Aspects of the physical transmission of the Qur’ān in 19th-century Sudan: Script, decoration, binding and paper
by Adrian Brockett

The University of Leeds possesses two complete copies of the Qur’ān from 19th-century Sudan in excellent condition — Leeds Arabic ms. 301 and Leeds University ms. 619. A wealth of information about the transmission of the Qur’ān in the Sudan can be gathered from them, but the latter has never been written about, and only a brief notice of the former has been published.

Ms. 301 has no colophon, date, nor name of scribe, but the script is that used largely for Qur’ān copies in western Sudan and West Africa, loosely called Sūdānī Maghribī. This manuscript will be referred to as ‘the West African Copy’. Its script will be called ‘Ifīrqī’, and as would be expected, the text is in the transmission of Warsh from Nāfi’2. According to the price written on the top page, it was acquired by (what is now) Leeds University Modern Arabic Studies Department for 25 shillings. This was in 1957, probably from a sale in London.

By contrast, ms. 619 has a clear, and poignant, history. Its colophon is dated 1299 ( = 1881 A.D.) and it was taken 18 years later from the massacre at Umm Dubaykrat on 24 November 1899. This was in southern Kordofan about 200 miles down the White Nile from Omdurman, near present-day Kosti. The Mahdi had declared holy war against the Turco-Egyptian occupiers in 1881, so the useful life of this copy of the Qur’ān exactly spans that remarkable period of powerful religious revival. It will therefore be referred to as the Mahdiyya Copy. It is in the transmission of al-Dūrī from abū ‘Amr3. On the death of the Mahdi in 1885 the leadership passed to his Khalīfa Abdallahi who maintained the Islamic state for fourteen years. In 1896 the British and Egyptian forces under Kitchener began their conquest, culminating in the massive victory over the Khalīfa on 1 September 1899 at Karari (often called the battle of Omdurman). What remained of the Mahdiyya retreated for their lives into Kordofan, and were followed by the army under Wingate to Umm Dubaykrat, where they were gunned down as they were praying. There is a macabre photograph of the Khalīfa lying dead on his prayer-mat with his general the Emir Ahmad Fadil, and others, also dead, close beside him. This was the final end of the Mahdiyya. Wingate took over from Kitchener as Governor-general in December and remained so until 1917. The photograph probably shows the owner of this Mahdiyya Copy of the Qur’ān, because according to a note in the hand of a British major (bimbashi T.E.N. Lewis) the copy was ‘found in the saddle-bag of an Emir who was killed near the Khalīfa ... at Um DEbrekut’. Major Lewis presumably brought the copy back to Britain, and it was subsequently presented to Leeds University Library in June 1929.

This article looks at some physical aspects of these two manuscripts in turn — their styles of script, their decorations, their bindings, the paper they were written on, and its watermarks. Ms. Arab. d. 141 of the Bodleian Library is referred to here and there for comparison.

1 THE WEST AFRICAN COPY
(LEEDS ARABIC MS. 301) 8

Description of the manuscript:
fol. 332 (163 bifolios, 6 folios); 220-230 × 160-167.5mm.; written area 150-160 × 100-110 mm.9; 16-20 lines per page; laid paper; bold Ifīrqī hand in shiny black ink, with diacritics in black, vocalisation in red, and ṭanṣūṭ al-qat‘ in yellow; sūra-titles in the same hand but in red, with diacritics and vocalisation in black; marginal decorations in red, brown, yellow and black; 4 larger decorations in ‘earthy’ yellow, reddish brown and black (ff. 1b, 81b, 163a, 246a); strong, leather loose-cover binding, stained reddish brown, with dark brown (almost black) associated with the tooling, ending in an envelope-flap and strap for fastening; the whole contained in a rigid suede-leather satchel, with a triple flap, thongs and straps; no date.

1.1 THE SCRIPT:

The script has a bold appearance, echoing the majestic western Kufi of the mushaf al-Hādīna, from which the whole west Sudani tradition could well derive. The ‘somewhat clumsy look’ of the Ifīrqī script can
largely be put down to the freedom of stroke that the script shares with the northern Maghribi tradition, in that it is the entire word that is formed rather than individual letters. But whereas the strokes and diacritics of the northern tradition are usually drawn with a sharp nib or fine brush, those of the Leeds West African copy are drawn with a blunter nib, and on unpolished paper. Where a fresh, or newly sharpened, nib has been used, the script appears more elegant. The letters are upright and vary little in height. A 'fā' for instance is often as tall as a kāf or lām, and the tail of a nūn or sād sweeps shallowly. The result squats, a stamp appearance when compared with the fine lines, variety in height of letters and curvaceous tails of Fāsī Maghribi again might lead one at first to think it clumsy. The long-term impression, however, is one of primeval vigour and ingenuous unselfconsciousness. Nor does this overall boldness of script preclude the presence of detailed indications regarding tajwīd like the double lengthening of ʾaʾlīf maqṣūra and the 2nd person plural possessive before hamzat al-qāf and assimilation of nūn to mīm before bā'.

The best analysis of the origins and history of the Ifrīqi script is by Bivar. He argues that it was in general use in North Africa up until the Almohads in the 12th century, after which it was preserved in western Sudan, even though the extant Qur'ān copies from Bornu may only date from the early 17th century. By the early 19th century (and indeed right into the 20th) it was still the prevailing tradition over the whole of Bornu, and into neighbouring areas like the city of Kano. Without known illustrations from Sokoto and further west, it is not possible to be sure that Qur'ān copies were written there also in the Ifrīqi hand, but judging by the conservatism in Qur'ān calligraphy it is likely. This does not contradict the fact that the correspondence of the Fulani Sultans of Sokoto was in a different, more secular script, Jihādī. Lack of firm knowledge of the extent of use of the Ifrīqi script is the reason for calling the Leeds copy “West African” rather than by a precise title like ‘the Bornu copy’.

Where the script of the Leeds West African copy differs from Fāsī Maghribi it sometimes resembles the older Kufi, which lends support to the theory that the Ifrīqi script is an earlier branch of the overall Maghribi tradition. Other differences of the Leeds West African copy’s script from Fāsī Maghribi are: the lower stroke of the dāl and dhal is more inclined; the teeth of the sīn and shīn are tall and written by lifting the pen for each; medial ‘ayn and ghayn are rounded rather than flat-topped; ‘a’ and qāf are on tall stalks and the initial and medial forms are the same; initial mīm is semicircular, and the medial and final forms join at the bottom; final yā’ can be little different to final nūn, and when it curves backwards, as in the word fī it is usually very short.

