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Personal Qur'ans in Early Islam: A Case of Palimpsesting and Training

Abstract: Included by Adolf Grohmann among the examples of seventh-century Qur'anic manuscripts, Vienna, Österreichische Nationalbibliothek, PER Inv. A. Perg. 2 is the remains of a bifolio described in the catalogue of Qur'anic fragments from the Papyrus Collection of the Austrian National Library as an unusual palimpsest. A. Perg. 2 is a puzzling case because it contains part of the passage about the biblical Korah (surah 28, verse 76–82) written three times. Recent imaging of the fragment using multispectral imaging has enabled the manuscript to be re-read. Rather than chronological layers, the three identical sections of surah 28 are part of one and the same project that happened on the given leaf in a single session. The script styles, peculiar dynamics of the object production and possible training context suggest that this fragment is a 'personal Qur'an' produced for practising how to write it.

1 A different approach to the written artefact in palimpsest studies

The process of palimpsesting is associated with rewriting (*scriptio superior*) over an earlier text (*scriptio inferior*) after it has been removed. However, the essence of palimpsesting is the reallocation of written materials for a new project and not only the presence of two or more layers of script.[1] Some cases of intertwined *scriptio inferior* and *scriptio superior* do not fall under the category of palimpsest where the definition of a palimpsested artefact depends on the fact that it was carried out as a new project on previously used material. The Qur'anic manuscript Vienna, Österreichische Nationalbibliothek (hereafter: ÖNB), PER Inv. A. Perg. 2 (hereafter: A. Perg. 2)[2] contains strata of the Qur'anic text but is not the result of a palimpsesting process. Its strata are the result of a process that likely took place as a single event. The definition of 'palimpsest' cannot be divorced from the tech-

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1 Cavallo 2001.

2 A. Perg. 2 is the shortened shelf mark used by Loebenstein 1982.

niques, actors, and intentions of the palimpsesting process that occur on the manuscript page.

The relationship between two or more objects in the *scriptio inferior* and *scriptio superior* is an essential aspect of the palimpsesting process. This relationship also encompasses the connection between the cultures and languages in which the old and new objects were produced. A survey of the known cases of Qur'anic palimpsests was recently carried out to identify the patterns they exhibit.[3] There are two types of Qur'anic palimpsests: those that are objects completely disintegrated and recycled in a different cultural context, and those that are objects partially destroyed and recycled within the same culture and possibly the same community. Examples of the former case are the Sinai and Damascus Qur'anic palimpsests, that is, Cambridge, University Library, Or. 1287 (large and small leaves) and Milan, Biblioteca Ambrosiana, L 120 sup. from Sinai, as well as the lost Damascus palimpsest leaf preserved in the 1908 photographic album of fragments from the Umayyad Mosque of Damascus. The only known examples of partially destroyed objects are the Qur'anic palimpsest from the Great Mosque of Ṣanʿāʾ[4] and the recently discovered Qur'anic leaves on paper from West Africa (see Section 3.3 below).

In her analysis of historical sources on the manuscript production process, Asma Hilali surveyed the techniques of 'palimpsesting', paying close attention to the Arabic terminology for rubbing, washing, soaking, and crossing out (*ḍarb*) sections of the text as well as rewriting the text (*ǧandara*, 're-inking'). In this context, the object and the text are a single unity with traces of their use and afterlife, rather than two separate projects resulting in two objects.[5] In Arabic manuscript culture, a *mabšūr* (i.e. 'scraped off, shaved off, scratched') manuscript also can be a manuscript where single words or groups of words have been scraped off and then rewritten. The *Glossary of Technical Terms* edited by Adam Gacek defines the palimpsest as *mabšūr*, meaning 'pared, erased', with the process being *bašr*, meaning: (1) 'paring, dressing (of leather)'; (2) 'erasure with a pen knife or scraper'; and (3)

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3 Fedeli 2023.

4 My survey did not include this very interesting case of a more recent reuse of a Qur'an on paper in West Africa, discovered by Khaoula Trad and Darya Ogorodnikova; see their contribution to the present volume. The traces I identified in Doha, Museum of Islamic Art, MS. 67.2007 and matching fragments (see Fedeli 2023, 276, n. 131) have the characteristics of Qur'anic text written on top of Qur'anic text but I have not yet accessed the objects using multispectral imaging.

5 'The palimpsesting techniques can be summarised in three ways: to keep the text as close as possible to the way it was written (*jandara*), to rub it out and to wash it out (*ḥakk*) or to cross out (*ḍarb*) certain passages. These techniques find their *raison d'être* in the transformations which have occurred in the text: fading ink and partial or major errors' (Hilali 2017, 11).

'cancellation by means of drawing lines above a word or words to be erased'.[6] According to Kūrkīs ʿAwwād's list of the oldest Arabic manuscripts, there exists a case of *nusḫah maktūbah bi-l-ḫaṭṭ al-kūfī ʿalā l-raqq al-mabšūr*, that is, a copy written in Kufic script on parchment leaves that have been erased or shaved off. The term *mabšūr* is accompanied by a footnote explaining that it corresponds to the English term 'palimpsest' and refers to previously used parchment from which the writing is removed and then written on again.[7] The copy listed by ʿAwwād is a manuscript held at at the Topkapı Sarayı, whose writing has been partially re-inked.[8] In Arabic manuscript culture, the focus is on the script and its ink rather than the entire object and its structure.

There is more to the process of palimpsesting than script, ink, and single words, Guglielmo Cavallo argues. It also involves repurposing an object for a new project. That is, the presence of multiple layers of writing is not the only aspect of the process. In 'L'immagine ritrovata: in margine ai palinsesti', Cavallo surveys the birth and definition of a specific interest in erased and rewritten codices. He stresses the importance of understanding palimpsests as a relationship between two or more objects, going beyond the deciphering of their *scriptio inferior*. In the frame of *Palimpsestforschung* ('palimpsest research'), Cavallo emphasises that the reuse of parchment (palimpsesting) was related to a mentality around reusing materials to produce new objects. That is, a palimpsest implies the reallocation of an object.[9] This is a key point in defining as a palimpsest an artefact that has two layers of script but does not embrace two objects. Based on Cavallo's theory, I argue that A. Perg. 2 is not a palimpsest, although it has two layers of script on part of its parchment surface.

2 A. Perg. 2 as described in previous scholarship

The object described in this article is known as an example of the early Qur'anic manuscripts from the seventh century CE. The manuscript is a parchment fragment measuring approximately 237 × 205 mm.[10] It is part of a collection of twenty-one items donated by Franz Trau Senior (1842–1905) to the papyrus collection of

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6 Gacek 2001, 13, s.v. *b-š-r*.

7 ʿAwwād 1982, 32.

8 Fedeli 2023, 255–256.

9 See Cavallo 2001, 8.

10 Loebenstein 1982, 23.

Archduke Rainer in Vienna in 1892.[11] Trau, owner of a tea trading company founded by his father in 1850, was an art collector connected with Josef von Karabacek, director of the Papyrus Collection of the Austrian National Library from 1899 to 1917.[12]

In his 1958 article on the dating of early Qur'anic manuscripts, Adolf Grohmann included a black-and-white reproduction of the manuscript to provide an example of the similarity of the script style of early Qur'anic manuscripts and that used in early papyri from the seventh century.[13] Grohmann compares the Qur'anic manuscripts to the Arabic papyri of the seventh and beginning of the eighth century. These manuscripts include London, British Library, Or. 2165; Paris, Bibliothèque nationale de France (hereafter: BnF), arabe 328 (a) and 328 (d); Vatican City, Biblioteca Apostolica Vaticana, ar. 1605; Cairo, Dār al-Kutub, Qaf 47,[14] reproduced in the *Arabic Palaeography*,[15] which matches Berlin, Staatsbibliothek zu Berlin, ms. or. f. 4313; Istanbul, Topkapı Palace Museum Library, Medina 1a;[16] parchment no. 1700 in the papyrus collection of the Egyptian National Library in Cairo (reproduced by Grohmann as plate III a); and A. Perg. 2 in the Archduke Rainer collection in the Austrian National Library in Vienna. Plate V of Grohmann's publication features a black-and-white image of the Vienna manuscript, labelled as 'Qur'ān Sūra 28 61–73'. This description refers to the content on the hair side of the almost completely preserved leaf on the left side of the fragmented parchment bifolio.

In 1980, Helene Loebenstein provided a comprehensive description of the manuscript and other early Qur'anic fragments from the Papyrus Collection of the Austrian National Library.[17] Her article includes reproductions of both the hair and flesh sides

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11 Loebenstein 1982, 7 (referring to Grohmann) and Schwartz 1984, 524.

12 See for example the catalogue for the auction of part of Trau's collection that also includes a postcard with Franz Trau Senior, Karabacek, and the numismaticists Alexander Missong and Friedrich Kenner (Trau 1935).

13 Grohmann 1958, 222: 'If we compare the Qur'āns Brit. Mus. Or. 2165, Mss. Paris. Arabe 328 (1), 328 (4), Codex Vat. ar. 1605, Arabic Palaeography Pl. 44, Istanbul, Saray, Medina 1a, the parchment no 1700 in the Papyrus-collection of the National Egyptian Library in Cairo (Plate III a) and Inv. Perg. Ar. 2 in the Archduke Rainer Collection in the National Austrian Library in Vienna (Plate Va) with these papyri, it is fairly possible to ascribe them to the first century of the Islamic era (viith or beginning of viiith cent. A. D.)'. Among the manuscripts listed in Grohmann 1958, 222 as dating to the seventh century, Berlin, Staatsbibliothek zu Berlin, ms. or. f. 4313 (which belongs to the same codex as Cairo, Dār al-Kutub, Qaf 47) has been radiocarbon dated. Two pieces of parchment from fols 2 and 5 have been dated to 606–652 CE (1423,14 BP). See the details in Marx and Jocham 2019, 201, 216.

14 See the dataset *MC*.

15 Moritz 1905, pl. 44.

16 Altıkulaç 2020.

17 Loebenstein 1982; Schwartz 1984.

of the parchment fragment and observations of traces of folding as well as remnants of a second leaf, whose text she was unable to identify.[18] Grohmann's content (i.e. surah 28, verses 61–73, on the hair side of the parchment) is supplemented by the reading of the flesh side. Loebenstein notes that the page contains surah 28, verse 75–80 from l. 1 to l. 10 and then, from l. 12 to l. 18, the scribe wrote verses 75–77 again, with the parchment being lacunose at its bottom (ll. 19–23 on the flesh side and ll. 20–23 on the hair side). She also observes that the upper part of the flesh side of the parchment is a palimpsest. The *scriptio inferior* is visible only in the outer margin of the page. Its script resembles the script style of the whole page on the hair side and the bottom part of the flesh side.[19] The *scriptio superior* on ll. 1–10 is a continuation from the recto of the leaf (the hair side). As described by Loebenstein, l. 11 and half of l. 12 show traces of a later undeciphered text by a third hand, which differs from both *scriptio inferior* and *superior*.[20] The scholar was unable to read the *scriptio inferior* of the upper part of the page on the flesh side. However, she considers the possibility that it is the continuation of the hair side due to its similarity with the script of the recto.[21] This assumption led Loebenstein to investigate why the same text was repeated at the bottom of the same page. She offers two possible scenarios to explain this repetition: (1) the upper half of the page on the flesh side had an incorrect text that was repeated in the bottom half and overwritten in the upper half; or (2) a text was mistakenly repeated twice in the upper and bottom half, and the scribe resolved the issue by removing the script in the upper half, which was later rewritten by another hand.[22] The later smaller script at ll. 18–23 on the flesh side is likely a gloss introduced by the *basmalah* (the invocation 'In the name of God, the truly Merciful'). Loebenstein analysed the script style of the hair side and the bottom half of the flesh side. She noted a resemblance to the script of early Arabic papyri, as did Grohmann. Specifically, the letters *dāl* and *rāʾ*; the open *ʿayn* in the medial position and its elongated shape in the initial position; the rounded *mīm*; the sickle-shaped *nūn*; and the *hāʾ* are identified as similar to the Vienna papyrus ÖNB, G 39.726 (PERF 558). Loebenstein notes the two different shapes of the letter *alif,* either inclined from top right to bottom left or a vertical upright line, both without a return at their foot, which does not coincide with the main feature of the early Qur'anic manuscripts but with the script of the early papyri.

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18 Loebenstein 1982, 23.
19 See Section 3.1 and Table 1 below on the script style of fol. 2^r (hand A1) and the bottom of fol. 2^v (hand A2).
20 Loebenstein 1982, 24.
21 Loebenstein 1982, 24.
22 Loebenstein 1982, 24–25.

The slanting appearance of the ascenders of the letter *alif* is the main element of distinction for placing A. Perg. 2 in the seventh century, as Grohmann, Loebenstein, and Beatrice Gründler do, or in the eighth or ninth century, as W. Matthews Malczycki. Gründler includes A. Perg. 2 among the examples of very early Qur'anic manuscripts. In her book *The Development of the Arabic Scripts*, the scholar surveys Nabatean and Arabic documents dated from the pre-Islamic to the Islamic period to trace the history of the Arabic scripts and their contacts with Nabatean and Syriac scripts. In this diachronic approach to Arabic scripts, Gründler identifies five types of script associated with certain functions: the epigraphic script, the chancellery cursive for gubernatorial correspondence, the chancellery cursive for bilingual notifications, the cursive of the protocols, and the slanting Qur'anic script of certain manuscripts. Gründler's corpus of early Qur'anic fragments includes those mentioned in Grohmann's article. A. Perg. 2 is also mentioned.[23] Gründler's book includes a drawing of the script of the Vienna manuscript traced after the reproduction in Grohmann.[24] If we compare Gründler's tracing with Grohmann's reproduction, we can see that the remains of the further fragmented leaf are missing in Gründler's work.

