments in Kufi, Nasta'liq and Maghribi by scholars such as Ibn al-Arabi, al-Khatib and al-Sayidhi solved these problems and for all. They established rules,

¹⁰⁰ De Goeje, "Arabic," 561.

Conclusion

Arabic belongs to the Semitic family of languages. Some of the oldest Arabic inscriptions were found in Hira¹¹¹. With the advent of Islam and the revelation of the Qur'an, the Arabic language was propagated as a liturgical and cultural language of the Arab-Islamic empire. Writing the Qur'an resulted in many developments in grammar and script.

During the Umayyad and the Abassid periods, major developments took place in the Arabic script. Some order was brought to the confusion that resulted from the different reading traditions of Ibn Mas'ud and Ubbay by spreading the use of diacritical points and orthographic signs. The first use of orthographic marks has been generally attributed to Hira and 'Anbar, which were two major centers for the Nestorian Christians. The accounts of the first introduction of the orthographic system of dots are unreliable. Some credit Abu'l-Aswad al-Dua'li and others credit al-Hajjaj for its introduction when he was governor of Iraq. By the 4th/ 10th century another system of orthogrpahy was established by Ibn Ahmad and its signs remain the ones in use until the present day.

During the 2nd-3rd/ 8th-9th centururies the developments in Qur'anic calligraphy echoed the communication developments of the written language. Major linguistic developments in Kufa, Basra and Baghdad by grammarians such as Ibn Ahmad, al-Kisa'i and Sibawaih solved these problems once and for all. They established *nahw*,

¹¹¹ De Goeje, "Arabiyya," 561.

which is the basis for understanding the Qur'an and which is derived from it, and developed clear orthographic signs that are reflective of *tajwīd* rules. Therefore, the link between development of Qur'anic scripts and language was made by the grammarians who also happened to be *qurrā'* of the 2nd/ 8th century. The graphic results were the different stages of the orthographic systems.

Calligraphy on the other hand led a different line of development. From the early Hijazi manuscripts and from the inscriptions found on tombstones or monuments in the first centuries of Islam, it could safely be said that the Arabic letters were defined. However there was no set calligraphic code¹¹². This only came with Ibn Muqla. Although aesthetic appeal was always a concern, communication was the basic aim for Qur'an writers. At some point calligraphy in its own right became a fine art and required special talent and education. Early calligraphers may have worked on developing new scripts and beautifying them, however the final aesthetic balance was not achieved until linguists took their turn in establishing a concrete science for the language.

Calligraphic developments were at first not influenced by orthographic ones. The different shapes of a *sukūn* or a *shadda* did not influence the shape of letters. However, by the end of the 8th century and the beginning of the 9th this changed. Orthographic marks were written with as much calligraphic care as the letters and

¹¹²Deroche, *Abbasid Tradition*, 27.

gave a final balanced look to the text. Directly affecting the calligraphic changes and the developments of the different scripts was the way the pen was trimmed. Paper served as a catalyst, however contrary to the general belief, it was not a direct reason for the development of the different scripts. Paper only facilitated a calligrapher's work by providing a smooth surface for the pen.

The question of dating remains a much debated subject when dealing with Qur'an manuscripts. It is very hard to date a fragment of a Qur'an or a manuscript according to the type of script or orthography. There are many examples when colored dots were added to older manuscripts. Also, the speed by which grammatical developments spread is another factor to consider when dating. The dotted system of orthography and Ibn Ahmad's system were not easily accepted. The process happened over a long period of time and sometimes the two systems were used simultaneously.

The study of Arabic calligraphy was very helpful in writing this thesis. Learning to trim the pen and experimenting with it shed light on many aspects which would otherwise have been obscure. For example, trimming the pen in different ways was an important factor in the development of letter shapes. This point however has been overlooked or has been considered a minor point. Furthermore, learning to write individual letters provided a deeper insight in how words were balanced with diacritical or orthographic marks.

Glossary

Balagha	Eloquence.
Diacritical Points	Points that distinguish similar looking letters from each other such as the <i>ba'</i> , <i>ta'</i> and <i>tha'</i> , the <i>ḥa</i> and <i>kha</i> , the <i>ṭa</i> and <i>za</i> etc.
Fard	An imperative duty.
Ghunna	Literally <i>ghunna</i> originates from the verb to sing however when applied on the <i>mīm</i> and <i>nūn</i> in the Qur'an, it is a nasal humming sound that emphasizes the letters and requires certain timing.
Isnād	The uninterrupted chain of authorities on which hadiths are based.
Ḥarf	Literally means letter. In this thesis it refers to the hadith by the prophet that the Qur'an was revealed in <i>sab'at aḥruf</i> , or in seven different ways.
Ḥuffāz	Literally those who know something by heart. The term refers to those who know the Qur'an by heart.
Ḥurūf/aḥruf	Plural of <i>ḥarf</i> .
Idgham	The combining of two letters in pronunciation, sometimes done with <i>ghunna</i> and other times not.
Ikhfa'	Literally to hide. In <i>tajwīd</i> , it is pronouncing a letter in a way in between <i>ghunna</i> and <i>izhār</i> , it is applied with 15 letters of the Arabic alphabet.
Imām	Prayer leader. Usually a person who is well versed in the Qur'an.
Iqlāb	to turn or change something into something else. In <i>tajwīd</i> , it is changing the <i>nūn</i> into a <i>mīm</i> when followed by a <i>ba'</i> . It is indicated in the Qur'ans by a small <i>mīm</i> on top of the <i>nun</i> .
I'rab	The grammatical analysis of a word.
Izhār	means clarification or to make obvious. In this rule it means the absence of <i>ghunna</i> .
Jahiliyyah	The term refers to the period prior to Islam in Arabia.
Jaḥlī	Literally means clear. Refers to a type of Arabic script that is written with large letters.

Mabsut	Literally means broad. Refers to an early type of Arabic script that is written with broad letters.
Khatt	Script.
Khattat	Calligrapher.
Madd	Is to prolong. In <i>tajwīd</i> it is the prolongation of one of the three letters of <i>madd</i> : <i>alif</i> , <i>wāw</i> and <i>ya</i> . There are different kinds of madd depending on the combination of letters in a word and it is always indicated by the same sign which is .
Muḥaqqaq	One of <i>al-Aqlam al-sittah</i> that resulted from the reform of Ibn Muqla. Its letters are very similar to <i>thuluth</i> , however in length and width takes more dots in Ibn Muqla's system of measurements.
Muqawwar	Rounded. Refers to an early type of Arabic script.
Mushaf	A copy of the Qur'an.
Nahw	is defined as the grammatical analysis of an Arabic word or its <i>i'rab</i> . Ibn Manzour defines <i>i'rāb</i> as clarification of the meaning of the word. <i>I'rāb</i> is <i>nahw</i> and for <i>naḥawwīn</i> it is the sign at the end of each word (whether <i>damma</i> , <i>fatha</i> , or <i>kasra</i>) to clarify its meaning in the sentence.
Naḥawwīn	Grammarians of the Arabic language.
Naskh	One of <i>al-aqlam al-sittah</i> that resulted from the reforms of Ibn Muqla. It was combined with another script, <i>ta'liq</i> , to form another script which became known as <i>nasta'liq</i> .
Orthographic signs	The signs that appear on top of words whether <i>fatha</i> , <i>damma</i> , <i>kasra</i> , <i>sukūn</i> or <i>shadda</i> to indicate the grammatical position and the meaning of the word in a sentence.
al-Qalam al-nisf	Literally the half pen. The term refers to the way the tip of the pen was trimmed by the <i>wazīr</i> calligrapher <i>al-aḥwal</i> who developed it from the <i>Jalīl</i> pen.
Qawa'id al-naḥw	Rules of grammar.
Qirā'at	Literally means readings. The term refers to the different ways of reading the Qur'an.
Qurra'	Literally means readers. The term refers to readers of the Qur'an.
Rayḥan	One of <i>al-aqlam al-sittah</i> that resulted from the reforms of Ibn Muqla.

Ridda wars	Wars that took place during the reign of the caliph Abu Bakr to subdue those who rose against Islam after the death of the prophet.
Sab', Sab'a	Seven. The number is connected with the hadith of the prophet that the Qur'an was revealed in seven different ways and the number also is of significance in the Qur'an.
Sahaba	Companions of the prophet.
Shura	Advice.
Suhuf	Plural of <i>ṣafḥa</i> . Refers to the early material which the Qur'an was written on.
Sunbuli	Term used among calligraphers to refer to the late Abbasid script and it is characterized by rounded letters. Deroche calls it The New Style.
Sura	A section of the Qur'an with a specific name and a certain number of <i>ayas</i> .
Tajwīd	is a specific way of reciting the Qur'an, which includes timing, special breathing and special vocalization depending on the order and nature of the letters in a word.
Thuluth	One of <i>al-aqlām al-sittah</i> that resulted from the reforms of Ibn Muqla by trimming the nib of the pen to measure a third of the <i>Jalīl</i> .
Tilawa	One of the ways of reciting the Qur'an.
Talhīn	is of two kinds. In the first kind known as <i>al-laḥn al-jalyy</i> certain mispronounced letters may change the meaning of the word or <i>aya</i> . For example pronouncing the <i>ta</i> , <i>ta</i> . It also includes reading the wrong orthographic marks at the end of the word such as changing a <i>ḍamma</i> to a <i>fatḥa</i> . In the second kind, known as <i>al-laḥn al-khafī</i> , wrong vocalization occurs during recitation.
Tashkīl	Literally it means molding. In Arabic writing the term refers to the appliance of diacritical and orthographic signs.
Vocalization	A term used in this thesis to indicate reading Arabic with orthographic signs or <i>tashkīl</i> .
Warrāqūn	copyists.

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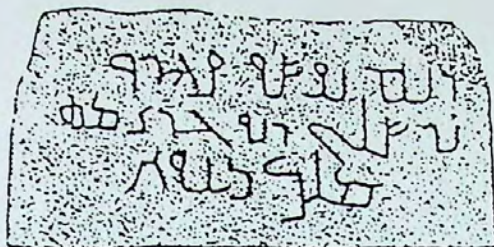
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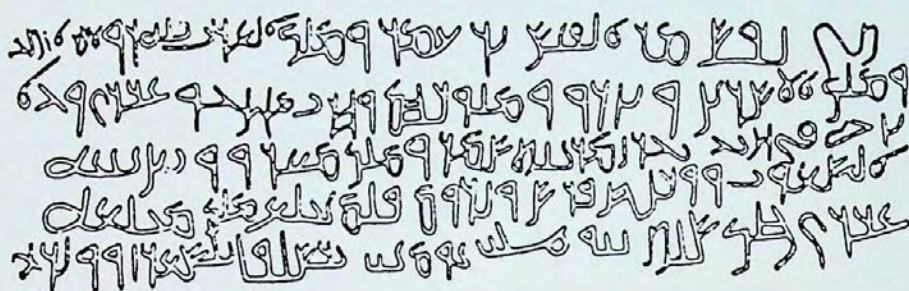
Appendix

Plates

Pl. 1 Record of early Arabic inscriptions, after Abbott. *The Rise of the North Arabic Script*, Pl. 1.



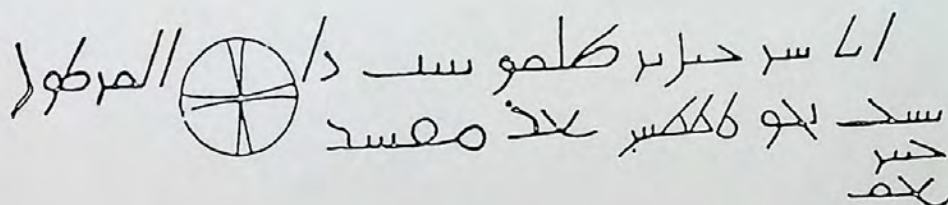
1. Nabataean inscription on tombstone of Fihri. Umm al-Jimāl, ca. A.D. 250. After Enno Littmann in *Flor. de Vogüé*, p. 356. Scale, 1:10.



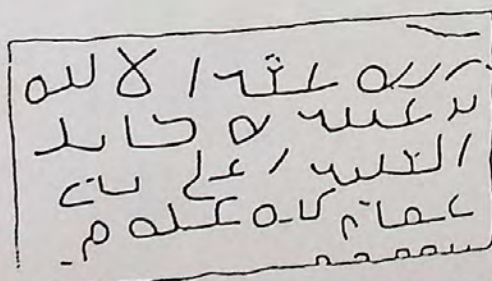
2. Arabic inscription of Imru' al-Qais. Namārah, A.D. 328. After René Dussaud in *Revue archéologique*, 3. sér., XLI (1902) 411. Scale, 1:10. Rép. No. 1.



3. Arabic inscription from Zabād, A.D. 512. After Eduard Sachau in *MPAW*, 1881, pl. facing p. 190. Scale, about 1:15. Rép. No. 2.



