

Digital Library of Collections from Cultural Institutions in Plovdiv

George Vragov¹, Maria Karadecheva², Petko Georgiev³, Rosica Ovcharova¹

¹Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Bulgaria

²Regional History Museum – Plovdiv, Bulgaria

³Regional Public Library – Plovdiv, Bulgaria

{vragov, roxyo}@math.bas.bg, m.karadecheva@gmail.com
p_d_georgieff@abv.bg

Abstract. This report presents the project outcomes for digital presentation of historical artefacts from the region of Plovdiv, related to the Balkan War (1912-1913). The selected collections include digitized periodicals, postcards, photographs, museum objects and paintings by Bulgarian artists. Problems related to the digitization, creation, storage and visualization of digital objects from the funds of these cultural institutions are also discussed. The content of this digital library is expected to be completed with other collections at cultural institutions in Plovdiv. The idea is as a next step to integrate the project with the other digital libraries. The project website „Digital library of collections from cultural institutions in Plovdiv” is also presented here - <http://plovdivartefacts.com/> (Figure 1).

Keywords: Digitization of Cultural and Historic Objects, Cultural Institutions, Balkan War, Digitized Objects, Digitized Collections, Metadata Standards.

1 Introduction

In 2012 several cultural institutions in Plovdiv decided to combine their activities by presentation of their collections in a common digital library – the Ivan Vazov Regional Public Library (<http://www.libplovdiv.com/>), the Regional History Museum (www.historymuseumplvdiv.org), the State Agency “Archives” (www.archives.government.bg) and the City Art Gallery (www.galleryplovdiv.com). The Institute of Mathematics and Informatics (the Bulgarian Academy of Sciences) was chosen to be a partner in the project [7].

The expert team of specialists first focused their efforts on the task of creating a digitized collections of objects linked with the participation of the city and the region of Plovdiv in the Balkan War (1912-1913). This topic was chosen because of the importance of displaying Bulgaria’s military history with the aid of modern technology. The goal is to present the history of Bulgaria’s wars for national unification in a professional and objective manner, while also making it interesting to a modern audience. The end of a century by wars in the Balkans is a serious reason to take a new look and rethink the role these conflicts played in both Bulgarian and World history.

This report presents the results of the development process of the digital library of collections at cultural institutions in Plovdiv - <http://plovdivartefacts.com/>. The digital library of regional cultural and historical institutions is accessible for each of the contributing institution for storage of digitized objects and for all visitors at discovery of resources.

2 Current Status of the Digitization Process of Plovdiv's Cultural Institutions

In period 2010 - 2012 a survey was conducted to find out whether the cultural institutions from the region of Plovdiv were prepared to undertake the digitization of their collections through the use of metadata standards for description of objects and the possibility of presenting them in digital libraries[1][2] [8][9][10].

As is well known, the digital libraries are a modern technological solution to problems related to storing and presenting valuable cultural artefacts and the possibility of semantic access to them. This requires a detailed description of the content by creating and maintaining metadata which are structured according to the relevant standards [4][5][11][12].

An analysis of the current state of the digitization process and storage of digitized objects was carried out in the Ivan Vazov Regional Public Library, the Regional History Museum, the Regional Archaeological Museum, the City Art Gallery and the State Agency of Archives. It was concluded that due to each institution working, rather than in a combined effort, difficulties appeared in the integration and maintenance of national and global digital libraries.

This led to the cultural institutions mentioned above deciding to work on a common project which would provide the functionality needed by experts to create, store and use the digital objects and also to support the more traditional services of digital libraries. The objective is to create a library of digitalized objects and a technological environment in which to maintain collections of thematically related artefacts. The content of the library will be maintained by specialists from the relevant institutions. This undertaking was mainly stimulated by the idea to store valuable historical monuments in the global digitized environment and thus preserve them completely [7].

