tenth century). But some fragments datable to the intervening period have been preserved, principally at the Cairo Geniza.

**Codex versus scroll**

Hebrew scribes appear to have remained faithful to the scroll format until the eighth century, as suggested by texts and scraps of surviving material. By contrast, all known Qur'anic fragments in Hijazi initially belonged to codices. The codex began to spread in the Near East between the second and fourth centuries. It was at first associated with Christianity, marking a clear visual distinction with the scrolls hitherto used by pagans and Jews. The earliest Hebrew codex, now kept in Cambridge, is datable to the eighth or ninth century (Figure 19). Colette Sirat has shown that this carefully written manuscript initially consisted of a single quire of twenty to twenty-four papyrus bifolios, an archaic composition which suggests that the codex was relatively new in Hebrew at the time. Originally, the manuscript must have been either square or slightly oblong, a format hardly encountered elsewhere than in early Kufic (e.g., Figure 33). As in other Hebrew fragments from the Islamic lands, the writing has features borrowed from Arabic, such as the notation of lamed and alef in one sign (Ar. lām–âlef) and the use of horizontal elongation (Ar. mashgh). One can also note the use of a dot within a circle to mark a verse separation, as in early Kufic. When Hebrew parchment codices started to be made in the late ninth to tenth centuries, the influence of Arabic scribal practice became even more pronounced. But what about the preceding period?

The only evidence at our disposal, in this respect, is textual. According to Arabic sources, the Jewish minority that lived in Medina at the time of the Hijra had its own religious school. A tradition ascribed by al-Baladhuri and al-Qattash to al-Wāqidi (d. 823) says that few people could write Arabic among the town’s two main tribes, Aws and Khazraj. One Jew (or ‘some’ according to Baladhuri) taught the script to Arab children, among them Zayd ibn Thabit and Ubayy ibn Ka'b, who would later become secretaries of the Prophet. Of the persons cited, Zayd alone is also said to have written
in Hebrew. Ibn Sr’d (d. 845) and Baladhuri also mention a second tradition whereby the Prophet enjoined Zayd to learn Hebrew—or, Ibn Sr’d adds, possibly Syriac—after the Hijra, as required by the needs of his correspondence.

It is difficult to derive historical facts from these contradictory accounts. But even if one chose to take them at face value, they would not clearly imply a Hebrew influence on Arabic. In a controversy against Islam attributed to the ninth century, ‘Abd al-Masiḥ al-Kindi, a Christian apologist, asserts that the recensions of the Qur’an made in the days of Abū Bakr and ‘Ali ibn Abī Talib were not bound into a single volume (msufat), but left as scattered leaves (sahaf), or scrolls (daraj) arranged in the manner of Jewish scrolls. However, the date of this text has been disputed and its polemical purpose greatly undermines its historical reliability. A few Qur’anic parchment scrolls, often apologetic in content, have been found in the Istanbul collection but, judging by their script, they cannot be much earlier than the ninth century. A Hebrew legacy is, at any rate, improbable in their case given that they are rotuli, whereas the columns were used for the Torah (the two formats fundamentally differ in the direction of writing and the manner of unfolding the scroll). There are, at present, no grounds to assert a Hebrew influence on early Qur’anic calligraphy.

**Format, ruling, quires and decoration**

Several traits of preserved Hijazi fragments can, on the other hand, be traced back to other scribal traditions. The observations made here are based primarily on the study of the collection at the Bibliothèque Nationale de France, of the published record and of a palimpsest held at Cambridge. While this sample reflects a diverse body of material, its scope remains limited, and it can only be hoped that more manuscripts will eventually come under close scrutiny. The first remark is the most obvious: the format employed in Hijazi is, as in all pre-Islamic codices, vertical (the few horizontal items that exist are either late in the tradition or small, perhaps personal, copies of the Qur’an). While there was always one column in Hijazi, there could also be two or three in Greek, Syriac, Christian Palestinian Aramaic, Ethiopic and, more
22. Qur’an written in R. ins, a transliterated style between Hijazi and early Kufic (BNF Arabe 5286, 32.5 x 25 cm).