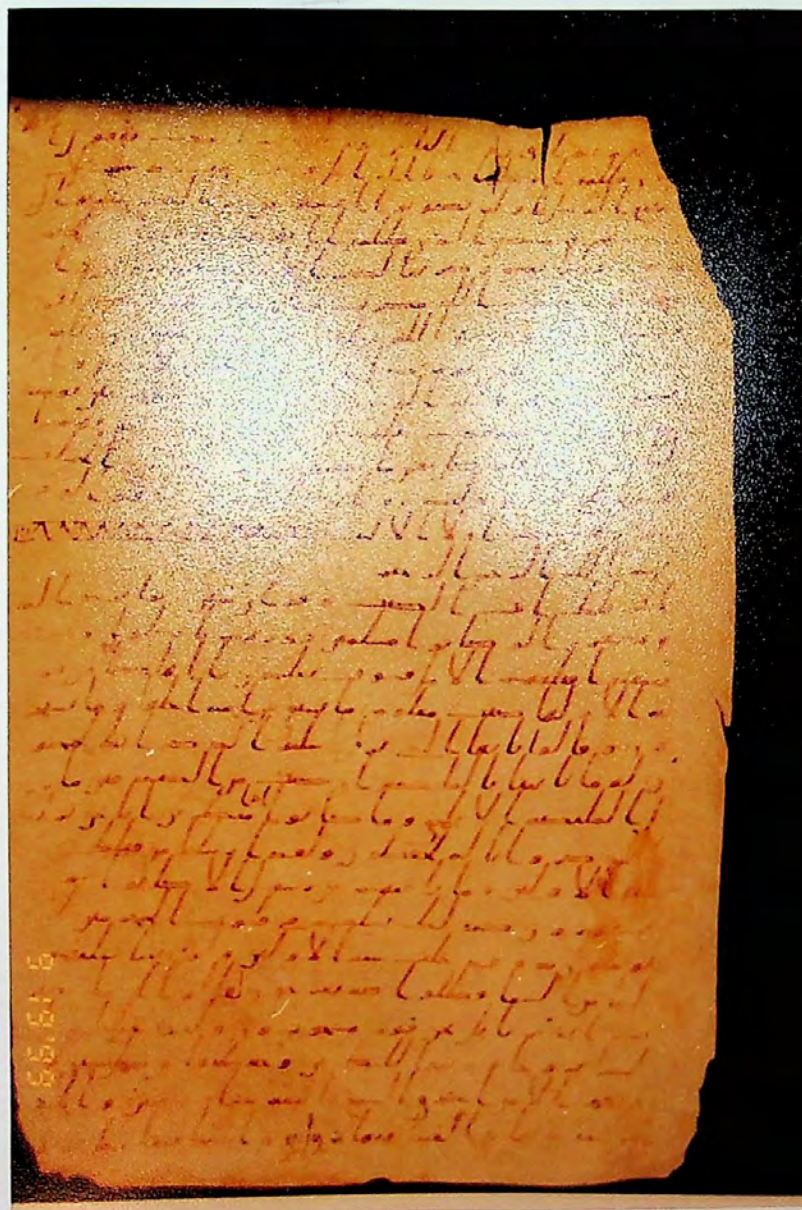
4. Arabic inscription at Harrān, A.D. 568. After P. Schroeder in *ZDMG* XXXVIII (1884) pl. facing p. 530. Scale, 1:2. Rép. No. 3.



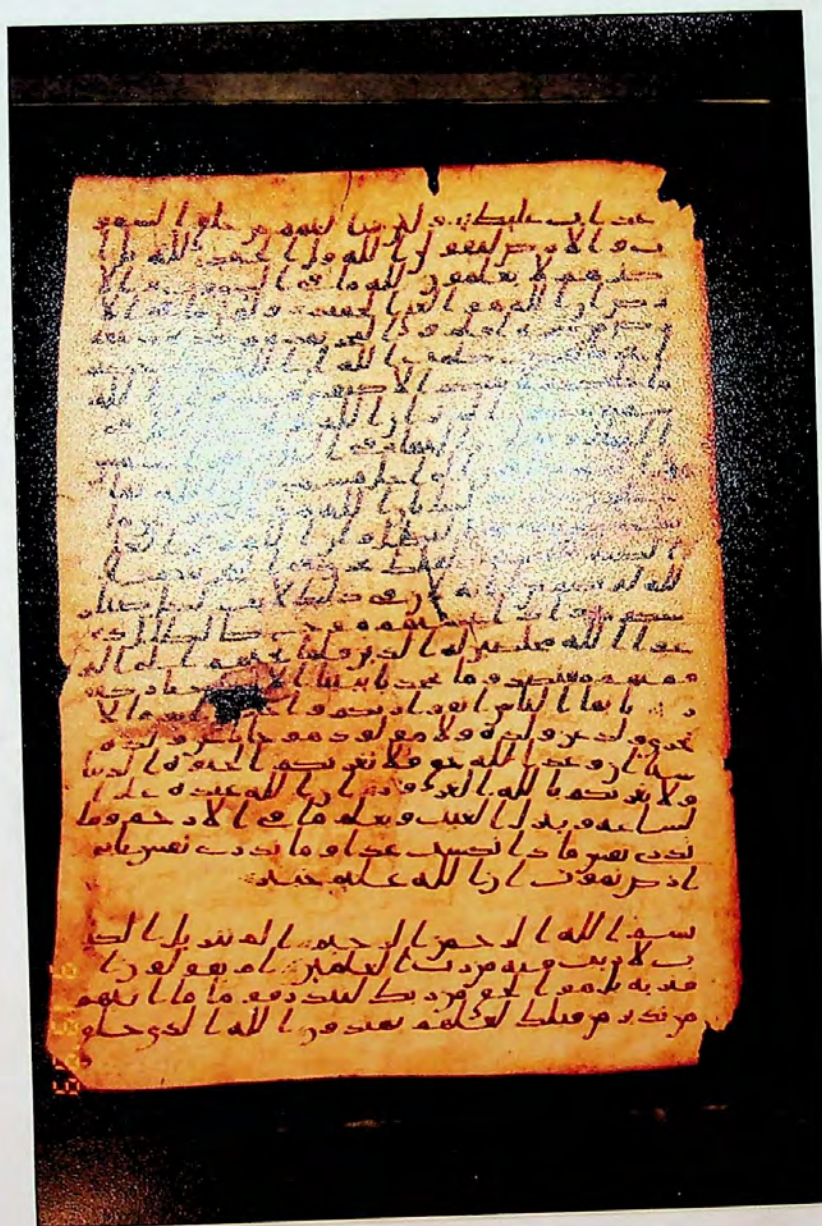
5. Arabic inscription at Umm al-Jimāl, 6th century. After Enno Littmann in *ZS* VII (1929) 198. Scale, 1:10. Rép. No. 4.

NABATAEAN AND PRE-ISLAMIC ARABIC INSCRIPTIONS

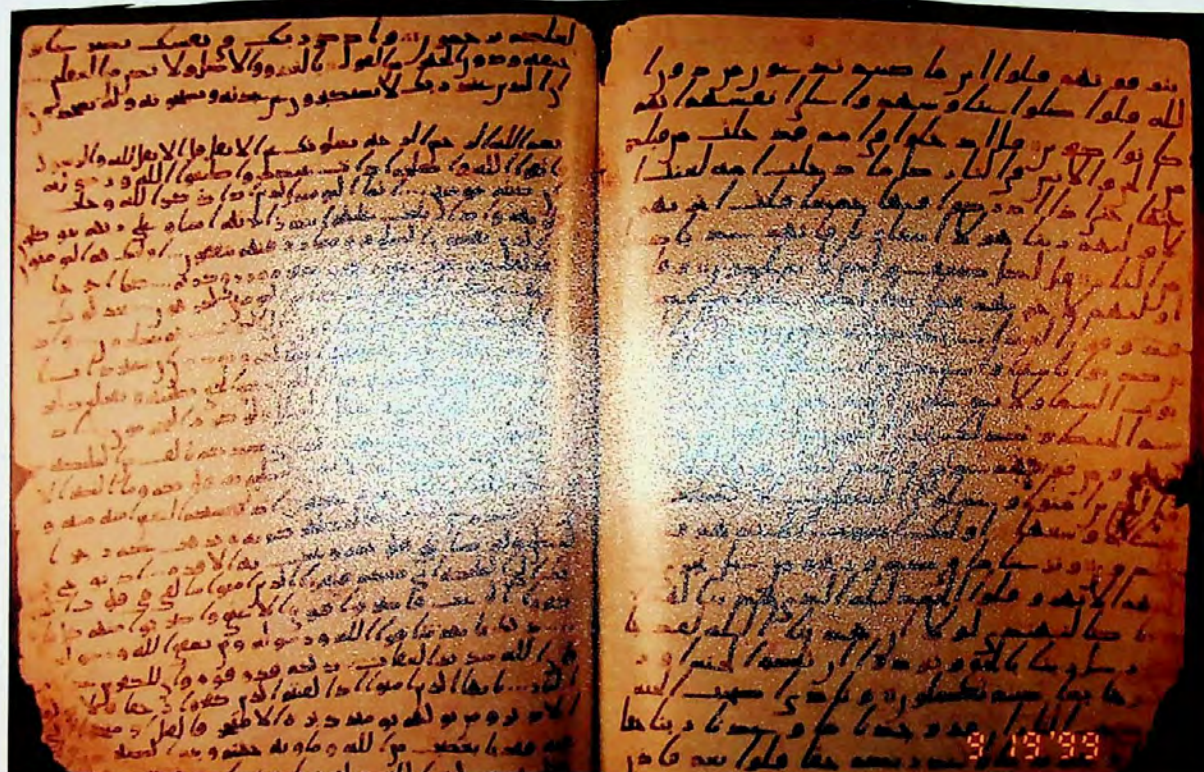
Pl. 2 Qur'an fragment, 1st/ 7th century, Hijazi, sura 14:43-15:20, San 'a' Manuscripts 00-29.1.



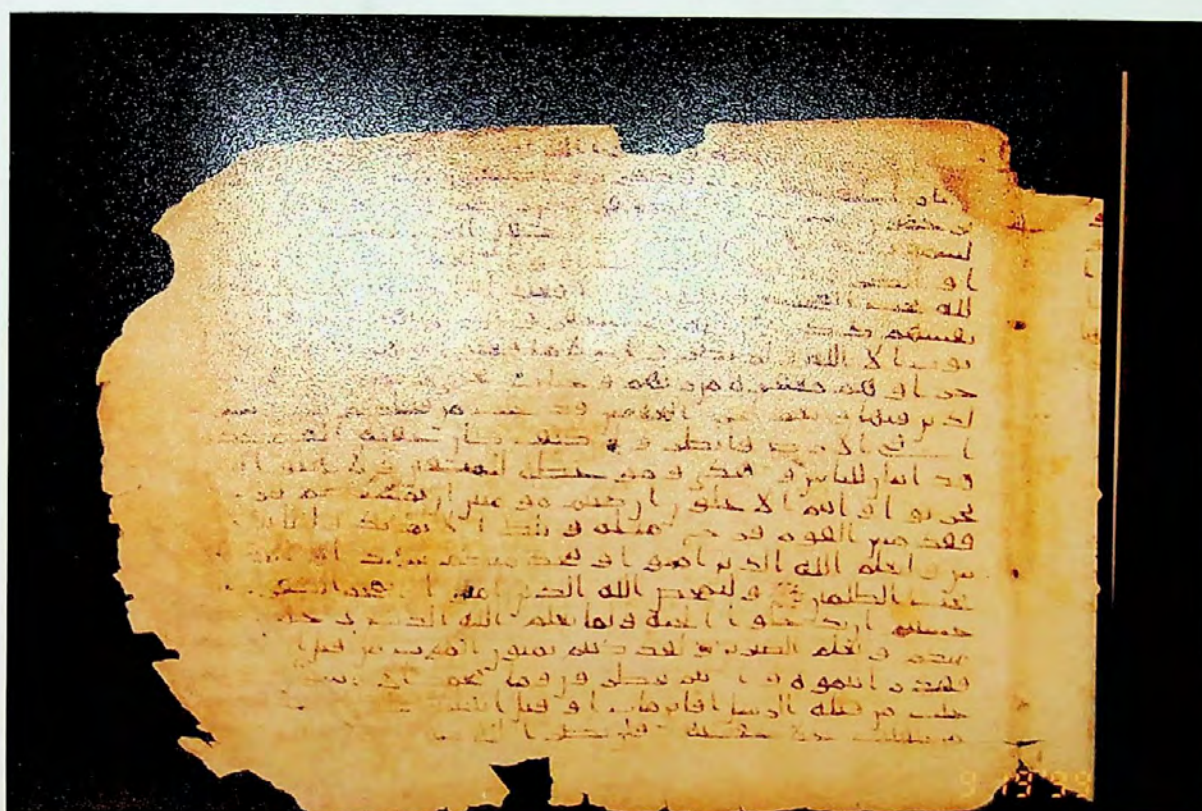
Pl. 3 Qur'an fragment, 1st/ 7th century, Hijazi, sura 31:24-32:4, San 'a' Manuscripts 00-27.1.