Both scholars identify the content of the almost complete leaf on the hair side as surah 28, verses 61–73. They do not consider the few traces of the additional leaf that Loebenstein had noticed[25] nor the traces of an underwriting. Similarly, Malczycki does not mention the palimpsested nature of the fragment.[26] In his dissertation on the literary papyri from the University of Utah's Arabic Papyrus, Parchment and Paper Collection, the scholar mentions A. Perg. 2 due to its similarity with the script of the papyrus Utah, University of Utah, Marriott Library, P. Utah inv. 342 and their nature as personal Qur'ans.[27] Malczycki criticises Loebenstein's attribution of A. Perg. 2 to the seventh century; instead he proposes a later date, suggesting it may be from the eighth or ninth century. This argument is based on the fact that A. Perg. 2 lacks the right-slanting characteristic of the *ḥiǧāzī* style.[28]

In the *Islamic Codicology* handbook edited by François Déroche (2005), the nature of A. Perg. 2 as a palimpsest is mentioned to help explain the production of

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23 Gründler 1993, 135, n. 206. The author quotes Grohmann and his list of Qur'anic manuscripts in the 1958 article.

24 Gründler 1993, 170.

25 Loebenstein 1982, 23.

26 Malczycki 2006, 122–123. The scholar did not notice the different hands in the lower and upper layers.

27 The papyrus P. Utah inv. 342 is available online (<https://collections.lib.utah.edu/ark:/87278/s6g73ss7>, accessed on 14 February 2024). See Malczycki 2006, 98–127 and Malczycki 2015.

28 Malczycki 2006, 123.

the Mingana-Lewis Palimpsest (Cambridge, University Library, Or. 1287) through assembling different materials:

> the lapse of time between one text being copied and the next was not necessarily very long: indeed, a scribe, on noticing he had made a mistake, might use the same process to correct his own copy.[29]

In 2004, one word in the margin was identified, the bifolio reconstructed, and the hypothesis of the palimpsest challenged. On the basis of visual inspection of the original artefact and printed copies of its photographs, the few letters in the right margin of the flesh side noticed by Loebenstein were related to the main text area.[30] At l. 3 in the margin was identified the word *fa-baġā*, which also occurs at l. 2 of the main text area in surah 28, verse 76. The parchment surface is torn here, dividing the word in the *scriptio superior* into two physical parts and leaving a gap. The presence of the same word in a complete form in the margin and in a fragmented form in the text area led to the interpretation of the margin as an auxiliary space for clarifying the text. A few isolated letters were noticed and associated with the main text area as clarifications and corrections based on the occurrence of the word *fa-baġā* in both the margin and main text area. The logical sequence of marginalia and main text area was explained as being the result of a teaching and learning context. Furthermore, the few words and letters found on the remains of the second leaf have been interpreted as part of surah 26, verses 115–145 on the flesh side and part of surah 26, verses 177–178 on the hair side. The manuscript appears to have been a bifolio consisting of fol. 1, which contains part of surah 26 on its recto and verso (the narrow strip on the flesh and hair sides); fol. 2ʳ, which contains surah 28, verses 61–75 (on the hair side); and fol. 2ᵛ, which repeats surah 28, verses 75–80 and 75–77 in the upper and bottom halves, with traces of the same section of text in the margin of the upper half of the folio (on the flesh side). The hypothesis of palimpsesting dynamics behind the production of A. Perg. 2 has been ruled out because of the relationship between the margin with traces of the *scriptio inferior* and the main text, which is repeated twice in the upper and bottom halves of the leaf. If palimpsesting practices imply the reallocation of the writing surface for a new project, the Vienna fragment cannot be considered a palimpsest as it is a single object produced in the same context and at the same time. The hypothesis that the manuscript is no longer a palimpsest has been wide-

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29 See Déroche 2005, 44, n. 90 and 91 concerning the Ṣanʿāʾ palimpsest manuscript; n. 93 on the Mingana-Lewis *Leaves from three ancient Qurâns possibly pre-ʿOthmânic*; and n. 94 on the Loebenstein catalogue.

30 Fedeli 2005.

ly accepted.[31] The 2004 reading was somehow incomplete because of the lack of special imaging or image-processing techniques known from the literature, such as those used in the Rinascimento Virtuale project from 2001 to 2004.

The new reading of A. Perg. 2 proposed in this article is the result of a collaboration in a project carried out by the Early Manuscripts Electronic Library (EMEL). Michael Phelps, Roger Easton, and Keith Knox involved me in the processing of the spectral images of the manuscript that Damianos Kasotakis took (see Figs 1 and 2).[32] The images were processed by the team to enhance the visibility of specific features of the scripts on the parchment. This was done in several steps. The team provided pseudo-colour and monochromatic images to address the challenges and incomplete results that arose during the process. The main challenge was the deterioration of the parchment and the ink that penetrated through it. The parchment suffered extensive damage due to ink corrosion and likely poor storage conditions before entering the antiquarian market, resulting in the loss of inked areas and the spread of degradation reactions to adjacent materials. As a result, several misleading holes appear in the images. To address this issue, the team has produced new images that clearly distinguish the holes and shadows from the ink (see Fig. 3). As for the second issue, since all layers were visible simultaneously on each physical side of the parchment, separating the different layers of the images of the flesh and hair sides proved challenging. The team proposed creating a single image containing the scripts from both sides. Rather than examining the parchment's two separate sides, we accessed the merged scripts from both the flesh side and hair side, which corresponds to the object's deterioration. Considering the two sides as a single item, rather than two distinct objects with separate unconnected images, has been incredibly helpful. When reading a palimpsest, scholars usually request to split the layers,[33] but in this case, the first step has been to merge the recto and verso into one single image, including all the layers in one image, as this reflects the reality of the object. This outcome was made possible after the team observed my methodology for accessing and using images. The team's production of merged images of the two sides was crucial to identifying the layers and the subsequent research (see Figs 4 and 5).

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31 See for example the list of Qur'anic palimpsests in Small and Puin 2007, 60.

32 Michael Phelps is the executive director of the EMEL, Damianos Kasotak is its director of imaging, and Keith Knox is its chief scientific advisor. Roger L. Easton is at the Chester F. Carlson Center for Imaging Science, Rochester Institute of Technology, NY.

33 This has been my experience in working on the images of the Cambridge Qur'anic palimpsest (Cambridge, University Library, Or. 1287). The result of the work is available in the Cambridge Digital Library and described in Fedeli 2015.

Fig. 1: A. Perg. 2 flesh side, image by Damianos Kasotakis, 2020; © Österreichische Nationalbibliothek, Papyrussammlung.

Fig. 2: A. Perg. 2 hair side, image by Damianos Kasotakis, 2020; © Österreichische Nationalbibliothek, Papyrussammlung.
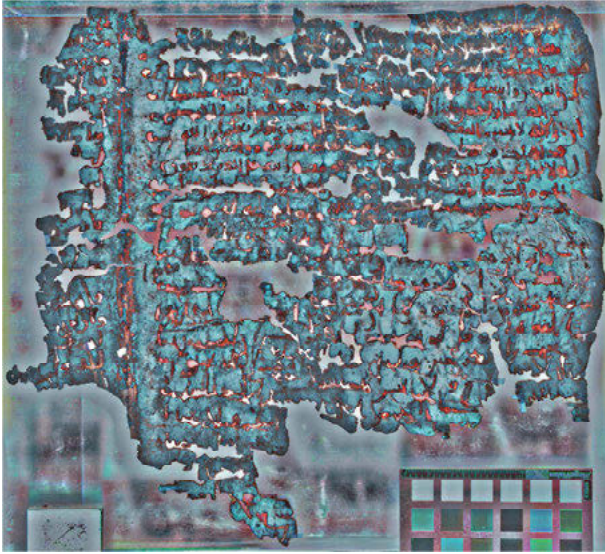
Fig. 3: A. Perg. 2, image postprocessed by Keith T. Knox to distinguish misleading holes and ink; © Österreichische Nationalbibliothek, Papyrussammlung.
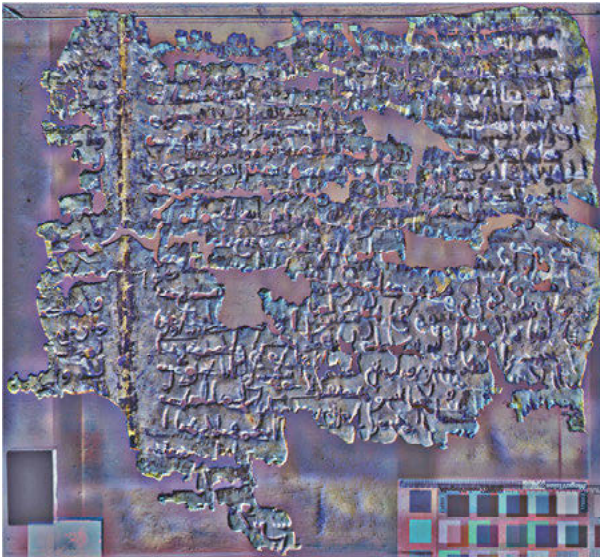

Fig. 4: A. Perg. 2, image postprocessed by Keith T. Knox with superimposition of all layers, from flesh and hair sides, to visualise them as a unique entity; © Österreichische Nationalbibliothek, Papyrussammlung.

Fig. 5: A. Perg. 2, image postprocessed by Keith T. Knox with superimposition of all layers, from flesh and hair sides, to visualise them as a unique entity; © Österreichische Nationalbibliothek, Papyrussammlung.

The content of the lower and upper layers has been identified through a kinaesthetic-palaeographic feedback loop. The physical act of tracing the contours of letters over the images and the knowledge of them constantly influence each other in a loop.[34] The new images produced during the step-by-step processing and the iterative work revealed new details about the manuscript's layout, composition, codicological structure, and palaeographic features. This approach led to a new interpretation of the object and its sociocultural context, as well as the discovery of previously unseen text. The identification of new lines of text allowed an answer to be suggested for Loebenstein's research questions from 1982 regarding the reason for and function of the repetition of a specific portion of the Qur'anic text. The study of the material aspects of A. Perg. 2 made it possible to reconstruct the social dimensions of its writing.[35]

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34 Tarte 2011.

35 On the reconstruction of the social dimensions of writing in antiquity (the 'ecosystem of writing'), competences in producing written material, and graphic schooling, see Bentein and Amory 2023.

3 The new reading of A. Perg. 2 enabled by the recent imaging and image postprocessing

As mentioned previously, Loebenstein observed traces of old writing in the margin of the upper half of fol. 2ᵛ (flesh side). There, in 2004, *fa-baġā* (surah 28, verse 76) and a few isolated letters were identified. The new images and joint work with Phelps, Easton, and Knox enhanced the readability of the manuscript and enabled us to identify fragments of whole lines of text in the *scriptio inferior* of the upper half of fol. 2ᵛ, rather than just single letters (see Fig. 6). After several steps, fragments of whole lines of text were enhanced also in the *scriptio inferior* of fol. 2ʳ. This occurred at ll. 1–2, as well as for some isolated letters at ll. 4 and 6. The discovery of two lines of *scriptio inferior* on fol. 2ʳ and a *scriptio inferior* in the text area of fol. 2ᵛ, along with the palaeographic analysis of the different strata of writing and the new layout of the text, contributed to a new reading of the object. The manuscript text is edited in the appendix to this article.
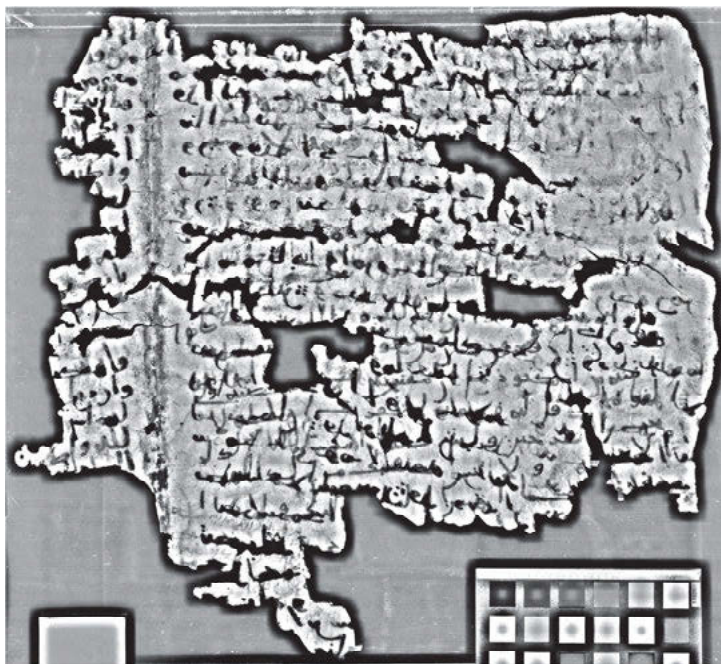

Fig. 6: A. Perg. 2, image postprocessed by Roger L. Easton, enhancing traces of full lines of *scriptio inferior* on fol. 2ᵛ, top half; © Österreichische Nationalbibliothek, Papyrussammlung.

3.1 Visual appearance, different script styles, and layout in A. Perg. 2

A. Perg. 2 is characterised by a varied and inconsistent appearance of the bifolio, with different writing styles, asymmetrical text frames, and unevenly proportioned structuring into lines. The deformation, deterioration, and fragmentation of the parchment has created split and wavy baselines, which may exaggerate the unevenly proportioned structuring into lines. Analysing the palaeography and layout is essential for understanding the possible mechanisms that connect the written layers on the manuscript pages.

There are two main writing styles in A. Perg. 2: a larger and a smaller rounded script with distinctive letter shapes.[36] The letters in the larger script are twice the size of the letters in the smaller script. The smaller script is used at ll. 1–2 of fol. 2ʳ (*scriptio superior*), at ll. 1–10 of fol. 2ᵛ (*scriptio superior*), and also at ll. *16 and *17 of fol. 1ᵛ, likely one stratum only (see Figs 7–10).