23. Syriac manuscript dated 622, the year of the Muslim Hijra (BL Add. 14,478, 24.1 x 18.3 cm).

24. Qur’an written in an undeciphered style close to Hijazi, with incised line-by-line ruling (BNF Arabe 5301g, 32.5 x 28 cm). The tall letters tend to slant slightly to the left, rather than the right.

25. The Poor Gospel, one of the earliest manuscripts of the New Testament, written in Greek (Egypt, fourth/fifth century, 20.9 x 13.8 cm).
rarely, Coptic.\textsuperscript{38} Notwithstanding this difference, Hijazi manuscripts were still inscribed in the visual landscape of Late Antiquity.

The dimensions of preserved Hijazi fragments are consistently large (typically 53 x 24 cm and above, see Table 1).\textsuperscript{39} They are only matched, towards the lower end of this range, by the most lavish Greek, Syriac, CPA or Ethiopic manuscripts.\textsuperscript{40} In Coptic, a few codices of imposing dimensions were produced, much smaller formats (typically under 15 x 12 cm) prevailed in the pre-Islamic period.\textsuperscript{41} Likewise, the Pahlavi Psalter measures only 11.1 x 9.6 cm. Before more subtle transformations were introduced, size may have been one way of conveying the distinct status of the Qur`anic text.

The comparison can be extended to other codicological features. Ruling is the system of lines drawn to guide the scribe's hand on the parchment. It is virtually absent in some Hijazi manuscripts\textsuperscript{42} but most of them use it in at least a primitive form. In some cases, it simply consists of baselines for the text, which are not even exactly straight or parallel and can either be incised with a dry point (as in BNF Arabe 328a, Figure 20) or drawn in lead (Arabe 328e, Figure 21).\textsuperscript{43} In terms of layout, this technique is hardly more effective than the complete absence of ruling.

In other manuscripts however, the text box is framed by a rectangle drawn in lead, with no baseline rulings (Figure 22). As a result, the lines of calligraphy are only approximately straight, parallel and equidistant, but well delineated within the framing rectangle. The top ruling coincides with the first baseline of text – that is, the ligatures rest on it. This exact configuration is encountered in BNF Arabe 328d, written in B.1a, an intermediary style between Hijazi and early Kufic, while Arabe 331 (also in B.1a) and Arabe 325a (B.1b) simply have two vertical rulings drawn in lead to justify the text.

This broad pattern is reminiscent of Syriac, where three rulings are typically drawn in lead: two vertical for justification, and one horizontal which roughly corresponds to the top baseline of text (Figure 23). Its two Hijazi variants also appear to have existed, albeit marginally, in Syriac.\textsuperscript{44}

In different Hijazi fragments, we find incised justification and line-by-line rulings (Figure 24). Two variants can be noted: in some manuscripts, the top horizontal ruling coincides with the top baseline of text; while in others, it reaches one line's height above it.\textsuperscript{45} Before

<table>
<thead>
<tr>
<th>Quire</th>
<th>Ruling</th>
<th>Parchment</th>
<th>Chapter markers</th>
<th>Dim. (cm)</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greek, Coptic, CPA</td>
<td>Quarterions Hair faces hair</td>
<td>Incised</td>
<td>Thin, supple, uncoated</td>
<td>None (or rare)</td>
<td>-</td>
</tr>
<tr>
<td>Arabe 328a</td>
<td>Quarterions Hair faces hair</td>
<td>Incised</td>
<td>Thin, supple, uncoated</td>
<td>None</td>
<td>33 x 24</td>
</tr>
<tr>
<td>Arabe 330g</td>
<td>Unclassified</td>
<td>-</td>
<td>Thick, supple, uncoated</td>
<td>None</td>
<td>35.5 x 28</td>
</tr>
<tr>
<td>Arabe 330d ** A.1</td>
<td>-</td>
<td>Incised</td>
<td>Thin, supple, uncoated</td>
<td>None</td>
<td>35 x 27</td>
</tr>
<tr>
<td>Syriac</td>
<td>Quiniones Hair faces flesh</td>
<td>Lead</td>
<td>Very thick and rigid, coated</td>
<td>Horiz. band and/or red title</td>
<td>-</td>
</tr>
<tr>
<td>Arabe 328c</td>
<td>Quiniones Hair faces flesh</td>
<td>Lead</td>
<td>Thick, rigid, coated? (traces)</td>
<td>Horiz. band</td>
<td>31.5 x 21.5 (damaged)</td>
</tr>
<tr>
<td>Or.1287 *** Hijazi</td>
<td>-</td>
<td>Lead</td>
<td>Very thick and rigid, coated</td>
<td>Horiz. band</td>
<td>25 x 19 (cropped)</td>
</tr>
<tr>
<td>Arabe 328d</td>
<td>-</td>
<td>Lead</td>
<td>Thick, rigid, uncoated</td>
<td>Red title</td>
<td>38 x 25</td>
</tr>
<tr>
<td>Arabe 331</td>
<td>-</td>
<td>Lead</td>
<td>Thick, rigid, uncoated</td>
<td>Blank space or horiz. band</td>
<td>41.5 x 34.8</td>
</tr>
</tbody>
</table>