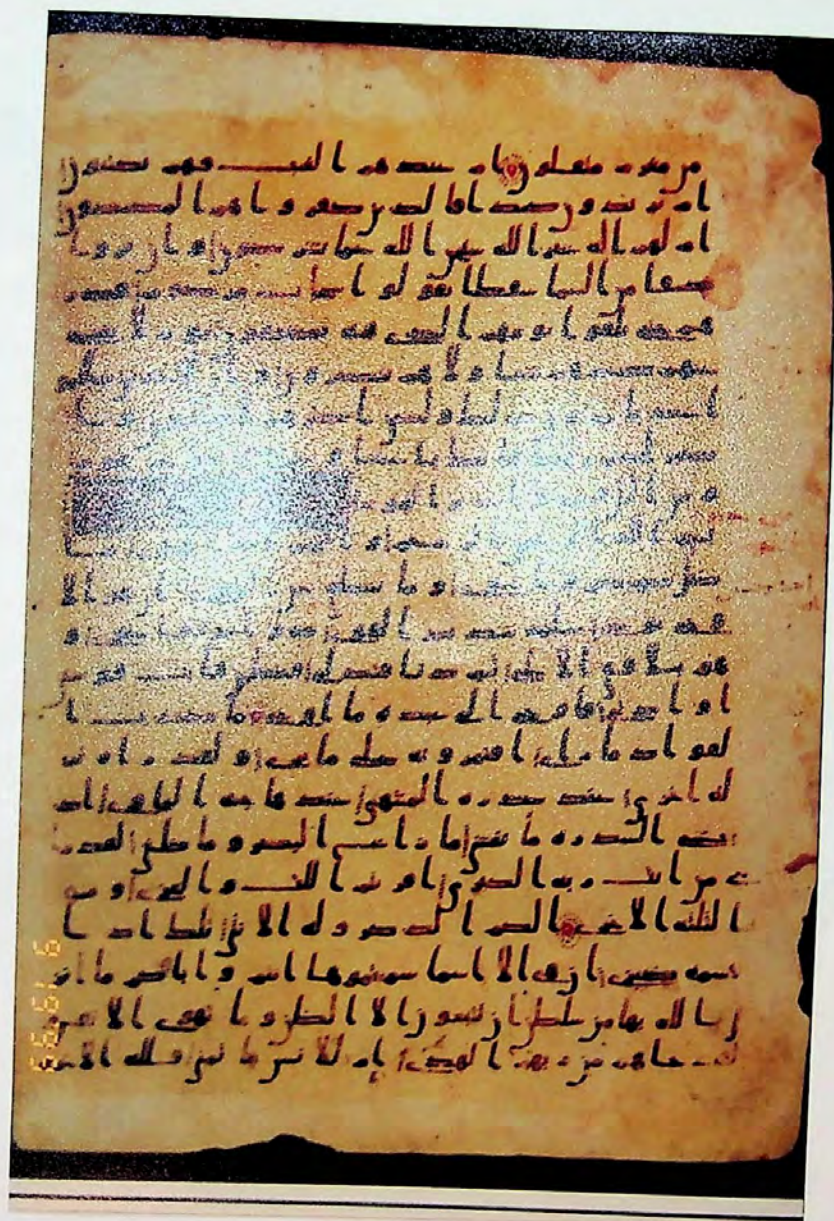
Pl. 4 Qur'an fragment, 1st/ 7th, Hijazi, sura 7:37-44/ 7:204-8:17, San'a' Manuscripts 00-25.1.



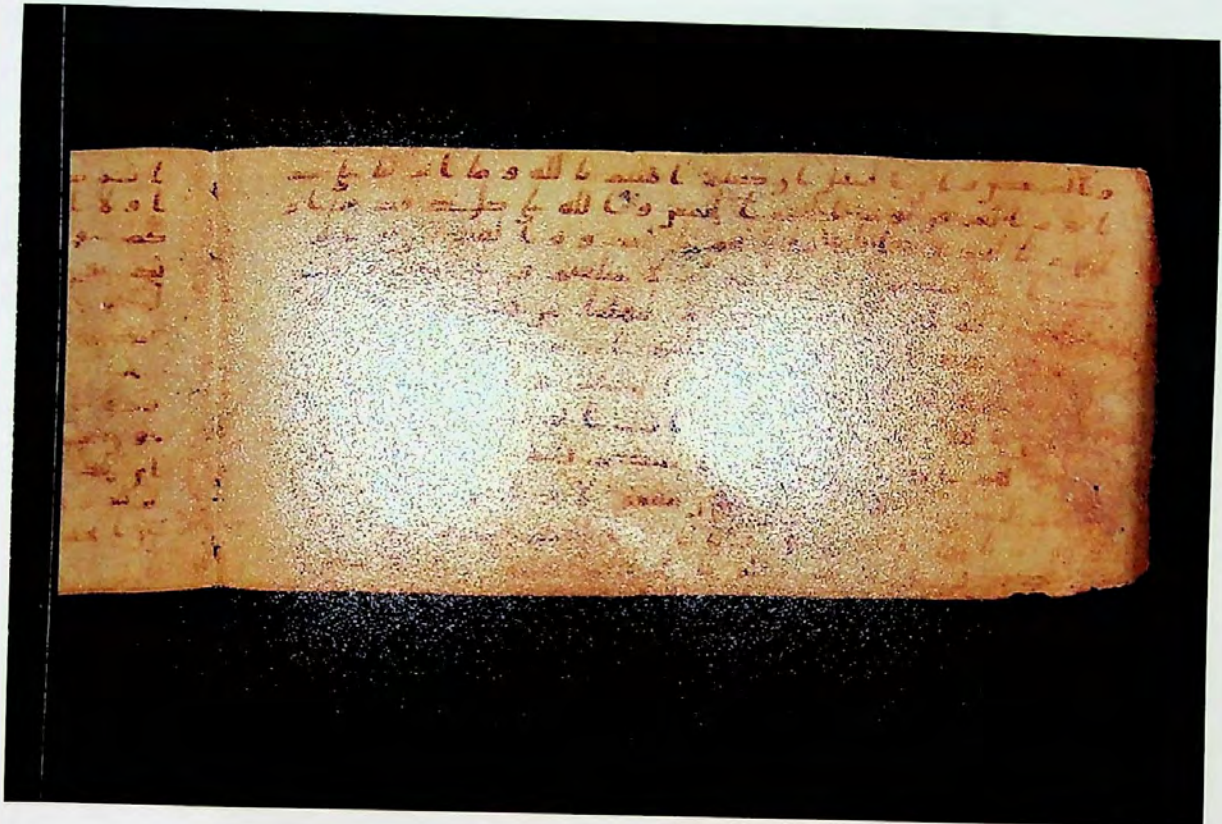
Pl. 5 Qur'an fragment, 1st/ 7th century, Hijazi, sura 3:130-144, San 'a' Manuscripts 20-18.1.



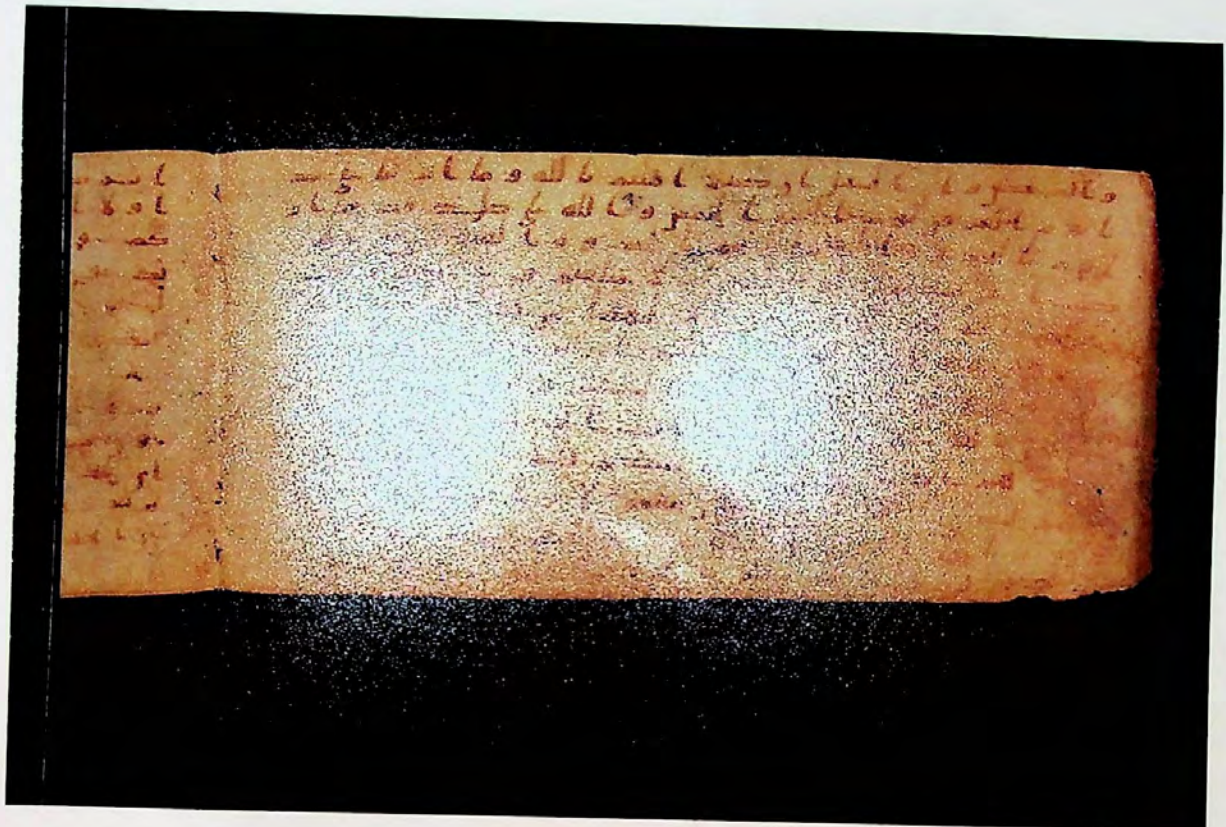
Pl. 6 Qur'an fragment, 1st or 2nd/7th or 8th century, late Hijazi, sura 52:40-53:25, San'a Manuscripts 00-28.1.



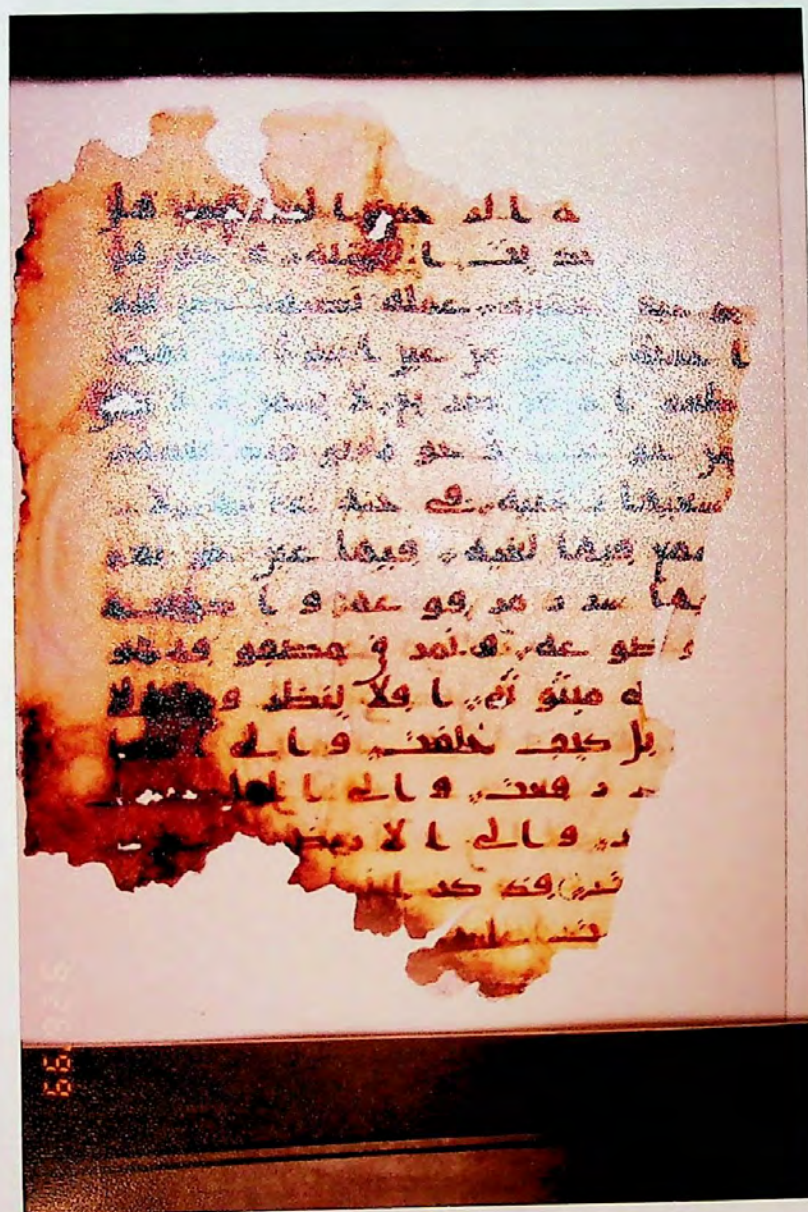
Pl. 7 Qur'an fragment, 1st or 2nd/ 7th or 8th century, late Hijazi, sura 8:41-8:46, San
'a' Manuscripts 00-18.3.



