

Digitalizing the Proceedings of the Bulgarian Museums, or How to Rescue from Oblivion Priceless Studies on the Cultural Heritage

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Abstract. The priceless knowledge from the scientific periodicals, published by Bulgarian museums, has fallen into oblivion over the years. In the era of electronic information, the opportunity arises this once lost knowledge to be made Open Access - free of all restrictions on access. Upon digitization and correct annotation of the museum paper editions followed by providing them on the Internet for free access, there will be offered scope for a more comprehensive study of the Bulgarian cultural heritage, an integral part of which are the works of its researchers. Registering content in platforms such as Europeana / Bulgari-ana and setting common standards to facilitate finding the information will be the next challenge for the followers of the idea of cultural heritage digital repositories.

Keywords: Digital Library, Virtual Museum, Functionality, Services, Standards, Digitalization, Cultural Heritage, Proceedings.

1 INTRODUCTION

The Bulgarian museums have their own traditions in the preparation of scientific periodicals. They often publish works of museum specialists that are a result of serious field and research work. Unfortunately, many of these publications filled with priceless studies, have fallen into oblivion over the years. Today, in the era of electronic information, the possibility arises this once lost knowledge to be made Open Access - free of all restrictions on access. Upon digitization and correct annotation of the museum paper editions followed by providing them on the Internet for free access, there will be offered scope for a much more thorough and comprehensive study of the Bulgarian cultural heritage, an integral part of which are the works of its researchers - ethnographers, historians, archaeologists. [1]

Registering content in platforms such as Europeana / Bulgari-ana and setting common standards to facilitate finding the information will be the next challenge for the followers of the idea of cultural heritage digital repositories. [2]

In the past 15 years the profile of the Bulgarian museum has been losing its attribute as scientific organization in the eyes of the society. Often the museum specialists are left out of the scientific circles build of university's lecturers and BAS members. Their research finds place often only in museum proceedings or collective books dedicated to certain event or person, which are published in very small editions. This circumstances result in low impact and popularity of their research as well as loss of important research data that can not be used as a stepping stone for further studies. Nevertheless the research generated in the museums is highly valuable due to the fact that is generated from first hand, on the base of field studies or museum storage with restricted access.

2 THE BEGINNING

Regional historical museum Burgas (RHM Burgas) is composed of four expositions Archeological, Historical, Ethnographical and Natural-history, situated in separate buildings, which are not in approximate vicinity. In the same time the museum specialists from the different expositions require access to the same resources, which can be stored in any of the buildings. To easy their work and avoid spending more to duplicate the paper resources in the museum libraries, the museum staff has begun to digitalize the most used book resources and offer their electronic version on its server.

At the beginning this procedure was used only for books of external authors, which the specialists from the different department use regularly or have to access to offer certain services to visitors. The access to these editions was available only to the museum workers due to copyright issues and the fact their authors were external to the museum system and use own resources. The resources were digitalized as .pdf files and use the OCR text recognition to optimize the search speed and easiness for the museum staff members.

At the beginning of 2016, RHM Burgas released the latest Proceeding of Burgas Museum Book V dedicated to the late director of the museum Tsonya Drazheva (ISSN 0407-9477). Due to the huge interest in the book and yet limited edition, the management of RHM Burgas decided to offer the electronic copy free on the Internet. In the first week of the release, it has reached over 2500 downloads and the museum received huge feedback on the usage of its Internet channels, reaction toward the publications inside the proceeding as well as increased popularity of the featured subjects and further recognition of the authors.

3 NEW PROJECT

Looking into the results stated above, the management of RHM Burgas decided to take a step further in order to multiply the effect. In following three months the Burgas museum digitized the other 4 books of its proceedings published over a century:

- Proceeding of Burgas Museum Book I, 1951
- Proceeding of Burgas Museum Book II, 1965

- Proceeding of Burgas Museum Book III, in memory of prof. Ivan Galabov, 2000
- Proceeding of Burgas Museum Book IV, Studia in honorem Ivan Karayotov, 2002
- Proceeding of Burgas Museum Book V, in memory of Tsonya Drazheva, 2016

3.1 FIRST STAGE

The old book copies were scanned in PDF format using the OCR text recognition. Later they were published for free download as online resources with open access on the official website of RHM Burgas: http://www.burgasmuseums.bg/index.php?page=encyc&enc=books_rhm

Put together the 5 online resources account for 2 months over 8000 downloads. The first two books of RHM proceedings have been until now extremely hard to get by due their limited edition and release date.

3.2 PREVIOUS EXPERIENCE

This is the second initiative of RHM Burgas for digitalization of its collection in order to meeting the requirements and needs of the information society in the 21st century. In 2014, thanks to project № BG161P003-1.2.02-0022-C0001 „Implementation of new office for transfer of innovation technologies in business organisations of the South-East Region of Republic Bulgaria” with beneficiary Burgas Free University, co-financed by Operative Programme “Development of the Competitiveness of the Bulgarian Economy” 2007-2013, RHM-Burgas started the implementation of technological innovation associated with the creation of a digital library collection of icons stored in the Historical exposition of the museum (DL-VCI, (<http://www.burgasmuseums.bg/bidl/>)). [3]

As the experience of this project showed the semantic description of the digitalized content was one of the most important parts in succeeding to offer usable online data. Moreover the electronic documents can provide much easier access to publications of specific authors and information on names and places if they are correctly annotated.

