
THE ROLE OF LIBRARIES IN PROMOTING CULTURAL HERITAGE

STATE OF THE ART REPORT

2019



TABLE OF CONTENTS

PART I: GENERAL OVERVIEW *by Serap Kurbanoglu*

INTRODUCTION
CULTURAL HERITAGE: DEFINITION and EVOLUTION of the CONCEPT
The VALUE and IMPORTANCE of CULTURAL HERITAGE
DIGITIZATION of CULTURAL HERITAGE
EUROPEAN FRAMEWORKS, PROGRAMMES, POLICIES and STRATEGIES
LIBRARIES and CULTURAL HERITAGE
DIGITAL LIBRARIES
CURRENT STATE in EUROPE
 Digitisation Schemes
 Digitisation Endeavors: Targets and Priorities
 Quality Assurance
 Monitoring the Progress
 Public-private Partnerships
 Optimised Use of Digitisation Capacity
 Preserving Public Domain Status After Digitisation
 Access to and Re-use of Digitized Material
 Long-term Preservation
 Digital Legal Deposit
 Contribution to Europeana
CONCLUSIONS
REFERENCES

PART II: SITUATION in PARTNER COUNTRIES – ITSELF PROJECT

ESTONIA *by Sirje Virkus*

DEFINITION OF CULTURAL HERITAGE IN ESTONIA
PRIORITY AND IMPORTANCE OF CULTURAL HERITAGE IN ESTONIA
NATIONAL FRAMEWORKS, PROGRAMMES, POLICIES AND STRATEGIES REGARDING
CULTURAL HERITAGE
CULTURAL HERITAGE LITERATURE AND RESEARCH
LIBRARY SERVICES REGARDING CULTURAL HERITAGE IN ESTONIA
 Digitisation, Preservation and Access: Developmental Overview
 Library Related Strategies and Policies
 Examples of Best Practices
 Cooperation with other Cultural Heritage Institutions
 Projects
 Identified Needs and Gaps within Cultural Heritage Related Library Services
CONCLUSION
REFERENCES

FRANCE *by Joumana Boustany*

INTRODUCTION
CULTURAL HERITAGE POLICY IN FRANCE
 1930 - 1960: Extension of Heritage Protection
 1960 - 2003: A New Notion of Heritage
 2003 -: Heritage in the Era of Decentralisation and Globalisation
WRITTEN AND GRAPHIC HERITAGE POLICY
WRITTEN HERITAGE ACTORS
 SLL - Service du livre et de la lecture (Books and Reading Service)
 The Regional Directorate for Cultural Affairs (DRAC)
 The Bibliothèque National Library of France (BnF)
 Fondation du patrimoine (Heritage Foundation)
 Research Centers

Network and Association
THE MOST SIGNIFICANT ACTIONS IN FAVOR OF WRITTEN HERITAGE
The Action Plan for Written Heritage (PAPE)
BEST PRACTICES
National Events
Local Events
Library Initiative on Place
Library Initiatives on the Web
Tools
CONCLUSION
REFERENCES

LATVIA by *Marta Dziļuma, Signe Mežjāne and Kristina Papule*

DEFINITION OF THE CULTURAL HERITAGE IN LATVIA
PRIORITY AND IMPORTANCE OF CULTURAL HERITAGE IN LATVIA
NATIONAL FRAMEWORKS, PROGRAMMES, POLICIES AND STRATEGIES REGARDING
CULTURAL HERITAGE
Tangible Cultural Heritage
Intangible Cultural Heritage
CULTURAL HERITAGE LITERATURE AND RESEARCH
Cultural Heritage Literature and Research: A Conclusion
NATIONAL LIBRARY OF LATVIA SERVICES REGARDING CULTURAL HERITAGE
Preservation, Digitization and Access
Library Related Strategies and Policies
Collecting and Organization
Projects and Promotion
Examples from the Best Practices
Cooperation with Other Cultural Heritage Institutions
Identified Needs and Gaps with Cultural Heritage Related Library Services
CONCLUSION
REFERENCES

The NETHERLANDS by *Daniel Weiss*

INTRODUCTION
DEFINITION OF THE CONCEPT
IMPORTANCE OF CULTURAL HERITAGE
PRIORITY AND POLICIES
NATIONAL STRATEGIES AND LEGISLATION
LIBRARIES AND CULTURAL HERITAGE
DIGITISATION
Quantitative Targets
Quality Assurance
Monitoring the Progress and Use
Collaboration and Partnership
Intellectual Property Related Issues
Access and Re-use
Long-term Preservation
BEST PRACTICES
CONCLUSIONS
REFERENCES

SERBIA by *Jasmina Ninkov, Marjan Marinković, Stanka Jovičić and Bojan Kundačina*

DEFINITION OF CULTURAL HERITAGE
PRIORITY AND IMPORTANCE OF CULTURAL HERITAGE
Legislation Framework
Strategic Framework
The Ministry of Culture and Information of the Republic of Serbia
The Cultural Heritage Browser
CULTURAL HERITAGE LITERATURE AND RESEARCH

Doctoral Dissertations, Master's Thesis
Proceedings
Journals
Seminars and Conferences
LIBRARY SERVICES REGARDING CULTURAL HERITAGE IN SERBIA
Introductory Remarks
Cultural Heritage Related Library Services – Short History
Libraries' Strategies and Policies Regarding Cultural Heritage
Types of Cultural Heritage Owned by Libraries
Organisation
Preservation
Digitisation
Providing Access to Cultural Heritage
Promotion
Projects and Examples from Best Practices
Cooperation
Problems and Needs within Cultural Heritage Related Library Services
CONCLUSIONS AND RECOMMENDATIONS
Conclusions
Recommendations
REFERENCES

TURKEY *by Yurdağül Ünal*

INTRODUCTION
DEFINITION OF CULTURAL HERITAGE
PRIORITY AND IMPORTANCE OF CULTURAL HERITAGE
NATIONAL FRAMEWORKS, PROGRAMMES, POLICIES AND STRATEGIES
LITERATURE AND RESEARCH
LIBRARIES AND CULTURAL HERITAGE
CONCLUSION
REFERENCES

PART I: GENERAL OVERVIEW

by Serap Kurbanoglu

INTRODUCTION

Cultural heritage is the aspects of the past that humankind wants to pass on to future generations (Ekwelem, Okafor & Ukwoma, 2011). It is the memory of people's living culture which is expressed in different forms (Arnold & Gezer, 2008). The 21st century has witnessed changes across the *cultural heritage* sector. There has been a proliferation in the use of *cultural heritage* concept which has been evolving during the last couple of decades.

The definition of the concept has been expanded from an approach referring exclusively to tangible assets to an approach that also includes intangible and digital assets. Whether tangible, intangible or digital, assuring the safeguard of the world's heritage is important.

Efforts to preserve cultural heritage have started long ago and gained momentum throughout the world since the year 2002 is proclaimed as the *Year for Cultural Heritage* by the United Nations (UN)¹. However, cultural heritage is still threatened with destruction and its protection often remains incomplete because of the scale of the resources it requires (UNESCO, 1972).

Cultural heritage has become an important theme during the last couple of decades. International organisations, national policy making bodies, and professionals from various disciplines especially from memory institutions² have put a tremendous effort into not only preserving but also making cultural heritage resources publicly available. Libraries, archives and museums, in particular, have been committing increasing amounts of time and money for safeguarding the heritage resources in their collections (UNESCO, 2003b).

Initiatives of organizations such as UNESCO and UN have also provided impetus to the joint efforts. UNESCO's *Memory of the World* Programme which is established in 1992 is one example. The vision of this programme is stated as: "the world's documentary heritage belongs to all, should be fully preserved, protected and be permanently accessible to all without hindrance". The mission is; "to facilitate preservation, by the most appropriate techniques, of the world's documentary heritage; to assist universal access to documentary heritage; and to increase awareness worldwide of the existence and significance of documentary heritage" (UNESCO, 2019).

The United Nations 2030 Agenda for Sustainable Development (2015) is another example which "calls on governments to strengthen efforts to protect and safeguard the world's cultural and natural heritage as well as to ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements".

CULTURAL HERITAGE: DEFINITION and EVOLUTION of the CONCEPT

Culture is the collection of a society's beliefs, customs, arts, language, and values. Every society has a culture which generally produces similar behaviour and way of thinking among people who live in that society. Cultural heritage, therefore, is people's way of life (behaviours, ideas, acts and artifacts) which is passed on from one generation to another (Ekwelem, Okafor & Ukwoma, 2011).

The main feature of the *cultural heritage* is indicated as "outstanding universal value from the point of view of history, art or science". Following assets are considered as *cultural heritage* by UNESCO when a convention for the protection of the world cultural and natural heritage was organized in 1972: monuments, architectural works, sculptures, paintings, inscriptions, cave dwellings, sites (man-made, natural or archaeological) (UNESCO, 1972).

It took couple of extra decades to include intangible heritage as part of the *cultural heritage*. The *intangible cultural heritage*, defined by UNESCO (2003b), as "the practices, representations,

¹ About one and a half decade later the year 2018 was announced as the European Year of Cultural Heritage by European Union (EU) (<https://www.europanostr.org/our-work/policy/european-year-cultural-heritage/>).

² In this paper, terms such as memory institutions, cultural institutions, heritage institutions, cultural heritage institutions and LAM are used interchangeably to refer archives, museums and libraries.

expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated there with – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage”. Tango from Argentina, acupuncture from China, falconry, yoga, marimba music, the Mediterranean diet, and flamenco are given as examples for intangible heritage (DeSouceya, Elliottb, & Schmutz, in press).

Tangible cultural heritage has the advantage over its intangible counterpart, such that with proper care (even in a neglected state) it remains authentic over centuries. On the other hand, survival of intangible cultural heritage is always threatened because a great deal of it is passed on only orally through generations (Sekler, 2001 as cited in Ekwelem, Okafor & Ukwoma, 2011).

Additional to the tangible and intangible heritage, today we are also speaking about *digital heritage*. UNESCO (2003a), recognizes that “resources of information and creative expression are increasingly produced, distributed, accessed and maintained in digital form, creating a new legacy – the digital heritage”. The digital heritage consists of resources/information not only created digitally (born-digital) but also converted into digital form from existing analogue resources. In addition to cultural resources, digital heritage includes scientific, technical, educational, legal, medical, administrative and other kinds of resources which are on various formats such as texts, audio, still and moving images, graphics, software and web pages. “Many of these resources have lasting value and significance, and therefore constitute a heritage that should be protected and preserved for current and future generations” (UNESCO, 2003a).

The concept of cultural heritage is constantly evolving. As Loulanski (2006) pointed out “the conceptual focus of cultural heritage has shifted alongside three interrelated and complementary directions: 1) from monuments to people; 2) from objects to functions; and thus 3) from preservation per se to purposeful preservation, sustainable use, and development”.

Today, many professions (with the diversity in their understanding) representing different stakeholders from different sectors are working to preserve inherited cultural heritage assets (tangible, intangible, digital) (Loulanski, 2006). This complexity and diversity cause some challenges for the collaborative works required for the management of cultural heritage (Hirszenberger, Ranogajec, Vucetic, Lalic & Gracanin, 2018). Therefore, a better understanding of the complex nature of the content is needed to be achieved.

The VALUE and IMPORTANCE of CULTURAL HERITAGE

The value and importance of cultural heritage has long been accepted. The heritage value of an asset lies in its cultural significance, which usually is based on its historical, symbolic, spiritual, aesthetic and social aspects. Heritage value is the major reason behind the conservation and preservation endeavours and the basis for its economic and social benefits and impacts. While historical value is based on the historical content which provides connection with the past; symbolic value is based on the symbolic meaning and power of certain assets on people’s cultural identity. A cultural asset may promote insights in the meaning of religious, sacred and transcendental practices and that constitutes spiritual value. Aesthetic value comes from the aesthetic quality of the cultural asset which is an important element for its enjoyment and may inspire new artistic creativity. Social value is based on the potential of the asset to help promoting local values and social cohesion by facilitating connection with others and the shared social experience. Because of this multitude of values, cultural heritage assets can enhance the cultural and social capital and community welfare in a number of ways (Arnold & Gezer, 2008).

The total economic impact of cultural heritage comprises direct and indirect economic effects. As Tonta (2016) argues, cultural heritage has an indirect effect on economy, by stimulating tourism development (promoting cultural tourism), hospitality sectors and the emergence of new trades and activities, as well as a direct effect by creating employment opportunities and providing income. Assessment of the total economic value of a heritage asset (place, building or object) requires to take into account both direct and indirect effects. According to Arnold and Gezer (2008), while direct values of a heritage asset can be captured comparatively easily, indirect values are difficult to evaluate.

Culture is considered as one of the four pillars of sustainable development along with economy, society and environment. When properly managed, cultural heritage can be instrumental in enhancing social inclusion, stimulating and supporting intercultural dialog, shaping the identity of a territory, improving the

quality of the environment, and nourishing social cohesion, as well as sense of self and belonging (Aparac-Jelušić, 2017).

DIGITIZATION of CULTURAL HERITAGE

Tangible cultural assets decay, intangible assets might get forgotten and digital ones might become obsolete as time passes. Thus, safeguarding the cultural heritage, tangible, intangible and digital, is crucial. Digitization plays a notable role in safeguarding tangible and intangible cultural heritage. The digitization of cultural heritage refers to the interdisciplinary domain that encompasses management of cultural heritage in the digital environment (Manžuch, Huvila & Aparac-Jelušić, 2005).

Digital cultural content helps to capture cultural memory and preserve it for future generations. Various creative expressions and resources of information are increasingly produced, distributed, accessed, and maintained in digital form (Cameron & Kenderdine, 2007). In regard to preservation of cultural heritage, constantly increasing amount of content is one of the biggest challenges faced by cultural heritage institutions (Clark et al, 2002). Another challenge appeared in digital era is about the relatively short life of most digital objects due to the media they are recorded on and the software that runs that media. Both the media and the software are under the risk of becoming obsolete when time passes and that makes information inaccessible (Rothenberg, 1995).

Cultural memory is mediated by designated institutions, primarily LAM (Libraries, Archives and Museums) institutions, which selected, collected, processed, and presented what was perceived and interpreted by these institutions as valuable assets worth preserving. However, there are also some differences among these institutions regarding the challenges they face. For instance, digitization poses more challenges for museums than it does for libraries and archives. First of all, museums collect 2D and 3D objects (while libraries preserve primarily the printed and graphic materials) digitization and distribution of which is challenging since it requires more storage space, special software and high bandwidth to view. Secondly, heritage materials preserved by museums (and generally in archives) are unique, while library materials usually (though not always) have more copies kept in different libraries (Hemminger, Bolas & Schiff, 2005; Tonta, 2008). Moreover, museums host temporary exhibitions (not only objects) which may never be displayed again and have a value on its own to be preserved (Tonta, 2008).