All this is typical of the Bornu Ifrīqi hand. Of those examples published it is perhaps closest to the hand in the correspondence of the Kanemi rulers of Bornu whose reigns spanned 1812-93.

1.2 Decoration

Verses are separated by trefoils in red ink filled in (and often over) in yellow. The two bottom lobes are round, the top is usually pointed. Every fifth verse is separated by a hā’ (khamsa) in black ink filled, apart from the very centre, with red. Every tenth verse is separated by a roundel (‘ashara) of two concentric circles in black, the outer one with a thicker line, the centre one filled with yellow and the space between it and the outer circle having pairs of red strokes or single dots top, bottom, and sides.

Marginal decorations are circular or rectilinear. Three circular devices are found on f. 1b, each different, as usual in West African copies, and each with a double circumference, as also usual. Their inner circles are filled with simply drawn diamond-shapes, squares and/or segments in alternating brown and yellow. On this first page of the text their function is decorative, but in the remainder they serve to indicate the sixty ḥizb divisions, occurring every 10-12 pages. These sixty are each usually divided into eight sections, mostly indicated in the margin by rectilinear devices containing one of the letters ḥā’, bā’, thā’, nūn, bā’, ḥā’, bā’, ṭā’, in that order. They are most commonly contained within an outlined square whose two sides extend up and down to at least twice, and sometimes many, times the length of the sides. Trefoils with tips extending into long wavy finials centre on these opened extensions. Lines are in red ink, letters are in black, and the trefoils are again filled in with yellow. There is a number of variations on this pattern, like diagonaled squares in place of the wavy finials, as well as different ones like triangles.

There is no frame around the written area, nor are there either marginal decorations or frames to indicate new sūras. Instead sūra titles, locations and verse-counts are rubricated, and along with their basmala usually take up two lines or the best part of them. The first verse of a sūra always begins a new line. The basmala of sūra 1 is stretched to fill a line.

Larger decorations precede sūras 2, 7, 19, and 38, that is approximately at quarterly intervals in the text. Again all the patterns are purely geometric, either weave or diagonal, and in no way vegetative. The ones at sūras 2 and 38 are single-panelled and occupy less than half the written area, the other two are triple-panelled and take up almost the whole of the written area. They are set within two, three or four frames, sometimes coloured in, sometimes not. They are all simply executed and have an ingenuous charm. The lines are drawn with a finer nib, or lighter touch, than
those of the script. The weave-pattern present in them all is composed of three transverse sets of a crenellating strapwork with their mirror-image, overlapping with vertical sets of the same. There are between three and four sets of each. The strapwork itself is unpainted, but the small spaces between straps are filled with a reddish brown, and the larger central spaces with an 'earthy' yellow. The decoration at sura 38 has circles added in the larger central spaces, reminiscent of an Umayyad design. In the one at sura 19 the weave-pattern is in a central panel flanked by two smaller panels with linear, diagonal strapwork. The one at sura 7 is the converse, with the weave design making up the two smaller flanking panels.

A similar, but tighter, weave pattern creating an overall diamond design is found in the Bodleian ms. Arab. d. 141 and the 17th-century Maiduguri copy. A different weave-pattern is found in the full-page decoration preceding sura 19 in the Bodleian ms. Arab. d. 141. It is absent from the Leeds copy but common in the mainstream of Qur'ān illumination from Kufi copies right down to Safavid, Mughal and Ottoman ones, especially in interface borders. A modified form of it is found in the decoration of the printed West African copy in the British Library.

Diagonal strapwork is also a recurring feature of West African Qur'ān decoration. On the decoration preceding sura 7 of the Leeds copy there are seven rows, four with crossed diagonals alternating with three with single diagonals. On the one preceding sura 19 the diagonals are within squares, three rows of nine squares in the top panel, and three of ten in the bottom panel. In the top panel the diagonals are single with bobbles on either side of the middle. In the bottom panel the diagonals are crossed. Similar examples of crossed diagonal strapwork, with or without bobbles, and within rows of squares, can be seen in the West African copies in Oxford, Dublin and Chicago. A detailed comparison of all these designs with those on West African textiles might well provide a means of locating these Qur'ān copies more exactly.

The disregard for exactness in line and angle in most of these decorations seems to be an indigenous feature of West African culture, apparent also in the avoidance of rectangles in buildings. It often seems to be deliberate non-symmetry or anti-symmetry. The major dislocation in the strapwork on the right of the opening decoration of the Leeds copy, where special attention to symmetry would be expected elsewhere in the Islamic world, is a good example. The full-page design preceding sura Maryam in the Bodleian ms. Arab. d. 141, where the otherwise regularly executed woven design is squashed in the middle, is another, and the dislocation of the pattern at the bottom of the design illustrated by Safadi is a third. If this feature is deliberate, then it could be put down to fetish and the avoidance of the evil eye.

1.3 The leather

The West African copy's leather is made up of three components. The first is a rigid outer satchel, well over a century and probably 130 to 140, and perhaps even 150 years old. Such satchels for Qur'ān copies and religious works were common in Muslim West Africa. They were primarily to safeguard the precious contents from coming into contact with anyone or anything unclean. This one has a plaited and thonged strap for attaching round the waist or shoulder, and an elaborate triple system of flaps to go over the inserted copy. After the three flaps of a first, soft layer are folded over, a middle, rigid, flap is held down by a leather strap that comes over it and ties on to another strap attached to the front of the satchel. Finally an outermost flap with a four-tailed thong and leather stitching around and across folds over unsecured. The outer satchel, measuring 235 x 180mm., is well-made, with the suede nap, that is the flesh, outermost. It is of hair-sheep or goat. Words have been branded in a crude West African hand on to the front. Of those that are legible, 'Fās' suggests that an owner may at some time have been on pilgrimage to Fez.

