An IT Support for an Exhibition of Illuminated Manuscripts

Maristella Agosti · Marco Bertini
Stefano Ferilli · Simone Marinai
Nicola Orio (Eds.)

Digital Libraries and Multimedia Archives

12th Italian Research Conference on Digital Libraries, IRCDL 2016
Florence, Italy, February 4–5, 2016
Revised Selected Papers

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Preface

Since 2005 the Italian Research Conference on Digital Libraries (IRCDL) has been providing a great opportunity for researchers in the field of digital libraries to present and discuss their current research activities and to envision together further developments. The IRCDL conferences were launched and initially sponsored by DELOS, an EU FP6 Network of Excellence on Digital Libraries, together with the Department of Information Engineering of the University of Padua. Over the years IRCDL has become a self-sustainable event that is supported by the Italian digital libraries community.

The IRCDL 2016 edition, in line with the conference series tradition, was committed to preserving the emphasis on the multidisciplinary nature of the research on digital libraries that has been characterizing the conference over the years. This multidisciplinary nature ranges from computer science to humanities in the broader sense, including research areas such as archival and library information sciences, information management systems, semantic technologies, information retrieval, and new knowledge environments. This is a continued challenge for the DL field and there is the need to continue contributing toward improving the cooperation between the many communities that share common objectives.

IRCDL 2016 hit its target and once more provided the opportunity to explore new ideas, techniques, and tools, and to exchange experiences also from on-going projects. This volume contains the revised accepted papers selected, on the basis of reviewers' comments, from those presented at the 12th Italian Research Conference on Digital Libraries (IRCDL 2016). The conference was organized by the Department of Information Engineering of the University of Florence, Italy, during February 4–5, 2016. The conference was held at the Murate Complex, using the facilities provided by the NEMECH (New Media for Cultural Heritage) Center of Competence established by the Tuscany Region and the University of Florence; the NEMECH Centre promotes the transfer of know-how of research from the university laboratories to the places where cultural goods are exposed and benefited.

The Program Committee comprised 21 members, including representatives of the most active Italian research groups on digital libraries. The Program Committee accepted 70% of the papers presented at the conference for inclusion in this volume, which contains expanded versions of the conference papers. These papers were reviewed again and the results of the final selection are the papers appearing in these proceedings. The topics covered and that reflect the interests of the community are:

- Formal methods
- Long-term preservation
- Metadata creation, management, and curation
- Multimedia

- Ontologies and linked data
- Quality and evaluation
- System interoperability

Here we would like to thank those institutions and individuals who made this conference possible: the committees members, the Department of Information Engineering of the University of Florence, the NEMECH Center of Competence, and the MICC Center of Excellence in the area of new media.

December 2016

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Organization

IRCDL 2016 was organized by the Department of Information Engineering and the Media Integration and Communication Center (MICC) of the University of Florence.

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An IT Support for an Exhibition of Illuminated Manuscripts

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Abstract. The paper reports on a project which envisages the employ of IPSA, an originally high-specialized digital archive and web environment purposely developed for professional researchers in History of Art and History of Illumination, to enrich and complete visitors experience in a forthcoming exhibition of illuminated manuscripts.

Keywords: IPSA digital archive · Illuminated manuscripts · User engagement

1 Introduction

IPSA (*Imaginum Patavinae Scientiae Archivum*) is a digital archive of illuminated codices which includes both astrological and botanical manuscripts produced mainly, but not exclusively, in the Veneto region and Northern Italy during the XIV and XV centuries[1]. It was initially designed for a specialist public of scholars and researchers [1] with specific interest in manuscripts and illuminations.

Due to involvement in the CULTURA project[2], it was decided to open IPSA to other categories of users, such as non-domain professional researchers, students and the general public. To accomplish this difficult task, it was essential to draw a precise profile of the different types of user and to study new ways of requirements elicitation: therefore different kinds of interactions with the final users were designed, such as trials with groups of undergraduate students and master students and interviews with domain and non-domain professional researchers [2, 3]. At the same time IPSA had been progressively changed according to the collected user requirements, and as a result it became more intuitive and user-friendly and it can now be used for other purposes than those for which it was designed.

Currently, the research team of the University of Padua which contributed to CULTURA is planning to furtherly extend IPSA possibilities as a tool for scientific knowledge dissemination and to use it in a forthcoming exhibition of illuminated manuscripts to be held in Padua in the spring of 2017.

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[1] http://www.ipsa-project.org/.
[2] http://www.cultura-strep.eu/.

2   Changing IPSA for Non-professional Users

IPSA was created purposely for professional researchers of History of Art and History of Illumination to allow them to study and compare the illuminated images held in the archive: it was therefore originally conceived as a high-specialist tool.

It should be underlined that IPSA is not only a digital archive, but also a web-application that enables users to work with images in different ways. In History of Art disclosing new relationships between images brings about further knowledge on a specific artistic period, on a painter or an illuminator, and so on: as a consequence, according to this specific user requirement in IPSA professional researchers are provided with tools that allow to link images and to annotate them [4]. Such a specialist tool turned out to be difficult to use by non-professional users, such as students and members of the general public, and overall the frequent interactions with these user categories highlighted the necessity of working on simplification. In fact these types of users generally do not have particular interest in illuminations or manuscripts but they can find fascinating to browse a beautiful collection if the experience is made easier.