Preserving born-digital cultural heritage resources is also a challenge. Challenges for the digitization of analogue materials (such as legal, financial, organizational and technical issues) are also valid for the preservation of digital materials. There are also some additional questions and concerns. For instance, whether it is possible or worthwhile to preserve all born-digital data (taking into account its proliferation), who decides what to preserve and who is responsible for preservation and in what way? Another problem is the dynamic and intelligent nature of born-digital objects (such as web pages), which requires more sophisticated preservation methods to accommodate changes introduced at a later stage to these objects. Additionally, the cost of long-term preservation of digital information is not very clear (European Commission, 2005).

Several methods have been suggested to deal with the preservation of digital information, such as copying or migrating contents of the old media onto newer ones and making multiple copies and making them available on the distributed network. It is still not known which method is the best for the long-term preservation of digital information (Tonta, 2008). One thing is clear that, unless satisfactory methods to solve the problem regarding long-term preservation of digital information is developed, the loss of precious digital information and digital cultural heritage will continue.

In order to preserve digital heritage, measures are needed to be taken throughout the digital information life cycle, from creation to access. Long-term preservation begins with the design of reliable systems and procedures to produce authentic and stable digital objects. The level of urgency, local circumstances, available means and future projections should be taken into account when strategies and policies to preserve digital heritage are developed. Selection decisions should be based on pre-defined principles, policies, procedures and standards. Legal frameworks are required to secure the protection of the digital heritage. Legal and technical frameworks for authenticity are crucial to prevent manipulation or intentional alteration (UNESCO, 2003a).

Digitisation is not only about making digital copies. Success of digitisation depends on several factors: Interoperability, creation of quality metadata, managing intellectual property rights, accessibility, usability, promotion, user satisfaction etc.

In an environment the variety of systems and applications are constantly increasing, interoperability makes it possible to re-use digital content and increase its visibility. It is essential to clear the intellectual property rights before digitisation and also make sure that what is in public domain remains in public domain after the digitisation. It is also important to present information on the status of the intellectual rights to make users be aware of any restriction on the use of the resource. Releasing digital cultural information as open as well as linked data (within the framework of existing legislation) provides not only economic benefits but also make it possible to be directly queried by any application regardless of programming language or technology. The promotion of digital cultural content is necessary to raise awareness and should be carried out through social media (which is more effective in reaching crowds) as well as traditional online tools (portals and websites). However, it should be taken into account that online communication especially social networks require constant attention. Additionally, information of interest to users, on websites and portals, must be visible, up-to-date, and easily located. All digital products must be designed and created by taking into account users' skill levels, needs, requirements, information behaviours, as well as the usability requirements to ensure accessibility. Making cultural heritage resources appealing to visitors requires cooperation with all relevant public and private stakeholders at the local, regional, national, and international levels (MiBACT, 2014). Consistent metadata makes it easy to explore the content, helps to reveal connections between items and improves exposure to external search engines. Providing the metadata, navigation, and supporting content (e.g., curator videos) in widely spoken languages (at least in English, if the native language is different) brings digital library closer to the goal of being universal (Nabi, 2012). Using products made with innovative technologies such as digital storytelling and transmedia storytelling³ makes cultural heritage assets more accessible and engaging (MiBACT, 2014).

The iBeacon project can be shown as an example for the use of digital storytelling. It is developed by two libraries in Hamilton, Canada as a part of a larger digital storytelling initiative (<http://www.hamiltonstories.ca/>) and involved the capture and distribution of digital stories about Hamilton. The iBeacon app which is based on proximity-based technologies is used to promote interest in the city and greater appreciation for its cultural heritage. If users install the app on their smartphones, then their mobile device sends a notification when the users are physically close to one of the cultural heritage included in the project and can read the digital stories. Findings of a research on this application indicated that participants were appreciative of the digital stories and the iBeacon app (Nosrati, Crippa & Detlor, 2018).

Crowdsourcing, involvement of volunteers in a digitization project, is another suggestion made for cultural institutions. People (experts and novices) can contribute to the description of digitized objects and interpreting documents. For instance, projects by the National Maritime Museum and the Royal Observatory in Greenwich have worked with volunteers in transcribing documents and recognizing details in photographic collections (MiBACT, 2014). Another example is the crowdsourcing program launched by The Library of Congress (crowd.loc.gov), that connected the Library with virtual volunteers to transcribe text in digitized images from the Library's historic collections.

EUROPEAN FRAMEWORKS, PROGRAMMES, POLICIES and STRATEGIES

There are numerous EU documents, related to frameworks, programmes, projects, policies and strategies, which emphasize the importance and address issues related to digitization, accessibility, management, and preservation of cultural heritage.

In the mid 1990s ICT was considered as one of the key drivers in the European Commission (EC) policy documents which defined the principles of the information infrastructure, and provided a framework for

³ Digital storytelling: narration technique using digital means. Transmedia storytelling: narration technique that makes it possible to tell stories using various means in different locations, such as one segment via computer, another in a museum, one through a film, and another through multimedia installations.

building up national digital collections. On the second half of 1990s, the EC and national governments created regulatory frameworks to remove the obstacles regarding the accessibility. Breaking up the national telecommunication monopolies to lower access costs was one of the important steps taken (European Commission, 2002). From the beginning of the 2000s, the EC and member states have invested millions of Euros in supporting cultural heritage institutions to digitize their collections and make them available on the Web (Aparac-Jelušić, 2017).

The Lisbon Strategy and the following Action Plans (*eEurope2002* and *eEurope2005*), targeted expanding European content in global networks by the growing use of digital technologies. European Frameworks projects were funded in order to find solutions to the problems caused by fragmented digitization efforts (which involved duplication of efforts and as a result waste of valuable resources) and lack of coordination mechanism for digitization programs across Member States (European Commission, 2000x, European Council, 2002).

Lund Action Plan included recommendations to support coordination and make digitization activities sustainable. Objectives of this action plan were increasing the visibility of ongoing activities, sharing experiences by the exchange of best practices, adopting common standards and compatible procedures, and offering e-services (that are interoperable and extendable) to enable the creation of a unified European platform (European Commission, 2001).

Several digitisation programmes and networks have been introduced to preserve cultural heritage and facilitate access to a richer European scientific and cultural heritage through the web. Examples include DIGICULT (Digital Heritage and Cultural Content Programme of the European Commission), MINERVA (Ministerial Network for Valorising Activities in Digitisation), COINE (Cultural Objects in Networked Environments), CALIMERA (Cultural Applications: Local Institutions Mediating Electronic Resources), NEDLIB (Networked European Digital Library) and ERPANET (Electronic Resources Preservation and Access Network).

The European Commission's *i2010: Digital Libraries* initiative aimed to provide access to "Europe's cultural and scientific heritage at a click of a mouse" (European Commission, 2005b). The target was making Europe's diverse cultural and scientific heritage available online and easier and interesting to use for different reasons (work, leisure and education).

Europeana was funded as part of the *i2010* policy. The aim was/is to provide online access to the digital content of European museums, libraries, archives and audio-visual collections. It involves representatives of heritage and knowledge institutions including numerous national libraries. The *Europeana* web site, launched in 2008, through a multilingual user interface, provides users direct access to millions of digital objects such as film material, photos, paintings, sounds, maps, manuscripts, books, newspapers and archival documents. The number of digital objects available through the *Europeana* portal reached about 58 million in 2019 (www.europeana.eu). The *Europeana* (European portal to both digitized and born-digital heritage) is considered as one of the most visible and comprehensive digitization initiatives. A sustainable financing and governance model is detected as the main challenges for the coming years were in relation to enriching *Europeana's* content (European Commission, 2009a).

In accordance with the communication *i2010: Digital Libraries* from 2005 and the Recommendation on the Digitization from 2006 (European Commission, 2006) that provided the basis for the development of strategic and operational frameworks, many EU institutions produced a series of strategic documents related to the *Europeana* in order to help to bring the vision of the European Digital Library to life.

A staff working document, prepared as an annex to the *i2010: Digital Libraries*, discussed the organizational, financial, technical and legal challenges that need to be handled to realize the digitization process. The cost of digitization, technical issues such as interoperability and metadata creation were also addressed in this document (European Commission, 2005b).

In the *Recommendation on the Digitisation and Online Accessibility of Cultural Material and Digital Preservation* (2006), Member States are requested to tackle the following areas: Large scale digitization by setting up digitization facilities; online accessibility by promoting the development of the *Europeana* as the multilingual access point to Europe's cultural heritage; and digital preservation by establishing national plans and strategies for the long-term preservation of digital material.

European Agenda for Culture in a Globalizing World (European Commission, 2007b) indicated digitization as one of the five priority areas in the context of intercultural communication. The promotion of access to cultural heritage, digitization, multilingualism, cultural tourism, synergies with education became priorities for the period 2008–2010 (European Commission, 2007a, 2008a). In the following plan for 2011–2014 (adopted in 2010) cultural heritage was also listed as one of the priority areas along with cultural diversity, intercultural dialog, and accessible and inclusive culture.

Europe 2020 strategic document aimed to achieve smart, sustainable, and inclusive growth in the European digital environment. Interoperability and standards, security, fast internet access, and enhancing digital literacy skills were addressed as important pillars (European Commission, 2010).

Digital Agenda for Europe: a Europe 2020 Initiative: Digitization and Digital Preservation (European Commission, 2014) is another strategic document which considered cultural heritage to be one of the crucial elements in achieving smart, inclusive, and sustainable growth. This document covers copyright issues and open access policies and strategies that are essential in forming the legal framework for digitizing cultural heritage, making it accessible to all, and unlocking the potential for its re-use. The value of the online accessibility to Europe's cultural heritage; need for close collaboration between EU Member States and cultural institutions; participatory governance of cultural heritage; skills, training, and knowledge transfer; traditional and emerging heritage professions; risk assessment and prevention for safeguarding cultural heritage were other subjects referred in the Agenda.

Commission Recommendation on the Digitisation and Online Accessibility of Cultural Material and Digital Preservation (European Commission, 2011) also provided guidelines for the selection of cultural heritage objects for digitization, particularly in regard to Europeana. User-oriented based selection was emphasized. Special attention was paid to the inclusion of hidden treasures which are known only by experts and items that are too fragile for users to consult, or to be displayed. The recommendations also suggested to develop appropriate mechanisms to avoid the duplication of digitization efforts. European Member States were invited to several actions: to consolidate their strategies and targets for the digitization of cultural material; to consolidate the organization and provision of funding for digitization; to promote public-private partnerships; to improve the framework conditions for the online accessibility and use of cultural material; to contribute to the further development of Europeana; and to ensure longterm digital preservation (European Commission, 2011).

European Commission Report on Cultural Heritage: Digitisation, Online Accessibility and Digital Preservation (European Commission, 2018) reviewed and assessed the overall actions and progress achieved in the European Union in implementing the Recommendation from 2011. The objective of the report was to monitor and track the implementation progress in each Member State in the areas addressed by the Recommendations from 2011 and to provide a comprehensive overview of Member States strategies and policies on digitisation of cultural heritage; to highlight best practices; and to serve possible synergies with initiatives at the EU level, including the implementation of the *Declaration of Cooperation on Advancing Digitisation of Cultural Heritage* signed at the Digital Day 2019.

European Cultural Heritage Strategy for the 21st Century focused on several priorities such as the contribution of heritage to the improvement of citizens' quality of life, education and lifelong training as well as attractiveness and prosperity of Europe, and participatory governance in the heritage field (European Heritage Heads Forum, 2015). All the policies, strategies and programmes regarding cultural heritage prove that the vision of the EC included digitization, accessibility, and digital preservation of cultural heritage and scientific knowledge, and highlighted the role heritage institutions and benefits of digital libraries. Thus, awareness from heritage institutions of their duty to safeguard and provide access to cultural heritage assets they possess is getting more important.

LIBRARIES and CULTURAL HERITAGE

Although they hold disparate collections, libraries, archives, and museums have a common mission, which is to make their collections (information and cultural heritage resources/assets) accessible to intended users (public and academic communities). Certainly, making resources accessible to users requires to take other actions such as collection (gathering), organization, preservation and promotion.

Cultural Heritage as physical as well as digital objects has been housed in libraries and digital libraries for a long time. Libraries, in fact, have a long history of collecting, storing, organizing, preserving and providing access to cultural heritage materials. In order to enhance access, during their history, libraries have duplicated and/or reformatted documents. In medieval times, monks transcribed documents by hand; in twentieth century, microfilming projects were initiated to preserve print holdings, in particular newspapers. Thousands of rare and/or crumbling newspapers reformatted. Beginning in the 1990s and accelerating in the 2000s, increasing number of libraries (all sorts from academic to public) started to digitize their unique holdings, including photographs, postcards, books, manuscripts, maps, and analog audio and video recordings. Today digitization is the ultimate method for preservation. Ancient documents as well as precious and fragile materials because of their historical and cultural importance, combined with century of exposure and degradation are the prime candidates for digitization. Digitization not only contributes to the conservation and preservation of heritage resources through high quality images, also provides improved access by the citizen to these resources (Boock & Vondracek, 2006)

Documentary works in all formats (including digital) are a key part of humankind's cultural heritage and they are kept in a wide range of libraries (including special, national, academic, research and public libraries). In order to provide access to future generations, organizing, preserving, and safeguarding cultural heritage in their collections, is at the core of the work of libraries. Unfortunately, documentary works (like other forms of cultural heritage) are under constant threat of destruction. Neglect, destruction in war, conflict or natural disaster are some of the examples for threat (IFLA, 2017). Significant collections worldwide have suffered a variety of fates. In addition to destruction, looting and dispersal, illegal trading, inadequate housing and funding have played a part in it. Much as vanished forever; much is endangered (UNESCO, 2019).

Many libraries and archives were looted or destroyed in various countries (e.g. Libya, Egypt, Syria, Yemen, Bosnia). For example, during the war, Iraq lost many of its cultural heritage materials such as books, journals, newspapers, and manuscripts. According to the director of the Iraq National Library, 60 percent of the library's historical documents were lost and 25 percent of its books were looted or damaged (Moustafa, 2017). The cultural heritage that was lost due to conflicts in the Balkan countries, in 1990s, can be given as an example from Europe. The National and University Library in Sarajevo was set on fire in 1992. More than million books, thousands of rare books and manuscripts were destroyed. Only 10 percent of the whole library collection was saved (Tonta, 2009). The archival documents belonging to the period of 1878-1918 were damaged when The Archives of Bosnia Herzegovina was set on fire at the beginning of 2014 (Tonta, 2016).

These events prove the importance of information professionals' work in digitizing cultural heritage assets to safeguard and preserve the history of the mankind. There are other examples to show libraries' role in safeguarding cultural heritage. In 2013 when armed groups occupied Northern Mali and Timbuktu, librarians and volunteers smuggled the manuscripts to safeguard them during the occupation. Since then, the manuscripts have been kept in the capital and are undergoing restoration and digitisation work. After the Earthquake in 2011, libraries from across Japan came together to help rebuild lost infrastructures, safeguard and preserve damaged materials (IFLA, 2017).

