

Possibilities of New Technologies in Promotion of the Cultural Heritage: Danube Virtual Museum

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Abstract: The cultural and historical heritage is consisted of goods that have been created by the previous generations. These objects, because of their symbolic meanings have special value for the current generations and they affect the forming of their identities. Modern age offers various possibilities to keep that heritage through digitization, converting to electronic form and analyzing and organizing this material. On the other hand, websites, social networks and different applications can contribute in the promotion of the cultural heritage, especially among young people who mainly use these technologies for information, fun and education. This paper will show the project “The Magic Touch of the Danube – Virtual Museum” that has been set up for the purpose of connecting the representative examples of the cultural heritage of the Danube region, all in one place – a website. The museum is imagined to be a developing platform with the possibility of constant import of new data and content. Every country of the Danube region will present the cultural heritage that is connected to the Danube that goes through its territory. In this way, the importance of these goods is being promoted, as well as necessity of their preservation. This project will also open the possibility of international cooperation of the various institutions of the Danube countries.

Key-Words: cultural heritage, virtual museum, promotion, Internet, new technologies, Danube region

1 Introduction

The development of Information and Communication Technology brought many new ways of application this technology in the field of cultural heritage. Cultural heritage today can be seen from any place of the world, so people become aware of the cultural diversity and accept it as a source of enrichment for the whole mankind.

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Traditional and virtual museums are the same in the sense they can be designed around specific objects, such as an art museum or a history museum, or it can consist of new exhibitions from various fields, similar to exhibitions at science museums. Furthermore, a virtual museum can refer to the mobile or internet presentation of a traditional

museum or can be born digital content such as Net art, Virtual reality and Digital art.

The goal of the virtual museum cannot be to replace the real museum. Only by cooperation of the ones who work on preserving and presenting the cultural heritage (historians, archeologists, museum curators etc.) can results that contribute to cultural creation can be achieved. The primary aim of virtual museum is to investigate and propose models for the exploration of the real purpose and conceptual orientation of a museum.

With the help of new technologies, museums can overcome many problems such as geographical boundaries, collections mobility, insurances, preventing from damaging and stealing, etc. and actively answer the needs of the contemporary visitors. On the other hand, digital collections, in place of material ones, present some interesting features: money and space savings, easier management potential, digital analysis or modelling, etc. Digital platforms can easily help museums to

use their collections actively for the enjoyment of all who wish to have access to our cultural heritage.

This paper deals with protection and representation of the significant examples of the cultural heritage of the Danube region with the help of various possibilities that new technologies offer.

2 Understanding of the term “cultural heritage”

Culture is now observed as contemporary creation and cultural heritage combined. It is a dynamic unity of all values that are made by material and spiritual creation of humankind, in all times and places.

Contemporary creation in culture is consisted of various activities that as a result have cultural and artistic pieces. These pieces can be both material and spiritual, and they can come from fields such as painting, theatre, music, literature, film, multimedia and other. The creation does not include only art, but other forms of life, value systems, tradition and beliefs. On the other hand, everything that humans have created in the past times and still has artistic, historical or scientific value can be considered as cultural heritage, either tangible or intangible.

The term “heritage” in the beginning was only referring to personal heritage and it signified the goods inherited from the father or mother. After the French Revolution, one comes to a broader concept. The heritage of the nation, consisting in the goods and property of the king, was nationalized and therefore considered public goods, artefacts that were owned by the public.

The term “artistic heritage”, used for the first time by Euripide Foundoukidis, General Secretary of the Organization of International Museums, at the Athens Conference (1931), was then commonly used in the documents of international organizations. André Malraux, French Minister of Culture used term “cultural heritage” in the decree 59-889 dated July 24, 1959. From this period on, the term was also used in political and administrative circles. However, Malraux is the first who used the concept of a museum “without walls”, in his book *The voices of silence* (1953). He imagined it being an environment for the presentation of mainly photography and art.

The first document that gives a definition of the concept of heritage is the International Charter of Venice (1964). In the introduction, a first definition of heritage is given: “Imbued with a message from the past, the historic monuments of generations of people remain to the present day as living witnesses

of their age-old traditions. People are becoming more and more conscious of the unity of human values and regard ancient monuments as a common heritage. The common responsibility to safeguard them for future generations is recognized. It is our duty to hand them on in the full richness of their authenticity is found” [1]. In article 1, it was indicated that heritage applies not only to great works of art but also to more modest works of the past which have acquired cultural significance with the passing of time.

The concept of cultural heritage was first viewed as a national treasure. Hague Convention of 1954, that deals with protection of cultural heritage in the case of armed conflict, showed the necessity to protect the cultural heritage of all humanity.

In the UNESCO Convention of the Protection of World, Cultural and Natural Heritage (1972), the term cultural heritage appears, including the monuments, the wholes and sites, which are of “exceptional universal value from the point of view of history, art or science” [2].