The second component is a cover or wallet to secure the loose bifolios. It is original — the paper fits perfectly. It also fits the satchel snugly, so that also looks original. The grain of the wallet shows it to be almost certainly sheepskin. Just as with the outer satchel this wallet is also probably 130 to 140, and perhaps even 150 years old. The leather has been folded over homemade cardboard, or pasteboard, made up of laminated paper. Endpapers have then been pasted over for final neatness, and strips of leather have been stuck down the inside of the folds. In pencil near the inside of the envelope-flap is written: 'Cat 79/62 r/r/y 10/1'. This is probably the catalogue number and price for an earlier sale in London. Straight lines have been tooled along the outer edges of the wallet in groups of three, four and five, with a wider band of seven along the middle. The whole has been tanned with vegetable material and stained reddish brown, but these bands of lines along the edges and the middle have a 15-20 mm. dark brown stain superimposed. Inside the rectangles thus formed is more, simple hand tooling of straight lines and dots. The lines are mostly in threes, combining to make four different motifs of diagonals and straight lines. The dots have been made with a circular ended punch with a cut-out cross shape, producing an imprint not unlike a small Maltese cross. These are placed either at junctions of the lines or in tight juxtaposition to form thick lines themselves. Attached to the envelope-flap, or tongue, is a thin suede thong a metre long ending in the base of a small white Cowrie shell used as a fastener once the thong has been wound round the cover. In this case the envelope-flap was clearly not designed, as usual, to tuck inside the cover.
The third component is an upper and lower end-piece. They appear to be akin to the *daffatān* of very early Qur'ān copies referred to in the celebrated Collection *hādīths*. A session studying the manuscript soon reveals their function. Being loose-leaved the copy needs to be tapped back into shape after use, as with a pack of cards. The leather endpieces enable the reader to grasp the copy firmly to do this without endangering any of the pages. These endpieces are thick pieces of cow or camel skin, crudely worked. Similar ones can be found with other unstitched bindings, for instance of al-Jazā'īr's *Dalā'il*, SOAS ms. 19620.

1.4 The Paper

The texture of the paper of the West African copy can be compared to a heavy cartridge paper of today, although some pages can be thinner. It consists of 163 bifolios folded in half to make 326 folios or leaves, which, with 6 other single folios here and there, make up the total of 332.

In nearly every case what is now the top edge of each bifolio was formed by a straight cut through the middle of an original sheet, a little more than double the size of the present bifolio. So, allowing at least 10 mm. for the trimming of what is now the bottom edge of each bifolio, the longer side of the original sheet would probably have measured about 480 mm. The side edges of the bifolios have also been hand-trimmed. Allowing about 10 mm. here as well points to an original shorter side of 350+ mm. These dimensions, 480 × 350+ mm., were the average size made by Venetian papermakers from 1774. The bottom and outer edges of the bifolios are not trimmed as straight as the top — the bottom edges can curve into or away from the fold and the outer edges can also curve in various ways. The continuity of these curves from bifolio to bifolio up to an average of 20 in sequence suggests that the trimming was done to gatherings of already individually folded bifolios.

The final trimming is at times careless, and so may well not have been done by the papermakers themselves, but perhaps by a middleman, like a warehousekeeper for an exporter, or maybe at its West African destination. Further, although the whole manuscript separates out into three self-contained lots of paper, and although the overall proportion of watermark to countermark within each lot is as near to 1:1 as makes no difference, the two bifolios from each original sheet often do not follow each other directly. This shuffling also suggests a middleman.

Judging by the size of the lower margin in relation to the upper one, the main trimming was probably done before any writing. From the catchwords to the bottom edge measures 20-30 mm. and from the top edge to the top of the first written line measures 15-20 mm. The size of the written area balances with the size of the page. Had the pages been longer more lines would probably have been written. There could have been a trim after the text was written to marry the manuscript to the cover, and this could account for its lack of straightness, but the similarity of the page-size to that of the Mahdiyya Copy suggests that if so it would have been minimal. The paper would thus most probably have reached the scribe in stacks of folded bifolios, more or less in the form and in many cases in the order that they are in still.

That the bifolios are neither stitched together nor attached to the cover enables the watermarks to be examined easily. Indeed a number of them were photographed using a beta-autoradiograph technique. The lack of stitching and binding also makes it possible (rare with European books) to examine the entire manuscript, and so ascertain whole sequences of paper.

There are three different sets of watermarks dividing the manuscript into three lots. All display the *tre lune*, the three crescents decreasing in size. The first and third lots have the simple *tre lune*, and the second the *tre lune* with human profile (moonface). On the original sheets they would have been in the centre of the left half with the largest crescent on the left. Chain-lines vary between 25 and 30 mm. apart.

The first lot comprises 113 bifolios and 5 folios (ff. 1-230). Its watermark is a *tre lune* and the letters *CL* in outline capitals. The *tre lune* occurs 56 times, the *CL* 55 times and there are 7 apparent blanks. Before cutting and folding the lot would have comprised 59 original sheets, or their equivalent. It has been mentioned that shuffling occurred, but if 7 or 8 original sheets made up a gathering, then this first lot could have consisted largely of eight gatherings, allowing for a damaged sheet, or perhaps two — none of the 5 single folios match.

The second lot comprises 28 bifolios (ff. 231-86). Its watermark is 3 moonfaces, and the countermark is Andrea Galvani Pordenone. The *tre lune* here occurs 14 times, as does the countermark. The 14 original sheets could have made up two gatherings.

The third lot comprises 22 bifolios and 1 folio (ff. 287-331). Its watermark is a simple *tre lune* and there is no countermark. The *tre lune* occurs 11 times, the blank 12 times. These 12 original sheets could have been a gathering and the bulk of another, the remaining few cut and folded parts of which were not needed once the manuscripts was completed.

1.5 The Watermarks and Countermarks

The *tre lune* of the first lot of paper, from the centre back of the largest crescent to the mid-point between the cusps of the smallest, measures between 71 and 78 mm. The cusps of the largest crescent range from 30 to 38 mm. apart, and those of the smallest from 20 to 23 mm. These variations can partly be put down to twin moulds in the paper's manufacture, but mainly to
the mobility of the marks in the mould. On the one hand, attaching semicircular shapes like crescents (as opposed to angular ones like letters) to the mould seems to have left the shapes more open to being jostled and pressed by the stuff. And on the other, during the manufacture of the paper many crescents have slipped along the underlying transverse wires well away from the chain-lines. Moreover, a number of the largest have swivelled through 60 or so degrees.