Preservation of library and archival materials focuses on preventing or slowing down their deterioration. Implementing the practices of preventative preservation rather than reliance on *after the event* intervention by conservation is given priority (Harvey, 1993). Additional to digitization of unique heritage, libraries and archives undertake activities to preserve them by providing proper housing, protection from mutilation and theft, and occasional repair and restoration (Ogden, 1994). Facilitating easy access and reference are other services offered (Ekwelem, Okafor & Ukwoma, 2011).

In libraries, although not as common as paper-based resources, there are tendencies to collect other types of cultural heritage resources. One example is the initiative started by Kanye Public Library in Botswana to capture, record and document cultural events such as cultural day celebrations and provide access to this collection of videos and photos (Setshwane & Oats, 2015). Another promising practice which can be used to connect libraries with cultural heritage could be the game of digital re-discovery of culture as described in their article by Mac An Airchinnigh, Sotirova and Tonta (2006).

When the year of 2018 was declared *the Year of Cultural Heritage⁴ in Europe*, it was indicated as an opportunity by IFLA to draw attention to the involvement of libraries in heritage from the oldest manuscripts to the newest born-digital materials. According to IFLA (2018) making it widely known might help increasing awareness especially at the political levels and might increase the chances for libraries to receive the support (both legally and financially) required to continue undertaking their work in this field effectively.

Libraries have always been at the forefront of efforts to fight against various threats by safeguarding, preserving and providing access to documentary cultural heritage. "Providing the community with sustainable access to its heritage helps to foster creativity, build resilient societies, and further development. It is therefore crucial to involve libraries in all discussions and actions around the preservation and safeguarding of cultural heritage, especially in the context of the 2030 Agenda. Libraries are key partners for any effort to ensure preservation and access to human kind's cultural heritage for future generations" (IFLA, 2017).

Today vast amount of libraries, museums and archives have already started to digitize their collections and place them on the web. By digitising their collections, cultural heritage institutions make information/resources that was previously available only to a limited group of users accessible to all. The benefits of digital access for collections are identified as follows: "Easy to be viewed from anywhere, at any time; can be readily printed from the web; viewers can find what they are looking for quickly and independently; electronically enhanced images can be viewed with greater legibility; increased use of collections and facilitated learning and research" (Jones, 2001 as cited in Ekwelem, Okafor & Ukwoma, 2011).

Due to their special collections the role of the national libraries as the guardian of the national cultural heritage has long been recognized. During the last couple of decades, national libraries worldwide have become active in digitising their holdings and promoting them on their websites in different ways. Findings of a research carried out on 50 European national library indicate that almost all (94 percent) have either digital holdings or a digital library, and about half of these libraries (58 percent) create virtual exhibitions although there are significant differences in quality and functionality among them (Šalamon-Cindori, 2017).

Recommendations regarding the digital preservation of cultural heritage in libraries include: providing necessary infrastructure; providing adequate funding; taking measures against changing formats/standards/hardware/software to ensure sustainability; developing online services to provide access to cultural heritage; providing large bandwidth Internet connectivity; making online services available in other languages; promoting cultural heritage online including the social media; monitoring and measuring the efficiency of online operations; providing access to these services through mobile devices; backing up both the content and services; developing creative services that help increasing public use; developing measures for quality assurance; training librarians who are responsible from these operations; looking for best practices to use them as the basis for developing new services and/or improving the existing ones (Šalamon-Cindori, 2017; Ekwelem, Okafor & Ukwoma, 2011)

As mentioned above, training of librarians, in other words, capacity building in preservation techniques is important. One of the primary problems faced by libraries is lack of human resources, particularly, in the area of digitization. There is no doubt that, digital projects (digitization) require new skills. Cultural institutions should give priority to their human resources development. Even when the digitisation is outsourced, there is a need for library staff to learn at least the basics to keep up managing their digital collections and services (Ekwelem, Okafor & Ukwoma, 2011).

Collaboration among libraries, archives and museums has been also a popular topic. There is no doubt that their collections are complementary and they all preserve and provide access to cultural heritage. Learning from each other (libraries and archives can learn from museums about how to better exhibit their heritage resources and museums can learn from libraries about how to provide better access to their collections) and lending to each other are the opportunities and real life examples (Zorich, Waibel

⁴ The aim of the European Year of Cultural Heritage is stated as "to encourage more people to discover and engage with Europe's cultural heritage, and to reinforce a sense of belonging to a common European space. The slogan for the year is: Our heritage: where the past meets the future" (https://ec.europa.eu/programmes/creative-europe/content/eu-year-cultural-heritage-2018_en).

& Erway, 2008). Certainly, cooperation and collaboration efforts are not limited with LAM institutions. For instance Tokic and Tokic (2017, 2018) argues that libraries' cultural heritage can contribute significantly to the development of tourism. Library facilities and services (library buildings, specific features of the library, heritage assets in their holdings, various cultural events, concerts, films, exhibitions, services) can be interesting to tourists from different aspects. Thus, it is crucial to establish a successful cooperation of librarians who know the specific resources of libraries with representatives of local authorities, tourist boards, marketing professionals and tourism entrepreneurs.

DIGITAL LIBRARIES

Evidence proves that, today, launching a digital library is the most common practice for the preservation of cultural heritage among heritage institutions, particularly in libraries. From the late 1990s onward, the use of cultural content in digital libraries has increased exponentially. This is mostly due to changing circumstances such as changes arising through research, development, and innovation in the ICT industry (Poole, 2010). Many novel tools and techniques have been developed to facilitate digitization, protection, promotion, and access to cultural heritage information.

The mediation of cultural heritage through digital libraries as well as tools, and standards for digitization and management of different kinds of digital objects and artifacts are the themes well explored and presented in the literature (e.g. Manžuch, Huvila, & Aparac-Jelušić, 2005; Cohen & Rosenzweig, 2006; Feather, 2006; Cameron & Kenderdine, 2007; Dahlstrom, 2015; Myburgh and Tammaro, 2013; Dalbello, 2004, 2009a, 2009b, 2015; Ruthven and Chowdhury, 2015). National and international grants have been awarded to digitization projects in libraries, with a goal to create more digital content and make it available to audiences in Europe and worldwide. Digitization guidelines, handbooks and best-practices have been produced over the last decades (e.g., Beagrie & Jones, 2001; Deegan & Tanner, 2001, 2006, 2008; Lee, 2001; European Commission, 2002; Drake, Justrell-Riksarkivet & Tammaro, 2003; Hughes, 2004; Abu-Zayed, 2009; Tanner, 2001). Numerous books on digital libraries have been published since 2000 (e.g., Fox & Urs, 2002, Harvey, 2005; Tedd & Large, 2005; Bearman, 2006; Rydberg-Cox & Jeffrey, 2006; Nicholas & Rowlands, 2008; Baker & Evans, 2009; Blandford & Bainbridge, 2009; Verheul, Tammaro & Witt, 2010; Hughes, 2011; Chowdhury and Chowdhury, 2003).

On one hand, digital technologies enabled cultural organizations to overcome the traditional constraints imposed by physical sites, in other words, expanded libraries' audience reach and opened new possibilities for new activity and services. Digital libraries have significantly improved the visibility and the accessibility of cultural heritage material for research, learning, and enjoyment (Chowdhury, 2015; Ruthven & Chowdhury, 2015). On the other hand, they have created new concerns about quality, sustainability, return of investment, and long-term cost (Chowdhury, 2015). As Ruthven and Chowdhury (2015) indicate, the processes of building up and managing digital libraries involve a number of challenges. For instance, because digital libraries include a variety of cultural heritage resources (ranging from stone carvings to manuscripts, paintings, sound recordings, films, video games, etc.), each of these objects may require different metadata, indexing, retrieval, and filtering techniques to support better functionality.

Because the volume of digital cultural heritage data is growing quickly, it is a priority to manage such a huge amount of data in an efficient and selective way, making it available to the researchers and the citizens worldwide. Efforts were made from the mid-2000s to assure that treasures of heritage institutions originally *hidden* from the public become available and accessible to all who are interested in these valuable special collections (Aparac-Jelušić, 2017). Two massive and largely international projects carried out to realize this goal: the World Digital Library (WDL) and Europeana.

The idea of WDL dates back in 2005 and the design of the prototype was realized through a consultative process that involved UNESCO, IFLA, and individuals and institutions in more than forty countries. The aim of WDL is to provide free and easy access to world's cultural heritage via internet. The five main features of WDL are indicated as consistent metadata, description of each item, multilingualism, technical development and collaborative network (Nabi, 2012).

Europeana was funded as part of the i2010 policy. The aim was/is to provide online access to the digital content of European museums, libraries, archives and audio-visual collections. It involves representatives of heritage and knowledge institutions including numerous national libraries. The Europeana web site, launched in 2008, through a multilingual user interface, provides users direct

access to millions of digital objects such as film material, photos, paintings, sounds, maps, manuscripts, books, newspapers and archival documents. The number of digital objects available through the Europeana portal reached about 58 million in 2019 (www.europeana.eu). The Europeana (European portal to both digitized and born-digital heritage) is considered as one of the most visible and comprehensive digitization initiatives. A sustainable financing and governance model is detected as the main challenges for the coming years in relation to enriching Europeana's content (European Commission, 2009).

A great percentage of digital collections are unique all over the world especially in regard to the collections in languages other than English. Majority of digital libraries, especially digital library projects of national libraries, focus on collections in their own languages. One of the major goals of any digital library is to provide easy access to information and knowledge to users and to be accessible over time. The users of cultural heritage information may vary from experts to novice users and each of which may have different needs and information-seeking behavior that need to be considered while designing information access systems (Ruthven and Chowdhury, 2015).

Beaudoin (2012) highlights the need for digital library frameworks that would enable cultural heritage to be used in different situations, by different users. In her view, contextual information is fundamental to the understanding of many aspects of digital content. Through the development of eight dimensions of context (technical, utilization, physical, intangible, curatorial, authentication, authorization, and intellectual) she proposed a fuller record of digital content with the intention of ensuring that digital preservation efforts include recording contextual information about each object to enable future retrieval, assessment, management, access, and use.

Liew (2012) warns that there is also a problem regarding the indigenous cultural knowledge *hidden* in a number of cultural heritage institutions. Such collections of indigenous cultural knowledge are held in many local LAM institutions. These are part of oral heritage collections and could be digitized only if the institutions that collected them consult with indigenous communities, putting in place internationally acceptable guidelines, policies, and practices.

According to Beagrie (2000?), digitization activities related to cultural heritage are very resource intensive, and dependent upon the relationship between different stakeholders. Therefore, using a holistic lifecycle approach for digitization initiatives is needed to develop a sustainable and successful digital library.

Digital libraries are often the key institution through which citizens can engage with their history and culture. They have an important place in restoring cultural assets to public view where the original is lost or too fragile for display and use. Delivering cultural heritage resources has become an imperative associated with the core mission of libraries (Deegan & Tanner, 2006b). Attempts to reach out to new audiences and to offer to current audiences new resources and services are major driving factors behind many digital libraries and digitization programs. Tanner (2005) also claims that "the justifications for delivering cultural resources digitally are rarely made on economic grounds, as the returns on investment are relatively small, but the cultural, educational, and prestigious returns are quite high".

Another indispensable aspect of digital libraries for cultural heritage in general is the constant fear that data might be destroyed or lost, which raises a concern for its protection and preservation. The documentary heritage has always been at risk of damage or destruction through natural or human forces: fire, flood, warfare, or neglect (Deegan & Tanner, 2006a). The main reasons for the threat to digital heritage or, more precisely, digital obsolescence, are two factors that put in jeopardy current efforts in archiving and preserving what has been digitized or digitally born: first, since the technology develops ever more rapidly, the time before a particular technology becomes obsolete is getting shorter; and second, "unlike their analog counterparts, digital resources are much more 'unstable,' with the effect that the integrity and authenticity of digital cultural resources is corrupted" (Geser & Mulrenin, 2002).

Boock & Vondracek (2006) lists the tasks and responsibilities for digitization as follows: "proposing an item or collection for digitization, giving final approval for digitization efforts to move forward, coordinating the efforts, selecting content, negotiating with groups outside the library, assessing user needs (e.g. determining the audience, how the audience will search and retrieve information, what information and context the audience will require), determining web interface usability, selecting and developing metadata structures (e.g. determination of schema, field selection, field labeling, and data dictionary

creation), selecting and creating controlled vocabularies, digitizing, assigning metadata, installing, maintaining and supporting software, programming, designing web pages, training and instructing users of digital content, promoting the collections and public relations, legal and rights management, preserving and refreshing digital content”.

Hargreeves’ report (2011) indicates copyright related challenges among others. Many approaches have been documented and opinions presented in the literature on copyright issues: from the ideas of Open Access and Creative Commons to the proposal that calls for the abolishment of the copyright. The decentralization of responsibilities and resources, as in Europe where different approaches have been taken, is another obstacle.

Today, a large number of online cultural heritage resources is made available through digital libraries websites. However, the discoverability of these resources through Internet search engines, and their re-use in other domains, are still underdeveloped. Many cultural heritage resources are not of a textual format (e.g., images, video or sound) and those that are, often lack machine readable full-text for search engine indexing. For discoverability, the creation of metadata has relied on. However, the existence of many individual digital libraries, maintained by different organizations, brings challenges to the discoverability of the resources by potential users. Metadata aggregation is an approach where centralized efforts (e.g. Europeana) facilitate their discoverability by collecting the resource’s metadata (Freire, Meijers, Voorburg & Isaac, 2018). However, the costs related to the implementation of the technical solution for aggregation are high for data providers.

Nowadays, cultural heritage institutions are applying technologies designed for the wider interoperability on the Web. Freire, Meijers, Voorburg and Isaac (2018) have identified the Schema.org vocabulary and linked data as potential technologies for innovating cultural heritage metadata aggregation and proposed the use of vocabularies for description of datasets and their distributions, namely DCAT, VoID and Schema.org. They also claim that for those already publishing linked data in their digital libraries, the process for sharing their data with cultural heritage aggregators would become extremely simple and for those that do not yet publish linked data in use, implementing the technical requirements for cultural heritage aggregation based on linked data, would be more rewarding, since wider interoperability with other domains than cultural heritage would come as a valuable extra benefit.

CURRENT STATE in EUROPE

The Cultural Heritage: Digitisation, Online Accessibility and Digital Preservation report (European Commission, 2018) consolidates national implementation progress reports that were submitted by 27 Member States and Liechtenstein, for the 2015-2017 period. Member States included in the report are: Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland and Sweden. This report presents the current situation regarding the digitisation, accessibility and long-term preservation of cultural heritage in these countries, including the best practices. In this section a summary from the progress report and country reports will be presented⁵.