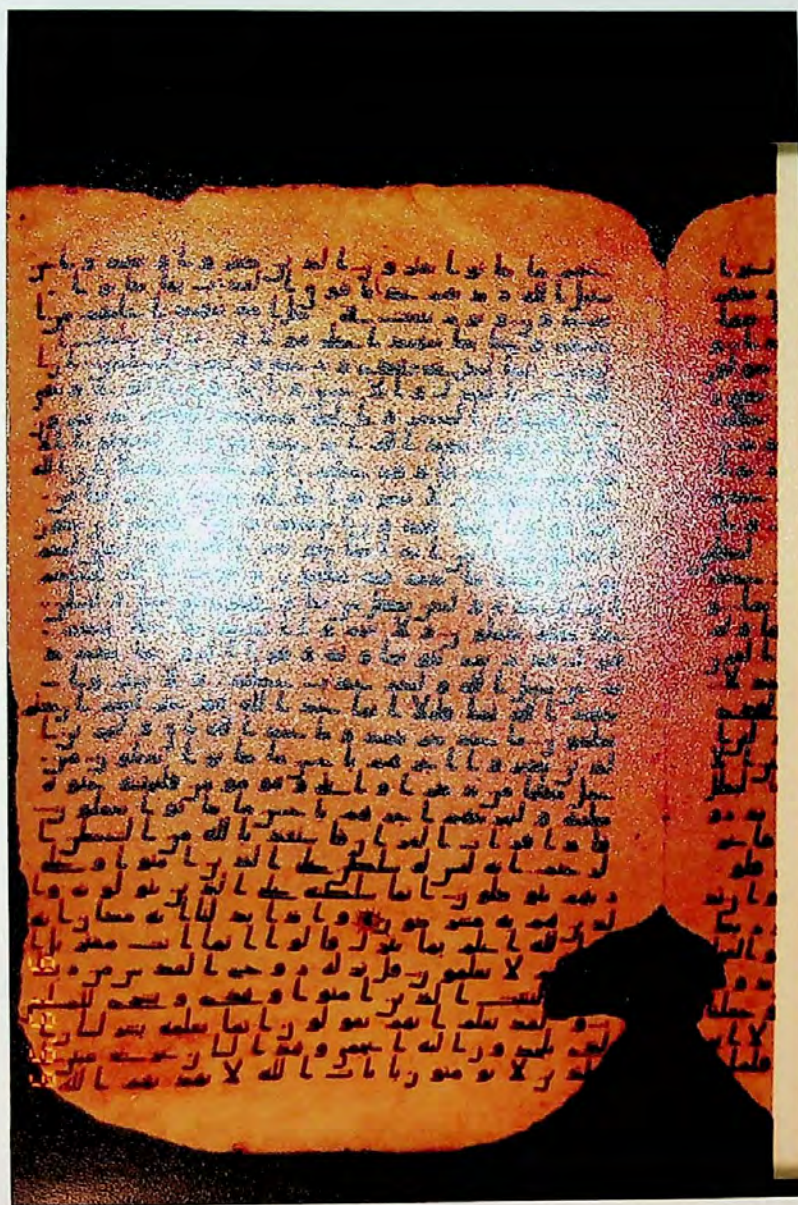
Pl. 7 Qur'an fragment, 1st or 2nd/ 7th or 8th century, late Hijazi, sura 8:41-8:46, San
'a' Manuscripts 00-18.3.



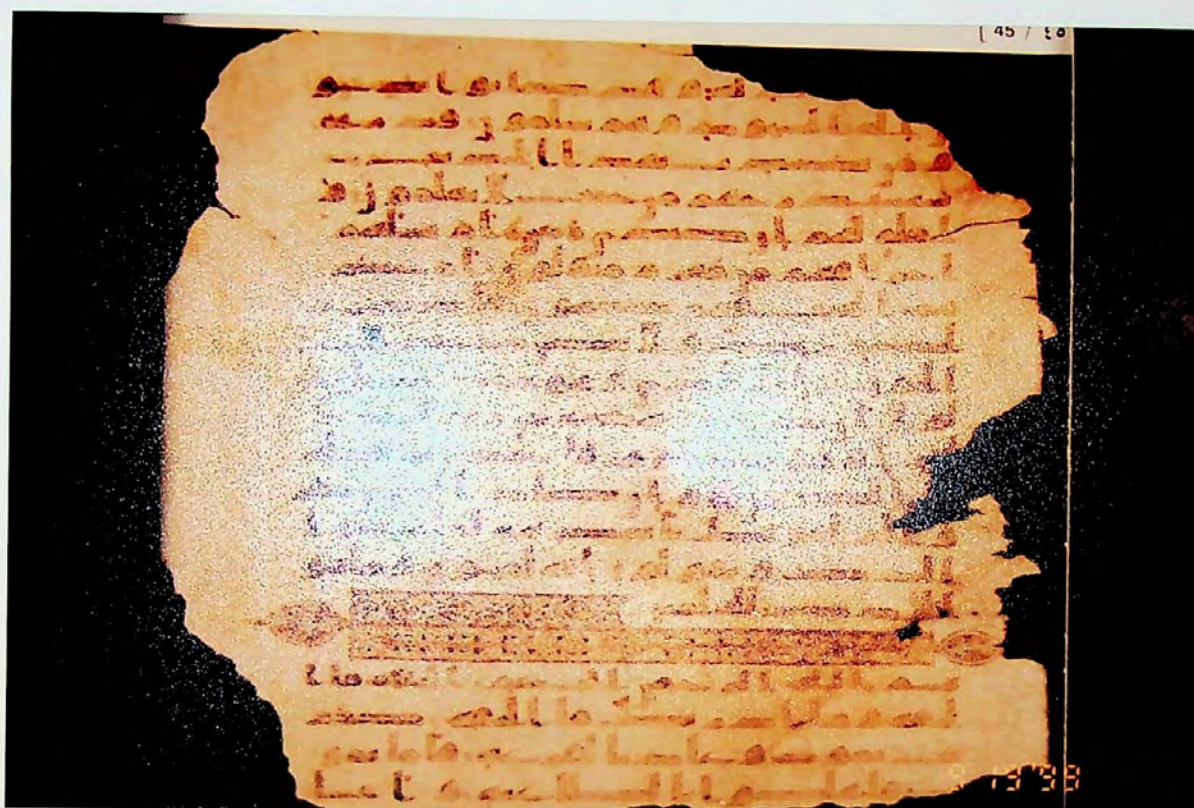
Pl. 8 Two folios., 2nd/8th century, Hijazi, sura 88, Khalili collection, KFQ42 verso.



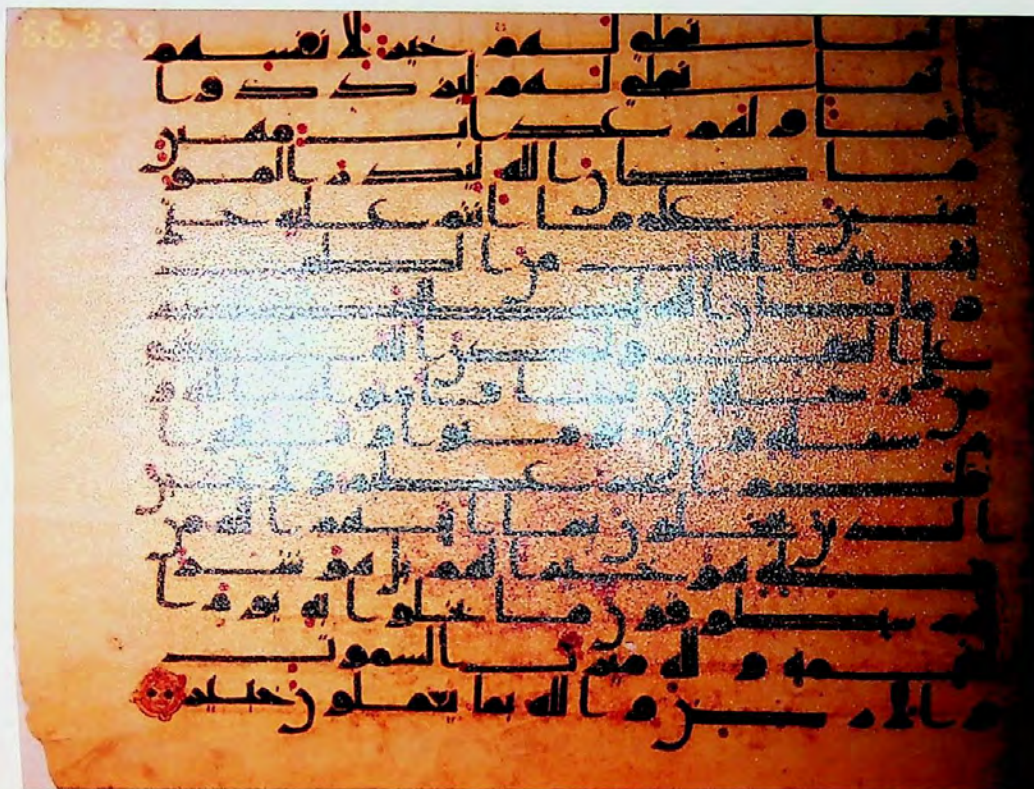
Pl. 9 Qur'an fragment, 2nd/8th century, late Hijazi, sura 16:87-104, San'a' Manuscripts 00.30.1.



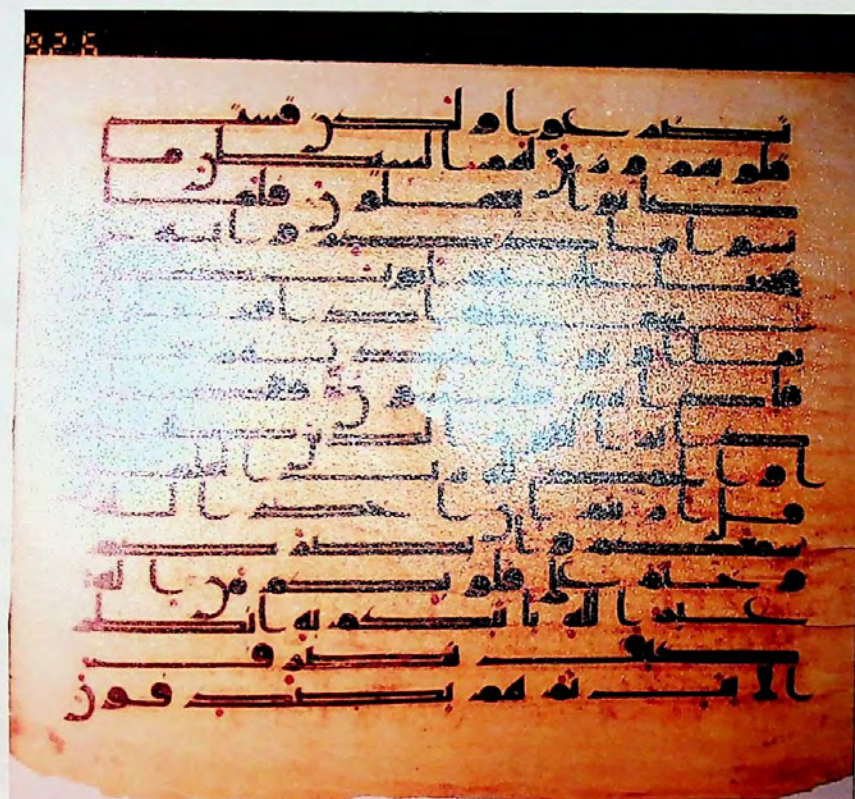
Pl. 11 Umayyad Mushaf, early 2nd / 8th century, Kufic, sura 68:43- 69:1, San'a Manuscripts 20-33.1.



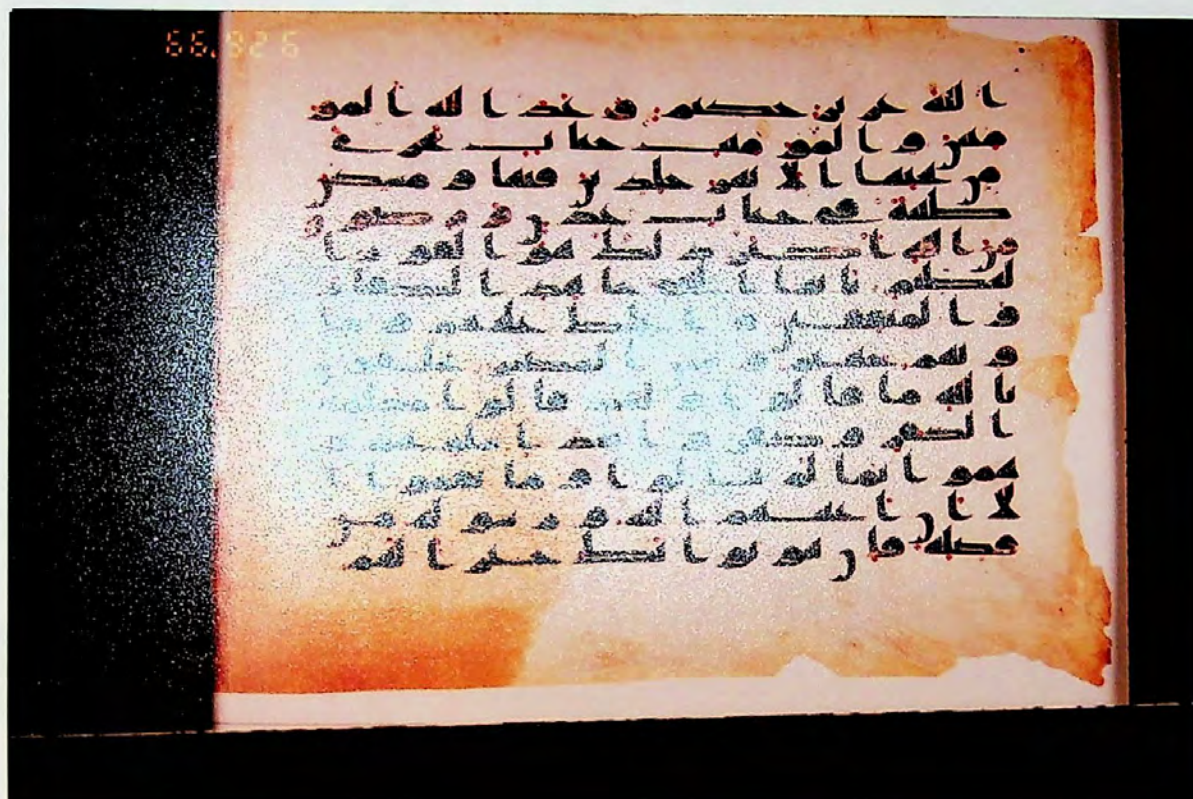
Pl. 12 Single folio, 9th century, Kufic, sura 3: 178-180, Khalili collection, KFQ71.