The shape of the letters of the countermark cl on the other hand is far more stable. The t would have been sewn on at both its top and bottom left tips, and the c, although also probably only attached at its centre back, is smaller than the smallest crescent of the tre lune and more compact. The letters consistently measure 17 mm. in height, but for the other dimensions there are two distinct sets of measurements, clearly illustrating that the paper was made from twin moulds. From centre back to the point between its cusps the c spans 10 or 11.5 mm., and from its back to its belly measures 2 or 3.5 mm. Similarly, the base of the t spans 13 or 14 mm., and its upright measures 2.5 or 3 mm. across. This countermark has not been identified.

Without going into further detail, the 28 bifolios of the second lot of paper also fall into two equal and separate groups, and the measurements of the crescents of the third lot of paper are also variable in a similar way. These are both indications of twin moulds in the manufacture of the paper of these other two lots also.

1.6 Dating

There are three issues here, the date of the manufacture of the paper, the date of its arrival in West Africa, and the date of the writing of the text. None can be determined precisely, but the general evidence converges with the estimation of the age of the leather binding, pointing to a probable mid-19th century dating for the writing of the text.

While the watermarks of the first and third lots of the West African copy's paper provide no precise help in dating its manufacture, the watermark, and especially the countermark, of the second lot place us almost certainly between 1836-80. Further evidence suggests that it is closer to the earlier rather than to the later date. As for the watermark, three moonfaces, this device apparently superseded the simple tre lune in Egypt by the early 1840's, and could therefore also have done so around this time in western Sudan. As for the countermark, Andrea Galvani Pordenone, it takes us into the world of a famous 19th-century family of Venetian papermakers.

The original firm was known at the beginning of the 18th century as Fratelli Galvani, or more usually Valentino Galvani. Valentino was the founder of the firm, and died 1800-10 leaving four paper-mills in the north-eastern province of Friuli, one at Pordenone. His son Carlo was the next director, until at least 1835. After the death in 1824 of Antonio, Carlo's brother and partner, the firm was known as Carlo Galvani. Andrea, a grandson of Valentino, was already active in the firm by 1835 and became its director in 1836. He had been born in 1797 and died in 1855. We have therefore in 1836 an earliest date for the paper's manufacture, a terminus a quo, but what about a latest date, a terminus ad quem?

The direction of the Galvani firm passed from Andrea in 1855 to the brothers Giorgo and Giuseppe, but it is not known for how long after this the firm continued to use Andrea's countermark. Texts of manuscripts now in Jos (some 200 miles south of Kano) with Andrea's countermark date from as late as the 1890s, 1900s, 1913 and even 1928. However, while in 19th-century Europe it was usual for paper to be used fairly soon after its manufacture, in West Africa it could be kept unused for considerably longer. That many of these Jos manuscripts contain amalgams of different papers (up to eight), makes it more than likely that they underwent a long period of storage before use. Conversely, the lack of amalgamation of papers in the Leeds West African copy, and what is more, the preservation of long runs of sheets in their original order, point to minimal storage. Despite therefore not being able to ascertain a latest date for the Galvani firm's use of Andrea's countermark, a date for the export of the paper, and indeed for the writing of the West African copy later than 1880 can almost certainly be ruled out. Moreover, given the evidence that the leather could well be 140 or so years old, a date nearer the middle of the century is more feasible.

The severe effect on trans-Saharan trade routes caused by the encroachment of European powers on West Africa from at least the 1880s lends further support to a pre-1880 date, at least for the transport of the paper to the Bornu area. Indeed, further consideration of the route the paper would have taken from Venice readily accommodates a mid-century dating. Paper was certainly reexported from 19th-century Egypt to both eastern and western Sudan — more especially to the former after Muhammad 'Ali's conquest of that area in 1821 — but the full Andrea Galvani Pordenone countermark is not apparently attested in Egypt before 1868. So were there not more direct routes to western Sudan than through Egypt? Moving westward we hit upon more likely (trans-Saharan) trails, if not in the Garamantian route from Tripoli through Fezzan to Hausaland and Bornu, then in the route from Tripoli through Ghadamis and Air to Kano. Tripoli is almost certainly where the consignment would have arrived for the Venetians had dominated paper imports there from the 17th century through the 19th. Galvani paper in particular was dominant in this market. It was one of the commonest papers in 1851 in Kuka (the capital of Bornu, just west of Lake Chad) and in Kano, and had
been in use further down in Nigeria from 1824 at least\(^1\). So one or other of these routes would have been the most likely way the paper for the West African copy came down, and whichever of the routes it was, it could well have been in the Bornu area within a year or two of its manufacture. The earliest possible date of its text could therefore be about 1837. The suggestion that paper bearing the Andrea Galvani Por- denone countermark was probably not used in western Sudan before 1870\(^2\), seems to be based on an assumption that it would always have come through Egypt. That this particular lot of paper could have come through Egypt cannot of course be totally ruled out, and in that case 1870 would be about the text’s earliest date, but all evidence is against this.

In conclusion, the countermark provides 1836 as the earliest date of manufacture. The lively trans-Saharan trade in Galvani paper at this time means that it could have been transported to the Bornu area very soon after manufacture. The well preserved original sequence of bifolios points to a short period of storage. The evidence of the leather corroborates all this by strongly indicating a mid-century date for the writing of the text.

2 THE MAHD\^IYYA COPY (LEEDS UNIVERSITY MS. 619)\(^3\)

Description of the manuscript:

fol. 346 (ff. 247, 341, 342 cancels); 234-238 x 160-164 mm.; written area 170-175 x 100-102 mm.; 13 lines per page; laid paper; east Sudan black ink hand in black ink, finely vocalised also in black, with recitative notation, verse-dividers and sûra-titles in red; frequent marginal notes again in red: no decorations; strong, leather loose-cover binding artistically tooled, ending in an envelope-flap: dated 1299 (= 1881 A.D.)

