instructions on the basic proportional rules of the script could be made public by the Ikhwân al-Ṣafa'. The new approach eventually obliterated the geometrical unity of the Qur’anic page. From being one whole bound together by successive proportional relations, it became divided into two parts: script and layout, each arranged according to its own geometrical principles. This shift of paradigm is reflected by the Ikhwân who, while asserting that calligraphy was a musical art, could not explain the concrete relevance of musical ratios to its practice.

The transformation of Arabic script in the tenth century thus marked, in many ways, the end of an era. In technique, it resulted from a new codification of the letters which was closely adhered to in the New Style, then gradually rendered more supple in cursive. But in this process, continuity with the Kufic past was stronger than appearances would suggest, notably as the founding principles of the old system – geometry, proportion and the thickness of the pen – were carried into the new. The major force behind this development lay in the transformation of Muslim society and the need of wider, less specialized audiences to consult the Qur’an, as well as a growing range of other texts. At the same time, the ethos inherited from Late Antiquity, which had stood at the root of all these developments, was receding into the background, eventually to be completely forgotten until our day.

Appendix

Guidelines to Déroche’s script classification

This classification serves to identify the style of any given early Qur’anic manuscript, and thereby link it to a larger scriptural group. It can be compared, in its workings, to the typeface of modern fonts. In its present state, it remains a work in progress, which will continue to be refined as more manuscripts come under study. There are seven scriptural groups (A to F, NS), each distinguished by a set of basic features. Groups B, C, D and NS are divided into several subgroups (e.g. B.I, D.Vb). For purposes of clarity, the most salient characteristics of each major style are singled out in the following pages.” Readers are referred to Déroche’s publications for more comprehensive definitions.


* Modifications have been made below to the original definitions of ālī and final nīn in C.Ia, a style for which the documentation initially available to Déroche was limited.

** In order to simplify notation, those letters sharing the same graphene have been designated by a single name, e.g. jam for jīm/hā/ḥāʾ, ‘ain for ‘ayn/ghayn, and so on.
Alef has a very short, pointed return; the shaft oscillates between a vertical position and a slight inclination to the right.

The lower stroke of final qaf is long, bent into a curve and has a straight, horizontal return; its shape recalls one form of alif maghara (circled above).

The base of final kaf is at least twice as long as its upper horizontal stroke; its shaft has a clear slant to the right.

Final mim is slightly curved at the top; its lower return is horizontal and joined to the vertical stroke by a thin angular stroke.

Final mim consists of a semicircle laid on the line, with no tail.

Alef has a short to medium-sized, relatively flat return.

The vertical shaft of heth slants to the right, as in Hijazi.

Initial and medial heth have a bar which slopes to the left; the 'eyes' are well defined; the letter rests on the baseline.

The right arm of medial 'ain is vertical.

Final qaf ends with an open curve, which narrows with the turn of the pen.
B. Ib

Independent alif has a horizontal return with a blunt end which is almost perpendicular to the shaft.

The tail of final qaf and, occasionally, of alif maqṣura, is U-shaped, with its branches parallel to the baseline.

The oblique stroke of medial jeem is straight and crosses the baseline.

Initial ‘ain has a short, straight hook placed at a sharp angle to the baseline.

The lower return of final mim and final lam curves slightly upwards.

Final and medial hamza sit astride the baseline, indicated by the central horizontal stroke; the vertical stroke leans slightly to the left.

B. Ia. Same letter forms, but the tall vertical letters slope to the right.

B. II

Independent alif has a short, round, hook-like lower return.

Final qaf is as in B. Ib, except that the U-ending is pushed further to the right.

Independent mim is reduced to a vertical stroke with a short perpendicular return at the bottom; at the end of a word, the top of the letter is thickened into a triangular shape.

Initial ‘ain has a relatively pronounced circular hook which tapers off at the top.

Final mim has a circular body which reaches below the baseline and a tail that rests on this line.

Medial hamza is as in B. Ib, but thicker and with a vertical bar.
• *Alif* has a short and thin return which curves up slightly.
• The oblique stroke of *jim* does not reach below the baseline.
• The upper part of initial *ayn* is made of two strokes joined at an acute angle.
• Final *waw* can be described as a flattened circle resting on the line; the horizontal tail ends obliquely and sometimes looks like an extension of the letter itself.
• Final *waw* has a thick vertical body which curves slightly at the top; the letter ends in a short horizontal lower return.
• *Ha* can be described as a quarter-circle propped against a vertical bar and laid on the baseline (in some instances, the line of the vertical bar curves into the body of the letter).

C.Ib. Generally similar to C.Ia, except that the horizontal strokes have a distinctive triangular ending. In comparison with C.Ia, *alif* also has a longer return, which is somewhat flattened, while final *waw* is more triangular and has a horizontal tail.

C.II. The letters have triangular endings, as in C.Ib, but the return of *alif* is short. The hook of initial *ayn* is more open than in C.I, and final *mim* has a smoother curve.