Digitisation Schemes

More than two thirds of Member States centralise the country’s digitisation strategy for cultural heritage at the Ministry level, however, the national institutions, especially the national libraries across Member States play a key role in the process. There is no one-size-fits-all approach that Member States employ for planning digitisation of cultural heritage. As digitisation of heritage is a multi-disciplinary endeavour that requires mobilising funds and diverse expertise for implementation (e.g. legal and technical), and as cultural heritage is at the core of social and economic value of a country, Member States balance digitisation policies between centralised and decentralised approaches, sometimes relying on both regional and sectoral directions.

⁵ Because all information in this section comes from the consolidated report which is referred in the beginning, separate citations will not be used through out the section.

Digitisation Endeavors: Targets and Priorities

In terms of quantitative targets for digitising cultural resources, most Member States report that targets are closely tied to available budget and the goals of the programmes. Targets are generally set by the individual cultural heritage institutions based on the number and type of objects in their collection. An example of digitisation targets set per region is observed in Spain. Quantitative targets are also set per domain (e.g. library, archive, museum collections). Digitisation of library and archival cultural resources including manuscripts, books, journals and historical newspapers, is one of the main digitisation priorities. At least eighteen Member States mention digitisation initiatives for text based cultural and historical resources.

The digitisation of museum objects, including images, photographs, and sculptures was also observed as a priority for Member States. At least seventeen Member States mention digitisation initiatives for museum objects. Sound and audiovisual heritage is also increasingly becoming a priority. Thirteen Member States reported digitisation programmes and actions of sound and/or audiovisual cultural heritage. Austria reported upcoming digitisation projects in this area: First one includes films from the period of 1918 and 1938 and the second one involves digital restoration focused on the surviving films from the period between 1938 and 1945.

According to the progress reports, there is an increase of funding programmes focused on digitising immovable cultural heritage such as monuments, forts, palaces, and archaeological sites. Eleven Member States reported digitisation initiatives in this area. Out of these countries, Bulgaria, Spain, Greece and Poland reported 3D digitisation of monuments and sites. In Bulgaria, within the Digital Cultural and Historic Heritage of Plovdiv Municipality Project a digitisation center was established and 3D models were created (<http://digital.plovdiv.bg/EN/Pages/default.aspx>). A 3D image digitisation project managed by the Regional Authority of Galicia, in Spain, covering notable pieces from the collections of the museums as well as overhead drone images of archaeological sites. The ZABYTEK.PL project (www.ZABYTEK.PL) from Poland is about Polish monuments and historical buildings, along with their descriptions, photographs, 3D models. 3D digitisation of monuments and sites is also taking place in Greece.

At least six Member States reported digitisation programmes for intangible cultural heritage. For example, in Belgium, the Flemish government established an official Inventory of Intangible Cultural Heritage of Flanders. This initiative highlights the strong community involvement that is essential when it comes to intangible cultural heritage.

Quality Assurance

Increasing the quality of digitised material is gaining importance, thus, more than half of Member States recognize the importance of minimum standards of quality in digitised cultural heritage, through published guidelines and technical standards. Fifteen Member States published guidelines, technical standards and specifications for digitisation that act as main points of reference for digitisation projects. These guidelines cover a wide range of topics such as ICT standards, visualisation of and access to digital objects (structured metadata), interoperability, storage, long-term digital preservation, copyright, findability, 3D digitisation and web statistics. These guidelines are generally compiled by the Ministries, competence centers or as a result of public projects. For example, in Greece, guidelines concerning interoperability, metadata and digitisation specifications were published by the National Documentation Centre. In Belgium, a toolbox named TRACKS6 was created by the Flemish Government.

In most cases, institutions are required to follow these published guidelines when digitising under specific funding programmes and/or in order for the digital objects to be stored in the central digital archive and presented through the national portal. In some cases institutions have their own initiatives to guarantee the quality of digitised material. For instance, in Finland, The National Archives has its own Digitisation Quality Criteria.

Monitoring the Progress

In terms of monitoring progress in digitisation, most Member States adopt a centralised approach while some adopt the decentralised approach. Centralised monitoring require more coordination and beneficial to avoid unwanted duplication of digitised objects, therefore saving costs and making digitisation more effective, and to enable easier access and sharing of the digitisation results across the country.

Sixteen Member States reported centralised monitoring of digitisation realised at the national level by the Ministries or at the regional level. In most instances, monitoring done at the national or regional level is part of the national/regional digitisation plans and projects, or the national digitisation funding programmes most of which include a methodology for monitoring digitisation that may comprise of set performance indicators and percentage based targets tracked through various reporting mechanisms such as national registries. The Digitisation Register of the Czech Republic (<http://www.registrdigitalizace.cz/>) is an example for the specialised national project, with the aim to run national registry of digitised documents (book funds). It is designed especially for libraries or other memory institutions that digitise their collections. In Slovak Republic, all digitised cultural materials are registered in the National Register of Digitisation, which was developed as part of the national project and progress of digitisation is monitored regularly at the Ministry level.

Eleven Member States reported decentralised monitoring of digitisation of cultural heritage resources through agencies, competence centres, the national aggregator or national institutions. For example, in Sweden, both Myndigheten för kulturanalys (Swedish Agency for Cultural Policy Analysis) and DIGISAM function as national monitoring channel. In Germany progress is tracked by the German Digital Library and the portal www.kulturerbedigital.de. While there is no scheme as such to monitor progress, the German Digital Library (Deutsche Digitale Bibliothek, DDB) collect all digital content from German heritage institutions. In Finland, practices of reporting and monitoring the digitisation of cultural material vary between sectors. Statistical monitoring is currently carried out in the museum sector. The National Library and the National Archives provide some quantitative data on digitised collections online in addition to internal monitoring. Moreover, all national cultural heritage institutions are to monitor and report on the digitisation of their cultural materials as part of their performance agreements drawn and concluded by the Ministry. Monitoring of digitisation projects funded with state subsidies is based on the Discretionary Government Transfers Act.

Public-private Partnerships

Main Public-private partnerships (PPPs) are between national libraries and technology companies such as Google and Proquest that are known to have interest in text based content. Crowdfunding has emerged as an alternative source of funding in the digitisation of books and audiovisual materials.

Some examples of PPPs between national or state libraries and Google were reported by Czech Republic, Germany, Netherlands, Austria and Italy. They all focused on large-scale digitisation of historical books. In Czech Republic 150,000 books have been digitised and made available since 2011 when a PPP was established between the Czech National Library and Google. In Germany, the PPP with Google has led to the digitisation of almost 2 million books. The National Library in the Netherlands has been cooperating with Proquest and Google for the digitisation of printed material. Austrian National Library and Google started a PPP in 2010 to digitise the entire historical books collection of the Austrian National Library (600,000 books). The books that have been digitised so far are available in full text via Google Books and the Austrian National Library. Italy also reported a PPP with Google Books that started in 2010 which has an outcome of 232,474 scanned volumes. The National Library of France and Proquest since has digitised 5.5 million pages from five collections of Early European Books. National Library of Spain has started a mass digitisation project with Telefónica (telecommunication compy).

Most Member States also reported digitisation projects between culture and creative institutions with organisations from other sectors, including education, science, technology, research, but also healthcare, environmental and ecological sectors, etc.. Such projects were reported to have various aims from digitisation to virtualization and access. However, such partnerships differ from PPPs in the sense that the driving force behind them is public, not private funding.

A crowdfunding campaign to finance the reconstruction and restauration of the Austrian silent movie *The City without Jews* was launched by Filmarchiv Austria in 2016. More than 700 supporters made it possible to preserve the film by contributing money.

Optimised Use of Digitisation Capacity

There are a number of ways that Member States pool resources and competences together to achieve economies of scale for digitisation. Two thirds of Member States have established digitisation and competence centres with the aim to centralise funds for digitisation and thus lower the costs involved, consolidate the digitisation processes to focus on and ensure quality, organise trainings and share best

practices. Two thirds of Member States share services or facilities such as repositories, content management systems or IT tools at the national level or cross-border, in order to optimise digitisation capacity. The aim of such sharing of services and facilities is to store and manage digital objects and data more efficiently, while avoiding overlap of efforts, and disseminating and making better-quality content available online.

In many of the Member States, economies of scale and the importance of coordinated digitisation activities are encouraged and supported in the national digitisation strategy or plan. For example, in Lithuania, one of the tasks of the Programme of Actualisation and Preservation of Digital Cultural Heritage 2015-2020 is to ensure coordinated digitisation activities of memory institutions and provision of consolidated digitisation services through the network of digitisation competence centres. Estonia reported several cross-border collaborations with other Baltic countries, Lithuania and Latvian, that focused on sharing best practices and establishing uniform standards for mass digitisation.

Apart from digitisation and competence centres, national or cross-border collaborations, or sharing of services and facilities, national and crossdomain/thematic aggregators also contribute to economies of scale. A number of Member States reported collaborating in European Union funded projects or cross-domain aggregators such as Archives Portal Europe Network of Excellence (APEX).

In some Member States, economies of scale in terms of digitisation is addressed at the regional level. For example, in Belgium: the Flemish Institute for Archiving (VIAA) provides a common approach to the digitisation of the Flemish audiovisual heritage. More than 140 organizations, such as broadcaster's archives, libraries, archives, museums and performing arts institutions throughout Flanders, provide content for VIAA's digitisation

Preserving Public Domain Status After Digitisation

Measures employed by more than two thirds of Member States to ensure that material in the public domain stays in the public domain after digitisation through various initiatives.

Cultural heritage institutions are encouraged to make sure that digitised material in the public domain is not subject to copyright or is released under an open license, from making the national funding and EU structural support for digitisation conditional on making the digitised objects available for public use without any restrictions but without infringing upon the copyrights of the works, to issuing guidelines and organising trainings on the topic. For example, in Bulgaria, all digitised reproductions created during the Digital Cultural and Historic Heritage of Plovdiv Municipality Project have been made accessible to the public through the project's website.

Despite the fact that the principle saying that public domain material should remain in the public domain after digitisation has mostly been accepted, seven Member States reported some kind of obstacles in connection with the following issues: a) fear of losing control and income by institutions in case of giving access for free to their most valuable collections; b) legal uncertainty, such as lack of relevant legal provisions at EU and national level regarding public domain and its status after digitisation or difficulties in clearly identifying objects to be in the public domain; c) possible rights of photographers and other digitising agents in relation to their digitised output. Germany specifically reported that the descriptive texts attached to museum objects are often copyright protected and also taking a photo of an artwork or an object can result in rights of the photographer on his work. Similarly, Romania reported that the author of a photographic reproduction of a public domain work has the copyright on the reproduction. So the digital images of public domain works are not in the public domain.

In order to promote the widest possible implementation of the digitised public domain material principle, Member States have taken different actions such as to make the funding conditional for digitisation projects that the digitised output is in the public domain; in order to clear the uncertainties to organise information campaigns, trainings and workshops.

Access to and Re-use of Digitised Material

The majority of Member States (25) employ several channels to increase access to and promote re-use of digitised cultural heritage with public domain status. Actions for promoting both access to and re-use of the digitised resources include dedicated portals, databases and repositories, as well as wikis, blogs, social networks, crowdsourcing, hackathons or web and media campaigns.

Ten Member States reported collaborations with or the publication of cultural heritage datasets on Wikipedia. For example, in Belgium, the centre of expertise in digital heritage PACKED vzw has been working with Wikimedia since the beginning of 2017 to publish datasets on a wide and diverse range of topics including. In the Netherlands in 2016, 900,000 items from Dutch heritage collections were available for re-use on Wikipedia Commons and 60,000 of these items were used in 900,000 Wikipedia articles. These articles generated 220 million page views a month. This is way beyond the audience reached by heritage organisations own web sites.

Many Member States have been reporting non-commercial re-use initiatives such as re-use for scientific and higher education research. For example, Greece reported initiatives such as the National Archive of PhD Theses (EADD) providing access to PhD theses from all Higher Education Institutions in Greece.

A few Member States reported commercial re-use. In Estonia, the digitised ethnographic patterns available through E-varamu, a portal for access to national cultural heritage which was opened in 2016, are widely used in design. It is very popular to use these patterns as inspiration for new modified designs and goods such as clothes; handmade folk costumes; jewellery; furniture; handicrafts etc.. In Hungary, the national aggregator Forum Hungaricum Nonprofit Ltd is making virtual exhibitions (<http://en.mandadb.hu/virtual-exhibitions>) from the records uploaded to the Hungarian National Digital Archive (<https://en.mandadb.hu/>). They also re-use these records on their events, to make puzzles, memory games and gifts such as fridge magnets.

Ensuring that the digitised public domain material is free of intrusive protection measures (e.g. use of watermarks) that may inhibit re-use is also an aspect of re-use. Although Member States reported isolated examples of use of watermarks, cultural heritage institutions refrain for the most part from this practice, in line with supporting re-usability of digitised public domain material.

Long-term Preservation Strategies and Action Plans

Across the EU, there is a mixed coordination approach at different levels to ensure the long-term preservation of digital material. Overall, the majority of Member States (21) have action plans, strategies and/or initiatives for the long-term preservation of digital material. Almost two thirds of Member States (18) either initiated or are preparing to initiate action points at the national level; while almost half of them (14) have public institutions, competence centres or associations taking action in this area.

Functions of national level action points include preparation of guidelines for stakeholders to follow; legal coordination; inclusion of digital preservation in national agendas; and ensuring effective management and administration of national information resources as well as setting up new infrastructures and network of repositories and aggregators. In terms of legal coordination to support long-term preservation of digital material, Estonia entered into force the New Legal Deposit Copy Act (<https://www.riigiteataja.ee/en/eli/514092016001/consolide>). Slovak Republic is preparing for the new legal deposit during the legislative term of 2016- 2020.

Activities of public institutions are either domain specific or cross-domain. A cooperation association called *nestor* was set up by the German Federal Ministry for Education and Research, to coordinate digital preservation efforts. Key challenges in digital preservation are identified by *nestor* as lack of resources, lack of suitable legal framework, lack of clear responsibilities, lack of sufficient research into new preservation techniques, lack of national strategy and coordination. The Ministry of Education and Culture of Finland initiated the development of Digital Preservation Service that covers preservation of digital data and works with organisations that store cultural heritage. Preservation specifications which describe in detail submission, description and file format requirements were published. These specifications are annually updated in collaboration with stakeholders and also provide outlines for the functional requirements for the further development of the Digital Preservation Service.

Almost half of (16) Member States' legislation allow multiple copying and migration of digital cultural material by public institutions for preservation purposes. Some (4) Member States made amendments or new legislation for this reason. Amendments to the copyright law concerning libraries were reported in Czech Republic and Germany, while in Estonia the New Legal Deposit Copy Act allows the National Library to migrate formats or use other technologies to ensure long-term preservation. The latest amendment to the Copyright Act in Czech Republic, which came into effect in 2017, clarified exemption for libraries and other storage institutions that allow the reproduction of copyrighted works for preservation purposes. With the change in copyright law in Germany it is now legal for the German

National Library to use web harvesting methods for long time preservation purposes. Also, digital media which have been published under a licence can now be archived.