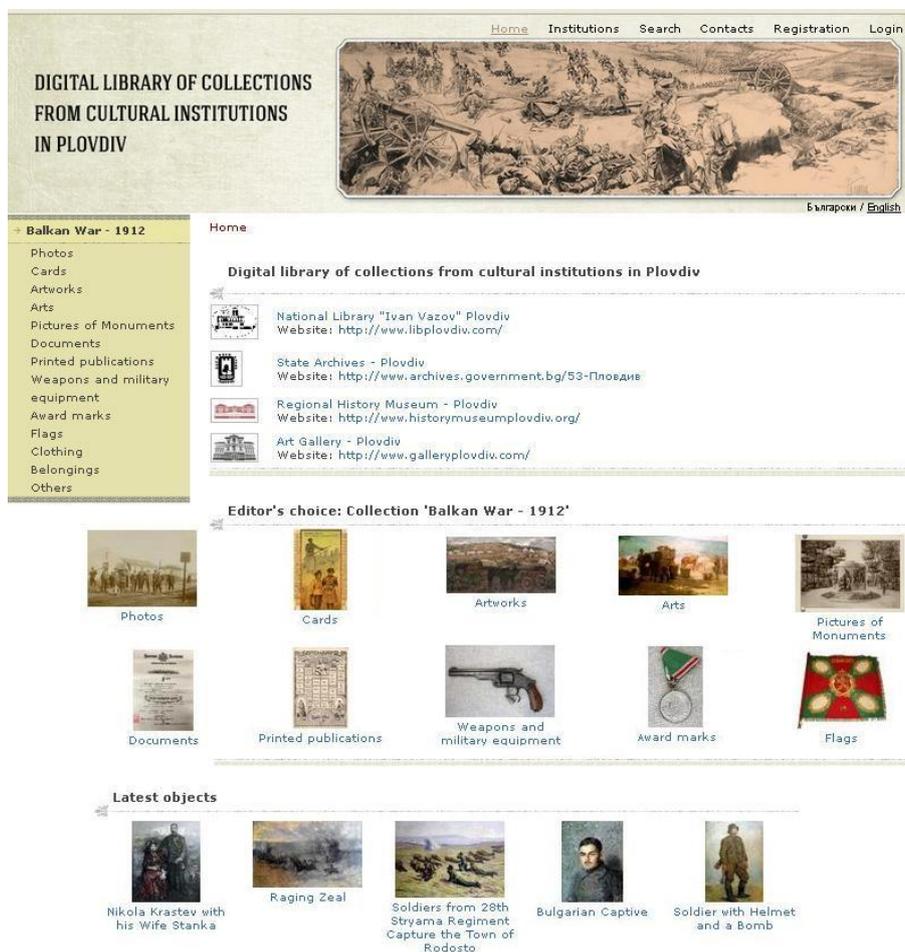


Fig. 1. Digital Library of Collections from Cultural Institutions in Plovdiv – home page

The first phase of implementation, which was carried out in the Ivan Vazov Regional Public Library, the Regional History Museum, the State Agency of Archives and the City Art Gallery includes digitized objects from the collections, related to the history Balkan war of 1912 [6].

3 Digitized Objects in the Balkan War Collection

The working group includes experts from the four institutions. They have digitized objects from their collections, adhering to the rules and the standards of digitization and exposition.

3.1 The Ivan Vazov Regional Public Library

The digitized collection of the Ivan Vazov Regional Public Library includes materials about the war from periodic national and regional newspapers, postcards and photographs. The photos, pictures, postcards etc., which have been stored in digital format, not only illustrate known historical facts, but have also uncovered new information. It turned out that over 4400 photographic documents dating from 1861 to the present day, are unknown to the general public, i.e. their digitization would be a way of sharing them. The archive includes photographic material related to Plovdiv and its surrounding region during the Balkan Wars. In spring of 2013, the catalogue of the Regional Public Library contained 3473 entries with 4446 images [7][8].

The digital collection associated with the Balkan war currently includes about 260 original photographs and postcards. The library's registry recorded thirty-two postcards from Liberation War 1912-1913. Of these, eight are included in digital library of collections from cultural institutions in Plovdiv. Two photographs date from 1913. One is of Serbian soldiers visiting the home of the director of the library Boris Dyakovich. The second is shown in the digital library and shows trenches used by the 39th and 27th regiments of the Bulgarian army near Bulair in June 1913 - donated by M.Vyrbanov.

The most interesting collection was added in 1914 – it contains fifty-five photographs „The life and marches of the Macedonian-Adrianople militias in 1913” by the artist Atanas Baklarov. Five of them are included in the digital library – they have not been published before.

In 1933 the Ivan Vazov Library received a total of 341 new artefacts. Two pictures are linked to the Balkan War and included in the digital library - „Countess Ignatieva Hospital in the Grammar School of Marazli” - a gift from Vaclav Velebni and „Catholic hospital - recovering officers”. The majority of objects related to the Balkan Wars were donated to the Library in 1935 - the overall number of objects was 310, of which 11 photographs and 172 postcards. Sixteen of them have been included in the digital library.

3.2 The State Agency of Archives – Plovdiv

The State Agency of Archives owns a vast amount of photographic material dating back to the period of the Balkan War. Over the past few years, a team of specialists led by Vladimir Balchev [6][10] have studied these photographs and postcards and selected the most significant ones to be included in the digital library.