Fig. 7: A. Perg. 2, image postprocessed by Roger L. Easton, enhancing the small round script on fol. 2ʳ, ll. 1–2; © Österreichische Nationalbibliothek, Papyrussammlung.

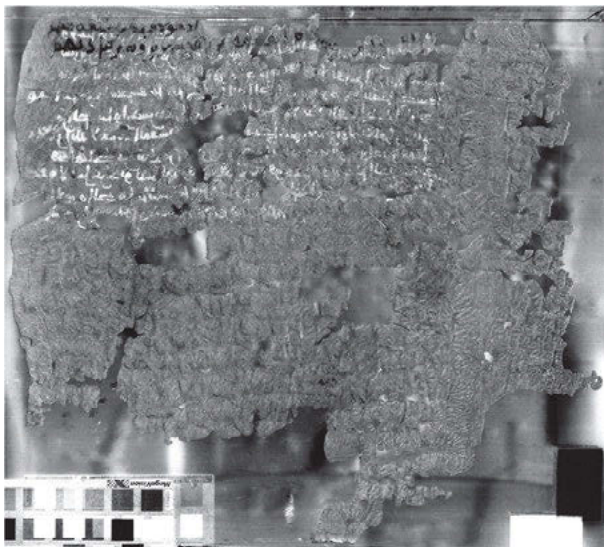**36** See Blair 2006, 143–194 on round script.

Fig. 8: A. Perg. 2, image postprocessed by Roger L. Easton, enhancing the small round script on fol. 2ʳ, ll. 1–2 (the white characters are the small script on fol. 2ᵛ); © Österreichische Nationalbibliothek, Papyrussammlung.
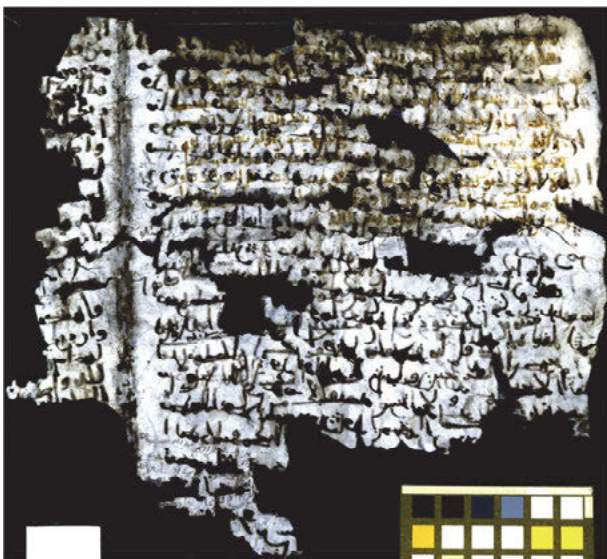

Fig. 9: A. Perg. 2, image postprocessing by Roger L. Easton, enhancing the small round script on fol. 2ᵛ, ll. 1–10; © Österreichische Nationalbibliothek, Papyrussammlung.
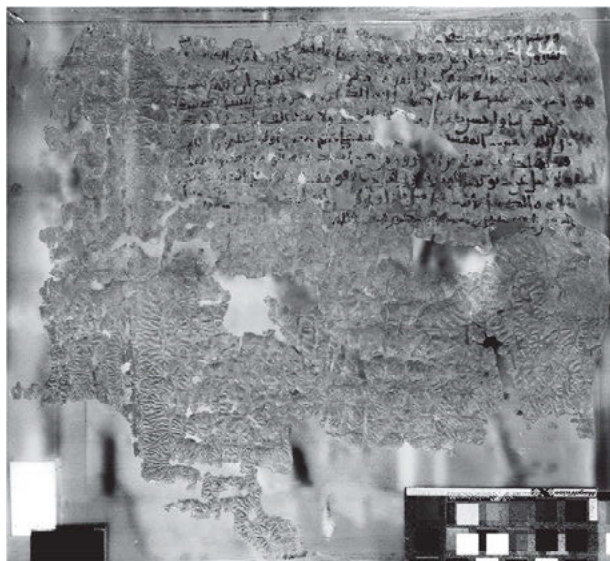
Fig. 10: A. Perg. 2, image postprocessed by Roger L. Easton, enhancing the small round script on fol. 2ʳ, ll. 1–10 (the white characters are the small script on fol. 2ʳ); © Österreichische Nationalbibliothek, Papyrussammlung.

The upper and lower layers run in the same direction and do not completely overlap due to their different sizes. The smaller script has little spacing between letter blocks, tends to space words, and does not split words across two lines. Additionally, no signs mark the end of the verse. Although the text areas with the small script may look crowded, word units are recognisable. In the larger script, a cluster of oval or rounded dots marks the final word of a verse, words are split over two lines, and the space that separates letter blocks is consistent between and within words.

The two script styles are characterised by distinctive letter shapes that connect them with the script of some early Arabic papyri. In the larger script, the final *mīm* has an extended horizontal tail that curves slightly upwards, while in the smaller script, the tail extends downwards. In some papyri, the former shape is more archaic, and the latter became the regular downward-pointing longer tail of the *mīm* used in documents in the eighth century.[37] In the larger script, the isolated *alif* may slant to the right, with its bottom part slightly curving to the right

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[37] See Sijpesteijn 2020, 456.

or left. The *alif* never extends below the imaginary baseline in either its isolated or final forms. In the smaller script, the isolated *alif* is short, and in its final position, it extends below the imaginary baseline.[38] In both writing styles, the medial letter *ǧīm/ḥāʾ/ḫāʾ* does not sit on the imaginary baseline. Instead, it has the shape of an oblique stroke through the baseline, which also can be observed in papyri.[39] With the cautiousness needed due to the legibility of the overlapping lines and cancelled ink, the letter *dāl/ḏāl* has the characteristic shape found in the early Qurʾanic manuscripts in the larger script, with two horizontal elongated arms ending in a rightward bend at the top of the upper arm. The smaller round script includes both the archaic form with parallel arms (e.g. in *al-dunyā*, fol. 2ᵛ, l. 9) and the angular smaller shape with a slight rightward bend (e.g. in *qad*, fol. 2ᵛ, l. 7).

In 1958, Grohmann compared the script of early undated Qurʾanic manuscripts with the Arabic papyri and included A. Perg. 2 in the corpus, as mentioned earlier. This Qurʾanic fragment also exhibits a peculiarity observed in Arabic papyri, namely the coexistence of different letter shapes, sometimes even in the same document. This coexistence is particularly striking on fol. 1ᵛ, on the narrow strip of the flesh side. At l. *17, the word *ʾasʾalukum* (surah 26, verse 180) is written in a small round script. The final *mīm* of the word has an elongated downwards tail, while the ending of surah 26, verse 177 (an isolated *nūn* and a marker for the end of the verse) has the style of the early *ḥiǧāzī* Qurʾans.

According to Petra Sijpesteijn, '[a]rchaic and newer letter forms existed side by side, sometimes even in the same document'. The development towards a dominant writing style was not 'a linear development and archaic letter forms appear next to later shapes in earlier texts and continued to be used even when the latter had become dominant'.[40] The coexistence of parallel script styles is not common in Qurʾanic manuscripts due to the need for visual identity in these early manuscripts, which were produced as official models to be displayed.[41] Multiple script styles may be the expression of a scribal exercise or a non-official context.

An example of the coexistence of script styles and different letter shapes within one script style can be seen in the papyrus P. Utah inv. 342. Malczycki interprets the fragment as a folio in a codex with a small papyrus cord in the upper middle part of the papyrus. The writing support has visible traces of ink on only one side. According to Malczycki, the papyrus fragment was likely an internal or external

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38 See Sijpesteijn 2020, 451.

39 See Sijpesteijn 2020, 452. This is the archaic form that also occurs in pre-Islamic Arabic-Nabatean inscriptions and early Islamic Arabic inscriptions.

40 Sijpesteijn 2020, 442.

41 On the visual identity and layout, see e.g. George 2010.

folio of a quire. The papyrus contains surahs 112, 113, 114 and part of surah 36, features a personal use of the document, and has four signs of folding on the verso. This suggests that the Qur'anic papyrus was used as an amulet.[42] Palaeographic analysis dates the papyrus to the ninth century. The initial three lines of the text on the right-hand side of the verso attempt to imitate the Kufic script. However, from ll. 4 to 15, the script becomes more curved, and the attempt to imitate the Kufic style is abandoned. Despite this only partial attempt, some letters still show variety in their execution. On the left-hand side of the recto, the script is smaller and the horizontal elongation of letters (*mašq*) disappears, with shorter distances between lines. Malczycki observes that the script style on the left-hand side shares no common features with the early papyri, except for the letter *kāf* at l. 1. However, a variety of executions of letters also seem to appear on the left-hand side. For example, the letter *ḏāl* appears differently at l. 3 (in *ʾunḏira* in surah 36, verse 6) and l. 6 (in *al-ʾaḏqāni* in surah 36, verse 8). The first case displays an archaic Kufic style with parallel horizontal arms, while the latter case features an angular shape with a slight upward bend at the top, which is characteristic of early papyri. At l. 7, the letter *dāl* in *ʾaydīhim* in surah 36, verse 9 is a vertical line that ends with a small curve sitting on the baseline, without the upward bend, resembling the shape of the letter *lām*. The combination of different styles in the same object suggests its experimental nature and personal use.[43]

The small round script, identified as *scriptio superior* in A. Perg. 2, shows similarities with the script of early Qur'anic fragments on papyrus.[44] It is likely the work of one hand that executes letters in different styles with both archaic and later features. The larger script used in the whole fragment is more challenging to interpret. It is referred to as *scriptio inferior* when covered by the small round script or as *scriptio superior* when there is only one stratum of writing. Some differences exist in the execution of single letters and combinations of letters in the large script (see Fig. 11). For example:

– on fol. 2ʳ bottom, the final *lām* does not descend below the baseline, but its tail sits on the baseline. On fol. 2ᵛ bottom, the tail of the final *lām* goes downwards below the baseline (see e.g. *q(ā)la* on fol. 2ʳ, l. 15 and fol. 2ᵛ, l. 15);

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42 See a similar textual sequence and the same function as an amulet in the papyrus Birmingham, Cadbury Research Library, Mingana Collection, P. Ming. 107 in Fedeli 2019, 184–190.

43 Malczycki 2006, 119 mentions papyrus Cairo, Michaélidès Collection, Arabic Papyri, P. Michaélidès 32 (reproduced in Grohmann 1958, pl. I) and A. Perg. 2 as being similar to the papyrus P. Utah inv. 342 and defines both of them as 'fragments of personal Qurans'.

44 See the script style of the Qur'anic papyri, e.g. the papyrus published in Grohmann 1958 and reproduced in Marx 2019, 30–31.

- on fol. 2ʳ bottom, the final *qāf* has a round head sitting on the baseline and its descender goes downwards to the left, ending in a tail with a *dāl* shape (e.g. fol. 2ʳ, ll. 4, 11). On fol. 2ᵛ bottom, the letter has its sickle-like shape (e.g. fol. 2ᵛ, l. 12);[45]
- the ligature *lām-alif* has two different executions, but due to the deformed parchment and line structure, it is unclear where it is positioned on the baseline. Both executions produce a triangular base, known as *al-lām alif a-warrāqīyah*, which is associated with professional scribes.[46] On fol. 2ʳ bottom, the left-side ascender is curved and the right-side ascender is a straight line, forming a very large angle, while on fol. 2ᵛ bottom, the left-side ascender is a straight line and the right-side ascender is curved;
- the initial and medial *hā'* is written with a long vertical extension on the right side, as found in seventh-century papyri,[47] on fol. 2ʳ bottom (e.g. fol. 2ʳ, ll. 8, 13, 14); on fol. 2ᵛ bottom, by contrast, it has a rounded shape without a vertical extension (e.g. fol. 2ᵛ, l. 12);
- the word *all(ā)h* (and *li-ll(ā)h*) has two parallel ascenders joined by the curved bottom of the first *lām* on fol. 2ʳ bottom (e.g. ll. 13 and 15); on fol. 2ᵛ bottom, however, the two parallel ascenders are joined by a straight line sitting on the baseline (e.g. fol. 2ᵛ, ll. 15, 16, 18);
- letters in the large script are marked by consonantal diacritics. On fol. 2ʳ bottom, diacritics are flattened oval dots, while on fol. 2ᵛ bottom, they are rounded dots. The use of a different writing instrument, with a much wider cut reed or a more rounded pen, could account for this difference in execution;[48]
- the final word at the end of each verse is marked by one or two columns of three rounded dots on fol. 2ʳ bottom. This occurs eight times in double columns and twice in single columns. The bottom of fol. 2ᵛ has two occurrences at the end of a verse in the shape of an oblique column of three dots.
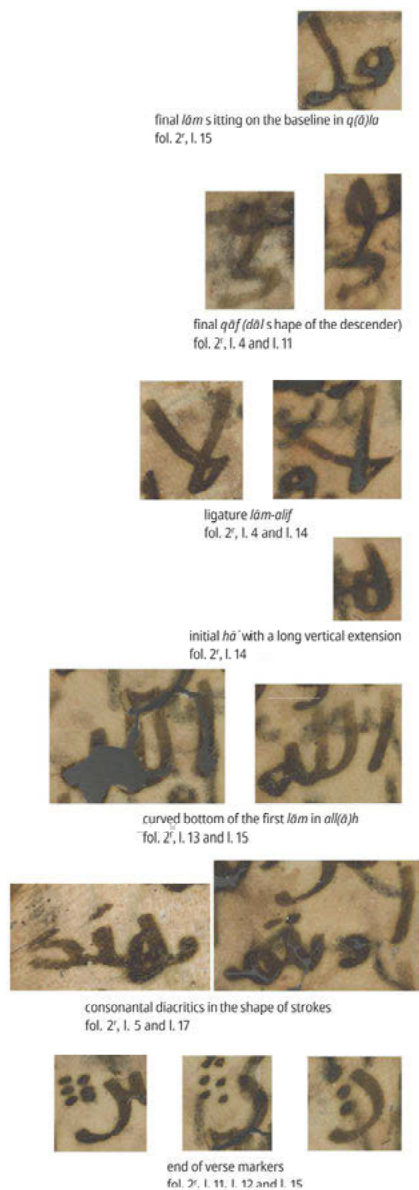
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45 The shape of the final *qāf* in the form of a small letter *dāl/ḍāl* or a sickle-shaped tail is one of the criteria to identify the two main groups (group 1 and group 2) of scripts in early Qur'anic manuscripts established by Estelle Whelan and published in Blair 2006, 114–115. The two groups of scripts are proposed as main categories to classify the enormous variety that characterises the early Qur'anic manuscripts.