2.1

There is no frame around the text. The surrounding margins contain frequent notes in red ink. These are usually in the side margins, sometimes in the top one, and a few times all around\(^4\). They are placed at different angles to the text to prevent any possibility of being confused with it\(^5\). The colophon, after praise to God and blessings on Muhammad, tapers to a point, beside the last word of which (al-janna), is the date 1299. The last three lines say, ‘God, great of generosity, give to its copyist and its owner paradise, paradise.’ Below that in red are five lines containing a had\^ith about the Prophet. Writing has been washed off to the right hand side of the colophon, but attempts to read it under ultra-violet and infra-red light revealed nothing. On the opening page there is a six line devotional poem by a certain Shaykh Mu\^ammad al-\^Amin. Each hemistich rhymes, but there is a new rhyme with each line.

The script is a somewhat rounded naskh but, as with the Maghribi tradition, regard is paid to the whole word rather than to individual letters, whose shape can vary considerably. It is completely unlike the clearly Maghribi hand of a 17th-century manuscript from Darfur\(^6\), yet on the other hand it has very little similarity with the rounded naskh of an 18th or 19th century East African copy\(^7\), which appears to be more akin to the Indian tradition. Three features of the Mahdiyya copy’s script may be isolated that can also be seen to some extent in the autograph of the Mahdi\(^8\). Final r\^a’ can sometimes be long\(^9\). Final m\^inn frequently impinges on the line below. It usually drops down inclined backwards slightly, but can also sweep forward\(^10\). Final y\^a’ often sweeps backwards\(^11\).

2.2

There is no decoration to speak of. Verse-dividers are indicated by a red comma-like symbol. Every fifth verse is marked by a small red h\^{a}, and every tenth verse by two concentric red circles\(^12\). The first word or phrase of each eighth of a h\^{a}iz is in larger script shaded in red, and th\^{a}umm, rub’ or nisf h\^{a}iz is written in red in the margin\(^13\). Certain other important words in the text are similarly shaded, e.g. much of the f\^{a}itha.

2.3

The well preserved tooled leather binding is a century old and without doubt original. It is of hand-tanned hair-sheep- or goat-skin. In the middle of both covers is a turuni, or stylised ovoid citrus design 48 mm. long terminating in two bell-like shapes. This tripartite pattern is contained within an outlined rectangle (1275 x 420 mm.) joined at the centre of its four sides by lines to the inner frame (1875 x 1200 mm.). The central design is reflected by four corner-pieces 50 mm. high and 30 at base with the third side curving. The overall pattern is perhaps the dominant decoration on Qur’\(\^{a}\)n bindings\(^14\). The exact correlation of measurements of the various components of the design on the two covers but the absence of correlation of measurements between them suggests the lack of an overall block-stamping technique\(^15\). The stiffness of the covers is produced by a homemade cardboard attached to the leather, that is, layers of paper stuck together with a gum, such as cereal starch.

2.4

The paper is in single folios — the bifolios have been cut in half, and very neatly. It is of more consistent thickness throughout the manuscript than the paper of the (in all likelihood) earlier West African copy. While showing signs of having had active use, this would only have spanned eighteen years, so the paper is in overall very good condition. As with the West African copy the leaves are neither stitched together nor bound to...
the cover, placing it in the Maghribi binding tradition rather than that of Egypt/Syria or South Arabia.95

2.5

As with the West African copy a number of pages were photographed using a beta-autoradiograph technique. Apart from the three cancel-pages there is only one watermark and its countermark occurring throughout the manuscript. The watermark is the two-headed eagle of the Austro-Hungarian Empire with sword. Being in the centre of the original bifolio its top or bottom half occurs at the edge of the respective folio. The countermark, Andrea Galvani Pordenone with a shield containing a moonface, is well attested in Egypt in the 1880s, and so the paper would most likely have come that way.97 Cutting the bifolios in half has resulted in this case in the top or bottom of the shield occurring at the edge of the respective folio. The folios and then the bifolios put together indicate an original sheet size similar to that of the West African copy.

The mere fact that the whole manuscript (bar three folios) is made up of one type of paper points to a probably undisturbed export from Pordenone to eastern Sudan. The cutting of the bifolios, and thus of the marks, means there are four different type of folio, one with the lower part of the eagle, one with the top, one with the top of the shield, and one with Galvani’s name and the bottom of the shield. The overall equal occurrence of these four over the whole manuscript strengthens the possibility that the exported package of paper may not even have been opened between Pordenone and eastern Sudan. The neat cutting of the bifolios further indicates this, as does the order of occurrence of the four types of folio. While there has been a good deal of shuffling, more in some parts of the manuscript than others, there are distinct runs where the four types of folio occur in groups of four, with one or more rogues intervening here and there. The best example is between the seventy-five folios 103-177 where there are sixteen groups of four, i.e. original sheets, with eleven rogues. Of the sixteen groups nine fall in exactly the order naturally occurring from the sheet being folded into four and then cut, four of them one after another, while a further three have the first two folio types exchanged. The rogues taken in their order of occurrence fall into a further two groups of four plus three random. Other words what shuffling has occurred has almost certainly been around the time of the original sheet being cut and stacked, at or near the source.

All this creates a picture, similar in some ways to that for the West African copy. The original sheets were cut into four in a mill in Pordenone, or a warehouse, probably in the 1870s. Many of the folios were piled straightaway in the order occurring from being cut, but most got shuffled a little, for some reason. The pile, or ream, was then tied up into a package, exported to Egypt and thence down to eastern Sudan, where it was sold to a buyer probably without having been previously opened. After completing each folio, the scribe probably simply took the next one from the top of the package and continued writing. Having written the colophon there still would have been some paper left in the package.

BIBLIOGRAPHY

Only works actually referred to in the article are listed here.

Abbot., T., 'Maghribi Koran manuscripts of the seventeenth to eighteenth centuries'. American Journal of Semitic languages and literatures 55 (1938), pp. 61-5 & Plate.
MANUSCRIPTS OF THE MIDDLE EAST 2 (1987)


Walz, T., *Trade between Egypt and Bilad as-Sudan (1700-1820)*. Cairo 1978.


NOTES

1 As part of a list of manuscripts in Ebied and Young, pp. 109, 10. ‘Sudan’ is used here in the title of this article in its comprehensive 19th-century meaning of the belt of sub-Saharan Africa between the desert and the tropical forest, stretching from Futa (present day Senegal) in the west to the foothills of north-west Abyssinia, see Fage, maps 13, 38. In what follows ‘eastern Sudan’ refers roughly to the area of modern-day Sudan (also called ‘the Sudan’), ‘western Sudan’ to the area west of that and along the north of modern-day Nigeria.