Table 1. Codicological features of key Hijazi manuscripts.

* On non-standard quire compositions and the case of CPA, see note 95.
** The same features can be observed in Arabe 330e and f (also in style A.1).
*** Cambridge, Or. 1287, fols. 87-94 (modern numbering).
Islam, the same ruling technique (first variant) was also used in Greek, Coptic and CPA, whether in one or more columns (Figure 25). 29

In the rest of the Hijazi corpus, there can be variations upon these basic models: part of Cambridge Or. 1287 displays thick, regularly laid out baseline rulings in lead, 30 while BNF Arabic 334c has its text framed in a rectangle of four rulings, but incised (this manuscript, however, may belong to a later phase of evolution). 31

The parchment itself can bear traces of scribal influence. Most Syriac manuscripts of this period have their folios coated with a layer of lime, which gives them a white appearance. 32 By contrast, in Greek, the pages were simply pumiced and instances of coating are rare. 33 The leaves tend to be thin and soft, whereas in Syriac they are thick and stiff (the pages hardly bend as they are turned over). In Hijazi and early Kufic, manuscripts ruled in lead tend to have thick, relatively rigid parchment (but still less so than in Syriac), sometimes with traces of white coating. By contrast, those with incised ruling will usually have thin, flexible parchment, devoid of coating (Table 1). 34 These discrepancies do not have an obvious practical rationale, since lead could be used to rule thin parchment and vice versa.

The finished product, the bound codex, results from the assembly of quires made from this raw material, usually with a regular number of pages. Before Islam, quaternions (typically made of four bifolios, i.e. sixteen pages) were dominant in Greek, Coptic and probably CPA, while Syriac scribes used quinions (twenty pages, characteristically in five bifolios). 35 Parchment, being made from animal skin, has a hair and a flesh side presenting different qualities to sight and touch. Manuscript quires can thus be arranged in two standard ways: either flesh faces flesh and hair faces hair ('Gregory's rule', which prevailed in Greek and Coptic); or hair faces flesh (as in Syriac). Furthermore in Greek, each quire normally opens with a flesh side, as opposed to hair in Syriac. 36

The quire structure of Hijazi manuscripts is difficult to analyse, since consecutive leaves from the same codex are rarely preserved. Déroche has made observations on two of them in Paris (Figure 26): one (Arabe 328a), he concluded, must originally have consisted of quaternions arranged according to Gregory's rule and opening with a flesh side (as in Greek), whereas the other (Arabe 328c) had quinions
with hair facing flesh, the first page of the quire being a hair side (the Syriac rule, which also became the norm for Kufic Qur'ans).\(^9\)

Hijazi manuscripts are, on the whole, sparsely decorated. In one example where the opening page survives, it has been left blank (in later Qur'anic manuscripts, this part of the book would have been richly illuminated).\(^9\) Likewise, the beginning of a new sura is usually marked by an empty space. When a decorative motif does occur, it takes the form of a thin horizontal band that fills the end or the whole of a line.\(^9\) In Syriac, chapter markers also assumed this form, occasionally with comparable decorative motifs (Figure 27).\(^9\) In Greek, by contrast, new paragraphs were marked by a large capital letter and, apart from figurative illustration, decoration was rarely used in the text.\(^9\) The Hijazi approach to sura markers may therefore be related to a Syriac model. This approach was taken over and amplified in early Kufic, where the chapter titles were often written in red, as in Syriac.\(^9\)