Digital Legal Deposit

Two thirds of Member States (18) have measures in place for the deposit of born-digital cultural materials by digital legal deposit libraries. Legislation of the half of Member States (13) allow the transfer of digital legal deposit works among legal deposit libraries. More than two thirds of Member States (18) have measures in place (such as web harvesting for collecting cultural material) to allow preservation of web content. In addition to preservation, some also provide access to harvested websites on some library premises.

The Italian Law on copyright states that rightsholders who have affixed technological protection measures can be required to remove them in order to allow the use of protected works or materials, upon request of the competent authority, for public safety purposes or for ensuring the proper conduct of an administrative, parliamentary or judicial procedure. In Estonia according to the New Legal Deposit Copy Act, the National Library of Estonia may submit a request to the depositor to submit the copy. In Spain, the Royal Decree establishes that web publication rightsholders in cases where access is protected by a username and password must provide conservation centres (the National Library of Spain and those autonomous regional libraries with copyright deposit responsibilities) with a capture of the content when required. The Inter-ministerial service for archives of France is in charge together with the BnF (harvesting web material since 2002 in an experimental way) of the Web legal deposit. In Greece, there are ongoing discussions on the balance between rights-holders' right to technical protection and the libraries' long-term preservation role.

Estonia and Finland permit the transfer of digital legal deposit works from one legal deposit library to another according to the law. Italy has put forth under development future regulation for the legal deposit of documents distributed via digital networks, which meanwhile can happen on a voluntary basis. In Belgium (since the legislation does not enable this), it is up to the publishers who deposit their publications in digital legal deposit to decide whether their deposited publications may be available or not in other libraries.

As for Web harvesting, provisions generally target cultural content of national significance published on websites with the relevant country code top-level domain (for example, websites with ".de" top-level domain in Germany). On the other hand, some Member States define web content of national significance for harvesting in broader terms, for example, web material in the language of the country or made by authors of the country. Other Member States harvesting policy covers certain topics or events of national relevance such as media (newspapers etc.), and politics (institutions, elections etc.). In Belgium a two-year project launched by The Royal Library began in 2017. It is a networked project with other scientific and academic institutions (the State Archives, the University of Ghent and Namur and the Haute Ecole de la Senne) to define a strategy for the preservation of the Belgian web. Poland prepared an analysis of the actions needed to start the system of Internet archiving, including the estimation of the costs of the planned activity and the optimal organizational model. National Library of Ireland, and National Library of Finland harvest and archive web content. Similarly, the National Library of Latvia is gradually increasing the scope and depth of web-harvesting. The National and University Library in Zagreb (NUL) started cataloguing web resources as early as 1998. However, the resources were not archived and could only be accessed via their original homepage, and this has resulted in the loss of many valuable web sites. The NUL, in collaboration with the University of Zagreb University Computing Centre started a project in 2003, the objective of which was to establish a tool for collecting and archiving legal deposit copies of Croatian publications on the Internet while preserving, to the largest extent possible, the original contents, formats and functionalities, in order to ensure access and use in the future. In 2017, a pilot web archiving project was launched by the National Széchényi Library in Hungary. In Germany and Austria, access to harvested websites is available on some library premises. In Greece and Cyprus no measures were adopted yet to allow preservation of web content.

Contribution to Europeana

The total content contribution to Europeana is more than 58 million objects (58% image, 39% text, 2% audiovisual, 1% sound and very small portion is 3D), and about 52.5 million of which comes from EU Member States while about 5.6 million comes from non-EU countries.

Netherlands participated with 18% of total contribution to Europeana, followed by Germany 10%, Spain, France and UK almost about 9% each. Sweden contributed 6%, followed closely by Poland and Italy approximately 5%. Among non-member countries Norway is the biggest contributor. Image and text are the largest categories of content in Europeana. Contribution by media has a link to the contributing cultural heritage institutions (i.e. libraries and archives are more likely to provide text based objects), and is not necessarily a reflection of the digitised cultural heritage in the respective country. In terms of sound and audiovisual contributions, for example: The Royal Library in Belgium (KBR) is running a digitisation project on its audio collection of historical sound recordings with focus on Opera and Jazz. By the end of 2020, KBR is projected to contribute to Europeana Music with about 4,000 hours of recorded music. Slovak Republic pointed out that copyright is the main problem in the audiovisual sector, limiting the broader dissemination.

In general, Member States apply national coordination to create a bridge between cultural heritage institutions and Europeana. Funding digitisation with the condition to make the digitised material available via the Europeana portal is one of the trends for encouragement. For example, all the funding of the Ministry of Culture of the Czech Republic for digitisation of manuscripts and old printed books is provided under the condition that the produced data is included into the Manuscriptorium Digital Library, a thematic Europeana aggregator whose services are provided by the National Library of the Czech Republic. In the case of Austria, the integration in Europeana is a prerequisite for projects of federal museums, which are funded by the Austrian Federal Chancellery. Poland awards additional points within the framework of the digitisation programs organised by the Ministry of Culture and National Heritage to institutions applying for funding that can declare the results of their projects via Europeana.

Quality of digital objects as well as the quality of metadata are important. More than a third of Member States actively encourage cultural heritage institutions to submit high quality content and metadata to Europeana through working groups, projects, guidelines, events or campaigns. However, only approx. 15% of total content from the EU Member States is in the high quality. Spain, followed by Sweden, made the highest number of contribution to the high quality content. They are followed by Netherlands, UK and Germany. In order to support cultural heritage institutions and aggregators from across the EU and beyond to provide Europeana with high-quality content and metadata, a set of standards have been put into place. The Europeana Publishing Guide (<https://pro.europeana.eu/post/publication-policy>) is a comprehensive guide that outlines the minimum content and metadata requirements for data incorporation into Europeana.

More than two thirds of Member States have a national cultural heritage aggregator. Also, approximately two thirds of Member States have participated in European Union funded aggregators with a thematic and domain focus. In order to promote high-quality content in Europeana, the EU funded aggregation projects have begun to include quality criteria. National and cross-border thematic and domain aggregators play a central role in digital cultural heritage and online accessibility of content. They are important players in the Europeana ecosystem because they streamline the technical process between these institutions and Europeana. Services offered by national aggregators differ across Member States based on the needs of the cultural heritage institutions they serve. Different services have been reported such as digitisation and technical expertise, copyright and legal expertise, online access, translations, workshops, helpdesk availability. Bulgaria named the Pencho Slaveikov Regional Library-Varna as one of the main aggregators in the country. Although it is not officially the national aggregator, it fulfils that role, especially for libraries. In Belgium and Portugal in the absence of national aggregators operating on a countrywide scale, there are regional aggregators that fulfil this role on a smaller scale.

There are also several cross-border aggregators, created between 2008-2014 with co-funding from the European Commission, through which Member States provide content to Europeana. Some examples are Archives Portal Europe (www.archivesportaleurope.net), OpenUP (<http://open-up.eu>), European Film Gateway (www.europeanfilmgateway.eu/), CARARE (www.carare.eu), European Fashion Heritage (<https://fashionheritage.eu/>), EU Screen (<http://euscreen.eu>). Interoperability/integration issues between systems is a technical challenge that is being worked on between some domain aggregators and cultural heritage institutions.

Use of Europeana standards and permanent identifiers, presents a mixed picture in terms of reported national initiatives that endorse digitisation standards defined by Europeana. However, even though less than half of Member States report national coordination on this topic, either through policy or the national

aggregator, there is an overall positive assessment in terms of the actual use or implementation of standards and permanent identifiers by cultural heritage institutions.

Free availability of metadata for re-use, offers again a mixed picture with only about half of Member States reporting that the wide and free availability of existing metadata of digitised cultural heritage is encouraged at the national level and implemented by a large number of cultural institutions. Some additional Member States reported free availability of metadata practiced only within specific domains. Very few mention Creative Commons Zero Public Domain Dedication (CC0). There are overall issues with CC0, with Member States reporting that it may not create a trust climate for the cultural institutions. CC0 requirements may be too strict for cultural heritage institutions, especially as a number of national aggregators do not adhere to CC0 as a requirement. More flexibility to open data licenses could be explored to better accommodate cultural institutions and to better promote highquality content, especially metadata. The importance of linked open data directly and indirectly related to Europeana has emerged as a relevant topic to be further addressed at the EU level along with 3D digitisation and emerging fields and technologies that can improve the quality of digitized material presented online.

CONCLUSIONS

The value and importance of *cultural heritage*, the definition of which expanded to include intangible and digital assets along with tangible ones, has long been recognized and efforts for its preservation have gained momentum throughout the world. Organisations from different sectors and professionals from various disciplines at different levels (local, national, regional, international), today, put tremendous effort into preserving and also making cultural heritage resources publicly available.

Memory institutions, libraries, archives and museums in particular, are committing increasing amounts of time and money for safeguarding the heritage resources in their collections. Cultural heritage assets have been housed in these institutions for centuries and libraries have a long history of safeguarding cultural heritage resources from manuscripts to born-digital material. Preservation efforts of libraries goes way back to medial times when manuscripts were copied by hand and also include microfilming initiatives. Today digitization is the ultimate method for safeguarding and is not only contributes to the conservation and preservation of humankind's cultural heritage in order to pass them on to future generations, but also provides improved access by citizens from around the world. Although, digitisation seems like the best method for long term preservation there are various factors to be taken in to consideration for the success of digitisation programs, such as interoperability, quality of images, multilingualism, and short life span of technology (hardware, software, etc) used and the risk for these digital heritage materials to become inaccessible whne time passes. There have been countless efforts and massive digitisation projects mainly carried out by memory institutions (where libraries are always in the forefront) around the world as well as in Europe. Now, it is time to move one step forward to focus on innovative services based on the cultural heritage collections and assets to increase awareness, enjoyable and creative use of these collections and increase their impact on the economy and the society. This is the main aim of ITSELF Project. In the following sections general situation in partner countries will be presented and main problems, needs and gaps regarding the subject will be discussed. This work will shed light on the following steps in the project.

REFERENCES

- Aabo, S. (2005). The role and value of public libraries in the age of digital technologies. *Journal of Librarianship and Information Science*, 37(4), 205-211.
- Abu-Zayed, A. (2009). *Digitisation workflow and guidelines: digitisation processes*. Exeter: University of Exeter. Available at <https://projects.exeter.ac.uk/charter/documents/DigitisationWorkflow-Guidev5.pdf>
- Aparac-Jelušić, T. (2017). *Digital libraries for cultural heritage: development, outcomes, and challenges from European perspectives*. Chapel Hill: Morgan & Claypoo.
- Arnold, D. & Gezer, G. (2008). *EPOCH Research agenda for the applications of ICT to cultural heritage: full Report*. Available at http://public-repository.epoch-net.org/publications/RES_AGENDA/research_agenda.pdf
- Audunson, R. (2005). Editorial: LIS and the creation of a European educational space. *Journal of Librarianship and Information Science*, 37, 171–174.
- Baker, D. & Evans, W. (2009). *Digital library economics: an academic perspective*. London: Chandos.

- Beagrie, N. (2000?). *Going digital: issues in digitisation for public libraries*. Earl: the Consortium of Public Libraries Networking. Available at <http://www.ukoln.ac.uk/public/earl/issuepapers/digitisation.htm>
- Beagrie N. & Jones M. (2001). *Preservation management of digital materials: a handbook*. London: The British Library.
- Bearman, D. (2006). Digital Libraries. *Annual Review of Information Science and Technology (ARIST)*: 223–271
- Beaudoin, J. E. (2012). Context and its role in the digital preservation of cultural objects. *D-Lib Magazine* 18(11/12). Available at <http://dlib.org/dlib/november12/beaudoin/11beaudoin1.html>.
- Benhabib, S. (2002). *The claims of culture: equality and diversity in the global era*. Princeton: Princeton University Press.
- Blandford, A. & Bainbridge, D. (2009). The pushmepullyou of design and evaluation. In: G. Tsakonas and C. Papatheodorou (eds.) *Evaluation of Digital Libraries*. Chandos Publishing.
- Boock, M., & Vondracek, R. (2006). Organising for digitization: A survey. *Portal: Libraries and the Academy* 6(2), 197-217.
- Cameron, F. & Kenderdine, S. (eds) (2007). *Theorizing digital cultural heritage: a critical discourse*. MIT Press.
- Chowdhury, G. G. (2015). Management of cultural heritage information: policies and practices. In: Ruthven, I. and Chowdhury, G. G. (eds). *Cultural Heritage Information Access and Management* (pp. 37–62). Facet Publishing.
- Chowdhury, G.G & Chowdhury, S. (2003). *Introduction to digital libraries*. London: Facet Publishing.
- Clark, J. T., Slator, B. M., Perrizo, W., Landrum III, J. E., Frovarp, R., Bergstrom, A., Ramaswamy, S., & Jockcheck, W. (2002). Digital archive network for anthropology. *Journal of Digital Information*, 2 (4) #107. Available at <http://jodi.tamu.edu/Articles/v02/i04/Clark/>
- Cohen, D. & Rosenzweig, R. (2006). *Digital history: a guide to gathering, preserving, and presenting the past on the Web*. Philadelphia, PA: University of Pennsylvania Press.
- Dahlstrom, M. (2015). Critical transmission. In: Svensson, P. and Goldberg, D. T. (eds). *Between Humanities and the Digital* (pp. 467-481). Cambridge, MA: The MIT Press.
- Dalbello, M. (2004). Institutional shaping of cultural memory: Digital library as environment for textual transmission. *Library Quarterly* 74(3), 265–99.
- Dalbello, M. (2009a). Cultural dimensions of digital library development. Part II: the cultures of innovation in five European national libraries (Narratives of development). *Library Quarterly* 79(1), 1–72.
- Dalbello, M. (2009b). Digital cultural heritage: concepts, projects, and emerging constructions of heritage. *Proceedings of the Libraries in the Digital Age (LIDA)*. Dubrovnik, Croatia, May 25–30, 2009.
- Dalbello, M. (2015). Digital convergence: the past in the present. In: Spence Richards, P., Wiegand, W. A, and Dalbello, M. (eds). *A History of Modern Librarianship: Constructing the Heritage of Western Cultures* (pp. 205–224). Libraries Unlimited.
- Deegan, M. & Tanner, S. (2001). *Digital futures: strategies for the Information age*. London: Library Association.
- Deegan, M. & Tanner, S. (2006a). *Digital Preservation*. London, Library Association Publishing.
- Deegan, M. & Tanner, S. (2006b). Key issues in digital preservation. In Deegan, M. and Tanner, S. (Eds.). *Digital Preservation*. London: Facet.
- Deegan, M. & Tanner, S. (2008). Some key issues in digital preservation. In: Earnshaw, R. and J. Vince (eds). *Digital Convergence: Libraries of the Future* (pp. 219–237). London: Springer:
- DeSouceya, M., Elliott, M. A. & Schmutz, V. (in press). Rationalized authenticity and the transnational spread of intangible cultural heritage. *Poetics*.
- Drake, K.-M, Justrell-Riksarkivet, B., & Tammara, A. M. (eds) (2003). *Good practice handbook: Minerva: digitizing together*. Minerva eEurope
- Ekwelem, V. O., Okafor, V. N. & Ukwoma, S. C. (2011). Preservation of cultural heritage: the strategic role of the library and information science professionals in South East Nigeria. *Library Philosophy and Practice (e-journal)*. 562. Available at <http://digitalcommons.unl.edu/libphilprac/562>
- European Commission (2000). *eEurope 2002: an information society for all action plan*. Available at https://ntouk.files.wordpress.com/2015/06/actionplan_en.pdf
- European Commission. (2001). *eEurope digitizing content together: Lund Action Plan*. Available at https://cordis.europa.eu/pub/ist/docs/digicult/lund_action_plan-en.pdf
- European Commission. (2002). *The DigiCULT report: technological landscape for tomorrow's cultural economy: unlocking the value of cultural heritage: full report*. Luxembourg: Office for Official Publications of the European Communities.
- European Commission. (2005a). *i2010 – A European information society for growth and employment*. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2005:0229:FIN:EN:PDF>