The Charter for the Protection of Historic Sites [3] was innovative because this document recognizes both tangible and intangible values as the object of protection.

The analysis of the cultural heritage adopts an integral approach, since monuments are no longer considered alone, but also in its context. Parallel to this extension process, the selection criteria of cultural heritage have also changed: while initially the historic and artistic values were the only parameters, other additional ones have now been added: the cultural value, its value of identity and the capacity of the object to interact with memory [4].

3 New ways of representation of the cultural heritage

Modern age offers various possibilities to keep cultural heritage through digitization, converting to electronic form and analyzing and organizing this material. Websites and social networks opened the door of cultural heritage to a vast number of people. It enabled communication and exchanges among people, and sharing of knowledge, information and ideas, especially among young people. This is the reason why in the recent years all the developed countries created free electronic archives and have made relevant attempts at digitizing their cultural heritage. Digital catalogues of museums, archives, libraries and other cultural institutions were published all over Europe.

This way of representation has many advantages. Tangible cultural heritage presented in the digital form can be viewed now only in two dimensions, but it is possible to choose the perspective and view it in whole or zoom to very fine details.

The use of Virtual reality techniques allows the viewers to experience life in cities that are long gone, to move through them or observe the surrounding in which certain monuments were located.

ICT offers cultural heritage education a new, interdisciplinary dimension, by providing the possibility of looking at each artifact within a broader network of historical, socio-cultural, economical and geographical links, which allow its better understanding and interpretation [5]. Large number of information can be found on the website, calling the visitors to explore, so they may “discover the richness of heritage in its context”, as cited in the Recommendation of the Council of Europe.

Through technology, cultural heritage today can be seen from any place of the world, so people become aware of the cultural diversity. They lose the feeling of nationalism and realize that the heritage of the entire humanity belongs to all cultures.

The acknowledgement both of “cultural diversity” and “common roots” emerges as a result of the possibility of studying/comparing a multiplicity of cultural objects and of discussing and communicating with people of different cultures; this goes both in the direction of strengthening links among people having common roots and of understanding basic cultural differences thus also providing a significant added value to civics [6].

4 Museums as virtual destinations

Museums have important aim in protection and representation of the cultural heritage. They entertain and inform; they tell stories and construct arguments; they aim to please and to educate; they define, consciously or unconsciously, effectively or ineffectively an agenda; they translate the otherwise unfamiliar and inaccessible into the familiar and accessible [7]. Information and Communication Technology and different types of virtual museums, can provide valuable help to achieve those aims.

A virtual museum is: “a collection of digitally recorded images, sound files, text documents and other data of historical, scientific, or cultural interest that are accessed through electronic media” [8].

Another less rigid definition states that a virtual museum can be a digital collection that is presented either over the Web, or to an intranet, either via a

personal computer (PC), an informative kiosk, a personal digital assistant (PDA), or even to a CD-ROM as an extension of a physical museum, or that it can be completely imaginary. A virtual museum is also known as an online museum, electronic museum, hypermuseum, digital museum, or Web museum. It can be a 3D reconstruction of the existing museum, or it can be a completely imaginary environment, in the form of various rooms, in which the cultural artifacts are placed [9]. Regardless of the name, the idea behind this phenomenon is to build a digital extension of the museum on the Internet, a museum without walls.

A virtual museum website can contribute to the promotion of cultural heritage and provide worldwide publicity. Research has revealed that 70% of people visiting a museum website would subsequently be more likely to go and visit the “real” museum [10]. High-resolution images can provide as much information as possible about the virtual exhibits, and 3D digital technologies provide the illusion of reality.



Fig. 1. The virtual reconstruction of the famous temple of Zeus in Olympia

Virtual museums can overcome limitations of space. They can provide access from any place and to anyone, including people with special needs. On the other hand, the cultural artifacts that are exhibited in the physical environment of a museum are usually shown in display cases, where only a limited amount of information about them is available. A virtual exhibit can contain information that a physical exhibit in a museum showcase cannot.

All these are reasons why bigger and bigger number of museums used the opportunities of technology, new media and new ways of communications. Still, this remains a huge field in which there are many ways to attract visitors, establish an interaction and allow them a fun and educative experience.

The idea of becoming virtual might not be a pleasant one for some museums, especially not for art museums who cherish the ideal of the “real thing” and its aura. But this development is inevitable because of the increasing digitization of cultural heritage and the demand to make collections more accessible. The virtual museum is no competitor or danger for the “brick and mortar” museum because, by its digital nature, it cannot offer real objects to its visitors, as the traditional museum does. But it can extend the ideas and concepts of collections into the digital space and in this way reveal the essential nature of the museum. At the same time the virtual museum will reach out to virtual visitors who might never be able to visit a certain museum in person [11].

5 “The Magic Touch of the Danube – Virtual Museum”

The goal of this virtual museum is to, on a comprehensive internet presentation, connect representative examples of natural and cultural heritage of the whole Danube region - from the source in Germany to its mouth in the Black Sea, to emphasize its importance as well as to point out the need for preserving the heritage and to open the possibility for future international cooperation between state institutions of the Danubian countries - Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria, Moldova and Ukraine [12].