Pl. 13 Three folios., end of the 8th century, Kufic/ mashq, sura 6: 43-46, Khalili collection, KFQ47 verso.



Pl. 14 Single folio, perhaps 9th century, Kufic, sura 9: 69-74, Khalili collection, KFQ44 recto.



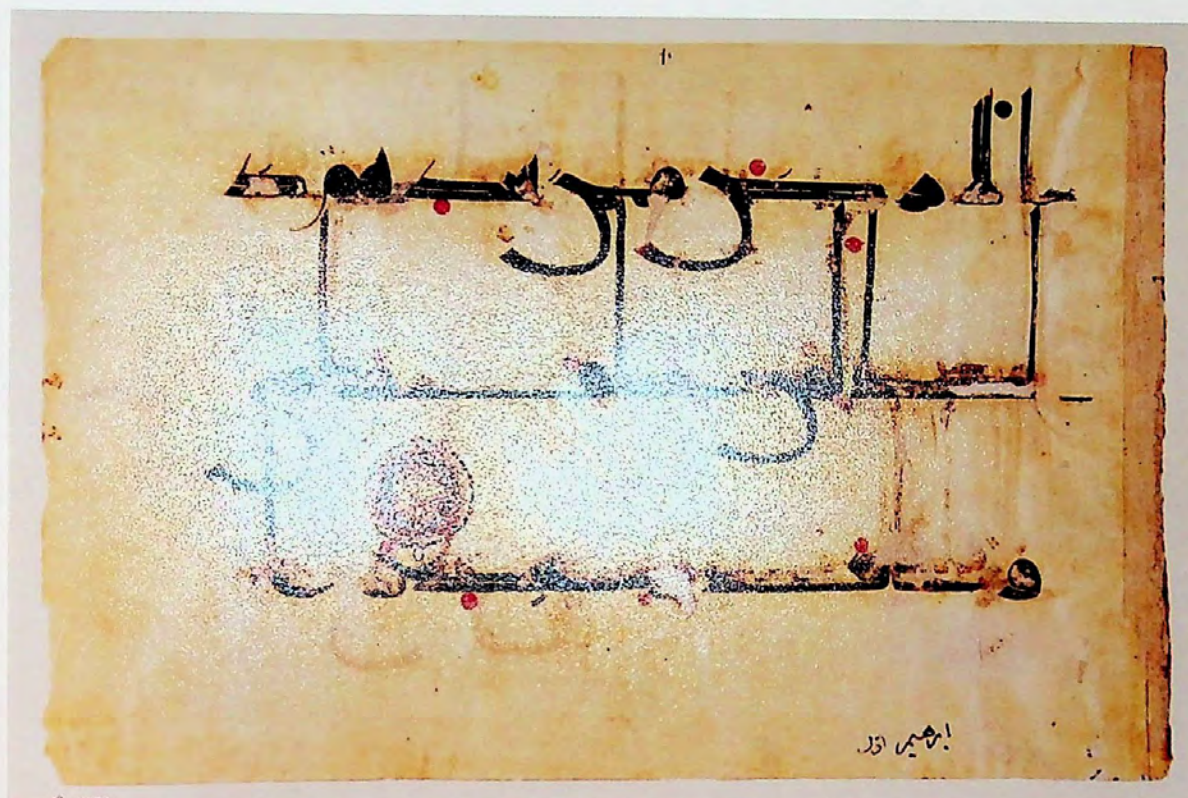
Pl. 15 Single folio, 9th century, Kufic, sura 17: 53-5, Khalili collection, KFFQ68 recto.



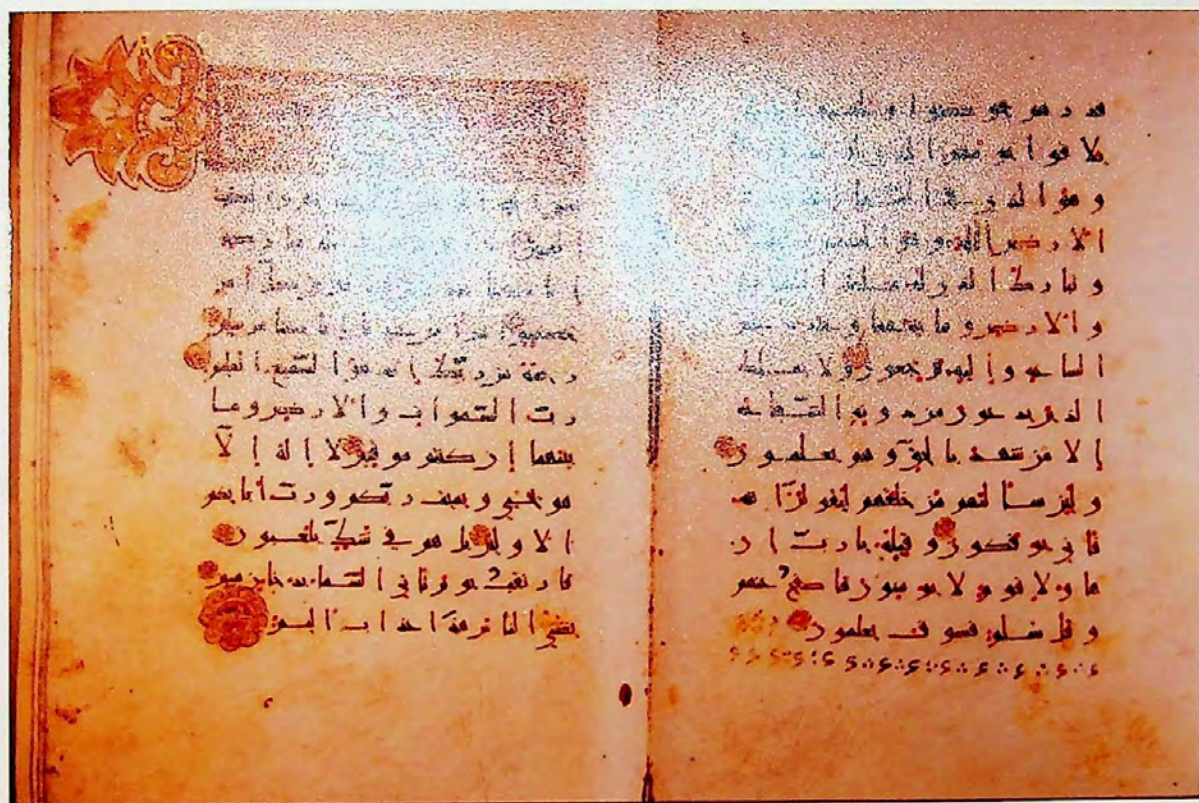
Pl. 16 Bifolio, first half of the 10th century, Kuffic, sura 33: 50-51/ 33: 45-46 , Khalili collection, KFQ89, f. 1a, f. 2b.



Pl. 17 Single folio, 10th century, Kufic, sura 14: 14, Khalili collection, KFQ91, recto.



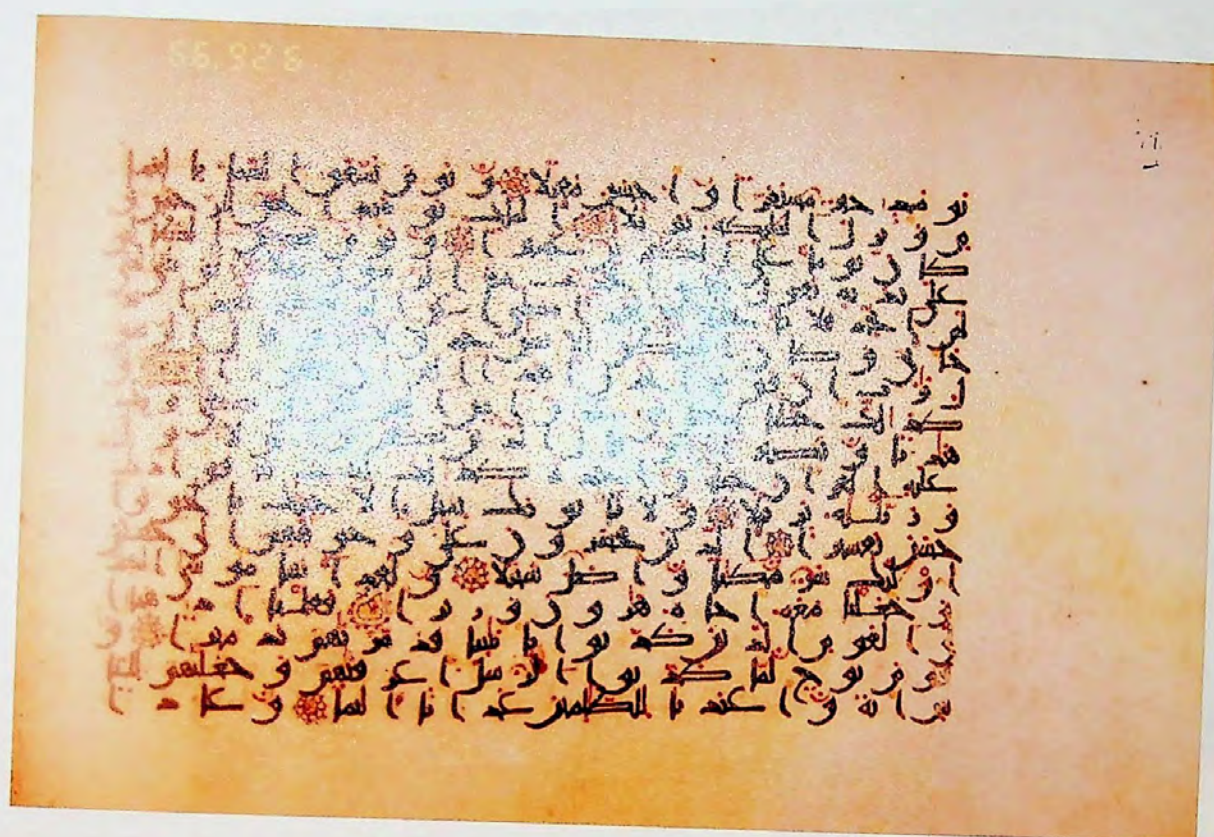
Pl. 18 Part 9 of a 10 part Qur'an, 10th century, sunbuli, sura 43:83-44:11, Khalili collection, QUR286, ff. 14b-15a.



Pl. 19 Single folio, Ramadan 383, October, November/ 993, Isfahan, sunbuli, sura 54:
1-6, Khalili collection, KFQ90, 83 verso.



Pl. 20 Two quires, 372/ 982-3, Palermo, Magribi, sura 25: 24-38, Khalili collection, QUR 368, f. 6b.



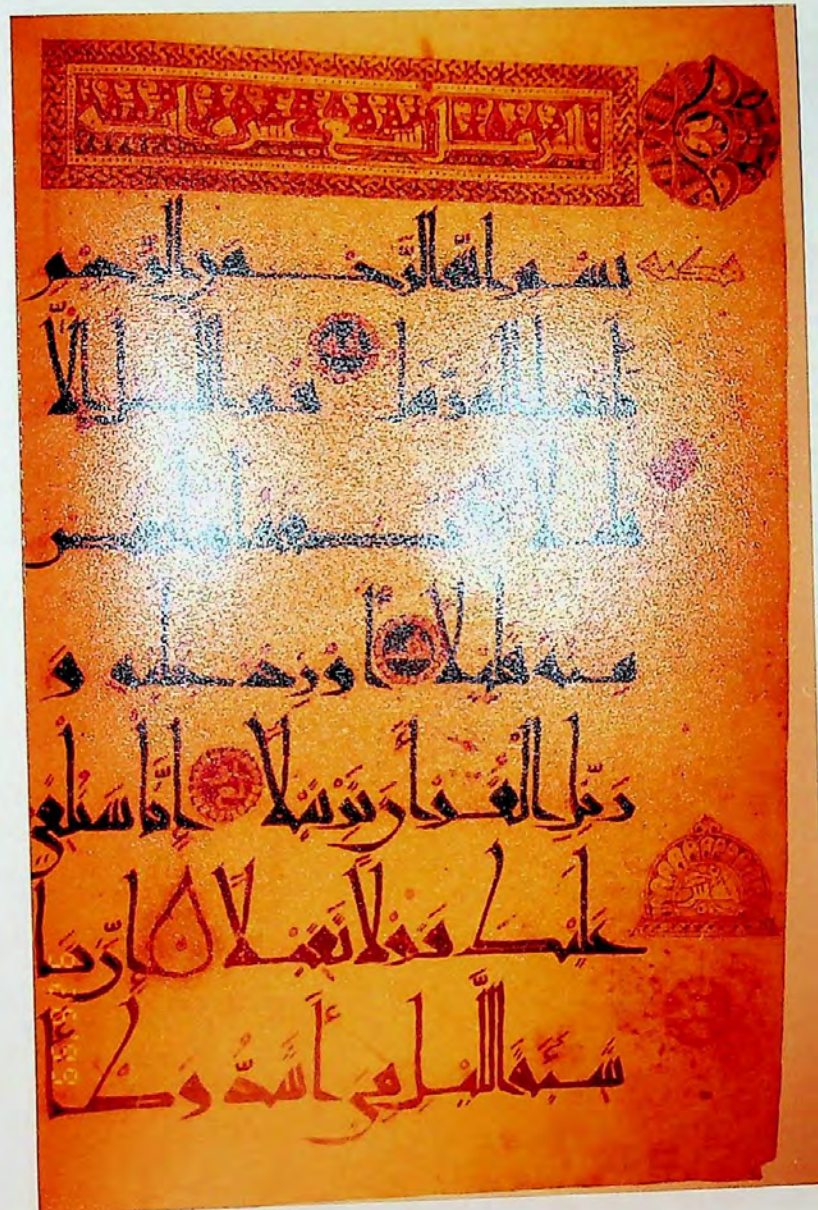
Pl. 21 Fragment of a 7-part Qur'an, 11th century, Kufic, sura 1/ 2:1-4, Khalili collection, QUR89, f. 2b-3a.