- European Commission (2005b). *Staff working document: annex to the Communication from the Commission "i2010: Digital Libraries."* COM(2005). Available at http://europa.eu.int/information_society/activities/digital_libraries/doc/communication/annex1_en.pdf
- European Commission. (2006). *Commission recommendation on the digitisation and online accessibility of cultural material and digital preservation.* Available at <https://ec.europa.eu/digital-single-market/en/news/commission-recommendation-digitisation-and-online-accessibility-cultural-material-and-digital>
- European Commission. (2007a). *DigiCult: digital culture and digital libraries research.* (brochure).
- European Commission. (2007b). *European agenda for culture in a globalizing world.* Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52010DC0390>
- European Commission. (2008a). *Europe's cultural heritage at the click of a mouse progress on the digitisation and online accessibility of cultural material and digital preservation across the EU.* Available at <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%2012580%202008%20ADD%201.35>
- European Commission. (2008b). *i2010: Digital libraries.* Available at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3A124226i>
- European Commission. (2009). *Europeana: next steps.* Available at http://ec.europa.eu/information_society/newsroom/cf/document.cfm?ac
- European Commission. (2010). *EUROPE 2020: A strategy for smart, sustainable and inclusive growth.* Available at <http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>. 25, 59
- European Commission. (2011). Commission recommendation of 27 October 2011 on the digitisation and online accessibility of cultural material and digital preservation. *Official Journal of the European Union.* Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:283:0039:0045:EN:PDR>
- European Commission. (2014). *Digital agenda for Europe: a Europe 2020 initiative: digitization and digital preservation.* Available at <http://ec.europa.eu/digital-agenda/en/digitisation-digital-preservation>.
- European Commission. (2018). *European Commission report on cultural heritage: digitisation, online accessibility and digital preservation.* Available at <https://ec.europa.eu/digital-single-market/en/news/european-commission-report-cultural-heritage-digitisation-online-accessibility-and-digital>
- European Council. (2002). *eEurope 2005: an information society for all.* Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2002:0263:FIN:EN:PDF>
- European Heritage Heads Forum. (2015). *European cultural heritage strategy for the 21st century.* Available at <https://www.ehhf.eu/news/european-cultural-heritage-strategy-21st-century-%E2%80%93-consultation>
- Feather, J. (2006). Managing the documentary heritage: issues for the present and future. In: Gorman, G. E. and Sydney J. Shep (eds.). *Preservation Management for Libraries, Archives and Museums* (pp. 1-18). London: Facet.
- Fox, E. A. & Urs, S. R. (2002). Digital libraries. *ARIST*, 36, 503–589.
- Freire, N., Meijers, E., Voorburg, R. & Isaac, A. (2018). Aggregation of cultural heritage datasets through the Web of data. *Procedia Computer Science* 137, 120–126.
- Geser G. & Mulrenin A. (2002). *The DigiCULT report: technological landscapes for tomorrow's cultural economy: unlocking the value of cultural heritage.* Available at <http://www.digicult.info/pages/report.php>
- Graham, B., Ashworth, G. J. & Tunbridge, J. E. (2000). *A geography of heritage.* London: Arnold.
- Hargreeves, I. (2011). *Digital opportunity: A review of intellectual property and growth: an independent report.* Available at <https://www.gov.uk/government/publications/digital-opportunity-review-of-intellectual-property-and-growth>
- Harvey, R. (1993). *Preservation in libraries: a reader.* New York: Bowker.
- Harvey, R. (2005). *Preserving digital materials.* Munchen:Saur.
- Hemminger, B., Bolas, G., & Schiff, D. (2005). Capturing content for virtual museums: from pieces to exhibits. *Journal of Digital Information*, 6(1) #313. Available at <http://jodi.tamu.edu/Articles/v06/i01/Hemminger/>
- Hirszenberger, H., Ranogajec, J., Vucetic, S., Lalic, B. & Gracanin, D. (2018). Collaborative projects in cultural heritage conservation –management challenges and risks. *Journal of Cultural Heritage*, 37, 215-224
- Hughes, L. (2004). *Digitizing collections: strategic issues for the information manager.* London: Facet.

- Hughes, L. (ed.) (2011). *Evaluating and measuring the value, use and impact of digital collections*. London: Facet Publishing.
- IFLA (2017). *Libraries safeguarding cultural heritage*. Available at <https://www.ifla.org/files/assets/pac/Documents/libraries-safeguarding-cultural-heritage.pdf>
- IFLA (2018). *European Year of Cultural Heritage 2018: opportunities for libraries*. Available at https://www.ifla.org/files/assets/hq/topics/cultural-heritage/documents/european_year_of_cultural_heritage_-_briefing.pdf
- Lee, S. D. (2001). *Digital imaging: a practical handbook*. London: Facet.
- Liew, C. L. (2012). Towards accessible and inclusive digital libraries. In: Chowdhury, G. and Foo, S. (eds.). *Digital Libraries and Information Access: Research Perspectives* (pp. 97–111). London: Facet.
- Loulanski, T. (2006). Revising the concept for cultural heritage: the argument for a functional approach. *International Journal of Cultural Property*, 13(2), 207–233.
- Lyman, P., & Kahle, B. (1998). Archiving digital cultural artifacts: organizing an agenda for action. *D-Lib Magazine*, 4. Available at <http://www.dlib.org/dlib/july98/07lyman.html>
- Mac An Airchinnigh, M. M., Sotirova, K. & Tonta, Y. (2006). Digital re-discovery of culture game of inquiry and the physicality of soul. *Review of the National Center for Digitization*, 9, 19–37
- Manžuch, Z. (2009). Archives, libraries and museums as communicators of memory in the European Union projects. *Information Research*, 14(2), 1–25.
- Manžuch, Z., Huvila, & Aparac-Jelušić, T. (2005). Digitization of cultural heritage. In L. Kajberg & L. Lorrington (Eds.), *European Curriculum Reflections on Library and Information Science Education* (pp 37-59). Copenhagen: Royal School of Library and Information Science.
- Manžuch, Z. & Knoll, A. (2007). Building digital access to cultural heritage in Europe: national libraries context. In: Achleitner, H. K. and Dimchev, A. (eds). *Globalization, Digitization, Access and Preservation of Cultural Heritage* (pp. 65–76).
- MiBACT (2014). *Digital cultural heritage and tourism: recommendations for cultural institutions*. Available at <https://athenaplus.files.wordpress.com/2014/10/ing.pdf>
- Moustafa, L. H. (2017). The role of Middle East studies librarians in preserving cultural heritage materials. *MELA Notes*, 90, 15-22. Available at <https://www.jstor.org/stable/10.2307/26407383>
- Myburgh, S. & Tamaro, A. M. (2013). *Exploring education for digital librarians: meaning, modes and models*. Oxford: Chandos.
- Miller, M. & Yudice, G. (2002). *Cultural policy*. London: Sage.
- Nabi, S. (2012). World digital library: a case study. *Trends in Information Management*, 8(1), 23-31.
- Nicholas, D. & Rowlands, I. (eds) (2008). *Digital consumers: reshaping the information professions*. London: Facet Publishing.
- Nosrati, F., Crippa, C. & Detlor, B. (2018). Connecting people with city cultural heritage through proximity-based digital storytelling. *Journal of Librarianship and Information Science*, 50(3) 264–274.
- Ogden, S. (Ed.) (1994). *Preservation of library & archival materials: a manual*. Northeast Document Conservation Centre.
- Poole, N. (2010). *The cost of digitising Europe's cultural heritage: a report for the Comité des Sages of the European Commission*. The Collections Trust. Available at https://www.academia.edu/1520040/The_Cost_of_Digitizing_Europes_Cultural_Heritage
- Rothenberg, J. (1995). Ensuring the longevity of digital documents. *Scientific American*, 272 (1), 42-47. Available at http://www.kb.nl/hrd/dd/dd_links_en_publicaties/publicaties/dig-info-paper.rothenberg.pdf
- Ruthven, I. & Chowdhury, G. G. (eds) (2015). *Cultural heritage information: access and management*. Croydon: Facet.
- Rydberg-Cox & Jeffrey, A. (2006). *Digital libraries and the challenges of digital humanities*. Oxford: Chandos.
- Salamon-Cindori, Breza. (2017). *Impact of a national library's cultural heritage in the digital environment*. PhD Thesis. Filozofski fakultet u Zagrebu, Department of Information Science. Available at <http://darhiv.ffzg.unizg.hr/id/eprint/9236/>
- Sable, K. A. & Kling, R.W. (2001). The double public good: a conceptual framework for “shared experience” values associated with heritage conservation. *Journal of Cultural Economics* 25, 77–89.
- Setshwane, C. M. & Oats, L. (2015). *Cultural preservation through public libraries: lessons from Kanye Public Library*. IFLA 2015.
- Tanner, S. (2001). Librarians in the digital age: planning digitization projects. *Program* 35(4), 327–337.
- Tanner, S. (2005). *Digital libraries and culture: a report for UNESCO*. London: KDCS Digital Consultancy.
- Tedd, L. A. & Large A. (2005). *Digital libraries: principles and practice in a global environment*. Muenchen: K.G. Saur

- The United Nations (2015). *2030 Agenda for sustainable development*. Available at <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- Throsby, D. (2003). Determining the value of cultural goods: how much (or how little) does contingent evaluation tell us? *Journal of Cultural Economics* 27(3/4), 275–85.
- Tokić, K. & Tokić, I. (2017) Cultural heritage in libraries as a resource for the development of tourism: The case of Eastern Croatia. In A. Mašek Tonković (ed.), *6th International Scientific Symposium Economy of Eastern Croatia - Vision and Growth* (pp. 123-132). Osijek: University of Osijek.
- Tonta, Y. (2008). Libraries and museums in the flat world: Are they becoming virtual destinations? *Library Collections, Acquisitions, & Technical Services*, 32, 1–9
- Tonta, Y. (2009). Preservation of scientific and cultural heritage in Balkan countries. *Program: Electronic Library and Information Systems*, 43(4), 419–29.
- Tonta, Y. (2016). Future of cultural heritage. *New Review of Information Networking*, 21(1), 63–78.
- UNESCO (1972). *Convention concerning the protection of the world cultural and natural heritage*. Available at <http://whc.unesco.org/archive/convention-en.pdf>.
- UNESCO (2002). *Year for Cultural Heritage*. Available at https://unesdoc.unesco.org/.../attach_import_9403a650-2f9c-434e-bf2f-4dc402c6901d?
- UNESCO. (2003a). *UNESCO charter on the preservation of digital Heritage*. Available at http://portal.unesco.org/en/ev.php-URL_ID=17721&URL_DO=DO_TOPIC&URL_SECTION=201.html.
- UNESCO. (2003b). *UNESCO's convention on the safeguarding of the intangible cultural heritage*. Available at <http://www.unesco.org/new/en/santiago/culture/intangible-heritage/convention-intangible-cultural-heritage>.
- UNESCO (2019). *Memory of the world*. Available at <https://en.unesco.org/programme/mow>
- Verheul, I., Tammaro, A. M., & Witt, S. (eds.) (2010). *Digital library futures: user perspective and institutional strategies*. Berlin: De Gruyter Saur.
- Zorich, D. M., Waibel, G. & Erway, R. (2008). *Beyond the silos of the LAMs collaboration among libraries, archives and museums*. Dublin: OCLC. Available at https://www.researchgate.net/publication/239554404_Beyond_the_Silos_of_the_LAMs_Collaboration_Among_Libraries_Archives_and_Museums

PART II: SITUATION IN PARTNER COUNTRIES

ESTONIA

by Sirje Virkus

DEFINITION OF CULTURAL HERITAGE IN ESTONIA

There has been much debate around the meaning of cultural heritage in Estonia and several Estonian authors have analysed the concept (Reimo, 2006, Kuutma, 2009, 2013, Alatalu, 2012, 2013, Konsa, 2013, 2017, Parts, 2015). The definitions of cultural heritage used in Estonia tend to be either very general or very specific. In a very broad sense, it can be said that cultural heritage is everything that is considered to be worthy of preserving in culture and that one wants to leave to subsequent generations. In a narrow sense, the term 'cultural value' (cultural property, cultural patrimony, cultural resources) is often used in Estonia. For example, the term 'cultural value' is more popular among collectors, dealers of cultural heritage, politicians and lawyers, and refers more to ownership relations compared to the term 'cultural heritage' (Konsa, 2013, p. 124).

However, the concept and meaning of cultural heritage is in the process of developing and changing historically, as are all ideas and concepts used by people. Furthermore, we are dealing with an ideological and symbolic construct, which is impacted by historical, political and social conditions, in the framework of which, cultural meanings, also including heritage, are created and interpreted (Konsa, 2013, pp. 124-125). The concept of cultural heritage has significantly expanded over the last decades in Estonia, especially in the new millennium, from a strictly material cultural heritage and a single object to a culturally valuable environment, including, for example, cultural landscapes, but also in the broader sense of convergence of material and spiritual cultural heritage⁶ (Alatalu, 2013, para. 1). Kuutma (2013, p. 1) notes that the field of heritage studies is complex, versatile, and often characterized by contradictory significance or interpretation, as claims for heritage can appear to be simultaneously uplifting and profoundly problematic. In essence, heritage is a value-laden concept that can never assume a neutral ground of connotation. Heritage indicates a mode of cultural production with reformative significance.