46 Gacek 2009, 139–140, s.v. *Lām alif*.

47 Sijpesteijn 2020, 443.

48 See Grohmann 1954, 83–86 on the writing instruments in Islamic culture and the importance of the cut (*ǧilfah*) of the reed.

Hand A1

Hand A2

final *lām* sitting on the baseline in *q(ā)la*
fol. 2ʳ, l. 15

final *lām* descending below the baseline in *q(ā)la*
fol. 2ʳ, l. 15

final *qāf* (*dāl* shape of the descender)
fol. 2ʳ, l. 4 and l. 11

final *qāf* (rounded shape of the descender)
fol. 2ʳ, l. 12

ligature *lām-alif*
fol. 2ʳ, l. 4 and l. 14

ligature *lām-alif*
fol. 2ʳ, l. 4 and l. 14

initial *hā'* with a long vertical extension
fol. 2ʳ, l. 14

initial *hā'* without vertical extension
fol. 2ʳ, l. 12

curved bottom of the first *lām* in *all(ā)h*
fol. 2ʳ, l. 13 and l. 15

straight line joining the two *lāms* in *all(ā)h*
fol. 2ʳ, l. 15 and l. 16

consonantal diacritics in the shape of strokes
fol. 2ʳ, l. 5 and l. 17

consonantal diacritics in the shape of round dots
fol. 2ʳ, l. 5 and l. 17

end of verse markers
fol. 2ʳ, l. 11, l. 12 and l. 15
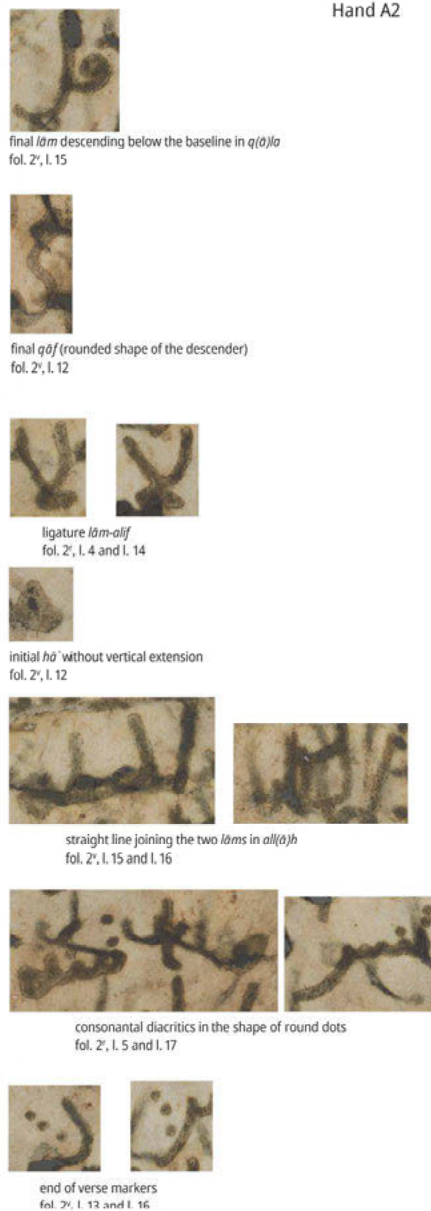
end of verse markers
fol. 2ʳ, l. 13 and l. 16

Fig. 11: Letter shapes of the *ḥiǧāzī* script styles in A. Perg. 2, hand A1 and A2.

The large script of A. Perg. 2 shows similarities with the *ḥiǧāzī* script style. Some letter shapes resemble the execution of hand C and hand E of the Codex Parisino-Petropolitanus, specifically Paris, BnF, arabe 328, fols 57ʳ–70ᵛ and fols 25ᵛ–26ʳ. The two hands are in the *ḥiǧāzī* I style of François Déroche's classification. However, the general appearance of the manuscripts in *ḥiǧāzī* I style and A. Perg. 2 is different. In the latter case, the script is less slanting and the letter *alif* does not have a marked return to the right at its bottom.⁴⁹

Some fragments from Seymour de Ricci's collection share similarities with A. Perg. 2, for example, Paris, BnF, arabe 7193 (two items), 7195 (the third of three items), and, particularly, 7191 (one item). The three manuscripts are part of the lot that De Ricci bought in Asyut on 8 February 1909. The manuscript Paris, BnF, arabe 7191 was written by two different hands on the recto (see Fig. 12) and verso (see Fig. 13). Déroche defines the script style of the recto as *ḥiǧāzī* I and the verso as 'influenced by the *ḥijāzī*, clearly less slanting than on the recto'.⁵⁰ The script on the verso resembles that of A. Perg. 2, not only in some elements of the letter shapes but also in its general appearance. The common elements in the execution of certain letters are for instance, the vertical bar at the right of the letter *hā'*, the final *mīm* with its upward tail, the rounded S-like shape of the final *yā'*, the crescent-moon shape of the final *nūn*, and the letter *alif*, which is mostly a vertical bar without a return at the bottom. The general appearance is characterised by ascenders that slant less, the round shape of consonantal diacritics, and clusters of six round dots arranged in two columns to mark the end of the verse. The text on the verso and recto of Paris, BnF, arabe 7191 has been written in two completely different hands, but their sequence is continuous. The recto contains surah 5, verse 94, word 3 to verse 97, word 20 (surah 5, verse 94, word 3 to verse 98, word 9 filling the lacuna according to the spaces of the page layout) written in *ḥiǧāzī* I style in nine lines prepared by a dry point. The verso contains surah 5, verse 99, word 7 to verse 107, word 18 (verse 99, word 1 to verse 107, word 24 or 25 filling the lacuna according to spaces of the page layout) in fifteen lines.⁵¹ This alternation of two hands on recto and verso is likely a trace of a training environment where different styles were practised and learnt. This fragment is part of a lot that was acquired with other Coptic papyri. It is likely that these materials were discarded due to their personal and ephemeral nature.⁵²

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49 This was already noted by Malczycki; see n. 28 above.

50 Déroche 1983, 151.

51 The catalogue indicates only the extant text on the fragmentary page, i.e. surah 5, verses 94–97 and 99–107. The reconstruction of the layout of the page and the structure of the text into lines suggests there was no gap in the sequence of the text between recto and verso. If so, the hand influenced by the *ḥiǧāzī* style continued on the verso the text written on the recto by the *ḥiǧāzī* I hand.

52 All the Qur'anic fragments of the lot are likely personal common Qur'ans.

Fig. 12: Paris, BnF, arabe 7191, recto; © Bibliothèque nationale de France, Paris.

Fig. 13: Paris, BnF, arabe 7191, verso; © Bibliothèque nationale de France, Paris.

The situation in A. Perg. 2 is more complex, not only because three different script styles share the writing of the Qur'anic text but also because a short passage is repeated three times.

3.2 Spatial and temporal sequence of script styles in A. Perg. 2

It is difficult to determine whether the differences in the *ḥiǧāzī* hands of A. Perg. 2 are the result of a varied script style, as seen in the small round script, or the work of two different hands. The personal use of the object as a writing exercise could support both scenarios. To reconstruct the production process of A. Perg. 2, it is useful to identify and visualise the two different large script styles and the small script on the manuscript page (see Figs 14 and 15). The spatial sequence of these styles may indicate a temporal sequence.

If we label the features of the script style on fol. 2ʳ (ll. 2–23) as hand A1 and on fol. 2ᵛ bottom as hand A2; the smaller round script in the first lines of the *scriptio superior* on both fols 2ʳ and 2ᵛ as hand B; and, finally, the later addition interpreted by Loebenstein as a gloss as hand C, it is possible to identify the following sequence of hands:

- Hand A1 on fol. 1ʳ (one layer only): The script on the narrow strip on the flesh side is closer to hand A1. This can be seen, for example, in the word *[a]ll(ā)h* at l. 17 and in the vertical prolonged line to the right of the letter *hāʾ* (e.g. ll. 14, 16).
- Hand *A1 + B on fol. 1ᵛ (one layer only): There are only a few letters with puzzling shapes. At l. 16, the isolated *nūn* and the oblique cluster of three dots correspond to hand A1. However, at l. 17, the final *mīm* of *ʾasʾalu-kum* has an elongated tail going down below the baseline, which is a feature of the smaller round script style. We can label fol. 1ᵛ as *A1 + B, assuming that there is only one layer of writing.
- Hand A1 on fol. 2ʳ top (*scriptio inferior*, ll. 1, 2, 4, 6): A few letters are recognisable here, and it is difficult to characterise the hand. The final *nūn* matches that of the rest of the page's script, suggesting it was written close to hand A1. The identity of the writing at ll. 4 and 6 is unclear.
- Hand B on fol. 2ʳ top (*scriptio superior*, ll. 1, 2).
- Hand A1 on fol. 2ʳ bottom (one layer only, except a few traces at ll. 4, 6, and a few corrections).
- Hand B corrections on fol. 2ʳ bottom: A later hand in hand B style corrected hand A1's work at a few points. Specifically, the words *kānū* and *ʾiyyānā* at l. 5 and the word *ʾannahum* at l. 7 were amended in a different script style with a thinner writing instrument. At l. 19, the letter block denticle + *alif* was added in the margin to restore the word *yaʾtīkum*. The restoration's script style is hand B.

- Hand A1 on fol. 2ᵛ top (*scriptio inferior*, ll. 1–7, and blank space at l. 8): Hand A1's script style can be identified by the ligature *lām-alif* and the word *all(ā)h*.
- Hand B on fol. 2ᵛ top (*scriptio superior,* ll. 1–10, which correspond to ll. 1–8 of the *scriptio inferior*).
- Hand C on fol. 2ᵛ middle (one and a half lines): There is an empty space between fol. 2ᵛ top and bottom, which was later filled with still undeciphered text in a cursive *nasḫ* script, written by hand C.
- Hand A2 on fol. 2ᵛ bottom (one layer only, ll. 12–18).
- Hand C on fol. 2ᵛ bottom margin: A generous bottom margin of about five lines was later filled with still undeciphered text in a cursive *nasḫī* script, written by hand C.

To understand the object and the possible reallocation of the writing support for a new project, it is necessary to comprehend the layout and position of each script style in its area, as listed above. This helps to connect the layers and facilitate understanding. Assuming that surah 26 was written before surah 28 – and there are no material traces that would support the opposite situation – the scribe(s) who produced A. Perg. 2 wrote down part of surah 26 on fol. 1 (recto/verso) in hand A1 with elements of hand B. There are no traces of a *scriptio inferior* on the narrow strip of parchment of fol. 1. The right-side margin of fol. 1ʳ respects the justification, while the left margin of fol. 1ᵛ does not. Loebenstein has already noted signs of folding on the entire object. The narrow strip and almost complete leaf are likely remnants of a bifolio. Due to the poor condition of the parchment, it is uncertain whether the small holes at the top and bottom of the bifolio's fold are signs of quire sewing.[53]

In terms of the fragment and any missing parts, surah 26 seems likely to have continued on a leaf following fol. 1 (including at least surah 26, verse 189–227 or part of it) and surah 28 would seem to have begun on a preceding leaf before fol. 2 (including at least surah 28, verse 1 up to the beginning of verse 60 or part of it). Based on the average number of characters on a page like fol. 2ʳ, it is estimated that the complete textual sequence between surah 26, verse 189 and surah 28, verse 60 would have required approximately six leaves in the script style of hand A1. While it is plausible to reconstruct a quire structure with three additional bifolia and A. Perg. 2 as the outer bifolio, the layout and palaeographic features show that the production process was not as linear, unlike for fol. 2ʳ. The repetition of the same text sequence on fol. 2ʳ makes it difficult to reconstruct a linear sequence in the writing of the text and a possible quire.

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53 The original bifolio was something similar to the remains of the bifolio Vienna, ÖNB, A. Perg. 213, part of the same collection acquired by Franz Trau Senior possibly in Egypt. See Loebenstein 1982, 27–30 and Tables 3–6.

