Building a Digital Collection of Manuscripts from the Library of the Royal Palace of Spain

Soledad Vélez, Manuel Sánchez-Quero, Juan Carlos García and Alejandro Bia
Miguel de Cervantes DL, University of Alicante
P.O. Box 99, E-03080
Alicante, Spain
{sole, manuel.sanchez, jcgarcia, alexbia}@cervantesvirtual.com

ABSTRACT
With an aim of bringing cultural contents to cyberspace and spreading some unknown aspects of the history of the Americas, the Miguel de Cervantes Digital Library has embarked in a joint effort with the Library of the Royal Palace of Spain, to develop the digital web publication of the Manuscripts of the Americas in the Royal Collections funds. In this joint venture, the Library of Royal Palace supplied its invaluable contents for digitization, and the Miguel de Cervantes DL its technology and experience as a digital publisher. The goal was to join the ancient and the new, the most precious and carefully preserved documents with the new electronic publishing technologies. The result was to make freely available to a worldwide public those otherwise unreachable treasures of the Royal Collections. We expected this effort to have an impact both on the general reader and on the specialized researcher. In both cases they would be spared the time and cost of a trip to Madrid, and the risk of an access denial. In all cases, the funds would gain exposure with a reduction in physical contact which is desirable for long term preservation.

With a long term vision we set high level quality requirements to obtain accurate digital facsimiles of the originals not only for the present state of the art of web technology but for future higher standard of graphic display. With an innovative spirit we applied the best available technology at the service of culture.

1. THE LIBRARY OF THE ROYAL PALACE
The Library of the Royal Palace of Spain has its origins in the private libraries of the kings of the House of Borbones. In the National Patrimony collections, which include the Library of the Royal Palace, we can find unique editions, rare books, incunabula, manuscripts, old printings, ancient maps, musical scores, drawings, engravings, rare book bindings, coins, tapestry, furniture and much more. Most of the Manuscripts of the Americas collection comprises manuscripts of the 17th and 18th centuries, the kings’ letters, royal credentials, royal bans, etc., all of great historical and cultural value: a wide and valuable testimonial set of the American colonial period.

2. TECHNICAL OVERVIEW
We started building this digital collection in two parallel fronts. On one hand, cataloguing the funds, and on the other hand, digitizing them. For cataloging, we defined an XML (eXtensible Markup Language) mark-up scheme based on the Master guidelines [5], and developed our own software for the automatic transformation of catalogue records to nicely formatted HTML (HyperText Markup Language) for web publication.

The digitization of the funds was partially done by the Miguel de Cervantes DL, and partially assigned to a private company that followed our quality standards.

After digitization was done, partially-automated digital image processing was applied to the top quality big-size preservation images to obtain both thumb-nail images to create graphical indexes and medium-size medium-quality images for adequate web transmission and display on nowadays screens. In this process, high quality TIFF images were converted to lower quality JPEG ones. Let’s remember that the JPEG format offers a high level of compression for higher speed transmission but with some loss of quality.

The last stage in digital facsimile production was the automatic generation of HTML facsimile ensembles using FacsBuilder, a tool we have developed to speed-up de mounting of facsimile sets for web display.

To complement this huge digital publishing effort, a lot of care and meticulous work was devoted to graphic design of the web site where the digital collection would be displayed.

2.1 Cataloguing
For cataloguing, we followed the MASTER guidelines (Manuscript access through Standards for Electronic Records). MASTER is a project partially funded by the European Union with the purpose of defining a general norm based on XML for the description of manuscripts. This working group developed a DTD (Document Type Definition) for manuscript descriptions that is compatible with the recommendations of
were sent in MARC format. We had to decode them and develop the necessary structures to keep the semantic information associated to the cataloguing data. For this purpose, we had to identify relationships and dependences. The result was the automatic generation of MASTER records from MARC ones. However, expert revision by a librarian was necessary to assure the quality of the resulting data.

3. REFERENCES