C.III

• *Alif* has a lengthened return, which only curves slightly.
• The horizontal strokes sometimes have triangular endings, as in C.Ib and C.II.
• Initial *ayn* is as in C.II, with the hook wide open.
D.I. As D.I. except that the vertical strokes are slightly inclined at the top and end in a curved script. The lower return of nun is less often pointed upwards.

D.II. In comparison with D.I. alif has a relatively long and flat lower return which tapers at the end. The head and body of final nun form a single curved line of regular thickness, and the letter has a horizontal lower return. Initial jīm and 'ayn begin, on the right-hand side, with a very thin stroke that gradually grows thicker; the hook of initial 'ayn is rounded and very widely open. The lām of kāf-‘ayn is vertical.

D.III. Alif has a long, tapering and clearly curved return.

D.I. Khalil KFR67 recto (19.5 x 27.2 cm).

D.II. Khalil KFR72 fol. 47 verso (final page width 28.2 cm).

D.III. Khalil KFR10 verso (12 x 17 cm).
D.Vi. As D.I, but with occasional curves in the vertical strokes, particularly for ُهَبَّ and ِنَامْ. Final ْمَمَ is as in D.III, but with a longer body. The overall appearance of the script is often more extemuated than in D.I.

D.Vi. Generally similar to D.Vb. Final ْمَمَ often has a thread-like tail. While final ْمَمَ can be as in D.Vb, it often consists of a characteristic semicircle, a form also used for ٌلَفَحَ and final ْسَنَ. ًلَمْ—ٌلَفَحَ typically has two parallel vertical arms.

D.Vb. Generally as D.I, but the vertical strokes are much taller and more extemuated. ٌلَفَحَ has a long and gently rising return, while the shaft of ِنَامْ and ِكَسَفَ is often oblique and curves over at the top.

D.Vb. Generally as D.I, but with occasional curves in the vertical strokes, particularly for ُهَبَّ and ِنَامْ. Final ْمَمَ is as in D.III, but with a longer body. The overall appearance of the script is often more extemuated than in D.I.

D.Vi. Generally similar to D.Vb. Final ْمَمَ often has a thread-like tail. While final ْمَمَ can be as in D.Vb, it often consists of a characteristic semicircle, a form also used for ٌلَفَحَ and final ْسَنَ. ًلَمْ—ٌلَفَحَ typically has two parallel vertical arms.

E.I. A simplified variant on the D group, where ٌلَفَحَ has no lower return and looks like a vertical rod. Final ْمَمَ has a thread-like tail, which is either vertical or curved.
D. Va. As D.I, but with occasional curves in the vertical strokes, particularly for kaf and taw. Final mim is as in D.III, but with a longer body. The overall appearance of the script is often more extenuated than in D.I.

D. Vb. Generally as D.I, but the vertical strokes are much taller and more extenuated. Alif has a long and gently rising return, while the shaft of taw and kaf is often oblique and curves over at the top.

E. I. A simplified variant on the D group, where alif has no lower return and looks like a vertical rod. Final mim has a thread-like tail, which is either vertical or curved.
Alif has a relatively flat lower return (though less so than in D.III), with a blunt end.

Initial 'ayn can either be slightly rounded, as in group D, or consist of a straight, oblique stroke placed at a sharp angle to the baseline, as in B.I.

Mim can sometimes bulge slightly below the baseline.

Final nun has a short and relatively thick head; its lower return is short.

Ha' consists of a rough semicircle leaning on a vertical bar; it tends to drop slightly below the line.

Lam-alif is sometimes reminiscent of D.I; alternatively, it can have two parallel vertical arms.

Alif has a lower return recalling D.I, but which tends to be flatter.

The hook of initial 'ayn rises more suddenly than in most other styles; it describes a smooth curve that ends in a sharp point; the lower horizontal stroke is widely elongated.

Medial 'ayn, fi' and qaf stand on a little stalk; their baseline sometimes curves so as to frame the letter.

Qaf and alif maqṣura end in a thick U-shaped tail set at an oblique angle to the baseline.

Medial ha' resembles the form seen in C; the vertical bar tends to curve and merge into the body of the letter.

Final nun oscillates between a broken, crescent-like curve and a semicircle; in either case, the letter is thickened at both ends.
Alif normally has a straight lower return placed at an oblique angle to the shaft; in some cases, this part of the letter is flat and thin.

The tall letters have a serif tending towards the form of a sharp hook.

Jum consists of a straight or slightly curved stroke that extends below the baseline.

Final nun has a short and thick head inclined to the left followed by a long, thin shaft and a short, relatively thick lower return; all three strokes are at marked angles to each other.

Medial há can be described as a slanting trapezium with its base flattened on the line.

Alif oscillates between the shape of an inverted S and a straight stroke ending in an oblique, slightly curved lower return.

The serifs are either less prominent than in NS.I or nonexistent.

Jum is as in NS.I.

Final nun is more rounded than in NS.I and has a less variable thickness.

Há has the same orientation as in NS.I, but its form is less geometrical, so that the movement of the pen can easily be traced.