Fig. 14: Layout, script styles and content of A. Perg. 2, hair side (fols 1ʳ–2ᵛ).
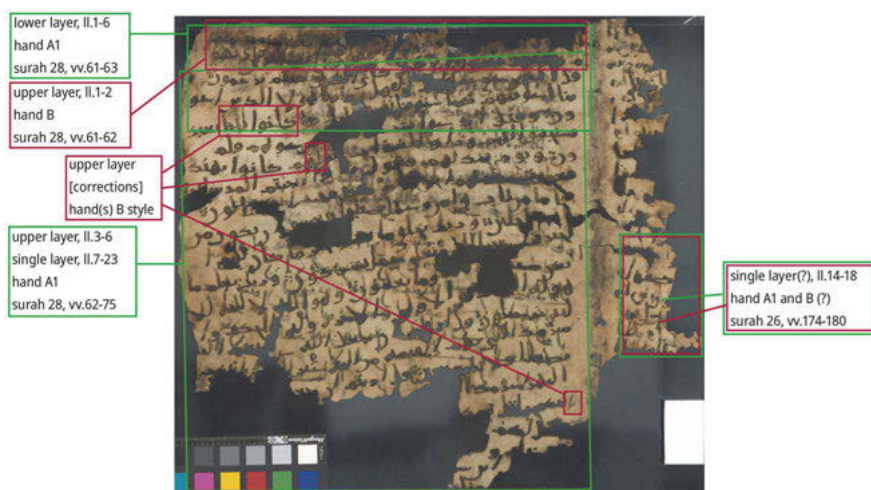

Fig. 15: Layout, script styles and content of A. Perg. 2, flesh side (fols 1ᵛ–2ʳ).

Another aspect to consider is the layout, text frames, and margins. Fols 1ʳ and 2ʳ respect the right-side margin justification and have a continuous sequence of text written by hand A1. Fol. 1ʳ is missing the left side of the parchment leaf, while fol. 2ʳ has a very narrow margin on the left side, and the scribe does not make special

efforts to respect the left-side justification. Fol. 1ᵛ does not contain sufficient traces of writing to determine the use of the left margin. Additionally, the right side of the parchment is missing. Fol. 2ᵛ is divided into two text frames, with hand A1 occupying the top half and hand A2 occupying the bottom half. The text frame on the top half occupies the entire right side of the page, with no margin on the right, while the left margin is justified. The text frame on the bottom half creates margins on both the right and left sides. Between the two text frames, there is one line of empty space. At the bottom of fol. 2ᵛ, which corresponds to ll. 19–23 of fol. 2ʳ, there are no traces of hand A1 or A2. The free margins, except for the top-right margin, which does not exist, have all been populated by a later hand. Hand C's script features the cursive style commonly found in documentary Arabic papyri from the first three centuries of Islam.[54] The marginalia are written with a thinner writing instrument in a darker ink. They run horizontally in parallel to the main text area and vertically on the right and left margins. Loebenstein has already noted the *basmala* written at the beginning of the marginalia text at ll. 19–23 and proposes that the text is a gloss to the main text.

Although I did not decipher the marginalia, except for the *basmala* and a few letter blocks, it is likely that the text was written in the areas left empty. If this is the case, hand A2 left a very generous bottom margin, extending for the height of four lines. The visual identity conveyed by early Qur'anic manuscripts tends to use small margins, and the bottom margin is not usually so wide.[55] This suggests that A. Perg. 2 is a personal copy, likely not produced in an official context. The difference in text frame between hand A1 (top half) and hand A2 (bottom half) on fol. 2ᵛ suggests a break between the two stages. Corrections are visible only on fol. 2ʳ, while fol. 2ᵛ (hand A2) appears to have no corrections. The script style of one correction on fol. 2ʳ is similar to a small round script. The *scriptio superior* (in hand B) is present only on top of hand A1, at ll. 1–2 of fol. 2ʳ and at ll. 1–10 of fol. 2ᵛ, to write the same portion of text of the *scriptio inferior*.

Since the newer, smaller round script does not replicate the whole text and does not reuse the whole writing surface, it is likely that the intention of hand B

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54 See for example Khan 1992. The use of the term *nasḫī* to classify the cursive script of papyri is discussed in Khan 1992, 44–46. See Rustow 2020, 161 on cursiveness in Arabic script with its abusive ligatures.

55 The oldest manuscripts can have no margins at all or small ones. See e.g. St Petersburg, National Library of Russia, Marcel 17. The original shape and space of its parchment leaves have been used in full and the writing has been adapted to the irregular shape of the leaf (see Fedeli 2015, 60). Alain George compared the layout and format of Qur'ans with Greek and Syriac manuscripts' layout. The examples he proposed have small margins in the *ḥiǧāzī* Qur'ans and wide bottom margins in the Greek and Syriac manuscripts. See George 2010, 44.

was not to reallocate the material and create a new object. On fol. 2ʳ, hand A1 serves as the *scriptio inferior* at ll. 1–2 and the *scriptio superior* at ll. 3–23. The most plausible explanation is that this was a scribal writing exercise. The variety of script styles in A. Perg. 2 coincides with the presence of multiple writing and script styles observed in papyri.[56] This situation supports the hypothesis of two or three different scribes working at the same time or a single scribe learning and practising how to write. Distinguishing between different actors behind each script in A. Perg. 2 requires material analysis of the ink composition.[57]

The suggested temporal sequence is as follows: hand A1 wrote the entire text from surah 26 to surah 28 or the two sequences of text from surah 26 and 28, but interrupted the work in the middle of fol. 2ᵛ. Then, either the same scribe or a master wrote part of the same text using a smaller round script style (hand B), overlapping with the script of hand A1. Finally, the same scribe or master wrote the section surah 28, verse 75–77 for the third time using a script style closer to hand A1 (hand A2). The layout of hand A2 mirrors that of hand B, with a margin on the right-hand side. Any visible corrections were made by hand B, or a later hand, or both using brownish and black inks.

3.3 A. Perg. 2 and other examples of writing exercises

A. Perg. 2 is an example of a modest common Qur'an,[58] likely an object produced for personal use as a writing exercise in which different script styles coexist. As such, it represents a unique object with traces of the events that happened on its pages. In the absence of accounts and details about schooling and scribal training in the first two to three centuries of Islam, A. Perg. 2 constitutes a precious source

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56 Sijpesteijn 2020, 442.

57 This is part of the current projects carried out at the Centre for the Study of Manuscript Cultures, Universität Hamburg, in the project 'What Is in a Scribe's Mind and Inkwell' as part of the cluster 'Understanding Written Artefacts'.

58 The main focus of scholarship on early Qur'anic manuscripts has been on the official or model Qur'anic manuscripts that imply a long-term project for writing down a consistent part of – if not all – the text, in a mature codicological structure that requires planning in economic terms for the writing support, ink, and labour. The personal or common Qur'ans are studied as parts of cataloguing works of whole collections. To be noted here is the work in Connolly and Posegay 2020 and 2021 and the work on Qur'anic papyri; see Fedeli 2019 and Malczycki 2006. In the written transmission of the Bible, for example, 'common Bible' is one of the possible typologies of the written text. See e.g. Outhwaite 2021 on the terminology for the Bible's typologies.

regarding the social history of the writing of the Qur'anic text.[59] The study of early Qur'anic manuscripts as material informants involves an investigation of their materials, assembly, and layout planning and a thorough comprehension of their script styles. Not much is known about the manufacturing environment or social dynamics underlying the making of Qur'anic manuscripts in the first two to three centuries of Islam. The organisation of scribe training is unknown. Scholars can reconstruct the characteristics of the commodification of the Qur'an as an object in terms of production and distribution, as well as the relationship between size and costs, the conditions under which the copyists worked and their working pace, the status of copyists and Qur'anic copies' patrons, the organisation of the work in teams, and such copies' use in teaching. The information is derived from medieval treatises and commentaries, manuscript inventories, and the physical and textual elements of the objects. Little is known about the (graphic) schooling and learning context during the spread of Islam and at the beginning of the written transmission of the Qur'anic text.[60]

The training scheme for master and apprentice scribe in a writing exercise could involve the repetition and imitation of a written text line by line. An example is an exercise that survived from the Cairo Genizah, as interpreted by Marina Rustow. In the Fatimid document Cambridge, University Library, T-S Misc. 5.148 + T-S Ar. 30.316 + T-S Ar. 42.196, an apprentice scribe attempted to learn the decree script (*qalam al-tawqī*) by imitating a teacher. The specialised training required to instruct the new administrative class of the Fatimids consisted of imitating the script of a master, line by line. Each line of text was repeated twice.[61] Rustow observes the retraining of an Abbasid-style hand in this writing exercise and notes differences in the execution of certain letters. These differences were rooted in the tradition for the apprentice scribe and opened to the new style forms for the master.[62]

Another pattern in the training process of an apprentice scribe by a master involves writing page by page without duplicating the text. This pattern of training and the coexistence of different writing styles can be seen in the Cairo Genizah documents, although the known examples are from a much later period. A

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59 See Déroche 2002, 143, although the study refers to a later period. Déroche concludes his article by commenting on the absence of studies on the popular manuscripts, generally but not only Qur'ans.

60 See Cortese 2013; Déroche 2007; Blair 2006; Déroche 2009; Fedeli 2015; Hilali 2017. See also Sijpesteijn 2020, 435–438 for scholarship on schooling and training in the first centuries of Islam.

61 Rustow 2020, 221–222, 237–238 and 491, n. 38.

62 Rustow 2020, 237.

variety of scripts also appear in the Qur'anic fragments from the Cairo Genizah that were produced for personal use. Magdalen M. Connolly and Nick Posegay surveyed common Qur'ans from the tenth to the nineteenth centuries and observed the coexistence of two or three codified ways of executing a single letter or ligature.[63] The Qur'anic fragments in the Taylor-Schechter Arabic collection are explained as being part of personal collections disposed of in the synagogue's Genizah when their owners died. The manuscripts were likely intended for personal study and include passages about non-Muslims and biblical figures.[64] Connolly and Posegay describe two fragments as writing exercises. Of particular interest is the format of the writing exercise, which features the collaborative writing of a student and a master (i.e. T-S Ar. 42.145), likely dated after the sixteenth century.[65] The task was divided between the student and the more experienced master, with each writing one page without duplicating any content.

When describing the palaeographic features of the papyrus Leiden, Universiteitsbibliotheek, Or. 8264, Sijpesteijn reports that it appears to be a writing exercise from the ninth century. The scribe may have had little experience in writing or was in the process of learning how to write.[66] The Leiden papyrus has been radiocarbon dated to the year 1324 ± 24 BP (before present, i.e. ^{14}C years), which corresponds to the span 653–766 CE.[67]

A modern example of some Qur'anic leaves on paper from West Africa reused for writing the introduction of *al-Risāla* by Ibn Abī Zayd al-Qayrawānī, preceded on the recto of the first leaf by a talismanic figure, recently has been identified by Darya Ogorodnikova and Khaoula Trad (manuscript Timbuktu, Mamma Haidara Library, 19191). The scholars propose that the same person may have written both layers of the artefact for personal use despite the fact that the *scriptio inferior* is written in small letters while the *scriptio superior* has large and bold letters.[68] The fact that the same scribe wrote both layers with different script sizes and the possible personal use of the object constitute a case to be compared with A. Perg. 2.

In A. Perg. 2, one section of the same text is repeated twice before being written a third time in the larger context of surah 28. The passage from the Qur'an that is repeated twice on the same page and rewritten for a third time on top of the first occurrence of the sequence refers to the biblical Korah (Qārūn in Arabic). Korah be-

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63 Connolly and Posegay 2020.

64 Connolly and Posegay 2020, 348.

65 Connolly and Posegay 2021, 3, 20.

66 Sijpesteijn in Noja Noseda 2003, 316–318, quoted also in Marx 2019, 10–12.

67 See Youssef-Grob 2019, 150–151; Marx and Jocham 2019, 216.

68 See Darya Ogorodnikova and Khaoula Trad's contribution to the present volume.

came insolent after God gave him enormous treasures, and, as a result, God decreed his death. The other characteristic of A. Perg. 2 (i.e. different hands executing the bifolio) exhibits a similar dynamic to that seen in papyrus P. Utah inv. 342. Here the Kufic style of the first lines is abandoned in the subsequent lines, as noted above.

The text, script, and layout of A. Perg. 2 show an unstructured format in the training of the apprentice scribe. The repetition of the same text does not perfectly overlap and the layout of the repeated section is not symmetrical. Then, only a section – the narrative about the biblical Korah in surah 28, verses 75–80 – is repeated twice and then written on top a third time. The rest of the text is not repeated (surah 28, verses 60–75), except for the rewriting on top of ll. 1–2 of fol. 2ʳ by hand B (surah 28, verses 60–62, i.e. from the end of surah 28, verse 60 to the beginning of surah 28, verse 62). If the traces in the *scriptio inferior* of fol. 2ʳ, l. 4 (*[ʾaġ]waynā* in surah 28, verse 63) are the work of hand A, this would explain the work on fol. 2ʳ as the writing of the same section by hand A, similar to fol. 2ᵛ. The training format in A. Perg. 2 differs from the examples mentioned above from the Cairo Genizah. In the latter case, the regular alternation of pupil and mentor writing one line or one page each within a fixed layout reveals a rigid structure applied during the learning process. In the case of A. Perg. 2, the absence of pattern in the layout and repetition of the text suggests the object was intended for personal use in an unstructured and informal setting.

3.4 Textual and contextual elements in A. Perg. 2

Some textual elements of A. Perg. 2 can provide clues about the possible sociocultural context in which the object was produced. The fragment shows inconsistencies in spelling practices and morphological features, which is a common situation observed in early Qur'anic manuscripts. On fol. 2ʳ, the word *kānū* (surah 28, verse 63, word 16) is spelled with an *alif* to mark the long /a/. At a later stage, the letter *alif* was cancelled and the initial *kāf* was joined to the following *nūn*. Subsequently, a thin *alif* was reinserted in black ink and the joining trait was erased. The following word, *ʾiyyānā* (surah 28, verse 63, word 17), is spelled without an initial *alif*. The first two characters were then inverted by overwriting a thin initial *alif* and denticle joined to the original second letter block. This adjustment was made in black ink (see Fig. 16).

Fig. 16: Details of corrections of A. Perg. 2, fol. 2ʳ.