Konsa (2013, p. 126) divides heritage conceptually into three groups: a) heritage as a set of valuable objects; b) heritage as a part of the environment; and c) heritage as a socio-cultural construct. In this framework, the main focus has clearly shifted from the content or structure of the heritage to heritage as a process (Konsa, 2013, p. 128). The first and second approaches deal with heritage in the ontological plane, as things and objects, even when this approach includes intangible heritage. The socio-cultural approach to heritage stresses the fact that heritage is not a 'thing' but cultural practices that participate in the creation and ordering of values and understandings. Therefore, heritage can definitely not be reduced to a list of things in the world (Konsa, 2013, pp. 128-129). Artefacts comprise only a small part of culture; a larger part of culture is connected to the intangible, or intellectual, aspect. Thus, languages, experiences, behaviour, memory and narratives comprise a significant part of cultural heritage – everything that is known as intangible cultural heritage. People are also part of cultural heritage; intangible cultural heritage cannot exist without the people that carry it – be they artisans, musicians, actors, witches or the ordinary people living on Kihnu Island (Konsa, 2013, p. 130). Thus, as of the early 2000s, emphasis started to be placed on the intangible aspects of heritage (Konsa, 2015, p. 126). The concept 'intangible heritage' has become more widespread since 2006, when Estonia joined the *UNESCO Convention for the Protection of the Intangible Cultural Heritage*. The socio-cultural approaches to heritage challenge the current cultural hierarchies, as well as focus on the diversity of the values related to heritage, and upon the dependency on the users of heritage. There is no single and correct approach to cultural heritage that has been presented by experts and legitimatised by the state. Heritage is intertwined with all aspects of culture and society (Konsa, 2013, p. 129).

The temporal dimension of heritage is becoming all-encompassing. Heritage no longer needs to originate from the past; it can also include objects or phenomena from the present, which have properties inherent to cultural heritage, or which may potentially acquire them (Konsa, 2015, p. 126). The idea to study heritage as a part of the broader environment emerged in the 1970s, and found expression, for instance, in the Council of Europe's 1975 *European Charter of the Architectural Heritage* and, especially, the *Burra Charter*. This type of approach was based, to a great extent, on the paradigm changes that occurred in environmental protection, where the protection of individual species was replaced by a focus on the preservation of ecosystems and living environments as a whole (Konsa, 2013, p. 127).

⁶ The concept of 'spiritual cultural heritage' was first introduced in 1982 at the World Conference on Cultural Policy of UNESCO member states. Since then, there is a growing awareness that the cultural heritage is not limited to tangible things such as monuments, buildings or places.

Considerable part of the cultural heritage is the documentary heritage that records the history and development of the society, knowledge and culture. Documentary heritage is defined as: 1) textual documents (manuscripts, posters, books, newspapers, journals etc.); 2) non-textual documents (drawings, prints, music, tapes etc.); 3) audiovisual documents (photographs, films, discs, tapes etc.); 4) electronic data of all types in analogue or digital form (Reimo, 2006, p. 263).

With the rapid development of information and communication technologies (ICT), the digital cultural heritage, its preservation and access to it are becoming increasingly important (Konsa, 2013, p. 126). Digital cultural heritage is the part of the cultural heritage that consists of objects that are converted to digital format or created in digital format (Reimo, 2006, p. 263). Thus, the term 'digital cultural heritage' has two meanings in the official documents: 1) one part is so-called digitally-born subject matter for which no other (analogue) format exists, and 2) the other is made up of digitized cultural heritage - older material cultural heritage that has been converted into a digital format (Laak and Viires, 2015).

The document *State Strategy of Digital Preservation of Estonian Cultural Heritage, 2004–2007* defined cultural heritage as objects of historical, scientific, cultural, social, technological or other value which, regardless of their physical location, are valuable to be preserved for future generations (Kultuuriministeerium, 2003). The proposal for the compilation of the *Estonian Cultural Heritage Conservation and Valuation Development till 2030* contains the following definition: "Cultural heritage refers to objects, phenomena, and cultural spaces (such as landscapes worthy of milieu), which are valued for their historical, scientific, artistic, social, technological, religious, and other value. This term covers both material (e.g. buildings, locations, artefacts, books, photos, videos, records) as well as the spiritual (e.g. beliefs, practices, handicrafts, technologies, music) heritage that is perceived as part of local, ethnic, religious or other identity and is therefore intended to be passed on to future generations". It is also mentioned that securing the viability and survival of culturally defined cultural phenomena is a guarantee of a sustainable and coherent development of the society (Eesti kultuuripärandi..., 2008).

20th of February 2019 the Riigikogu passed the new *Heritage Conservation Act* which entered into force on 1 May 2019. This Act defines *tangible cultural heritage* as follows: "Tangible cultural heritage means all kinds of objects and places created by people, or by the synergy of people and nature in collaboration, and which have historical, archaeological, cultural, or aesthetic value". The document states that the protection of tangible cultural heritage includes the identification, research, documentation, promotion of objects and areas of cultural value and designation thereof as a monument, heritage conservation area or protected archaeological site, and regulation of the activities connected therewith. *Intangible cultural heritage* is defined as "the practices, representations, expressions, knowledge, skills transmitted from generation to generation – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognise as part of their cultural heritage and recreate constantly". The document states that the safeguarding of intangible cultural heritage means the creation of conditions to ensure the viability of intangible cultural heritage. This includes, *inter alia*, the identification, research, documentation and promotion of intangible cultural heritage (Muinsuskaitseeadus, 2019).

Thus, only a short time ago, the concept of 'cultural heritage' predominantly marked what is currently referred to as material culture or cultural property – all manner of objects from times past and other cultures, that were able to be collected. Today, the material part of cultural heritage is considered to be all kinds of objects and places created by people, or by the synergy of people and nature in collaboration, and which have historical and cultural, or aesthetic value. Previous generations have valued and kept these, and passed them on to the following generations. The field that encompasses material cultural heritage is very broad, including buildings, cultural landscapes, monuments, works of art, ethnological objects and many other things that are important bearers of historical memory and local identity, which preserve the diverse environment and reflect local traditions and society. Today cultural heritage also includes *intangible cultural heritage* that refers to the kind of knowledge, skills, customs and practises that have been passed on from generation to generation and which are alive and practised today. To emphasise the fact that intangible cultural heritage is an essential part of all of our lives here and now, and that it changes with people and circumstances, it is also called living heritage. The English term 'intangible cultural heritage', (cultural heritage that cannot be touched), illustrates the essence of this concept and helps to understand it. Beliefs, traditions, practises and skills cannot be touched by hand. They are always based on knowledge. Knowledge, in turn, cannot exist without someone, who possesses that knowledge, and that is why intangible cultural heritage, as a living heritage, can never

be separated from people. By using their knowledge, people make intangible cultural heritage visible, audible, detectable by touch, able to be tasted and perceivable (<https://www.parandiaasta.ee>).

Thus, the definitions of cultural heritage in Estonia include tangible, intangible and digital heritage, from monuments and sites over expressions of human creativity to museum collections and film heritage. The protection of cultural heritage has moved from single objects to whole areas – building complexes, town quarters and settlements (Kultuuriministeriumi veebileht, 2019).

PRIORITY AND IMPORTANCE OF CULTURAL HERITAGE IN ESTONIA

For a small country with rich cultural heritage like Estonia the protection and preservation of language and culture have always been of vital importance (Ministry of Economic Affairs and Communications, 2005, p. 9). Estonia's development is based on the sustainability of Estonian nationality and culture, and Estonia's survival is one of the development goals of the State (Kultuuriministerium, 2019). *The Estonian Constitution*, adopted in 1992, states that the preservation of the Estonian nation and culture through the ages is one of the central aims of the Republic (Eesti Vabariigi põhiseadus, 1992).

Preservation of national cultural heritage has been actively discussed both on institutional and state levels (Reimo, 2006) and cultural heritage-related issues have become increasingly important in cultural policies in Estonia (Konsa, 2013, p. 147). There are several strategic documents that place emphasis on preservation and digitisation of as well as access to Estonian cultural heritage through many years (see the related section below).

Most recently, the Ministry of Culture has worked out principles of cultural policy up to 2020 in a strategy document *The General Principles of the Cultural Policy up to 2020 (Culture 2020)*, adopted by the Parliament on February 12, 2014. The aim of cultural policy is to create a society that values creativity by preserving and promoting Estonian national identity, researching, storing and transferring cultural memory and creating favorable conditions for the development of a viable, open and diverse cultural space and participation in culture. The *Culture 2020* places particular emphasis on digital cultural heritage; the use of digital cultural heritage in education, e-services and creative industries is promoted (Kultuur 2020, 2014, Laak and Viires, 2015).

New goals and visions of cultural policy until 2030 will be developed in 2019. The new document *Culture 2030*, will create a vision and a long-term plan, including in the field of cultural heritage, for the next decade. According to the current plan, the government will approve a new base document in the first half of 2020 and it will be in force on January 1st 2021 (Kultuuriministeriumi veebileht, 2019).

The Ministry of Economic Affairs and Communications worked out principles called *Digital Agenda 2020 for Estonia*, approved by the Government in November 2013. The development plan provides the guidance for creating a well-operating national ICT environment. The main objective for cultural heritage in this document is that the most valuable part of the cultural heritage has been digitised and digitisation, preservation and dissemination will be supported (Digital Agenda, 2013, Laak and Viires, 2015).

Furthermore, a number of nationwide events highlight the importance of cultural heritage. The European Year of Cultural Heritage 2018 gave Estonia the opportunity to highlight the importance of culture and what we can do to preserve, transmit and digitize cultural heritage. During 2018, there were many events in Estonia where diverse cultural heritage was highlighted: from sites with archaeological value to architectural monuments, from medieval strongholds to folklore traditions and artistic heritage, from architecture to music, from barndwellings to manor mansions, from literature to landscape heritage. During the European Year of Cultural Heritage, Estonian local cultural heritage was introduced and also links and points of contact within the larger European cultural sphere were found. Estonian cultural heritage was discussed throughout the year. The events of the European Year of Cultural Heritage in Estonia were coordinated by the National Heritage Board, in co-operation with the Estonian Folklore Council (<https://www.parandiaasta.ee>).

Since 2000 the Ministry of Culture has organised theme years. In 2019, attention is focused on the song and dance festival tradition, which is included in the UNESCO Representative List of the Intangible

Cultural Heritage of Humanity, as it is 150 years since the first song festival was held in Tartu. The year 2020 will be dedicated to digital culture (Kultuuriministeeriumi veebileht, 2019).

In addition to nationality/state level, the importance of cultural heritage is also acknowledged at various societal levels: a) individual and family, b) community, and c) local government level (Konsa, 2013, p. 131). Individual and family level, the personal heritage can include family photos, musical recordings, things, souvenirs, the place or house where they were born, landscapes, family traditions, and, for instance, family structure and relations. At this level, the evaluation of the heritage and transmission, from generation to generation is the responsibility of every person and family (Konsa, 2013, p. 131). There are many different communities in Estonia which also deal with cultural heritage. The heritage of such communities is closely linked to the traditions, customs, rituals and ways of acting inherent to the given group. The objects that are included among a community's heritage may simultaneously belong to the heritage of the state or local government. In this case, their use by the community is regulated by the governing legislation (Konsa, 2013, p. 132). According to the Estonian Constitution, the local governments make decisions and organise all the issues related to local life, and do so independently, in accordance with the law. Local governments exercise supervisory control over the monuments located on their territory and are responsible for the fulfilment of heritage conservation requirements (Konsa, 2013, pp. 132-133).

Regional and global organizations are also influencing how cultural heritage is approached in specific countries. The European Union (EU) deals very actively with cultural heritage. In the Treaty on the Functioning of the EU, the following is stressed: "The Union shall contribute to the flowering of the cultures of the Member States, while respecting their national and regional diversity and at the same time bringing the common cultural heritage to the fore." (Konsa, 2013, p. 133). The idea of world heritage is related to the activities of UNESCO, and especially to the UNESCO World Heritage programme. The UNESCO *Convention Concerning the Protection of the World Cultural and Natural Heritage*, which was adopted by UNESCO in 1972, provides the definitions for cultural and natural heritage of global significance, which is characterised by outstanding universal value. Outstanding universal value is determined by the selection criteria for the World Heritage List. Since 1997, the list has included the Tallinn Old Town, and since 2005, the surviving stations of the Struve Geodetic Arc (Konsa, 2013, p. 146). *The Convention for the Safeguarding of the Intangible Cultural Heritage* was adopted by UNESCO in 2003 and ratified by Estonia on 27 April 2006. This has boosted the activities of the intangible cultural heritage. Based on the convention, UNESCO established an Intergovernmental Committee for the Safeguarding of Intangible Cultural Heritage. The committee compiles and publishes a representative list of the intangible cultural heritage of humankind and updates it. The representative list contains 166 cultural phenomena, including the Estonian, Latvian and Lithuanian song and dance festival tradition, the Kihnu cultural space, and Seto leelo singing (Konsa, 2013, p. 146) and the Vana-Võromaa smoke sauna tradition. Since 2010, Estonia has opened a list of its spiritual cultural heritage, where communities can present living traditions, customs and customs of more than two generations.

Thus, the cultural heritage is of great importance in Estonia at very different levels. Cultural heritage has acknowledged at individual and family, community, local government and state levels and is influenced by developments at international level.

NATIONAL FRAMEWORKS, PROGRAMMES, POLICIES AND STRATEGIES REGARDING CULTURAL HERITAGE

To preserve nationality through the ages, first and foremost, cultural mechanisms are needed that enable the survival of the Estonian national identity (cultural affinity) and ensure the transmission of the values, traditions, behavioral patterns and lifestyle elements inherent in national culture from generation to generation, as well as their acceptance by other Estonian residents (Kultuuriministeerium, 2019). Thus, preserving cultural heritage on a national basis largely depends on political frameworks and clearly formulated preservation policies (Konsa, 2017).

Some observers note that heritage in Estonia has been treasured for almost five and half centuries. The Papal Bulls, for example, issued by Pope Paul II in 1468 and Pope Sixtus IV in 1474 requiring the preservation of valuable articles in ecclesiastical buildings applied also in these parts of Europe. One of the most advanced laws concerning heritage protection in early modern Europe, the Conservation Act

of King Charles XI of Sweden in 1666, also applied in the territory of Estonia, as the Swedish Kingdom of those days included the present Nordic and Baltic countries. The Peter the Great House Museum in Kadriorg, Tallinn, is apparently the oldest museum in Estonia, the collections of which have been complemented since the end of the 18th century. The first heritage protection laws in Russia were the imperial decrees of December 31, 1826 and December 14, 1827 prohibiting the unjustified demolition and reconstruction of old buildings also applied in the territory of Estonia. The restoration of St Olaf's Church in Tallinn after it was struck by lightning in 1820 is considered the beginning of systematic restoration activities in Estonia (Puustak, 2013, p. 5).

Since then, there have been important initiatives, established institutions and regulations for the protection of cultural heritage in Estonia in every period of history. For example, on June 19, 1925, the Estonian Parliament (the Riigikogu), adopted the *Heritage Conservation Act*. In 1977, *the Law on the Protection and Use of Historical and Cultural Monuments* was adopted. In 1980, Tallinn was awarded the European Gold Medal for the preservation of its architectural heritage. In 1984, it was decided to celebrate every year the *Heritage Protection Month* lasting from April 18 to May 18. In 1987, the *Estonian Heritage Society (EHS)* was founded as a bottom-up initiative. The society focused on gathering, recording, and studying historical memory (Tamm, 2013). In 1988, national conservation company "Eesti Restauraator" was formed (Puustak, 2013, pp. 5-6). However, when looking back, we can note that until the second half of 1990ies heritage protection mainly tackled with historical monuments. At the end of 1990ies a change took place in the prevailing approach (Pärm, n.d.).