Pl. 22 Fragment of a 7-part Qur'an, 11th century, *sunbuli*, sura 53:59-62/ 54:1-2, Khalili collection, QUR89, f. 38a.



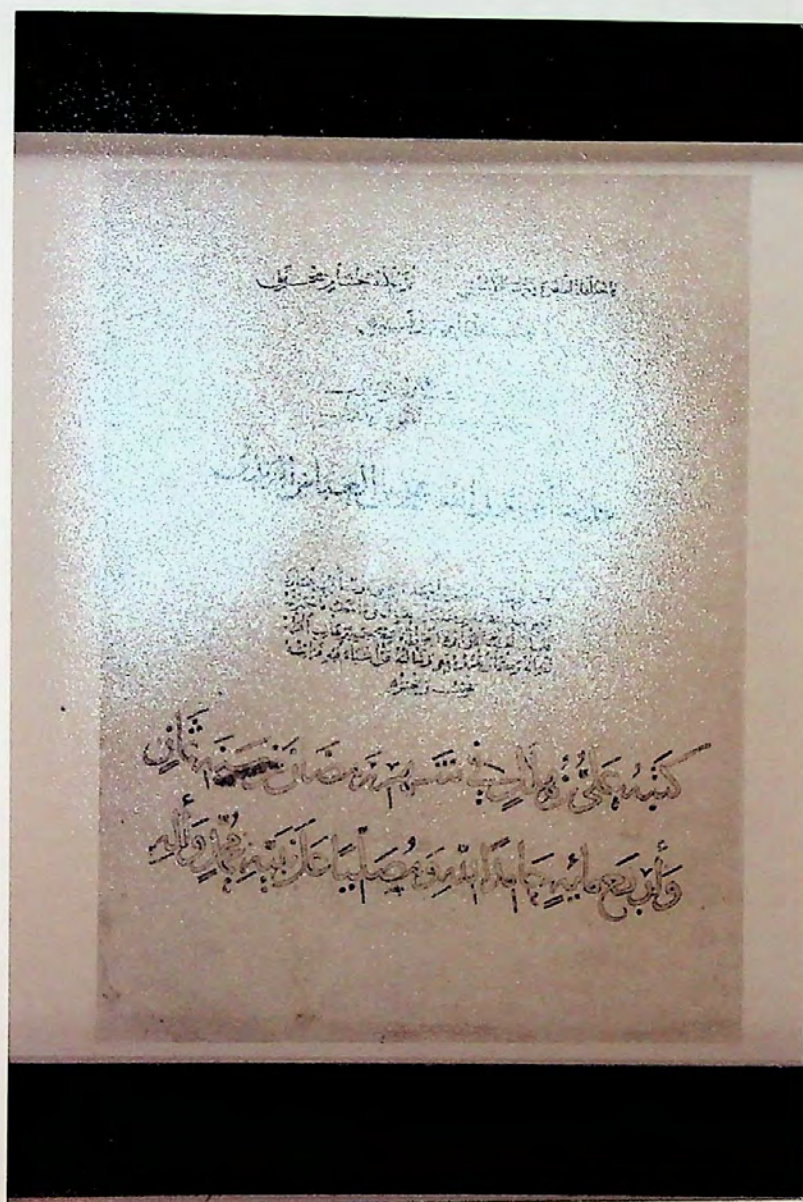
Pl. 23 Fragment of a 7-part Qur'an, 11th century, *sunbuli*, sura 73: 1-6, Khalili collection, QUR89, f. 103b.



Pl. 24 Fragment of a 7-part Qur'an, 11th century, *sunbuli*, sura 106: 1-6, Khalili collection, QUR89, f.122a.



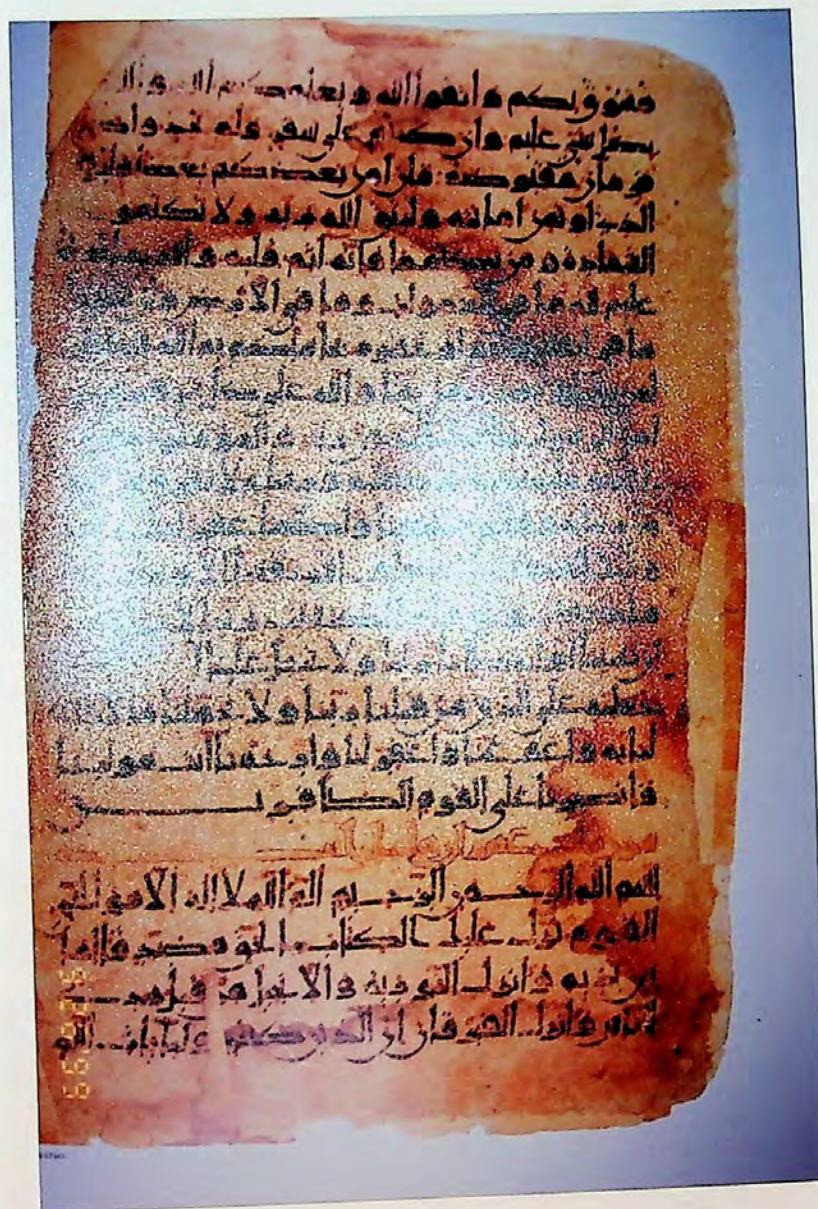
Pl. 25 Ibn al-Bawwab Qur'an, Ramadan 408/ 1017, Baghdad, *naskh*, f. 34 recto.



Pl. 26 Ibn al-Bawwab Qur'an, Ramadan 408/ 1017, Baghdad, main text in *naskh*,
 incidentals in *thuluth*, f. 283 verso.



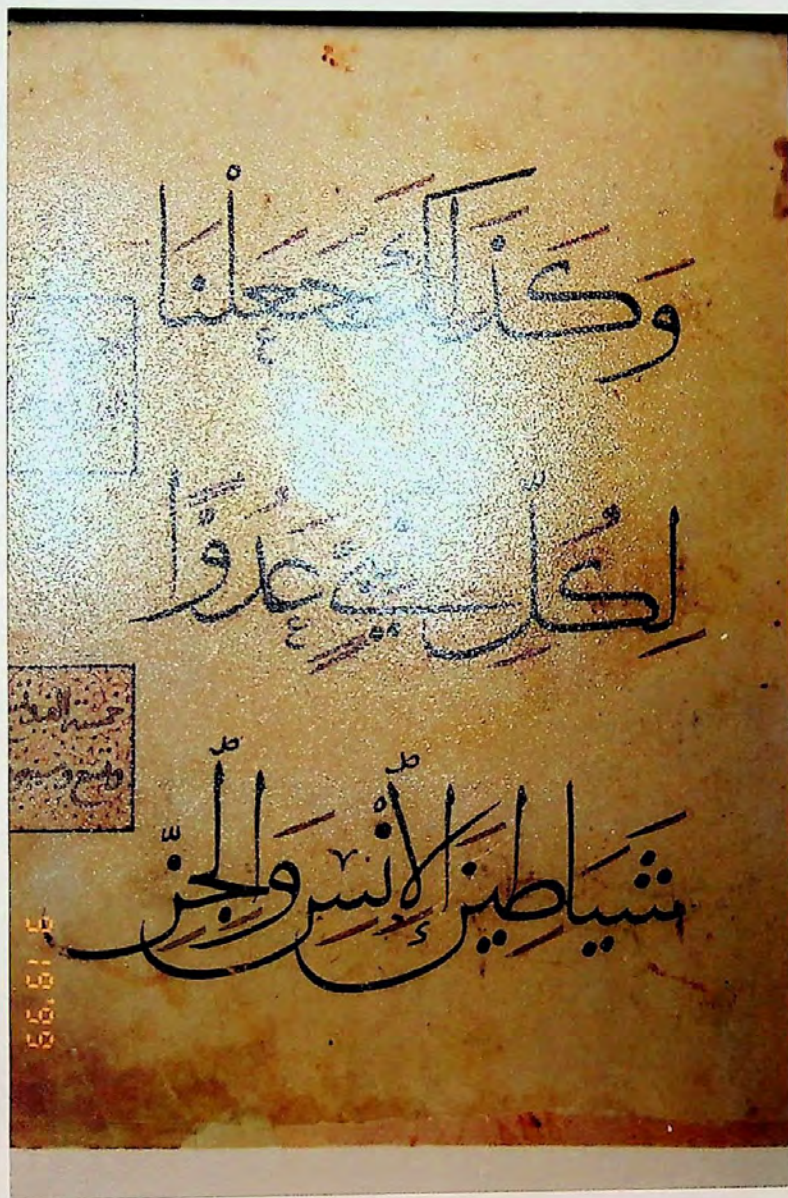
Pl. 27 Single folio, 11th or 12th century, *sunbuli*, sura 2: 277-3: 4, Khalili collection, KFQ73 verso.