On fol. 2ᵛ, in the section that has been written three times, the round small script has *fa-baġā* spelled with a final *alif* at l. 2 (surah 28, verse 76, word 7);[69] *fī mā* is spelled with two letter blocks and not as a single word at l. 5 (surah 28, verse 77, word 2); *ʾatā-ka* is spelled with an *alif* to mark the long /a/ at l. 4 (surah 28, verse 77, word 3);[70] the jussive forms *wa-lā tansā* at l. 4 (surah 28, verse 77, word 8) and *wa-lā tabġi* at l. 5 (surah 28, verse 77, word 18) are spelled with a final *alif* (*wa-lā tansā*) and a final *yāʾ* (*wa-lā tabġī*);[71] *yā-layta* is spelled with an *alif* at l. 9 (surah 28, verse 79, word 11); and *ṯawābu* is spelled without an *alif* at l. 10 (surah 28, verse 80, word 6). The larger *ḥiǧāzī*-like style writes *fīmā* as a single letter block (fol. 2ᵛ, l. 16), as suggested by the visible joining trait, despite the partial lacuna; *ʾatā-ka* is spelled with a denticle to mark the long /a/ (fol. 2ᵛ, l. 16); and *wa-lā tansa* is spelled with a final *sīn* (fol. 2ᵛ, l. 17). The bottom half of fol. 2ᵛ has a lacuna where we expect *fa-baġā*, and the repeated text does not include the section with *yā-layta* and *ṯawābu*.

One noteworthy reading is found in surah 28, verse 65, on fol. 2ʳ, l. 8, where hand A1 wrote *wa-yawma tunādīhim fa-taqūlu māḏā aġabtumu l-mursa[līna]* ('Upon the day when you will call to them, and you will say, "What answer gave you to the Envoys?"'),[72] marking the denticle of the verbal forms with two oval dots (*tunādīhim* and *taqūlu*). This reading is unique, as the widely known *qirāʾāt* works only present the reading *wa-yawma yunādīhim fa-yaqūlu* ('Upon the day when He shall call to them, and He shall say') and, to my knowledge, the other known manuscripts leave the two denticles unmarked or mark them with two diacritics below the baseline.[73] The verse is part of an intricate narrative structure that Jessica Mutter recently analysed in detail to explore the use of *iltifāt*, that is, the shift

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69 *Alif maqṣūra* is frequently found spelled with an *alif* as well as with a *yāʾ* in early papyri; see Hopkins 1984, 14–16, § 12. The spelling with an *alif* is attested in early Qurʾanic manuscripts too; see e.g. Fedeli 2015, 157, 211, 269, 272, 283, 331.

70 See other examples in early Qurʾanic manuscripts in Fedeli 2015, 302.

71 See other examples in early Qurʾanic manuscripts in Fedeli 2015, 159, 213 and in early papyri in Hopkins 1984, 85–86, § 82d.

72 Arberry 1964. Arthur J. Arberry's translation has been adapted to the manuscript text.

73 Nasser 2020; *EVQ*; *VLC*; and Muḫtār ʿUmar and Makram 1997 do not list a variant reading but have only '*yunādīhim fa-yaqūlu*'. Examples of manuscripts leaving the two denticles unmarked are, for example Dublin, Chester Beatty Library, Is. 1615, fol. 2ᵛ; Istanbul, Topkapı Palace Museum, Saray 50385 (from the Gotthelf Bergsträßer archives), fol. 202ᵛ; and Tübingen, Universitätsbibliothek Tübingen, Ma VI 165, fol. 53ʳ. Among the manuscripts that mark the denticles as *yāʾ* are Berlin, Staatsbibliothek zu Berlin, Petermann I 38, fol. 71ᵛ; Baltimore, The Walters Art Museum, W.554, fol. 43ʳ; Tübingen, Universitätsbibliothek Tübingen, Ma VI 148, fol. 60ʳ; and Cambridge, University Library, Add. 1139, fol. 36ʳ. These manuscripts have been searched and accessed through the dataset *MC*.

between people in the narration and dialogues. The narrative structure involves multiple layers of dialogue between the Qur'anic voice, an audience addressed in both the singular and plural form, and a future conversation between God and the polytheists.[74] The readings affecting the choice of pronouns in the text reflect the shift in narration as experienced by the scribe, reader, or whoever was involved in the transmission of the text. This phenomenon is known through *qirāʾāt* literature and early manuscripts.[75] Papyri offer a unique perspective on this practice because they were often objects for personal use. Papyrus Birmingham, Cadbury Research Library, Mingana Collection, P. Ming. 107 is an example of this perspective. In surah 3, verse 11, the scribe wrote *bi-ʾāyāti-llāh* instead of *bi-ʾāyāti-nā* ('our signs'); *la-hum* was used instead of *la-kum* in *qad kāna la-kum ʾāyatun* ('there has already been a sign for you') in surah 3, verse 13; and in surah 100, verse 11, *ʾinna rabba-ka* ('surely your Lord') was written instead of *ʾinna rabba-hum* ('surely their Lord'). A similar use of pronouns for writing fragmented verses and amalgams has also been observed in Qur'anic graffiti and inscriptions.[76] These artefacts show a personal use of the text. The Qur'anic narration's perspective appears to support the non-official setting in which A. Perg. 2 was created.

4 Concluding remarks

The imaging and image processing by Phelps, Easton, Knox, and Kasotakis, combined with palaeographic and philological analysis by the present author, enabled a new reading of A. Perg. 2 and a new hypothesis about its meaning in the context of graphic schooling and scribal training in the first centuries of Islam.

The collaborative efforts led to a reading of almost complete lines of a lower layer of script in the top half of fol. 2ᵛ that has roughly the same section of text overwritten in the top half, which is then repeated in the bottom half of the same leaf. This confirms Loebenstein's hypothesis that the lower layer of fol. 2ᵛ (flesh side) was the continuation of fol. 2ʳ (hair side). She did not identify the text of the lower layer of fol. 2ᵛ, but the similarity of the script of the two sides (fol. 2ʳ and fol. 2ᵛ top) support her hypothesis. In 2005, I identified one word and a few letters in the lower layer of the right-hand margin of fol. 2ᵛ that partially agreed with Loebenstein. Multispectral imaging not only confirmed Loebenstein's identification of the content of

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74 Mutter 2022, 111–112.

75 Fedeli 2012, 413–419.

76 See Fedeli 2019.

the *scriptio inferior* of fol. 2ᵛ but also revealed two almost complete lines of a lower layer and a few letters, also in the top half of fol. 2ʳ. Who wrote the same sections of text three times, why, and when? Is the object a palimpsest?

As regards the first question, only Loebenstein commented on the presence of two people: a first hand, which wrote fol. 2ʳ, the *scriptio inferior* of the top half on fol. 2ᵛ, and the bottom half of fol. 2ᵛ; and a later hand which rewrote the *scriptio superior* of the top half of fol. 2ᵛ. The scholar did not establish the possible connection between the two hands and considered the first hand as the author of a possible correction process. Previous scholarship did not focus on the characteristics of the three different hands, here labelled as A1, A2, and B, not only regarding letter shapes but also layout, text frame, and the use of space to divide word units or letter blocks.[77] The three script styles and the dynamics behind the layout of the text explain the different *scriptiones inferiores* and *superiores* as the work of different hands that performed their Arabic script skills and training at the same time, rather than distinct chronological events. There might be two or more people (master and apprentice scribe) or even the same person (self-taught scribe experimenting with a script style). The repetition of the same portion of text points to a learning environment. If so, old material was not reallocated to create a new object but rather what potentially occurred was a conversation between apprentice and master or an autodidactic experience by one person. If the material was not reallocated, but only used in a learning environment, the term 'palimpsest' does not accurately describe what happened, based on the conceptualisation of 'palimpsest' by Cavallo. Rather, such a situation entails one single written artefact built in several steps within the same episode. However, a different point of view seems to be applied in Islamic culture, where the object is considered the result of a palimpsesting technique when some text has been erased and rewritten independently from the presence of two distinct objects, one reallocated and partially destroyed and one new project. Following Cavallo's position, which I find convincing, A. Perg. 2 is not a palimpsest, even though it does meet the definition according to, for example, ʿAwwād's perspective.

The dating of the object has always been discussed in previous scholarship. The only evidence supporting the proposed dates are the palaeographic features of the object and its similarity to early papyri. A dating of the seventh century or beginning of the eighth century is proposed by Grohmann, as well as by Loebenstein and Gründler, while Malczycki suggests the eighth or ninth century be-

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77 An important feature stressed by Sheila Blair following Estelle Whelan is the split of words between lines, something to be avoided by secretaries but common in early Qur'anic manuscripts; see Blair 2006, 116–117.

cause the script lacks the right-slanting characteristic of the very early Qur'anic fragments. The complexity of the palaeographic argument to date A. Perg. 2 lies in its three hands and two different script styles.

The coexistence of different script styles, including when performed by the same hand, is a common phenomenon in Arabic papyri and in the Arabic fragments from the Cairo Genizah, but it is relatively uncommon in Qur'anic manuscripts. Cases of different hands alternating in the task of copying the Qur'anic text are known in early written transmissions like, for example, the so-called Codex Parisino-Petropolitanus and the Mingana-Lewis Palimpsest.[78] However, in these known cases, the difference concerns various hands' performance of the same script style characterised by great heterogeneity. In A. Perg. 2, hands A and hand B perform two different script styles, while hand A1 and A2 accomplish two different interpretations of the same script style.

This concurrence of two script styles observed in A. Perg. 2 points to a possible non-linear development of Qur'anic script styles, in contrast with the mainstream scholarship on Arabic palaeography and classification of scripts from the first three centuries of Islam. Manuscripts like Paris, BnF, arabe 7191 and the early Qur'anic manuscripts from Seymour de Ricci's collection do not fit this linear development and are defined as unclassified scripts or as showing similarities with other artefacts and established styles.[79] This characteristic places A. Perg. 2 in a unique position in the history of the written transmission of the Qur'anic text. In addition to that, the bifolio – which implies a certain planning of the structure when making the object – makes the repetition of the same text puzzling (top and bottom half of fol. 2ᵛ). This fact raises interesting questions about the use of writing material and schooling, at least in this case. The three parts repeating the same portion of text are likely three iterations of the same project happening around the page in a single session, rather than chronological layers. The script styles, the possible training context, and the peculiar dynamics of the page suggest that this fragment is an interesting 'common Qur'an' produced for the purposes of learning how to write it. If the object was created as a single-step project, it is likely to date from the time of the more recent palaeographic features of the script, specifically the eighth century, when scribes were still practising the ḥiǧāzī style. This would confirm Malczycki's hypothesis that this fragment dates from the eighth or ninth century, although he focused only on the non-slanting characteris-

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78 See the five scribes who wrote the Codex Parisino-Petropolitanus alternating the copying of allocated pages (Déroche 2009, 26–45) and the two scribes who wrote the small leaves of the Mingana-Lewis Palimpsest, one taking up the work started by the other (Fedeli 2015, 105–118).
79 Déroche 1983, 151–155.

tic of the script. Blair stresses that differences between script styles are commonly accepted as steps of a chronological linear development while, following Estelle Whelan, differences can coexist chronologically and be due to different milieux of religious scholars and secretaries.[80] In A. Perg. 2, two different hands influenced by the *ḥiǧāzī* style but lacking the main feature of the slanting ascenders, and one round script that divides the sequence of letters into word units coexist chronologically. Because of the presence of the small round script, A. Perg. 2 can be plausibly placed in the eighth century or later. If we accept Whelan's hypothesis about the different social groups and professions behind the different scripts, A. Perg. 2 is not only the product of a learning context but also reveals traces of a conversation between a copyist or scholar and a secretary.

As to the palimpsested nature of written artefacts, the continuous act of erasing and writing is the dynamic in the palimpsesting process. In the given case, the same text has been written (at least) three times, likely in a learning context, in the *scriptio superior* and at the bottom of the page.[81] This repetition and continuity of the act apply not only to the procedure of creating the palimpsested object but also to its interpretation. When scholars read manuscript objects, they are scraping, reading, and providing a new reading, especially in the last two decades thanks to the available technologies and collaboration between scientists and 'manuscript readers'. In the words of Eva Pallesen: 'Movement is the precondition of studying anything at all: All things, to be noticed, must be moving'.[82] If manuscripts are a process 'continuously and relationally under construction',[83] insofar as they are produced and performed, palimpsested manuscripts are processes whereby relationships are shaped and reshaped, and they can be studied because of their movement. And this is what has happened in the manuscript pages of A. Perg. 2 and in the reading of those pages. The shift in reading has been made possible by the latest technology and the productive collaboration between philologist and scientist in an iterative process. We anticipate further new insights from the material analysis of ink composition of this manuscript with the interdisciplinary approach of 'archaeometric philology', despite the challenges due to the overlapping ink layers of the *scriptiones superiores* and *inferiores* as well as from the versos and rectos.

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80 Blair 2006, 125.
81 As the possible physical context of the bifolio is unknown, the repetition of the same section three times is one possible scenario, but in principle the same portion could have been copied a fourth time as well.
82 Pallesen 2017, 8.
83 Pallesen 2017, 3.

Acknowledgements

Abbreviations

EVQ = Shady Hekmat Nasser (ed.), *Encyclopedia of the [Variant] Readings of the Qur'an*, Cambridge, MA: Harvard Digital Humanities, released in 2022, <https://erquran.org/> (accessed on 1 January 2024).

MC = Michael Marx (ed.), *Manuscripta Coranica*, Berlin: Berlin-Brandenburgische Akademie der Wissenschaften, 2007–2024, <https://corpuscoranicum.de/en/manuscripts/> (accessed on 1 January 2024).

VLC = Michael Marx (ed.), *Variae Lectiones Coranicae*, Berlin: Berlin-Brandenburgische Akademie der Wissenschaften, 2007–2024, <https://corpuscoranicum.de/de/verse-navigator/sura/1/verse/1/variants> (accessed on 1 January 2024).