2 As witnessed by the red dot over the *alif* to signify *liyihaba* (not, as might be expected, *l‘ahaba*), see illustration No. 4, second full line of text; and by the red dot under the ligature between *nān* and *alif maqṣūra* in *annā* to signify *imāla* (i.e. *annay*) in the next line of the same illustration. The Sudanese call this script simply ‘Kufi’, and the Hausa people ‘Ajamī’. (Bivar, *ALR*, p. 10). Because there have been several varieties of Maghribi used in western Sudan, the script of the West African copy is termed ‘Ifriqi’, following Bivar and probably Ibn Khalda. see Bivar *NM*, p. 204, *ALR*, p. 9.

3 As witnessed by the readings *wâ‘arjulkaum* (5:6), see illustration No. 8, line 7, and *nansa‘hâ* (2:106), see illustration No. 7, line 1. No copy in this transmission has been described in Western works, see Jeffery, p.6, and compare Labib al-Sa‘id, p. 91 n. 1 (English translation, p. 143 n. 16).

4 While there is no shortage of manuscripts from earlier centuries, especially from Egypt, in the transmission of Abû ’Amr, it was steadily displaced from early last century by the printing-press, and has never itself been printed. A copy in the Hafs transmission is said to have recently been doctored in the Sudan with Abû ’Amr readings, but without approval from Omdurman (oral communication from M. Turabi).

5 The small number of Qur’ān copies existing from eastern Sudan, and similarly of manuscripts on Qur’ān sciences, can mainly be explained by two factors, one the prevailing Sudanese custom of education by oral transmission (cf. Eid, p. 453), and two, the high price of a written mushaf (upwards of £300 today). It is planned to make a study of the textual transmission of the Mahdiyya copy elsewhere.

6 For these events, see Holt, p. 243, and Holt and Daly, pp. 112, 119, and for the macabre photograph (opposite one of Wingate) Holt and Daly, Plates 24 and 25.

7 By a Mrs. G.R. Lancaster on the death of her husband, a Barnsley (West Riding) councillor and long-serving member of Leeds University’s governing council. How he acquired the copy is not known.

8 Greater space is given to the West African copy. This is because it has more decoration and more leather. Also its date and place are not stated, so a detailed discussion of its paper and watermarks is necessary. For much useful assistance with this article I would especially like to thank Dr. Adam Gacek, David James, Dr. Y.H. Safadi and Dr. A.D.H. Bivar. The cost of publication of the colour plates for this article has been generously met by the University of Leeds, and I am indebted to Mr. R.P. Carr, Librarian of the Brotherton Library, for his support. I am also very grateful both to Mr. P.S. Morrish, Sub-Librarian in charge of Manuscripts and Special Collections, and to the Photographic Section of the University of Leeds.

9 Many thanks to Colin Wakefield, Senior Assistant Librarian in the Bodleian for his kind assistance with the manuscripts there, and also to the Bodleian Library for permission to publish Plates of Bodleian ms. Arab. d. 141.

10 See illustration No. 1, centre and left.
9 The variation in the size of the written area arises in the main from the varying width of the pen-strokes according to the wear on the nib of the reed-pen, see Mitchell, p. 18.

10 In eastern Sudan made from soot, gum Arabic and water (Eid, p. 480).

11 Written in 1020 (Lings, Pl. 10; Safadi, pp. 23, 78). I owe this observation to Dr. Safadi, and it fits the views of Houdas (pp. 102, 111) and Bivar (NM, p. 204, ALR, p. 9).

12 Safadi, p. 24; 'grosier', Houdas, p. 109. The culture's lack of need for symmetry should also not be ignored.

13 Cf. Houdas, p. 101 (quoting Ibn Khaldu'n) and p. 107 for the possibility of finding the same letter on the same page in three or four different forms.

14 f. 122a, for instance.

15 Unlike Houdas' example (his illustration No. 11). The slant of Shetimo Kawo's Maiduguri copy (Bivar, ALR, Pl.I) and that of Safadi's illustration (see note 17 below) appears not to be the norm.

16 e.g. f. 162b ult., fattuqa 'idhã and ilaahukkanimu ilaahun.

17 e.g. f.167a, 4, vambaghã. Note also the same with the tanwin before each hasmula, whether in, or om (see illustration No. 2). In fact, vocalisation shows the copy to be in the transmission of Warsh by way of al-Azaq. This is seen by lack of assimilation of the bâ‘ to the mim in irkab ma'nã (11:42), and the presence of fatha over yâ‘ in ikhwatyya (12:100) and waliyya (20:18) (see Ibn al-Jazari, vol. 2, pp. 168-9, 173.16). The same applies to the printed Nigerian copies in the British Library, one printed in 1905 (Ellis and Fulton, no. 14507, cc. 11, also in the Bodleian, shelfmark Arab. d. 408), and the other a handsome 1960s facsimile of a late 19th-century manuscript (British Library Select Book Or. 74, d. 23), illustrated in Safadi, p. 24.

18 BSOS, and especially ALR.

19 ALR, p. 10. Kano was an important centre of Qur'an scholarship, and a very possible provenance of the West African copy, written there perhaps by a Hausa scribe.

20 Bivar, BSOS, Pl. III, ALR, p. 6.

21 Unlike the pointed ones in Abbott (Pl. I). Very occasionally the šdã‘ is pointed in the Leeds West African copy as also in Abbott.

22 Bivar, BSOS, Pls. I, II.

23 This trefoil motif, preserved far longer in the Islamic West than East (see, for example, Brockett, pp. 44, 5), goes right back to Kufi Qur'âns copies (e.g. Lings, Pl. 1) and seems to have emerged from the triangular group of dots to be seen in many mâ‘il copies. The yellow pigment has a metallic element that does not allow beta rays to pass through (see note 57 below, and the white blobs on the illustrations Nos 18, 19, 20, 21 — the larger ones are verse-dividers and the smaller ones hanzâs). It is most likely orpiment, or King's yellow, which is an arsenic sulphide that was used in north Maghribi Qur'an manuscripts for the same purpose, verse-dividers. The red will most likely be vermilion. Thanks to Don Baker for information about pigments.