Taken as a whole, the above features of Hijazi manuscripts—quires, ruling, parchment, decoration—tend to appear in an internally consistent manner, leading back either to the Greek or the Syriac tradition (Table 1). For instance Arabe 328a (Figure 20), noted earlier for the use of quaternions and Gregory’s rule, has no sura markers, a primitive form of incised ruling and thin, supple parchment. This recalls the pattern observed in Greek, Coptic and CPA. But in Arabe 328c, which has quinions arranged in the Syriac manner, each new sura is marked by a decoration band, while the ruling is drawn in lead on its thick parchment, which bears traces of coating. There are exceptions to the rule and variations upon it, such as the relatively thick parchment of Arabe 330g (Figure 24) or the lack of coating in Arabe 328d (Figure 22) and 331. Like the increasingly varied ruling patterns, they might reflect the gradual blending of the initial components by Arabic calligraphers.

**Pens, strokes and dots**

The writing instrument used by the first Qur'anic scribes was the reed. The Arabic word for ‘pen’ (qalam) comes from the Greek kēlēmos. It occurs in the Qur’an.\(^{10}\) Before Islam, reed pens were used in Greek, Coptic, CPA and Hebrew. Syriac scribes, on the other hand, used an instrument that gave rise to large, rounded letter endings, with a fluid variation of the strokes and circular dots—possibly the quill, which is more supple than the reed and mentioned in texts.\(^{10}\)

Different pens will give a different appearance to the script. In
"square" or "biblical" uncial (a Greek style also used in Coptic) and in CPA, the horizontal strokes are thin, whereas the verticals use the full thickness of the nib and typically have straight, horizontal endings (Figure 28). This implies that the reed was horizontally applied to the page, having either a horizontal or slightly right-facing oblique cut. In Hijazi, the head of the vertical letters fluctuates between a comparable horizontal shape and a slight slope to the left, often within the same manuscript. Although they remain thinner than the verticals, the horizontal strokes have more volume than in Greek, Coptic or CPA. This means that the nib made contact with the page at a slightly left-facing angle. The same tendency was amplified in Kufic, where the letter heads have an angle of 30 to above 45° to the line, while the horizontal and vertical strokes are of approximately equal width. This gradual transformation of sciptal technique was probably accompanied by an evolution of the nib cut from horizontal or right-oblique cut to left-oblique.

Like CPA, the Arabic alphabet combines vertical, horizontal and rounded shapes; in both languages, some of the letters are also joined at the base. Hijazi scripts could thus easily have moved towards a similar approach to writing, with thick vertical strokes and very thin horizontals. Instead, they remained based, as in pre-Islamic inscriptions, on a combination of slanting strokes and horizontal ligatures. This, like the tendency to make the horizontal and vertical strokes even, seems to reflect the Syriac aesthetic of the script.

In some Hijazi manuscripts, the shape of final yā’ directly echoes that of Syriac final wāw, a long stroke that horizontally extends to the right until the ink runs out (Figure 29). This type of dextrorotary yā’, which is of Nabataean origin, thus appears to have been transformed in Arabic under a Syriac influence. It is not encountered in all the Hijazi corpus, but does occur in Qur’āns related by their codicology to both Greek and Syriac: alone, it may not be sufficient to denote a direct Syriac imprint on a given manuscript.

The diacritical marks attested in Arabic from 645 onwards are also thought to have originated in Syriac, where dots were used from at least the fifth century to distinguish letters or mark the plural, vowels and accents. In Hijazi, they take the form of either an ovoid dot, as in the earliest papyri and inscriptions; or of a thick, slightly curved dash (Figure 30). These forms still occur in Kufic styles A.I and B.I, alongside the thin, flat dashes that eventually prevailed in C.I and later Kufic. The natural hand movement required to draw a dash with a reed is simple: a downward pressure of the pen. The dots observed in Hijazi could thus represent a forced attempt to imitate the round form initially inherited from Syriac before it was gradually adapted to the Arabic writing instrument.