These digitized images give a visual representation of all phases of the war - from the declaration of mobilization, to the signing of the armistice. The majority of images represent events of high significance - the sending of troops to the front, the victories at Svilengrad, Kardzhali, Lozengrad, Gallipoli, Briz, Chorlu, Bounar Hisar, Bulair, etc. There are also photos of the streets of Edirne and Svilengrad lined with people welcoming the arriving King Ferdinand of Bulgaria. A large number of the selected postcards and photographs are related to the Battle of Edirne.

A number of them show Bulgarian military camps and the siege of Edirne fortress. Others are dedicated to the capture of Edirne by the 2nd Bulgarian Army. There is also unique footage which was taken by an anonymous French monk of the Order of the Assumption which shows many important events - the retreat of the Turkish Army, the abandonment of weapons on the streets of Edirne, the capitulation of garrison of Edirne.

Another part of the images gives an idea of life in Plovdiv during the war. One part shows the mission of the French Red Cross, which was housed in the building that now is the Plovdiv Seminary; the mission of the Russian Red Cross; schools in the city that were converted into makeshift military hospitals. Several photos display the escort of Turkish prisoners of war in the city, accommodating refugees from Thrace and the activities of charities.

Also of interest are the artist Dimitar Andreev's caricatures of the Balkan War (published by „Modern bookshop” – Plovdiv). The collection includes many amateur photographs depicting the life of the ordinary soldier - vacation, building dugouts and shelters, burial of the deceased soldiers, etc.

3.3 The Regional History Museum

The Regional History Museum has also provided a substantial amount of interesting objects to the digital library. This includes high-quality photos of the life of both normal soldiers and officers in the regimental barracks [9].

The museum team provided documents and artefacts relating to the participation of the 9th Infantry Regiment of Plovdiv in the national unification wars. Thanks to Colonel Vasil Delov, who was the commander of the regiment, the museum has been able to exhibit high quality photographic material of officers, soldiers, their drills and life in the barracks of the regiment, i.e. the routine of Bulgarian soldiers.

The digitized collection also includes photos from battlefields and of places where the Bulgarian Army managed to assure victories - the liberation of the Rhodope Mountains and the Aegean region, during the Balkan War.

A collection of military trophies and paraphernalia was also donated to the project - a captured Turkish flag from the Rhodope squad in 1912, rifles, guns and uniforms. This also includes a large collection of medals and honours.

3.4 The City Art Gallery – Plovdiv

The Curators of the City Art Gallery provided the digital library with all nine of the museum's canvases which depict events of the Balkan War.

4 Preparations of Digitized Objects and Technological Solutions

This project allows the digital library to be accessible to any regional cultural and historical institution (museums, galleries, etc.) in the process of storage of digitized sites as and to various users for resource discovery.

Through this technology the working team enters data about their objects.

Dublin Core (DC) [3] is widely-used standard developed by the Dublin Core Metadata Initiative in 1995. The standard contains in its basic part consists of (dc namespace) 15 components: contributor, coverage, creator, date, description, format, identifier, language, publisher, relation, rights, source, subject, title and type. Moreover it owns 7 additional groups with 126 metadata elements. The last group is a group of standards for resource search and retrieval.

A comparison between the requisite metadata generated by the Dublin Core Metadata Element Set (DCMES) and available descriptions of digitized items - mainly photos and postcards – was made.

The results showed that more than half of the studied objects possess relevant metadata from etc. *strongly recommended* and *recommended* - dc.title, dc.contributor.author, dc.date.issued, dc.date.available, dc.description, dc.publisher, dc.type, dc.language and also *additional* - dc:identifier, dc:rights, dc:format. These experts have had no difficulty in preparing the metadata of digitized objects. They have described „identification signs” (standard metadata description) such as title, archive number, period, type, annotation, etc. of the specific object and additional technical information, connected with the digitalization of the objects.

The basic structure, the category, is created by the administrator. It has been decided that the library will include the following categories of digitized objects: **photos, post cards, artworks, paintings by artists, pictures of monuments, documents, printed publications, weapons and military equipment, awards, flags, clothing, personal belongings and others.**

All objects have the following information in their metadata:

- Title or name by which the object is known;
- Name of the creator or creators of the original physical object;
- Genre / type of digital or physical object - photography, painting, sculpture, etc.;
- Description of the digital or physical object;
- the most important Date or Period for the object;
- Owner of the object - information about intellectual property rights - in our case it is only the name of the institution;
- Identifier - inventory number;
- Physical characteristics - size, weight, etc.;
- File identification.