3.3 SECOND STAGE

Development of a model to comply with the standards and specifications in the field of representation of cultural information is the next objective of this project. The Digital Library “Virtual Collection of Icons” used the CIDOC Conceptual Reference Model (CRM), "object-oriented domain ontology" for expressing implicit and explicit concepts in the documentation of cultural heritage. [4]

To support its digital collection of books, the RHM Burgas has to transcribe them with a variety of standardized metadata and retrieval protocols. Some of the primary standards that focus on digital libraries are the MARC bibliographic family, including MARCXML, MODS and the most used MARC 21. By definition MARC 21 Format for Bibliographic Data is designed to be a carrier for bibliographic information about printed and manuscript textual materials, computer files, maps, music, continuing resources, visual materials, and mixed materials. [7] Bibliographic data commonly

includes titles, names, subjects, notes, publication data, and information about the physical description of an item. At the moment more Bulgarian libraries begin to use this format for the digitalization of their collections in order to achieve unity of information through common standards. This process has been supported by few organizations, events and projects, conducted by libraries across the country.

Registering the content of its proceedings in platforms such as Europeana / Bulgariana and setting common standards to facilitate finding the information will be the next challenge for RHM Burgas. It is important to note that in the dynamic and rapid development of the web formats and standards, it has to be ensured that after 10 years these already digitized and organized in a certain way materials will continue to be readable.

4 CONCLUSION

As once stated, in Bulgaria this process is very long and difficult due to the large gap between the areas of culture and information technology. The problem is even deeper when it comes to museum libraries and collections. In the same time they hide huge resources which are unusable in their present form. Yet this priceless knowledge from the scientific periodicals, published by the Bulgarian museums, has fallen into oblivion over the years. In the era of electronic information, the opportunity arises this once lost knowledge to be made Open Access - free of all restrictions on access and published on the web in the museums' repositories. The experience and example of RHM Burgas has already been noted by other Bulgarian museums, which are also willing to publicize their proceedings.

References

1. Monova-Zheleva M, R. Stewart, Y. Zhelev, Coins from the Burgas Bay. 2014. Creation of a New Digital Numismatic Content in the Internet, Representing the Economic and Cultural Development of Burgas Region from Ancient Times to the Present Days, In: Proceedings of International Conference "Digital Presentation and Preservation of Cultural and Scientific Heritage /DiPP/, Veliko Tarnovo, September 18-21, 2014, pp. 247-256. ISSN 1314-4006
2. Stewart R., M. Monova-Zheleva, Y. Zhelev, The Digital collections of Burgas museum: creation of new digital content on the Internet, representing the economic and cultural development of Burgas region from ancient times to the present day, In: Proceeding of Burgas Museum Book V, Burgas 2015, pp. 337-343. ISSN 0407-9477
3. Stewart Radovesta, Monova-Zheleva M., Zhelev Y., Pavlova Lilia, Luchev Detelin, Paneva-Marinova Desislava, Pavlov Radoslav, 2015, The Orthodox Icons Collection of the Regional Historical Museum Burgas: A Digital Library for Iconographic Objects, Proceedings of International Conference "Digital Presentation and Preservation of Cultural and Scientific Heritage /DiPP/, Veliko Tarnovo, September 28-30, 2015, pp. 157-172. ISSN 1314-4006;

4. Pavlov, R., Pavlova-Draganova, L., Draganov, L., Paneva, D., 2006. e-Presentation of East-Christian Icon Art. In: Proceedings of the Open Workshop "Semantic Web and Knowledge Technologies Applications", Varna, Bulgaria, pp. 42-48.
5. Pavlova-Draganova, L., D. Paneva-Marinova, R. Pavlov. 2011. Ontological Presentation of East-Christian Iconographical Art Domain, International Journal "Serdica Journal of Computing", Vol.2, 2011, pp. 101-114, ISSN: 1312-6555
6. Pavlova-Draganova, L., D. Paneva-Marinova, R. Pavlov, M. Goynov, 2010. On the Wider Accessibility of the Valuable Phenomena of Orthodox Iconography through Digital Library, In the Proceedings of the 3rd International Conference dedicated on Digital Heritage (EuroMed 2010), 8-13 November 2010, Lymassol, Cyprus, pp. 173-178, Published by ARCHAEOLINGUA, ISBN:978-963-9911-16-1
7. The Application of MARC 21 at the Central Library of the Bulgarian Academy of Sciences: A Tool for Accessibility and Preservation of the Medieval Cultural Heritage. – In: Globalization, Digitalization, Access and Preservation of Cultural Heritage: Papers from the International Conference (Sofia, Bulgaria, 8-10 November 2006). Ed. by Herbert K. Achleitner, Alexander Dimcherv. – Sofia, Bulgaria : St. Kliment Ochridski, University of Sofia, 2007, 349-354.