24 For all these, see illustration No. 5. This scheme, with minor variations, is found in all illustrations I have seen.

25 See illustration No. 2.

26 Similarly with the five rondouls on the opening folios of Oxford ms. Arab. d. 141, and of Chester Beatty Library ms. 1599 illustrated in James, Qur'ãns and Bindings, no. 95 (misplaced on p. 116 for 117), and with the four on Chester Beatty Library ms. 1601 illustrated in Arberry, Pl. 69. In the 17th-century Maiduguri copy a 'shujâyra' function is found, in that a rondel is connected to the frame of a design. In this case it is semicircular and reminiscent of a mîrâb on a mosque floor plan (Bivar, ALR, Pl. 1). Again reflecting a closer adherence to the mainstream tradition of Qur'an illumination, the other rondel in this Maiduguri copy illustration is akin to the 'ashâra symbol. Another different feature of this copy is the strapping together of the five rundouls in the margin of sûra 1 (photograph in Dr. Bivar's possession).

27 thâ‘ for thunn, bâ‘ for rûb and nûn for nisf, as in Abbott, p. 64.

28 See illustration No. 4. For the device around 1800, see Bivar, ALR, Pl. II, and compare the more elaborate one in Oxford ms. Arab. d. 141 (illustration No. 16).

29 e.g. f. 89b (diagonals), 111b, 129b, 131a, 244b (triangle). See illustrations Nos. 11, 12, 13.

30 See illustration No. 2, as in Abbott, p. 63 1ur., but not in Chester Beatty Library ms. 1599, 1601.

31 f. 1b, 81b, 163a, 246a, see illustrations Nos. 2, 3, 6 and 5 respectively. In the Sudan these are sometimes called 'dabbâqî'.

32 Strapwork is a long established Maghribi feature, cf. James, Qur'ãns and Bindings, p. 109b, and p.111 for a similar crenellation pattern (interlacing rather than overlapping) from the 13th-century Maghrib.

33 ms. IN: 15-271, Musâbah 1553, p. 49. Circles are also in the spaces between the weave-pattern on the opening folio of a Bornu Qur'an copy from Bama (photograph in Dr. Bivar's possession).

34 See illustration No. 14.

35 Bivar, ALR, Pl. I, Maiduguri is just SE of Lake Chad.

36 See illustrations Nos. 15, and No. 17 for close-up.


38 See illustration No. 3.

39 See illustration No. 6 and front cover of this journal.

40 See illustration No. 15: Arberry, Pl. 69; Abbott, Pl. I.

41 See illustration No. 2.

42 See illustration No. 15.

43 Thanks for these and other points about West African culture to Dr. S. Brett-Smith.

44 James, Qur'ãns and Bindings, p. 138. See also James, Das arabische Buch, entry 23, for an elegant example. For help with the leather and the judgement about its age, I am indebted to S. Wolstenholme, formerly of the Leather Dept., University of Leeds. The judgement was made without any knowledge whatsoever of the manuscript, or any prompting from the author.

45 See illustration No. 1, left. Such a satchel can be called 'kehek' in the Sudan. The fetish for hiding anything good from the evil eye may also be relevant here. The outer satchel of Oxford ms. Arab. d. 141 is soft, and similar to that illustrated in James, Qur'ãns and Bindings, pl. 115.

46 Loose folios or bifolios, rather than stitched gatherings, were a tradition in N. and W. Africa, see Haldane, p.66 re Pl. 74. Although by the early 18th-century books such as al-Jâzûlî's Dalâ'il were often being bound in N.W. Africa (Haldane, Pl. 74, but for an unbound one see James, Das arabische Buch, Pl. 23). Qur'âns copies maintained the older tradition, especially in west and east Sudan.

47 For a sheepskin cover from N. Africa see Haldane, Pl. 53, and pp. 14, 15.
The top of one of them is just visible inside the opened cover, see illustration No. 1, centre.

Gacek, SOAS Catalogue, no. 51.

Following the custom with Arabic manuscripts, catchwords appear at the bottom of verso folios (Witkam, p. 13). That early copies of the Qur'ān would have been loose-leaved provides a possible reason for this practice, not self-evident in stitched manuscripts. Foliation has been added in pencil in European numerals top left of each folio, with the omission of the fourth, which has now been numbered 2.2. Although therefore there are 332 folios in all, they are numbered 1-331. The six single folios are nos. 14, 85, 104, 110, 113, 153.

Gaskell, figs. 48, 49, pp. 90-1.

Although therefore there are 332 folios in all, they are numbered 1-331. The six single folios are nos. 14, 85, 104, 110, 113, 153.

Gaskell, p. 142.

The run ff. 116-165, for instance, breaks down as follows:

116-123 — two original sheets one after the other.
124-129 — 3 countermarked bifolios.
130-1 — 1 watermarked bifolio.
132-5 — an original sheet.
136-7 — 1 countermarked bifolio (not the other half of either 130-1 or 138-9).
138-49 — 6 watermarked bifolios.
150-9 — 5 countermarked bifolios (150-1 not the other half of 148-9).
160-1 — 1 watermarked bifolio (not the other half of 158-9).
162-5 — an original sheet.

234+ x 160+ mm. see below. The folio-size of the four West African copies in the Chester Beatty Library are also similar, varying only between 220-230 x 163 mm. (Arberry, pp. 76, 77), as is that of Oxford ms. Arab. d. 141 (235 x 176 mm.) The folios of the three manuscripts in the Oriental Institute in Chicago are a little larger — 240 x 182 mm., presumably having been trimmed less (Abbott, pp. 61, 65). On the other hand, a couple of (more northerly?) West African copy's paper falls into such gatherings. There is evidence of reams in eastern Sudan, and the Hijaz, numbering only 115 and 120 sheets (Walz, 'Paper trade', p. 46 n. 43), in which case a gathering may only have been 6 sheets. While closer, this again does not match the apparent gathering of 7 of the West African copy. Gatherings of 10 were also sold (Walz, 'Paper trade', p. 39). Wear and tear on the outer bifolios, depending on distance travelled and handling, perhaps explains these variations.