Thus changes and improvements to the system aimed at smoothing users' interaction with IPSA. For example, in the original IPSA professional researchers, accustomed to the complexity of illuminated manuscripts which sometimes can hold hundreds of illuminations, when consulting a manuscript catalogue file were shown a wall with the thumbnails of all the illuminations. This was perceived as confusing by non-professional users, so the list of images of a manuscript evolved from a simple wall of all images, very heavy to render and to explore, to a partial wall of twenty images, much faster to render. Browsing the images was made ever easier by a drop-down menu from where users can select the *folio* of the illumination they want to see (Fig. 1).
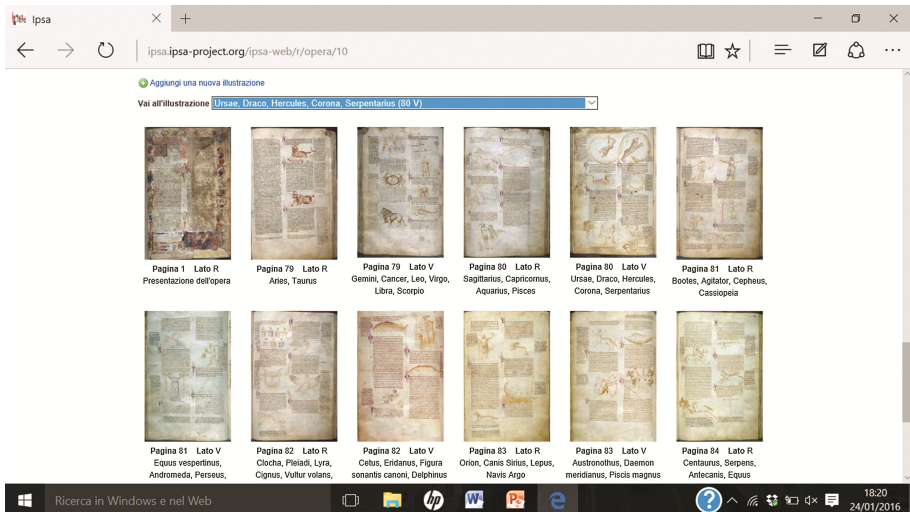

Fig. 1. Wall of images in the new IPSA version

3   Preparing an Exhibition

In the context of the project *Word and Image in the Padua University Library manuscripts*, funded by the University of Padua through a post-doctoral research grant, an exhibition of illuminated manuscripts is currently being organized for the spring of 2017.

The project aims at continuing and completing the research work started with the exhibition *Splendore nella regola. Codici miniati da monasteri e conventi nella Biblioteca Universitaria di Padova* (2011), which presented the results of a study on twenty-four manuscripts held in the Padua University Library [5]. Considering the positive outcomes of this experience, the research is now being extended to those manuscripts that weren't included in the previous exhibition, with the objective to achieve a complete catalogue of the illuminated manuscripts of the Library and to present them to the citizenry.

The research will focus on a *corpus* of approximately thirty manuscripts, from the XIII to the XVI century, not sumptuous but with a wide range of different decorations and illuminations which testify their various provenances. The *corpus* includes liturgical and religious books –e.g. the *Sermones* by Saint Leo Magnus or the *Summa de casibus conscentiae* by Bartholomaues de San Concordio - but also books for studying, such as the *Codex repetitae praelectionis* by Justinan or the *Expositio super libros Aristotelis de generatione et corruptione* by Paolo Veneto. Illuminations can be very different as well: beautiful French gothic illuminations, XIV century Bolognese illuminations, Renaissance decorated pages with the typical ornamental pattern of the *bianchi girari*, etc. These manuscripts testify to the great flow of books in Padua in the Middle Ages and in the Renaissance connected to the presence of national and international students attending the University and the schools in the local convents.

4   Continuing the Research

The exhibition will be a valuable chance to further evaluate IPSA as a tool for scientific knowledge dissemination and to collect useful data for new investigations.

In fact, one of the main limits of illuminated manuscripts exhibition is the impossibility to show all the illuminations of the manuscripts: usually manuscripts are opened on their most beautiful illuminated pages, but the others, although equally interesting, remain hidden. Facing this problem not only requires difficult decisions to select the best opening page of each manuscript, but it also gives the visitors the wrong perception that manuscripts are like small paintings, while they are completely different objects, a treasure that it is possible to appreciate only leafing through the pages and discovering their many illuminations, decorated initials and other kinds of embellishments.

To this respect, IPSA will be a precious tool to complete visitors' experience: all the manuscripts in the exhibition will be digitized and a new instance of IPSA will be created to collect all the digitized images and their metadata (description of the manuscript, description of its illuminations, date, provenance, calligrapher, illuminator, etc.). Thus visitors, via a computer terminal located in the exhibition, will be able to see all the illuminations hidden in the manuscripts they just saw and to easily get information on

them. Visitors' interaction with IPSA will be possibly made more involving through the development of engaging systems for presenting the content, such as narrative and serious games. Afterwards, visitors will be asked to fill in a satisfaction questionnaire, in order to obtain new data for further improvements to IPSA.

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