References

Altıkulaç, Tayyar (2020), *Al-Mushaf Al-Sharif (Topkapı Palace Museum Library, Madina nr. 1)*, 2 vols, Istanbul: OIC Research Centre for Islamic History, Art and Culture.

Arberry, Arthur J. (1964), *The Koran Interpreted*, London: Oxford University Press.

ʿAwwād, Kūrkīs (1982), *Aqdam al-maḫṭūṭāt al-ʿArabiyah fī maktabāt al-ʿālam al-maktūbah munḏu ṣadr al-Islām ḥattā sanah 500 h. (=1106 m.)*, Baghdad: Wizārat al-Ṯaqāfah wa-l-Iʿlām.

Bentein, Klaas and Yasmine Amory (2023), 'Introduction: Developing a Historical Social-Semiotic Approach to Communication Practices in Antiquity', in Klaas Bentein and Yasmine Amory (eds), *Novel Perspectives on Communication Practices in Antiquity: Towards a Historical Social-Semiotic Approach*, Leiden: Brill, 1–14.

Blair, Sheila (2006), *Islamic Calligraphy*, Edinburgh: Edinburgh University Press.

Cavallo, Guglielmo (2001), 'L'immagine ritrovata: in margine ai palinsesti', *QVINIO: International Journal on the History and Conservation of the Book*, 3: 5–16.

Connolly, Magdalen M. and Nick Posegay (2020), '"An Arabic Qur'ān, That You Might Understand": Qur'ān Fragments in the T-S Arabic Cairo Genizah Collection', *Journal of Islamic Manuscripts*, 11: 292–351.

Connolly, Magdalen M. and Nick Posegay (2021), 'A Survey of Personal-Use Qur'an Manuscripts Based on Fragments from the Cairo Genizah', *Journal of Qur'anic Studies*, 23/2: 1–40.

Cortese, Delia (2013), 'The Commodification of the *Muṣḥaf* in the Early Centuries of Islam', in Robert M. Kerr and Thomas Milo (eds), *Writings and Writing: Investigations in Islamic Text and Script in Honour of Januarius Justus Witkam*, Cambridge: Archetype, 41–65.

Déroche, François (1983), *Les manuscrits du coran: Aux origines de la calligraphie coranique, Catalogue des manuscrits arabes, Deuxième partie: manuscrits musulmans*, vol. 1/1, Paris: Bibliothèque nationale de France.

Déroche, François (2002), 'Copier des manuscrits: remarques sur le travail du copiste', *Revue des mondes musulmans et de la Méditerranée*, 99–100: 133–144, <http://journals.openedition.org.ezp-prod1.hul.harvard.edu/remmm/1179> (accessed on 20 February 2024).

Déroche, François (2005), *Islamic Codicology: An Introduction to the Study of Manuscripts in Arabic Script*, ed. Muhammad Isa Waley, tr. Deke Dusinberre and David Radzinowicz, London: Al-Furqān Islamic Heritage Foundation [1st edn: François Déroche (2000), *Manuel de codicologie des manuscrits en écriture arabe*, Paris: Bibliothèque nationale de France].

Déroche, François (2007), 'The Copyists' Working Pace: Some Remarks towards a Reflexion on the Economy of the Book in the Islamic world', in Judith Pfeiffer and Manfred Kropp (eds), *Theoretical Approaches to the Transmission and Edition of Oriental Manuscripts: Proceedings of a Symposium Held in Istanbul, March 28–30, 2001*, Beirut: Ergon Verlag Würzburg in Kommission, 203–213.

Déroche, François (2009), *La transmission écrite du Coran dans les débuts de l'islam: Le codex Parisino-petropolitanus*, Leiden: Brill.

Fedeli, Alba (2005), 'A. Perg. 2: A Non Palimpsest and the Corrections in Qur'ānic Manuscripts', *Manuscripts Orientalia*, 11/1: 20–27.

Fedeli, Alba (2012), 'Variants and Substantiated *qirā'āt*: A Few Notes Exploring Their Fluidity in the Oldest Qur'ānic Manuscripts', in Markus Groß and Karl-Heinz Ohlig (eds), *Die Entstehung einer Weltreligion II*, Berlin: Schiler, 403–440.

Fedeli, Alba (2015), *Early Qur'ānic Manuscripts, Their Text, and the Alphonse Mingana Papers Held in the Department of Special Collections of the University of Birmingham*, PhD thesis, University of Birmingham.

Fedeli, Alba (2019), 'Isolated Qur'ānic Fragments: The Case of the Three Papyri from the Mingana Collection', in Asma Hilali and Stephan R. Burge (eds), *The Making of Religious Texts in Islam: The Fragment and the Whole*, Berlin: Gerlach, 174–198.

Fedeli, Alba (2023), 'Deposits of Texts and Cultures in Qur'ānic Palimpsests: A Few Remarks on Objects and Dynamics in Palimpsesting', in Claudia Rapp, Giulia Rossetto, Jana Gruskova and Grigory Kessel (eds), *New Light on Old Manuscripts: The Sinai Palimpsests and Other Advances in Palimpsest Studies*, Vienna: Austrian Academy of Sciences Press, 255–282.

Gacek, Adam (2001), *The Arabic Manuscript Tradition: A Glossary of Technical Terms and Bibliography*, Leiden: Brill.

Gacek, Adam (2009), *Arabic Manuscripts: A Vademecum for Readers*, Leiden: Brill.

George, Alain (2010), *The Rise of Islamic Calligraphy*, London: SAQI Books.

Grohmann, Adolf (1954), *Einführung und Chrestomathie zur arabischen Papyruskunde* (Monografie Archivu Orientalniho, 8/1), Prague: Státní pedagogické nakladelství.

Grohmann, Adolf (1958), 'The Problem of Dating Early Qur'āns (with Five Plates)', *Der Islam*, 33/3: 213–231.

Gründler, Beatrice (1993), *The Development of the Arabic Scripts: From the Nabatean Era to the First Islamic Century According to Dated Texts*, Atlanta: Scholars Press.

Hilali, Asma (2017), *The Sanaa Palimpsest: The Transmission of the Qur'an in the First Centuries AH*, Oxford: Oxford University Press / London: Institute of Ismaili Studies.

Hopkins, Simon (1984), *Studies in the Grammar of Early Arabic Based Upon Papyri Datable to before 300 A.H. / 912 A.D*, Oxford: Oxford University Press.

Khan, Geoffrey (1992), *Arabic Papyri: Selected Material from the Khalili Collection*, London: Nour Foundation, Azimuth Editions; Oxford: Oxford University Press.

Loebenstein, Helene (1982), *Koranfragmente auf Pergament: Aus der Papyrussammlung der Österreichischen Nationalbibliothek, Tafelband; Textband*, Vienna: Hollinek.

Malczycki, William Matthews (2006), *Literary Papyri from the University of Utah Arabic Papyrus and Paper Collection*, PhD thesis, University of Utah.

Malczycki, William Matthews (2015), 'A Qurānic Amulet on Papyrus: P.Utah.Ar. 342', in Petra Sijpesteijn and Alexander T. Schubert (eds), *Documents and the History of the Early Islamic World*, Leiden: Brill, 235–246.

Marx, Michael J. (2019), 'Introduction', in Andreas Kaplony and Michael Marx (eds), *Qur'ān Quotations Preserved on Papyrus Documents, 7th–10th Centuries*, Leiden: Brill, 1–41.

Marx, Michael J. and Tobias J. Jocham (2019), 'Radiocarbon (^{14}C) Dating of Qur'ān Manuscripts', in Andreas Kaplony and Michael Marx (eds), *Qur'ān Quotations Preserved on Papyrus Documents, 7th–10th Centuries*, Leiden: Brill, 188–221.

Moritz, Bernhard (1905), *Arabic Palaeography: A Collection of Arabic Texts from the First Century of the Hidjra till the Year 1000*, Cairo: Khedivial Library.

Muḫtār ʿUmar, Aḥmad and ʿAbd al-ʿĀl Sālim Makram (1997), *Muʿjam al-qirāʾāt al-Qurʾāniyya*, 6 vols, Cairo: ʿĀlam al-Kutub.

Mutter, Jessica (2022), 'Iltifāt and Narrative Voice in the Qur'ān: Grammatical Shift and Nested Dialogue in Sūrahs 19, 20, and 18', *Journal of the International Qur'anic Studies Association*, 7: 93–121.

Nasser, Shady H. (2020), *The Second Canonization of the Qur'ān (324/936): Ibn Mujāhid and the Founding of the Seven Readings*, Leiden: Brill.

Noja Noseda, Sergio (2003), 'A Third Koranic Fragment on Papyrus: An Opportunity for a Revision', *Rendiconti: Istituto Lombardo, Classe di Lettere e Scienze Morali e Storiche*, 137: 313–326.

Outhwaite, Benjamin (2021), 'The Tiberian Tradition in Common Bibles from the Cairo Genizah', in Aaron D. Hornkohl and Geoffrey Khan (eds), *Studies in Semitic Vocalisation and Reading Traditions*, Cambridge: OpenEdition Books, 405–466.

Pallesen, Eva (2017), 'Documenting the Invisible – On the "How" of Process Research: (Re)considering Method from Process Philosophy', *Methodological Innovations*, 10/3: 1–10.

Rustow, Marina (2020), *The Lost Archive: Traces of a Caliphate in a Cairo Synagogue*, Princeton, IL: Princeton University Press.

Schwartz, Werner (1984), 'Recension of: Helene Loebenstein, *Koranfragmente auf Pergament: Aus der Papyrussammlung der Österreichischen Nationalbibliothek, Tafelband; Textband*, Vienna: Hollinek, 1982', *Die Welt des Islams*, 23–24: 523–525.

Sijpesteijn, Petra M. (2020), 'Arabic Script and Language in the Earliest Papyri: Mirror of Change', *Jerusalem Studies in Arabic and Islam*, 49: 433–494.

Small, Keith and Elisabeth Puin (2007), 'Unesco CD of Ṣanʿāʾ MSS. Part 3: Qur'ān Palimpsests, and Unique Qur'ān Illustrations', *Manuscripta Orientalia*, 13/2: 59–71.

Tarte, Ségolène (2011), 'Papyrological Investigations: Transferring Perception and Interpretation into the Digital World', *Literary and Linguistic Computing*, 26/2: 233–247.

Trau, Franz (1935), *Sammlung Franz Trau: Münzen der römischen Kaiser, 22. Mai 1935*, Vienna: Gilhofer & Ranschburg / Lucerne: Adolph Hess.

Youssef-Grob, Eva Mira (2019), 'Radiocarbon (^{14}C) Dating of Early Islamic Documents: Background and Prospects', in Andreas Kaplony and Michael Marx (eds), *Qur'ān Quotations Preserved on Papyrus Documents, 7th–10th Centuries*, Leiden: Brill, 139–187.

Appendix: Edition of A. Perg.2

Symbols used in the edition of A. Perg. 2:

مـو[م يـ هو]	Faded characters between square brackets represent a lacuna in the materiality of the manuscript (loss of parchment or ink) that has been reconstructed. The possible text of the lacunae is from the Tanzil edition, which is based on the King Fahd Complex for the Printing of the Holy Qur'an (the Medina edition). The possible text of the lacunae aims at showing that the reading of the few visible letters is plausible (especially on fol. 1ʳᵛ) and how the reconstructed text would fit on the manuscript page.
[26:116]	Two faded numbers separated by a colon and enclosed between square brackets represent the numbering of the verses in the Medina edition (i.e. the Kufan system for verse counting). The numbering is inserted to facilitate the mapping of the textual remains in the manuscript although the manuscript displays no traces of a specific system.
: or ::	The signs : and :: represent the markers used by the scribe to indicate the end of the verse and to represent the textual subdivision. The colon symbol imitates the column(s) of oval dots.
ر(بك)	Characters between round brackets represent uncertain characters where some traces of inks are present but difficult to read.
(...)	An ellipsis in round parentheses represents traces of multiple words present in the text but that are difficult to read and which the editor is unable to interpret.
1|	A vertical line preceded by an ordinal number indicates the numbering of lines when the sequence of the structure into lines is clear.
1|	A faded vertical line preceded by an ordinal number indicates the numbering of lines when the sequence of the structure into lines is unclear because of the missing material (e.g. on fol. 1ᵛ where the numbering is reconstructed on the basis of the lines on fol. 1ʳ). The aim is to indicate the reading of the mirrored text of the recto due to the overlapping texts as a result of the ink that penetrated through the parchment.
مفـ/بـا/بحه	Characters between solidus and reverse solidus represent an insertion made by the scribe, likely the first hand.
كـر]-[بـا//[[\\انوا	Characters between double solidus and reverse solidus represent an insertion made by the scribe, likely a later hand.
كـر]-[بـا//[[\\انوا	Characters between double square brackets represent an erasure made by the scribe.