In sum, while Arabic scribes adopted and developed their own type of pen, Syriac left a distinct imprint on the Hijazi aesthetic of the script. Three of its aspects—the tridirectionality of the letters, thickness of the strokes and shape of the dots—can be
observed across the Hijazi corpus. This makes them likely to reflect a common origin, the state of the script at the very beginning of Islam. The terminus ante quem for their introduction can be placed in 643, the date of the earliest papyri, leaving us to assess whether they emerged before or during the early years of the Muslim era. Since one of these features, the slanting letters, is clearly attested in the sixth century, at Zabad and Harrān, and since the other two are linked to the same source, they may well have all arisen in that period, as part of the same scribal process. Our evidence, however, is too limited to allow a definitive conclusion in this respect.

With the rise of Islam came the urgent need to produce bound codices in Arabic script. The codicological diversity observed in Hijazi suggests that pre-established techniques and norms were lacking in this domain, which probably led to their being learned from older scribal traditions within the confines of the newborn empire. Beside the slant of the tall letters to the right, one feature, the one-columnar format, usually of large dimensions, contributed to the outward unity of a tradition otherwise marked by its diversity. Its universal adoption might reflect the will to generate a visual identity with the frugal scribal means at hand, perhaps on the basis of a revered model.

Christian scribes of the Qur'an

The manuscript evidence, at any rate, shows that some of the earliest Qur'anic scribes had become acquainted with Christian scribal techniques. This could have happened either by personal contact, or because some of them were (or had been) Christian. The latter case is, surprisingly, recalled in early hadith literature. 'Abd al-Razzaq al-San‘ānī (744–827) thus writes in his Mustawaf: “A Christian from Ḥijrā wrote ‘Abd al-Raḥmān ibn Abī Laylā a mushaf for seventy dirhams.” Born in 658, ‘Abd al-Raḥmān ibn Abī Laylā was a Kufan tābi‘ī, a man who collected traditions he had heard from ‘Alī ibn Abī Tālib and other companions of the Prophet. This khabab (‘account’), recorded at an early date, is based on a particularly solid chain of transmission, going through ‘Abd al-Razzaq’s teacher Sufyān al-Thawrī (d. 778) to ‘Abd al-Raḥmān own son Muḥammad ibn Abī Laylā (693–765) and the latter’s elder brother ‘Īsā. It reappears in the slightly later compilation of Ibn Abī Shaybah (d. 850) and the Kitāb al-muṣāḥāf of Ibn Abī Dāwūd (844–929).

The latter also records that “‘Abd al-Raḥmān ibn ‘Awf had a Christian from Ḥijrā write him a mushaf and gave him sixty dirhams.” ‘Abd al-Raḥmān ibn ‘Awf (d. 653) was a companion of the Prophet who notably took part in the hijra to Ethiopia and played a major role in the appointment of ‘Uṯmān as caliph. Ibn Abī Dāwūd adds that “a Christian wrote a mushaf for ‘Alqāma” – presumably ‘Alqāma ibn Qays (d. c. 682), a Kufan disciple of Ibn Mas‘ūd and an authority on the Qur’ānic text.

These purely factual anecdotes, which incidentally appear, in their respective books, among ʻabhar that condemn the copy of the Qur’an for a pay, are most unlikely to have been invented for this purpose: they are probably authentic. The process described is simple: some of the earliest Muslims had Christian scribes copy the Qur’an for them. Given the dates of the persons involved, there can be little doubt that the reference is to Hijazi manuscripts. One implication is that Christians from Ḥijrā were among the most reliable Arabic scribes in the early decades of Islam. This reinforces the possibility that the city played a role in the pre-Islamic diffusion of the Arabic script. It might also explain why Kufa, lying just a few miles away from Ḥijrā, soon became a prominent centre for Arabic calligraphy (in the above anecdotes, two of the three Muslims mentioned are themselves Kufans).

The late Nabataean alphabet used by the Arabs was transformed under the influence of Syriac, around the early sixth century, to give rise to ‘Arabic.’ Beside inscriptions, this primitive phase probably included utilitarian documents. Whether or not bound codices were also sporadically made in that period, the advent of Islam created an unprecedented need for their production. Alongside traits inherited from Syriac, different techniques were thus adopted from older manuscript traditions in the earliest Qur’ans. Having reached this point, it is also clear that much remains to be learned from this immensely important corpus.