In the implementation and supporting of the project „Digital library of collections from cultural institutions in Plovdiv” we have applied and adapted the technological

solutions of the aggregator of collections of cultural and historical sites (<http://www.plovdiv-eu.com/>) [1][13].

The team of experts have had previous experience with the experimental project „A catalogue of the cultural and historical objects” and in particular in the methods of structuring, preparing and data processing of the digital objects.

The aggregator for digital collections is a web-based technology, offering the numerous different users the possibility not only to publish objects on the Internet but also to create their own models of data, related to these objects. All the objects with the same data model are combined in a collection. The creation of data models ensures additional categorization of the objects and facilitates data input.

In the aggregator of collections of the cultural and historical sites by using the developed tools for modeling of the collections, are created six basic data models [13]:

- Europeana (BG, EN) – the object of such collection has all the standard features of Europeana in Bulgarian and English language;
- Europeana SHORT (BG, EN) – it is based on the previous model, but some rarely used metadata fields are excluded;
- Scientific passports (Europeana+) (BG, EN) – passports of digital objects, in accordance with Europeana [14] and „Scientific passports of movable cultural artefacts in Bulgaria” [15].

The data model used in current digital library corresponds to the model Europeana SHORT (BG, EN).

The system provides several roles for its users:

- Content providers – registered users that enter data into the system - institutions and ordinary users. They can create, edit and delete categories and separate objects.
- Administrator – he controls the major categories and collections of the library as well as the objects created by ordinary users;
- Unregistered user – can only browse the content of the site.

Each consumer can register in the system and change basic data concerning his profile.

The system provides tools for object input, editing, deleting and different ways of searching (with the help of keywords, categories, dates, and by choosing a particular institution) – Figure 2.

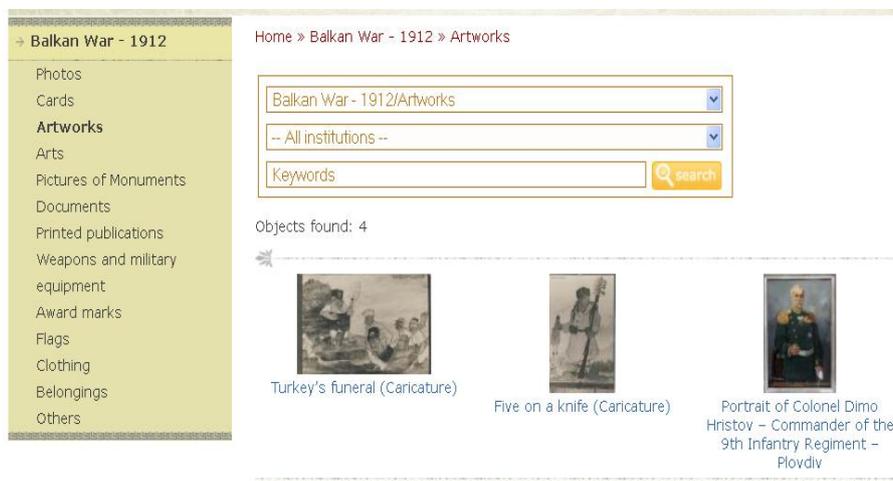


Fig. 2. Tools to search by different criteria

The library <http://plovdivartefacts.com> offers its users a convenient navigation method (through different menus with categories and a path to the current site). The ways of searching adhere to apply the good practices of recognized digital libraries.

The system is managed in two languages - Bulgarian and English. Each object can be entered in these two languages and is shown in the respective language version of the site. Unfortunately, a considerable number of the descriptions of the archival units in Bulgaria do not have an English translation.

The presentation of objects, related to such notable and highly emotional events, requires a high artistic value and professional design of the site, that provides access to digitized resources. The authors perceive the need to substantial improvement in this respect.

5 Conclusion

Currently in the digital library are located about 150 objects, relating to the Balkan War, from the archives of the contributing cultural institutions. The project is currently being developed - new digitized objects are being continuously entered in the catalogue.

This project is an important step towards better presentation and promotion of the rich cultural heritage of the city of Plovdiv and the region in the global digital space. According to members of the participating cultural institutions, their efforts in protecting the city's cultural heritage have received both institutional and national recognition due to the inclusion of this part of their exhibits in the digital library project.

Development of the digital library of cultural and historical sites continues through the creation of additional new collections offered by the team of experts.

They are now preparing a new collection of digitized objects devoted to the great historical event - Unification of Bulgaria in 1885.

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