In 2013 Cambridge University Library digitised fragments of 45 Qur`ans copied in the first four centuries of Islam, as part of its *Foundations of Faith* project. With a grant of £5000 awarded by the Islamic Manuscript Association, the digital images were enriched with metadata containing codicological descriptions and the identification of all the Surahs and verses of each fragment. Images and the accompanying metadata were incorporated to the Cambridge University Digital Library as part of the Islamic Manuscript collection. The data are delivered in a TEI/XML metadata format. The descriptive text is searchable from the CUDL and openly accessible on the WWW.

In addition to the standard content added to all the digitised images, a collaboration with the Corpus Coranicum project led to an adoption of transcriptions of two fragments (Add. 112/Add. 1146).

Background

Amongst these Qura`nic fragments on parchment, held at Cambridge University Library, is a portion of the Qur`an of Amajur.

This Qur'an is known for its dated (262/877-8) endowment record (waqfiyah) by Amajur the governor of Damascus between 256/870-264/878 and is thus the earliest extant copy of the Qur'an which can be dated by *terminus ante quem*.

The collection of fragments originate from 45 Qur`ans. Bought from Professor E.H. Palmer in 1878, who acquired them on his voyage to the Middle East (probably Damascus) in 1870, while only the provenance of the Qur`an of Amajur (Tyre) and that of the fragment Add. 1130 (al-Ḥarām al-Sharīf in Jerusalem) can be determined so far. This versatile collection of early Qur`anic scripture bears witness of a variety palaeographic styles, traditionally grouped under *Kufic*. With reference to Francois Deroche's palaeographic classification these have now been distinguished as types of Abbasid styles. The latter method is applied in the description of the Cambridge fragments.

Objectives

With the creation of <u>Cambridge Digital Library</u> this collection was prioritised for digitisation within the Islamic Manuscript collection. The aim was to make this holding known to the world, to support research and teaching and to facilitate the virtual reunifications of initially coherent witnesses of the text.

Research

The systematic approach to Qur`anic palaeography as developed by F. Deroche, examining the multiple types of early scripts collectively known as Kufic of Kufi, has shed new light on the origins and chronological relations in the tradition of Qur`anic transmission. This widely recognised method of scriptural classification, has been used by other major projects like the

<u>Corpus Coranicum</u>, the digitisation of <u>The Minassian Collection of Qur`anic Manuscripts</u>, and by modern scholars of Qur`anic palaeography (e.g. Alain George). The Cambridge Qur`an Collection will make a contribution to the evidence of early scriptural styles rendering the classification of each text alongside their images.

Teaching

Early Qur`anic calligraphy imposes substantial obstacles in deciphering the text for contemporary readers of Arabic script. Moreover are page layouts often governed by aesthetic and in some cases geometrical criteria or render a continuous text without distinctions of verses (ayahs) of Chapters (Surahs). This project focused on identifying each section of the text and producing content list which describe the location of the beginning and end of each Surah and Ayah while linking the heading to the text. Additionally, the palaeographic classification of the script on each fragment provides a reference to the letter shapes typical to its group.

This effort is aimed to make the scripture accessible to the reader and usable for teaching by facilitating both the deciphering of the text and the teaching of early Qur`anic palaeography.

Reunification

As evident on the example of the above mentioned Qur`an of Amajur, all fragments can assumed to have belonged to a coherent and complete volume of the Quranic text. The largest portion of this Qur`an can be found in the <u>Turk ve Islam Eserleri Muzesi</u> (Istanbul), a further portion in the *Dar al-Kutub* (Cairo) and a single folio in the <u>Ashmolean Museum</u> in (Oxford, UK). For the remaining collection we expect to find further examples in the course of time and on-going digitisation projects.

Methodology

First developed for <u>FIHRIST</u> the union catalogue for Islamic manuscripts in UK, a schema tailored for the description of Islamic manuscripts, captures the data in the TEI/XML metadata format. The FIHRIST schema, was used for the Manuscript description in the Cambridge University Digital Library.

Images and the descriptive content are available for download and licensed under a Creative Commons Attribution-NonCommercial 3.0 Unported License (CC BY-NC 3.0). The TEI schema is also openly accessible and available for download from the <u>FIHRIST website</u>.

Challenges

To display the data in a meaningful and user friendly fashion, regular adjustments to working practice were made in the course of the project. The FIHRIST TEI-P5 schema, adopted for description of content was sufficiently suitable for an on-line catalogue but required additional features to suit the Digital library. For example names were coded to display as a fluent text in addition to their encoding required for indexing. Also TEI structures to enable the display of images were added to the records, including information on image rights and

orientation. Some obstacles with multiple script in the same text and "right to left" and "left to right" orientation in particular meant that an increased time was spent on front end adjustments.

The close examination of the text allowed us to reconstruct the correct order of the folios of three Qur'ans, which were bound with the folios misplaced. It should be noted that no catchwords or comparable collation marks are present in the text. This meant that a complete reordering of the images was necessary, while renumbering of the folios and recapturing the images exceeded the scope of the project.

Operations by the conservation department to facilitate digital imaging without damage were required.

Approximately 40 of the folios were nearly illegible due to faded ink and damages in the parchment. Best effort was made to render the content of these fragments with continuity.

Conclusion

We are grateful for the grant awarded by TIMA, which facilitated the content description of the early Qur`anic Fragments of the Islamic Manuscript Collection at Cambridge University Library. The work on content description was carried out by Dr. Ignacio Sanchez on a consultant basis. Huw Jones and Pete Johnston from Cambridge University Digital Services took responsibility over the data management. The project was coordinated by Yasmin Faghihi Head of the Near and Middle Eastern Department Cambridge University Library.