The internet presentation “The Magic Touch of the Danube – Virtual Museum” is seen as a development platform with a possibility of constant input of new data and content, the mapping of new sites and expansion of the database. The website is designed so that each country through which the Danube flows, by accreditation of adequate institutions, takes responsibility and obligation to include content that will present the cultural and natural heritage of its territory.

In the initial phase of the implementation of a part of the website “The Magic Touch of the Danube - Virtual Museum”, referring to the flow of the Danube through Serbia, partners of PE “Belgrade Fortress” have been the most important national cultural institutions such as the National Museum, the Ethnographic Museum, the Historical Museum of Serbia, the Natural History Museum in Belgrade and the Belgrade City Museum. In order to best present cultural and natural heritage of the Danube flow through Serbia, museum professionals, in the field of competence of their institutions, have

selected the material from archives and museums funds. This material has also been included in this website.

The future steps of this project are to include a greater number of museums and other institutions in Serbia in order to substantially enrich the existing database, and to call on the cooperation and involvement of the official institutions of other Danube countries, so that the internet presentation “The Magic Touch of the Danube - Virtual Museum” would become internationally recognized.

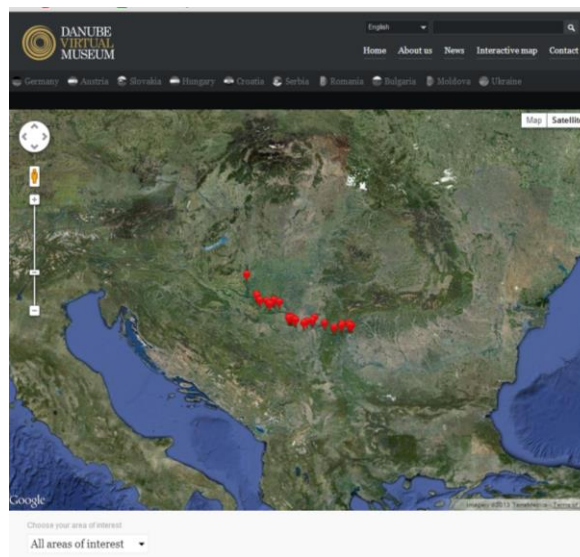


Fig. 2. Interactive map of the Danube Virtual Museum with locations which presents the cultural and natural heritage of Serbian territory

However, the museum is far from achieving this goal.

Most embassies and cultural institutions gave positive answers, but the only active part of the website is the one about Serbia. In the presentation, digitized material of six Belgrade museums has been used. The parts of the cultural heritage presented on the website have been chosen by the museums themselves. Visitors can choose between nine virtual tours of the most important places.

The program used for the creating of website is 3D SOMPRO, because of its accessibility and simplicity.

Today, culture is viewed as a very important economic segment in the EU. This is why more than 500 million euros are spent in the European regional funds with the cultural dimension. One of the most important EU projects was the foundation of Europeana – European digital library available for everyone through Internet. This library hold the entire fund of all national libraries, archives of culture, museums, documents... Fund Europeana is

multicultural and multilingual and should cover the entire European historical, cultural, scientific and media fund.

Although a lot smaller, Danube Virtual Museum can be very important for the development of the Danube region countries, strengthening the intercultural cooperation, promotion of cultural heritage and preserving the long-term mutual memory for the future generations. We hope that the countries of the region will see this and join in the collaboration in this unique project. The heritage of every country is also heritage of Europe, so through these activities we promote the mutual respect of all people in the region and support a better coexistence in the future.

6 Conclusion

We are going through a period of significant changes in the way that we use our cultural collections. Museums are no longer static depositories for objects, as they used to be for the past two centuries. Audiences, often regarded as passive participants, now look for interaction and seek to participate in new ways and to have greater access to stored objects. Online and interactive access has created new opportunities for museums and cultural institutions to reach out and discover new audiences and for promotion of cultural achievements. At the same time, many of them are finding ways to show their objects outside the walls and to embark on fresh ways of enticing visitors inside.

Digitization of collections has been and is one of the great challenges for museums in the twenty-first century. It requires significant financial investment in both equipment and staff. These expenses are an addition to the costs of conventional museum work. Governments have subsidized the digitization of cultural heritage in many countries through specific programmes and other means of support. Besides for the resources, there are challenges in developing and selecting the appropriate and sustainable technology: it is not enough to develop databases, operating systems, interfaces and image formats once and for all. They must be continuously updated in order for them to remain usable as technology evolves.

Modern society is characterized by the tendencies of networking of museums and other institutions that explore and preserve the cultural

heritage. New media give many possibilities in creating connections between all organizations of cultural memory and in exploring the integrated heritage. It is up to expertise, abilities and adjustability of the people employed to see if and how much they will use these possibilities.

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