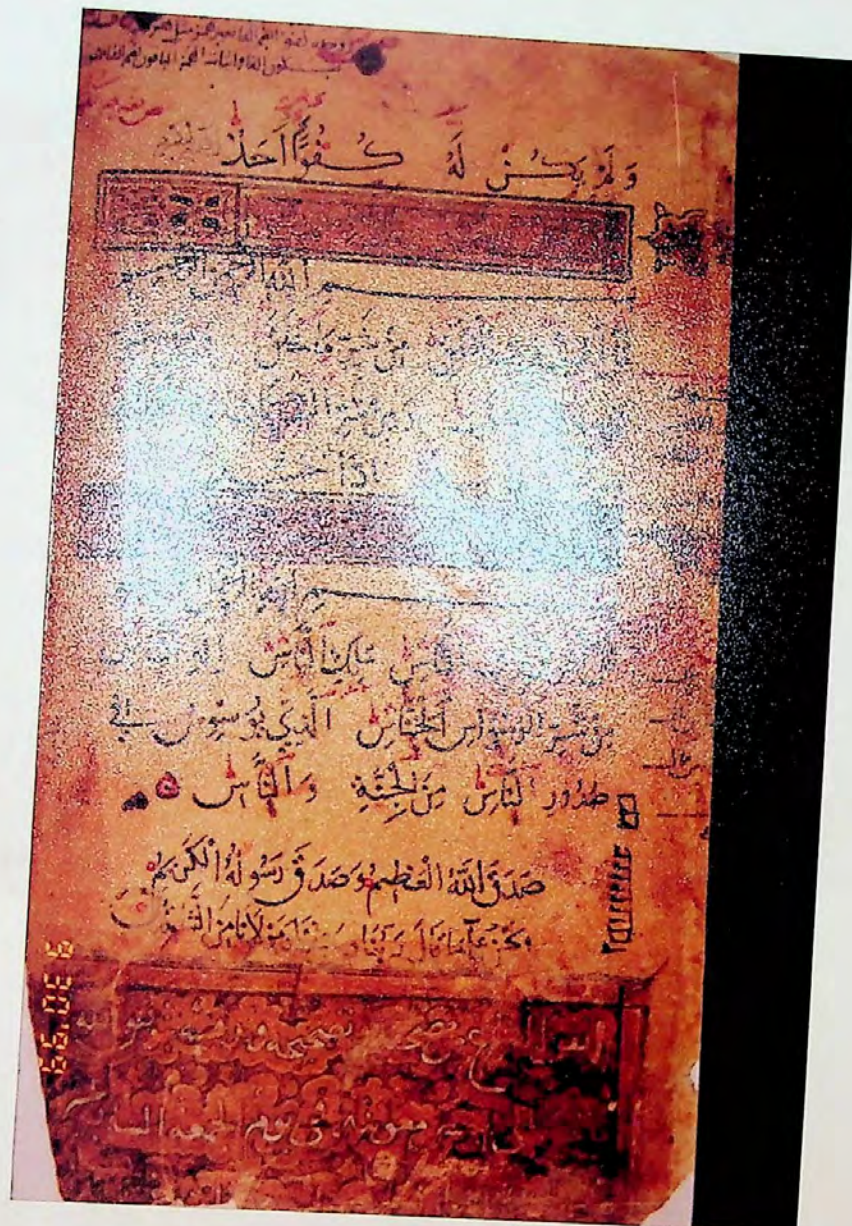
Pl. 29 Part 21 of a 30-part Qur'an, 12th century, *sunbuli*, sura 32: 4-7, Khalili collection, QURI50, f. 55b-56a.



Pl. 30 Part 8 of a 30-part Qur'an attributed to Yaqut al-Musta'simi, c. 1175-1225, North-west Iran, *muhaqqaq*, sura 6: 112, Khalili collection, QUR.87, f. 3a.



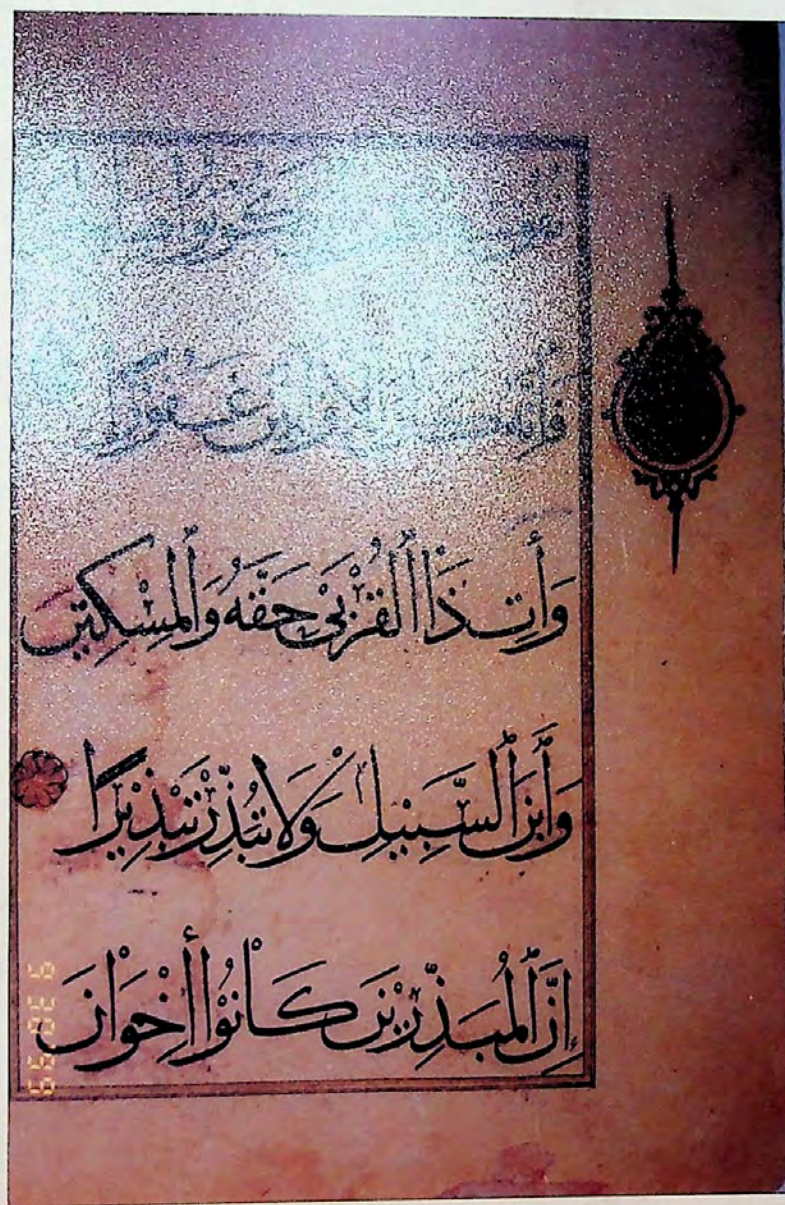
Pl. 31 Single-volume Qur'an, 582/ 1186, Iraq or Iran, *naskh*, sura 112: 4/ 113: 1-5/ 114:1-6, Khalili collection, QUR572, f. 199b-200a.



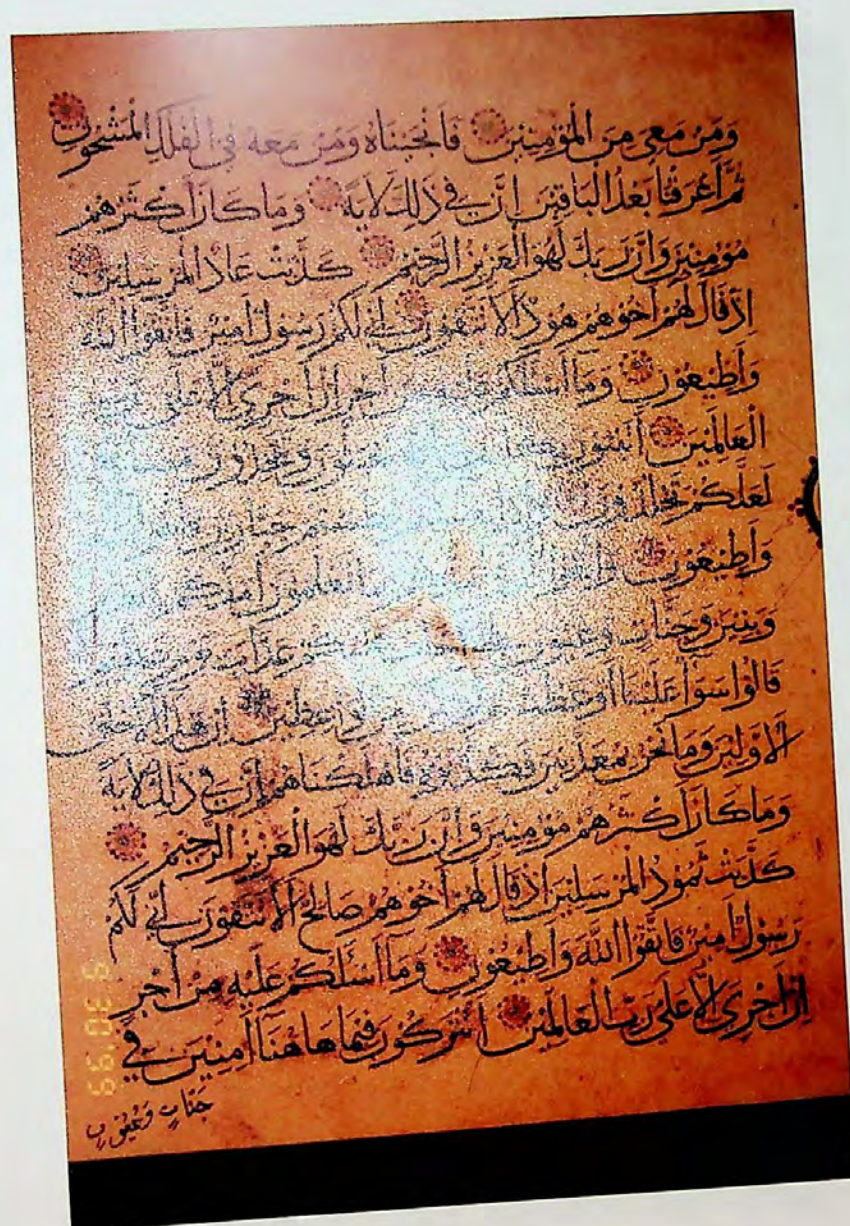
Pl. 32 Part 28 of a 30-part Qur'an, 1198-1219, Sinjar or Nisibin, main text in *thuluth*, incidentals in Kufic, sura 58: 1-2, Khalili collection, QUR497, ff. 2b-3a.



Pl. 33 Two folios, c.1250-1300, Iran, *muhaqqaq*, sura 26: 119-146, Khalili collection, QUR583, f. Ib.



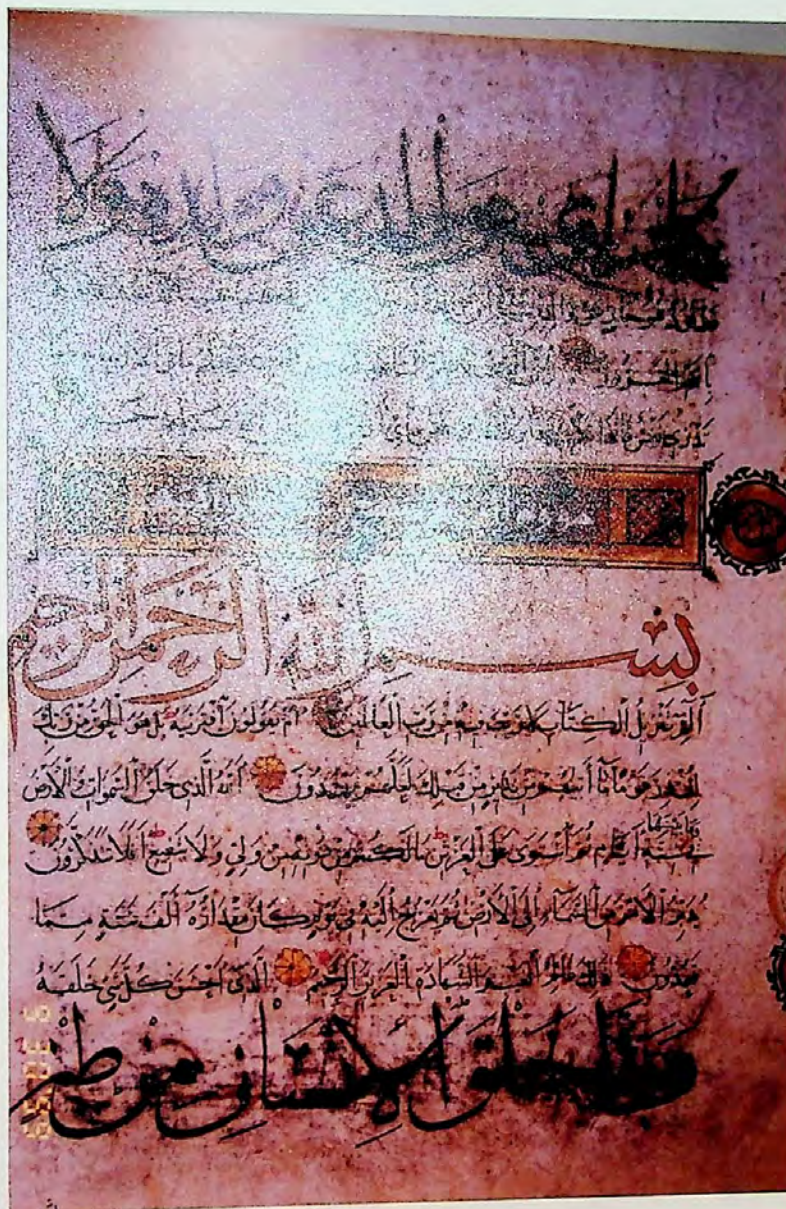
Pl. 34 Qur'an fragment, c. 1250-1350, Iran, main text in *muhaqqaq*, incidentals in *ihuluth*, sura 57: 28-29/ 58: 1, Khalili collection, QUR495, f. 1a.