See illustrations Nos. 21 and 22. Oxford ms. Arab. d. 141 has the same, but less finely designed, suggesting that its paper may predate that of the Leeds West African copy.

See illustrations Nos. 18 and 20.

Compare Gaskell, pp. 58, 62; and especially Stevenson, 'twins'.

See illustration No. 20. Compare Stevenson, Missale, pp. 248-52 (excursus 4 — The movement of the mark on the mould). For jostling see the smallest moonface, illustration No. 21.

Einered has only one cl entry (no. 1105) as countermark to a mitre and grapes of Austrian origin from 1378 (paper-mill unknown). The letters are shaped similarly to those of the West African copy's countermark, although larger and with the c superimposed on the c. Briquet has four entries (see index, p. 129, + no. 9339) but they are from the 15th and 16th centuries and are not shaped similarly. Heawood also has only one, dissimilar cl entry, no. 276, dated to Madrid 1749. Again, Labarre found only one in the German Imperial archives of the 17th and 18th centuries. Nostitz, no. 357, dating to Breslau 1641.

Walz, 'Paper trade', p. 35.

Einered, p. 169, and pp. 166-175 for maps of the area (Fruili) and other information regarding the firm. See also Fedrigoni.

Luchetta, p. 12, where there is also a picture of him, as also Fedrigoni, pp. 182, 3 (with colour portrait); Marchetti, p. 758. I am indebted to Dr. D.E. Rhodes for these and other Italian references, and to Brian Richardson for translating them for me.

Luchetta, p. 13. It is not clear who their father was.

Not mentioned in Benedetti, nor in a number of other Italian works consulted.

Walz, 'Paper trade', p. 47.

In the case of printing paper rarely more than two years, although writing paper is likely to have had a longer inactive life (Gaskell, p. 319; Stevenson, Missale, pp. 90-99). Thanks to G.D. Hargreaves for help here.

Walz, 'Paper trade', p. 47.

Fage, maps 40 and 43.

Walz, 'Paper trade', pp. 36, 41.

Nachtigall, p. 28n.; Last, p. 194. But for its decline mid 19th century, Boahen, p. 115. Arab paper, if not Venetian, was still going down the Garamantian route even in the late 19th and early 20th centuries. This is seen from the Beniamino Arribi/yâ našīb watermarked paper, probably made west of Tripoli at that time, used extensively in Nigeria but not attested in Egypt (Walz, 'Paper trade', p. 42). The Qur'ān copy bought in Lagos in 1928 and dated by Abbott in 1938 to the 17th or 18th centuries was written on this paper, and should therefore be redated 19th or early 20th century (Abbott, pp. 61, 2).

Boahen, p. 108.

Walz, 'Paper trade', p. 40f. This makes it unlikely that the paper came down the most important trans-Saharan route west of Egypt of the later 19th-century, the Sanusi-
controlled Benghazi-Kufra-Wadai route (Boahen, p. 111). That the Leeds West African copy had connections with the Sanusiyya is also unlikely since the transmission they tended to use was that of Qâlân from Nââfî'. The routes are clearly shown in Boahen, map 3 (p. 102) and Walz, Trade, map 1 (p. 5).

Walz, 'Paper trade', p. 36. The Galvani firm had also cornered one of the largest shares of the Levant paper market by the mid-19th century (Walz, 'Paper trade', pp. 35, 36).

Walz, 'Paper trade', p. 41.

See illustration No. 1, right.

E.g. f. 284b. The notes mostly concern qirāʾāt.

See illustration No. 7.

Vajda, Pl. 60.

Digby.

Holt, Pl. 19.

See illustration No. 7, e.g. lines 1, 2, 3.

See illustration No. 7, as in taʿlam in line 1, but see the same word in line 2. Cf. also lakum and am in line 3. The tail of the final mim of the basmala can even run right down three lines of text, f. 346a.

See illustration No. 7, lines 3, 8.

See illustration No. 7, line 2 and penult.

See illustration No. 8.

See Haldane throughout, and glossary, p. 203, col. 1.

Compare Haldane, fig. 19.

Haldane, pp. 20, 200 n. 22.

See illustration No. 24.

Walz, 'Paper trade', p. 36 and n. 34. The pair span 1810-67 in Nikolaev. An exact correlation to the marks in the Mahdiyya copy has not been found, but one dated 1851 (Nikolaev, Pl. 1132) is very similar, but with a different countermark. For the double headed eagle see also Heawood, Pls. 168-93, and with a sword especially nos. 1282 and 4306.

Top of eagle 84 times, lower part of eagle 89, top of shield 84. Andrea Galvani Pordenone + bottom of shield 86.

E.g. one occurrence of four of one type of folio together (ff. 236-9), three of three together (23-5, 231-3, 267-9), and often of two of one type together.

Lower part of eagle, Andrea Galvani Pordenone + bottom of shield, top of shield, top of eagle. These are ff. 121-4, 129-32, 135-8, 139-42, 143-6, 147-50, 153-6, 166-9, 174-7.


Ff. 119, 120, 125, 126; 127, 128, 133, 134; 151, 152, 165.
1. Leeds Arabic ms. 301 (left and centre) and Leeds ms. 619 (right)
2. Leeds Arabic ms. 301 f. 1b (sūra 1:1 — 2:1)

3. Leeds Arabic ms. 301 f. 81b (sūra 6:165)

5. Leeds Arabic ms. 301 f. 246a (sūra 37:168 - beginning of 38)

7. Leeds University ms. 619 f. 10a (sūra 2:106-12)
8. Leeds University ms. 619 f. 61a (sūra 5:5-7)

9. Leeds University ms. 619 colophon (f. 346b)

ASPECTS OF THE PHYSICAL TRANSMISSION OF THE QUR'ĀN


18. Leeds Arabic ms. 301, watermark *tre lune*.

19. Leeds Arabic ms. 301, countermark *ct*.
20. Leeds Arabic ms. 301. watermark swivelled *tre lune*.

21. Leeds Arabic ms. 301. watermark 3 moon faces.
22. Leeds Arabic ms. 301, countermark *Andrea Galvani Fordenone*

23. Leeds University ms. 619, countermark shield with moonface (top half only)
24. Leeds University ms. 619, watermark eagle (composition of two halves)