The text is not marked by vowel dots or vowel symbols. The edited text includes only consonantal diacritics when they are marked in the manuscript text. The reconstituted text between squared brackets does not represent vowels, as they are not part of the manuscript system. The diacritics are kept as they are in the base text, since we have no clues as to their distribution in this manuscript. A different solution might have been the removal of all consonantal diacritics from the reconstituted text between squared brackets, but it would have conveyed a wrong impression of a possible text without diacritics while the writing system of A. Perg. 2 knows the consonantal diacritics.

fol. 1ʳ (the narrow strip on the flesh side): one stratum of script only, featuring part of surah 26, verses 115–146 in hand A1

1| اى اں[نا الا نذير مبين 26:115 قالوا لں لم تنته ينوح لتكونں من المرجو]
2| مں (:) [26:116] فل [رب اں قومى كذبوں 26:117 فافتح بينى وبينهم فتحا ونجنى ومن]
3| معى مں [المومنين 26:118 فانجينه ومن معه فى الفلك المشحون 26:119 ثم اغر]
4| فنا بعد ا[لباقين 26:120 اں فى ذلك لاية وما كان اكثرهم مومنين 26:121 واں]
5| ربک [ــ]ـهو [العزيز الرحيم 26:122 كذبت عاد المرسلين 26:123 اذ قال لهم]
6| احـ(ـو)ـ[هم هود الا تتقون 26:124 انى لكم رسول امين 26:125 فاتقوا اللـه]
7| واطنعـ[ـون 26:126 وما اسلكم عليه من اجر اں اجرى الا على رب ا]
8| لعلـ[ـمين 26:127 اتبنون بكل ريع اية تعبثون 26:128 وتتخذون مصانع]
9| لعـ[ـلكم تخلدون 26:129 واذا بطشتم بطشتم جبارين 26:130 فاتقوا ا]
10| [ــ]ـلله و[اطيعون 26:131 واتقوا الذى امدكم بما تعلمون 26:132 امدكم]
11| بانعم (و)[ـبنين 26:133 وجنت وعيون 26:134 انى اخاف عليكم عذاب]
12| (بو)[م عظيم 26:135 قالوا سوا علينا اوعظت ام لم تكن من الو]
13| [عـ](ـطـ)[ين 26:136 اں هذا الا خلق الاولين 26:137 وما نحن بمعذبين 26:138 فكذبوه]
14| فاهلكنـ[ـهم اں فى ذلك لاية وما كان اكثرهم مومنين 26:139]
15| واں ر(بک) [لهو العزيز الرحيم 26:140 كذبت ثمود المرسلين 26:141 اذ قال]
16| لهم احو[هم صلح الا تتقون 26:142 انى لكم رسول امين 26:143 فاتقوا ا]
17| للـه واطـ[ـيعون 26:144 وما اسلكم عليه من اجر اں اجرى الا على رب ا]
18| الـ(ـعلم)[ين 26:145 اتتركون فى ما ههنا امنين 26:146 فى جنت وعيون 26:147]

[missing parchment][84]

fol. 1ᵛ (the narrow strip on the hair side): likely one stratum of script only, featuring part of surah 26, verses 174–180, in hand A1 and hand B[85]

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84 Here the writing support is completely absent. Some traces of the folding of the bifolio correspond to the vertical space of about two to three lines. If the leaf contained further text that was structured into lines, similarly to fol. 2ʳ (i.e. 23 lines), and calculating the average number of letters and spaces as in the text at ll. 1–18, the lacuna would have the text of surah 26, verses 148–155. This reconstructed situation is only one of the possible situations, as there are no arguments for suggesting how the missing text was structured (or even repeated). What is highly probable is the existence of further text as part of the same object.

14 |[فسا مطر المنذرين 26:173 ان فى ذلک لاية وما کان اکث](ـر)[هم]

15 |[مومنين 26:174 وان ربک لهو العزيز الرحيم 26:175 کذب ا]صحـب

16 |[ليکة المرسلين 26:176 اذ قال لهم شعيب الا تتقـ]ـون : [26:177] ابى

17 |[لکم رسول امين 26:178 فاتقوا اللـه واطيعون 26:179 وما] (ا)سـلکم

18 |[عليه من اجر ان اجرى الا على رب العلمين 26:180 اوفوا الکيل]

fol. 2ʳ top half (hair side): surah 28, verses 61–63 in the *scriptio inferior*, at ll. 1–2 and a few letters at ll. 4 and 6, in hand A1

1 |[افلا تعقلون 28:60 افمن وعدنه وعدا حسنا فهو لقيـ]ه] (ک)ـمں [متعنه متع]

2 |[الحيوة الدنيا ثم هو] ٮوم القٮمه مں المحصرٮس (:) [28:61] وٮو

3 |[م ٮنادٮهم فٮقول اٮں شرکاى الذٮں کنتم تزعمون 28:62 قال]

4 |[الذٮں حق علٮهم القول ربنا هولا الذٮں اغـ]ـوٮنا

5 |[اغوٮنهم کما غـوٮنا ٮٮرانا الٮک ما کانوا اٮانا ٮعبد]

6 |(وٮ) [28:63] وقٮل ادعوا شرکاکم فدعوهم فلم ٮستجٮٮوا]

fol. 2ʳ (hair side): surah 28, verses 61–75 in the *scriptio superior*, at ll. 1–2 in hand B and at ll. 3–23 in hand A1[86]

1 |[وابقى افلا تعقلون 28:60 افمن وعدنه وعدا حسنـ]ـا فهو لاٯٮه کمں مـ(ٮعٮـ)ـه ماع

2 |الـ[ـحٮو](ه الدسا ٮ)ـم [هو ٮ]ـٮوم القٮمه مں المحصرٮس [28:61] وٮوم ٮـادٮهم

3 |م [ٮٮادٮ](ٮهم فٮٯـ)ـول اٮں [شر]کاى الذٮ کنتم تزعمون :: [28:62]

4 |فل الـ[ـذ]ـٮں حٯ علٮـ[ـهـ]ـم ا)لٯول رٮا هولا الدٮں اعو

5 |ٮنا اعوٮنهم کما غوٮنا ٮٮـ[ـر نا ا]لٮک ما کـ[ـا]/[[ا]\\ٮوا[87] [ا]ٮا]/[[ا]/ا\\اٮا[88] ٮعبد

6 |وٮ :: [28:63] وٯٮل ادعوا شر[کاکم فد]عوهم فلم

7 |ٮستجٮٮوا لهم وراو العذاب [ـا]ـو /[ٮهم[89] کانوا ٮهتد

8 |وٮ :: [28:64] وٮوم ٮٮدٮهم فٮٯول مادا اجٮتم المرسـ[ـلٮں] :: [28:65]

9 |فعمٮـ(ٮٮت) [عـ]ـلٮهم الاٮٮا[ء] ٮو[مـ]ـذ فـ[ـهم] (لا) [ٮتـ]ـسالوں :: [28:66]

10 |فاما مں ٮاب وامں وعمل صلحا فعسى اں ٮکوں مں

11 |الـ[ـمفـ]ـلحٮں :: [28:67] وربک ٮخلٯ ما ٮـ[ـشا وٮـ](ٮخٮـ)ـر ما کاں لهم ا

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85 The reading of the text on fol. 2ᵛ poses some challenges as the remains of single letters are on the inner margin, close to the fold. It is likely that the scribe did not respect the justification of the text frame on its left side. Some lines have a few remains but others – in the upper half of the leaf – do not exhibit any trace of script. Assuming that the verso continued the text written on the recto, it is plausible that the remains are part of surah 26 from verses 175 to 180. Here, the numbering of the lines duplicates the situation on the recto of the leaf, although there are no traces of ll. 1–13 on fol. 1ᵛ. The space of the conjectured ll. 1–13 would fit the missing portion of text from the recto to the first readable line (*l. 14).

86 The text written by hand A1 at l. 3 of the *scriptio superior* continues ll. 1–2 of the *scriptio inferior*.

87 كانوا *ante correctionem*. The word was later corrected – likely by a different hand and with a darker ink – into كـنوا and then again back into كانوا.

88 ٮانا *ante correctionem*. The word was later corrected – likely by a different hand and with a darker ink – into اٮانا.

89 The letter *alif* seems to be a later addition traced with a different writing instrument.

12| لحىره [سبحن] (الله)[ـه] وتعلى عما ىشركوں :: [28:68] وربک ىعلم⁹⁰ ما

13| ىکں صـ[ـدور هم] وما ىعلنوں :: [28:69] وهو الله لا الـ(ـ)ـه⁹¹ الا

14| هو له الـ[ـحمـ](د) فى الاولى والاخره وله الحكم وا

15| لـه ترجعوں : [28:70] قل ار[ىتم ا]ں جعل الله (علىكم) الىـ(ـل)

16| سرمدا الى ىوم القىمه من الـ(ـ)ـه⁹² غىر الـ[ـله] ىاتـ(ـكم)

17| ىصىا افلا ىـ[ـسمعو]ں : [28:71] قل ارىتم اں حعـ[ـل الله علىكم]

18| الىهر سرمدا [الى ىوم القىمة من اله غىر الله ىا]

19| //ىا\اتىكـ[ـم]⁹³ بلـ[ـيـ]ـل تـ[ـسـ]ـكـ[ـنو]ں فىه افلا تبصروں 28:72 ومن رحمتـ[ـه]

20| [جعـ]ـل لكم [الىل والنهار لتسكنوا فىه ولتبتغوا]

21| [من فـ]ـضله ولـ[ـعـ]ـلكم تشكروں 28:73 وىوم ىنادىهم]

22| [فىقول] اى سر[كاى الذىن كنتم تز عمو]

23| [ں 28:74 ونز]ـعنا [من كل امة شهىدا فقلنا هاتوا]

fol. 2ᵛ top half (flesh side): surah 28, verse 75, word 3 to verse 77, word 18 in the *scriptio inferior* at ll. 1–8 in hand A1 (corresponding to ll. 1–11 of the *scriptio superior*)

1| (كل ا)[مة شهىدا فقلنا هاتوا برهنكم فعلموا ان الحق لله و]

2| (صل)[عنهم ما كانوا ىفترون] [:] [28:75] [ان قرون كان من قوم موسى]

3| ڡـعى [علىهم واتىنه من الكنو](ر ما ا)ں مفاىحه لنوا با

4| لـ[ـعـصـبـة] اولى ا[لقوة اذ] قل له [قو]مه لا [ىفرح]

5| اى الله لا ىحب الـ[ـفر]ـحس [:] [28:76] وابتع ڡىما اتک

6| الله الدار الا[خرة ولا تـ](ـس) [نصىىک من]

7| ا[لدنىا و]ا[حسـ]ـں (كما) [احسن الله الىک] (ولا) [ىبغ]

8| [empty line]

fol. 2ᵛ top half (flesh side): surah 28, verse 75, word 1 to verse 80, word 7 in the *scriptio superior* at ll. 1–10 in hand B (corresponding to ll. 1–8 of the *scriptio inferior*) and hand C at ll. 10–11 (undeciphered)

1| وبرعنا مں (كل) امه (س)ـهـ[ـ]ـىدا فقلنا هاتوا برهنكم فعلموا ان الحق الله وضل عنهم ما] (كـ)[ـانوا]

2| ىعسرون [28:75] اں ڡر[و]ں كاں مں ڡوم موسى اں ڡر[و]ں [ڡـ]ـىعا علىهم وا(ىساه) من الكـ[ـنور مـ](ـا ا)ں

3| مڡـ/ىا/ىحه⁹⁴ لنوا بالعصىه اولى الڡوه اد ڡل [لـ](ـه) [ڡـ]ـومه لا ىڡرح اں الله لا ىحب

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90 The two diacritics at the right of the initial denticle are traces of the ink from the flesh side to mark the letter *tā'* in *wa-ātaynāhu* (in surah 28, verse 76, word 9).

91 The trait that joins the isolated letter *alif* and the initial *lām* is the ink from the back of the parchment (the hair side). The denticle-like shape between the letter *lām* and the final *hā'* are likely the traces of medial *qāf* with a diacritic above in surah 28, verse 76, word 18 at l. 15 of the back of the parchment (the hair side), rather than a spelling of the word *'ilāh* with a denticle to mark the long /a/.

92 The condition of the parchment does not allow one to identify whether there is a joining trait between the initial *lām* and the final *hā'* or a denticle to mark the long /a/. Both occurrences, at ll. 13 and 16, are unclear.

93 *Supplevit* different hand. The initial letter block ىا was added, written in a light-brown ink in a different script style; see the downstroke of the foot of the *alif*.

4| [28:76] واسع فى ما اباك الله الدار (الا)حره ولا سسا بصبک

5| من الدسا واحس کما اح[سن الله] (الـ)ـک ولا سعى الفساد فى الارص

6| ان الله لا ىحب المسد[ين 28:77] قال انما اوتـ]ـسه على علم عدى اولم ىعلم اى الله

7| قد اهلک من فـ(ـله) من الـ[ؤ]ـروں من هو اسد مىه قوه واکبر حمعا

8| ولا سل عن دوىهم [ا]لمحرمون [28:78] فحرح عـ[ـلـ](ـى) قومه [فى] رسه فل الدس بردون

9| الحىوه الدسا بالـب لىا مىل ما اوبى فـ[ـر و]ں اىه لد[و ح]ـ(ـظ) [عظىـ]م [28:79] (وفل)

10| الدس او[تو]ا العـ[لـم و]ىلکم ىوب الله (...)

11| (...)

fol. 2ᵛ bottom half (flesh side): surah 28, verse 75, word 7 to verse 77, word 17 at ll. 12–18, one stratum only in hand A2[95]

12| هاتوا برهنکـ[ـم فعلمـ]ـوا اں الحق الـله و[ضـ]ـهم] (عـ)[ـهم] ما کانوا

13| ـ[ـفتـ]ـروں : [28:75] اں قروں کاں من قو[م موسى فبغى عـ]ـلىهم

14| واتىنه من الکنوز ما اں مفتحه لتنو[ا بالعـ]ـصبه اولى

15| القوه اد فل له فـ[ـو]مه لا تقرح اں الـله لا

16| ىحب الفرحں : [28:76] واتع [فمـ]ـا اتک الـله الدار

17| الا[خر]ه ولا تنس ـ(ـصـ)ـبک مں الدسا وا

18| [حسن] کما احس اللـ[ـه ا]لىک ولا

94 *Supplevit* scribe. It seems that the letter *alif* was later supplied by the scribe of hand B.

95 The identification of lines and their numbering is difficult because of the condition of the parchment and the page that does not have a single text frame. The page has been structured to have two empty areas: one is between the top text area (both strata) and the bottom text area, and the second empty area is a generous bottom margin. The bottom margin occupies the area that corresponds to ll. 19–23 on the recto of the leaf (hair side).