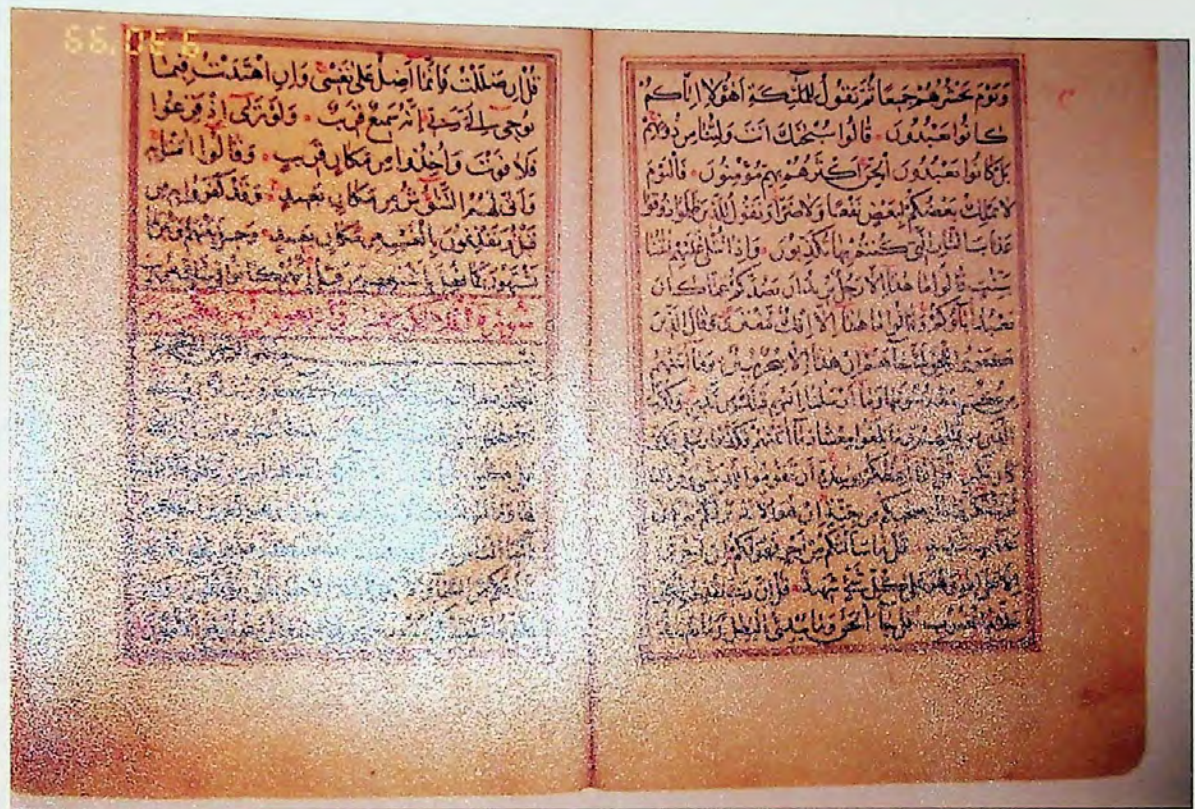
Pl. 35 Part 15 a 30-part Qur'an, 681/ 1282-3, Iraq, probably Baghdad, main text in *muhaqqaq*, incidentals in Kufic, sura 17: 25-27, Khalili collection, QUR29, f. 9b.



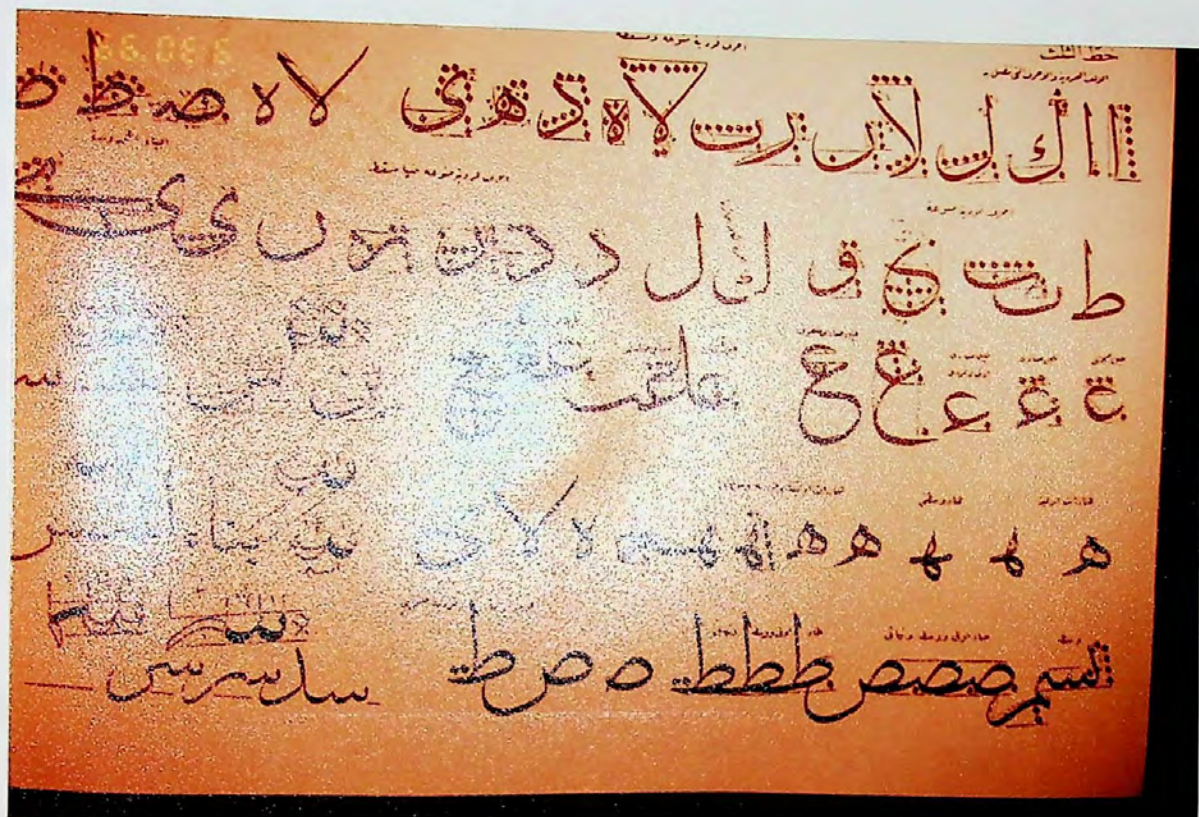
Pl. 36 Single Volume Qur'an, c. 1400-1450, probably Iran, main text in *naskh*, incidentals in *thuluth*, sura 34: 40-54/ 35:1-4, Khalili collection, QUR52, f.s 217b-218a.



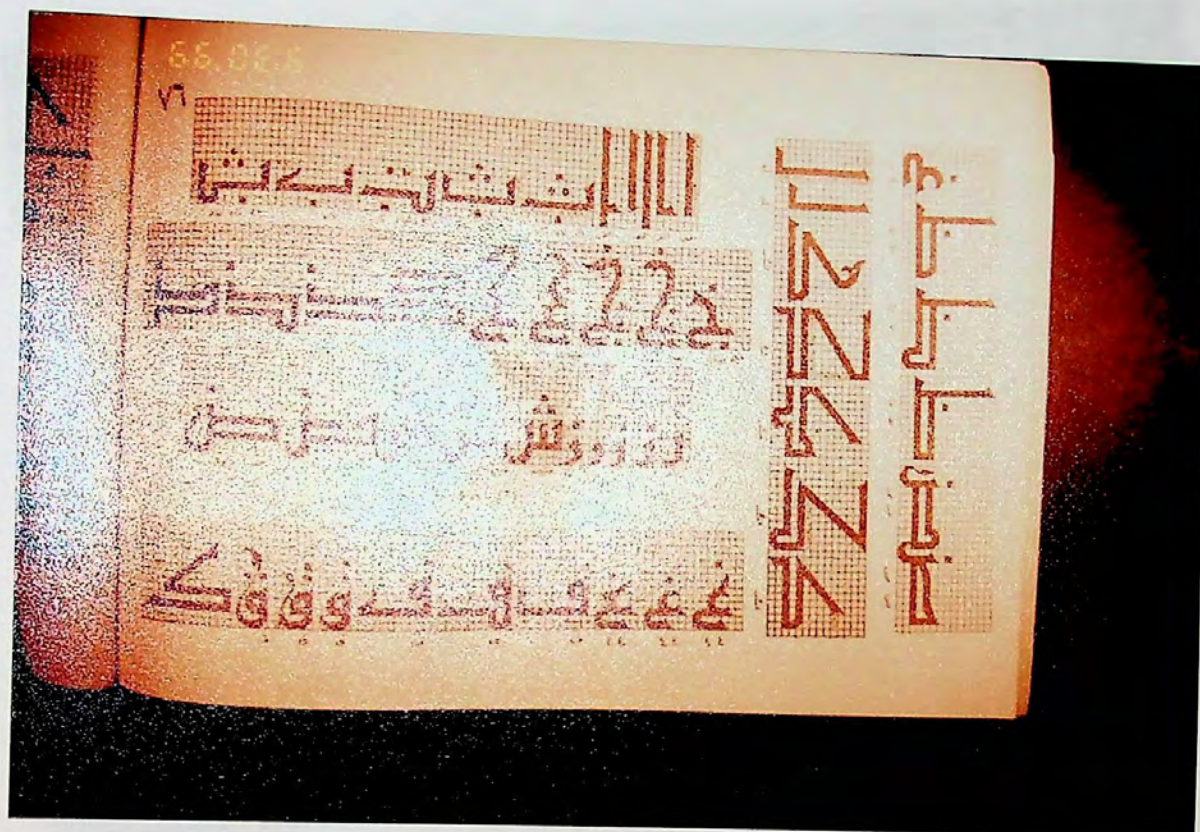
Pl. 37 Single folio, c. 1300-1350, Yemen, a combination of *naskh*, *muhaggaq* and *thuluth*, incidentals in Kuffic, sura 31: 32-34/ 32: 1-7, Khalili collection, QUR850, f. b.



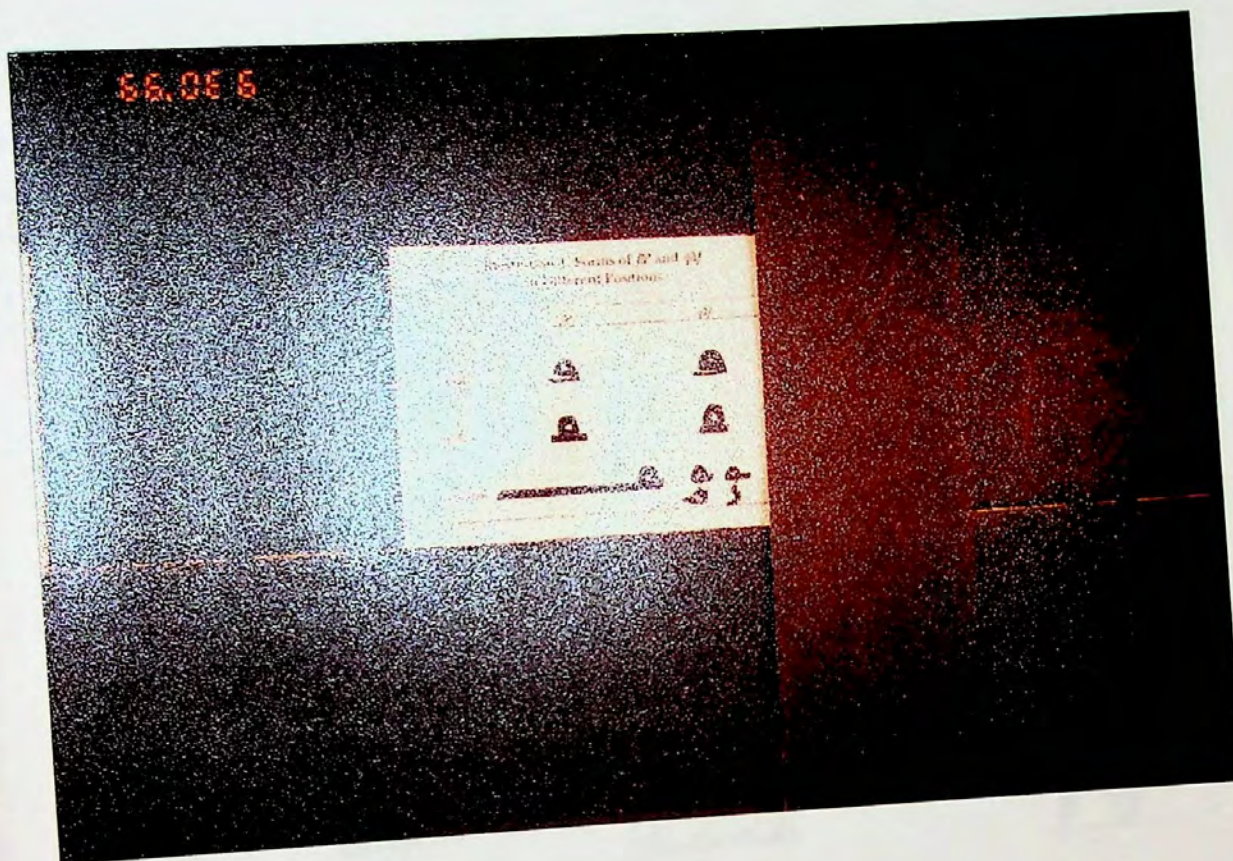
Pl. 38 Thuluth letters after Sa'd



Pl. 39 Kufic letters after Sa'd



Pl. 40 Kufic letters after Whelan



Pl. 41

Examples of muhaqqag, thuluth and
rayhan letters after Hammam.



rayhan



thuluth



muhaqqag



rayhan



thuluth



muhaqqag

Pl. 42 Mufradat album, 1283/ 1866-7, Turkey, signed by Mehmed Sevki, *thuluth* and *naskh*, Khalili collection, MSS239, f.10b.