During the re-independence of Estonia, the *National Heritage Board* (1993) was established. *The Conservation Act* was approved by the Government and entered into force in 1994. *The National Registry of Cultural Heritage* was established in 1994. In 2003, the working group on digital preservation by the Ministry of Culture elaborated preservation guidelines *Strategy of Digital Preservation of Estonian Cultural Heritage for Years 2004–2007* (2003). This strategy was based on the principles of *eEurope 2002 Action Plan* (2000) and *Lund Principles* (2001). The main coordinators of the digitisation and preservation of cultural heritage were the Ministry of Culture, The Ministry of Education and Science, the State Chancellery and the National Archive. The methodology of decision making for digital preservation was based on the principles of the UNESCO programme *Memory of the World* (Reimo, 2006).

Principles of the Estonian Information Policy 2004-2006 also referred to the creation of common databases for public libraries and introduction of e-services for readers, drafting a national programme for the long-term digital preservation of national cultural heritage as well as for its integration with the e-environments of educational institutions, collection of digital information with archival value and digitisation of records (Ministry of Economic Affairs and Communications, 2005, p. 9).

The Foundations of the Cultural Policy of the Republic of Estonia, adopted by the Parliament in 1998 was the most comprehensive document stating the objectives of cultural policy till 2014. This document outlined the plans and overall situation and tried to express and establish general consensus on some central issues. It was not, however, legally binding. In practice, cultural policy making relies on a number of specific acts, some of which are relevant for many areas outside the sphere of cultural policy (Lagerspetz and Tali, 2014, p. 29).

In addition to domestic discussion, international contacts and influences have played an important role in the development of legislation, either through international conventions ratified by Estonia (copyright legislation in particular), or through the use of foreign countries' practices as models when designing domestic legislation (Lagerspetz and Tali, 2014, p. 29).

Currently, the following major strategic documents regulate the cultural field and influence the cultural heritage in Estonia:

- *The Estonian Constitution*, adopted in 1992, sets the protection and preservation of the Estonian culture as one of the central aims of the Republic.
- *The General Principles of Cultural Policy until 2020 (Culture 2020)*, worked out by the Ministry of Culture, replaced the previous *Foundations of the Cultural Policy of the Republic of Estonia* in 2014. National cultural policy is based on the constitutional aim of ensuring the preservation of the Estonian nation, language and culture in perpetuity. *Culture 2020* as the main policy document on culture outlines the plan to promote Estonian culture in the years 2014 to 2020 and create opportunities for cultural development and ensure long-term preservation of cultural heritage.

The document contains the principles of how the cultural policy is formed and carried out and what are the priorities by each field including performing arts, sound art, museums, libraries and national culture. The use of digital cultural heritage in education, e-services and creative industries is promoted. New goals and visions of cultural policy until 2030 (*Culture 2030*) will be developed in 2019 as described in the previous section.

- *Sustainable Estonia 21* (2005) is a strategy for developing the Estonian state and society until the year 2030 with the aim of integrating the success requirements arising from global competition with the principles of sustainable development and preservation of the traditional values of Estonia. *Culture 2020* draws on this national strategy which states four main goals of which the first goal is the viability of Estonian cultural space.
- *Development Plan of the Ministry of Culture 2019–2022*. The Ministry of Culture, together with its institutions, works to preserve the national identity of Estonia and to ensure and develop a viable cultural space. The Ministry of Culture's development plan formulates a vision of the future in the field of culture with a view to the year 2030, highlights the main goals, bottlenecks and priority actions. The development plan outlines the need to support the preservation and mediation of the diversity of intangible and tangible cultural heritage. It foresees the preservation and mediation of cultural assets, necessary to ensure the viability and preservation of the rich intellectual and material cultural heritage of Estonia for future generations. The development plan has been prepared in accordance with several sectoral and crosssectoral strategy documents (e.g. *Estonia 2020*, *Culture 2020*, *Integrating Estonia 2020*) (Kultuuriministeerium, 2019).
- *Integrating Estonia 2020* (2014) is a development plan, completed by the Ministry of Culture, which formulates the integration policy of Estonia and the activities needed to achieve them. The general objective of integration policy is to increase social cohesion and ensure the social inclusion of people with different linguistic and cultural backgrounds. The development plan also aims at preserving the Estonian language and culture including the culture and language of the ethnic minorities. The preparation of a new national integration plan for 2021-2030 is underway which will serve as the basis for the implementation of integration policy in 2021-2030.
- *Digital Agenda 2020 for Estonia* (2013) is a strategy, worked out by the Ministry of Economics and Communication (described in the previous section). The document highlights the importance of digitisation, preservation and dissemination of cultural heritage.
- *Estonian Entrepreneurship Growth Strategy 2014-2020* (2013) is the most important strategic document on the Estonian economy for the years 2014-2020. Development on cultural and creative industries is a part of the Strategy and focuses on three main challenges in order to increase the wealth of Estonia: increasing productivity, stimulating entrepreneurship and encouraging innovation.
- The main objective of the third *Estonian Research and Development and Innovation Strategy 2014–2020 (Knowledge-based Estonia)* (2014) is to create favourable conditions for increasing productivity and improving living standards, for good education and culture, and for ensuring the development and continuity of Estonia. The strategy highlights sustainable development of culture and is in line with the priorities of both the EU 2020 reform plan and the European Research Area.
- *The State Strategy of Digital Preservation of Estonian Cultural Heritage, 2004-2007* (2003) was adopted in 2005. The main aims of this strategy were: 1) ensuring that digitization becomes a routine, daily activity in memory institutions; 2) improving the nationwide co-ordination of digitization and preservation of digital cultural heritage; 3) developing a shared framework of services based on digital cultural heritage. The aim of the strategies for the next periods remained the same. The Ministry of Culture has prepared several development plans for the digital cultural heritage field. Documents, under slightly different names, have been adopted since 2004 (for 2004–2007, 2007–2010, 2011–2016, 2016–2020) (Ibrus, 2017). In these operational plans, it is prioritized what should be digitized during next years in different fields of cultural heritage: art, objects, publications, audiovisual material, photography and documents (Laak and Viires, 2015). An examination of the development plans reveals that the first strategy for 2004-2007, was the most optimistic: it included ambitious digitization targets and a proposal for a relevant national development plan, promised to coordinate digitization systematically at the Ministry's level and specific funds planned for digitization (Ibrus, 2017). *The Council for Digital Preservation of Cultural Heritage* was set up in 2004 (still active today) to implement the strategy with the aim to coordinate digitisation and digital preservation of cultural heritage in Estonia (Kultuuriministeerium, 2003, European Commission, 2016). In Estonia, heritage at the state level is defined by the following legislative acts:
- *The Heritage Conservation Act* (1994, amended in 1997, replaced in 2002, 2019). The objective of the act is to ensure that monuments and heritage conservation areas are preserved in their

traditional environment in order for the people to enjoy our cultural heritage in all its richness and uniqueness today and in the future. The new legislation came into force as of 1 May 2019 which balances the rights and obligations of the state with those of the owners of cultural monuments, creating for the first time a compensation system for monument owners. From now on, the activities of the National Heritage Board will include both heritage conservation and museum fields.

- *The Museums Act* (1996, latest amendment 2011, was passed in 2013) stipulates a deadline for state museums to digitize all their collections by 2018. By now it is clear, that this ambition was too optimistic as several museums applied to prolong this deadline (Karvonen *et al.*, 2018). The Estonian Ministry of Culture together with the Conservation and Digitisation Centre Kanut developed digitization guidelines for museums in 2015. Implementation of these guidelines has started as best practice.
- *The Archives Act* in 2011 established standards for formats for archives and these were implemented during the 2013-2015 period.
- *The Nature Conservation Act*. The purpose of this Act is to: 1) protect the natural environment by promoting the preservation of biodiversity through ensuring the natural habitats and the populations of species of wild fauna, flora and fungi at a favourable conservation status; 2) preserve natural environments of cultural or esthetical value, or elements thereof; 3) promote the sustainable use of natural resources. The amended Act entered into force 01.06.2013.

The activities of libraries in Estonia are regulated by the National Library of Estonia Act, the Legal Deposit Copy Act, the Public Libraries Act and the Copyright Act. These acts will be described in the related section below.

Preservation and digitisation of cultural heritage is coordinated by the state. The role of the state is to monitor and guide the long-term preservation of cultural monuments and to compensate for restrictions imposed in the public interest. Public interest aims, among other things, to preserve Estonian cultural heritage through the ages. *The Ministry of Culture* is responsible for national culture and for the coordination of the whole heritage conservation field in Estonia. The Ministry forms and coordinates policies (e.g. state's media policy, audiovisual policy), puts together budgets, and implements state grant programmes. It prepares draft legislation in its area of government and checks that drafts are in compliance with the constitution and other legislation (Kultuuriministeeriumi veebileht, 2019).

The Heritage Conservation Council operates under the Ministry of Culture; it makes proposals on the matters related to *the Heritage Conservation Act* and helps form heritage conservation policies (Kultuuriministeeriumi veebileht, 2019).

Restoration of cultural monuments is financed by the state, local governments, and private owners. The Ministry of Culture finances the study and preservation (incl. maintenance) of rural architecture and landscapes, for this it has compiled a development plan "Rural architecture and landscapes. Study and preservation." (Kultuuriministeeriumi veebileht, 2019).

In carrying out culture policy, the Ministry of Culture cooperates closely with *Estonian Museum Society* (MTÜ Eesti Muuseumiühing) and *the Museum Council*. Estonian Museum Society is an association of museum workers with more than 300 members. The Museum Society is responsible for Museum Night⁷ and the Estonian museum festival in Narva, and administers the webpage of the Information Centre of Estonian Museums, which gathers together all information related to the field of museums. The Museum Council is an advisory council to the Minister of Culture, which includes representatives from museums and the founders thereof plus other experts in the field of museums. The Museum Council makes propositions and publishes opinions on matters related to the Museums Act, such as reviewing the collection principles of museums (Kultuuriministeerium, 2019).

Nationwide activities in the field of folk culture are managed or coordinated by *the Folk Culture Centre, Estonian Song and Dance Festival SA* (ELT SA) and seven sectoral centers of folk culture as national partners: *Estonian Choral Association, Estonian Folk Dance and Folk Music Society, Estonian Folk Art*

⁷ Once a year in May Museum Night takes place, when all the museums and other memory institutions stay open longer than usual and free of charge to celebrate the Europe-wide Long Night of Museums. Museum Night happens on the Saturday closest to the International Museum Day on May 18.

and Crafts Union, Estonian National Folklore Council, Estonia Union of Hobby Theaters, Estonian Association of Cultural Societies and the Association of Estonian Folk Houses as the youngest organization (Kultuuriministeerium, 2019).

Following the accession to the Convention for the Safeguarding of the Intangible Cultural Heritage in 2006, the Minister of Culture of Estonia designated *the Folk Culture Centre* under the Ministry of Culture as the main body responsible for the national implementation of the Convention. The mission of the Centre is to support the survival and evolution of Estonian folk culture. The Centre participates in the process of developing and carrying out the cultural policy, organizes training courses, and administers support programmes for Intangible Cultural Heritage. A *Chamber of Intangible Cultural Heritage* was set up which organises awareness-raising and training activities, advises the communities and administers *the National Inventory of Intangible Cultural Heritage*. The purpose of the inventory is to serve the interests of local communities and therefore it is based on the initiative of the communities themselves (Tamm, 2017).

The National Heritage Board is the only state authority to handle heritage conservation. The objective of the National Heritage Board is to protect and preserve cultural heritage and culturally valuable environments. Their tasks include supervision, advice for the owners of monuments, support for renovation, and maintenance of a national cultural heritage registry. The National Heritage Board has employees in all 15 counties. Major towns, such as Tallinn, Tartu, Pärnu, Haapsalu and Narva, have concluded contracts under public law with the National Heritage Board and fulfil heritage conservation obligations in their territories themselves. The programme “Preservation and development of cultural heritage” is used for interdisciplinary large-scale development activities to raise people’s awareness in matters of conservation and to promote non-profit cooperation projects. Specific allocations and investments are made to churches and to the Estonian Heritage Conservation Society. Via the National Heritage Board, all owners and possessors of cultural goods can apply for grants (Kultuuriministeeriumi veebileht, 2019). Various national support programs and foreign aid have also contributed to the preservation of cultural heritage.

To protect the environment the state has established 12 heritage conservation areas. These mostly include the historic centres of Tallinn, Tartu, Narva, Kuressaare, Pärnu, Valga, Võru, Viljandi, Paide, Rakvere and Lihula. Rebala heritage conservation area is protected because of its valuable cultural landscape (Kultuuriministeeriumi veebileht, 2019).

Estonia has joined a number of international conventions, the principles of which form the foundation of heritage conservation work. These conventions are the following:

- UNESCO 1972, 1970;
- First and Second Protocol to the Hague Convention;
- European Council conventions.
- Currently, preparations are ongoing to join the UNESCO Convention for the Protection of Underwater Cultural Heritage (Kultuuriministeeriumi veebileht, 2019).

Thus, there have been important initiatives, established institutions and regulations for the protection of cultural heritage in Estonia in every period of history. The current legislation framework regulates the cultural field and several strategic documents have highlighted the importance of the preservation of and access to the cultural heritage in Estonia.

CULTURAL HERITAGE LITERATURE AND RESEARCH

Over the years, a significant number of studies have been carried out in the field of cultural heritage in Estonia. Many authors and institutions have contributed to the field. Cultural heritage studies cover different areas and aspects of cultural heritage. The studies focus both on tangible and intangible cultural heritage as well as digital cultural heritage. Some studies have a more theoretical focus, others more practical implications.

Much of the research is carried out in Estonian universities, where several doctoral, master’s and bachelor’s theses focus on cultural heritage. In addition, academic research has been conducted in the framework of various research and development projects. Some examples of doctoral thesis are as follows:

- Johanson, Kristiina (2018). *Missing Interpretations. Natural and Residual Finds in Estonian Archaeological Collections*. Tartu: Tartu University (doctoral thesis).
- Pawlusz, Emilia (2017). *In Search of an Estonian Identity: (formal and informal) Mechanisms of Identity Construction in Estonia. The Role of Song Festivals, Popular Music and Nation Branding*. Tallinn: Tallinn University (doctoral thesis).
- Kärberg, Tarvo (2016). *Digital Preservation of Knowledge: A Theoretical-Practical Research at the National Archives of Estonia*. Tartu: Tartu University (doctoral thesis).
- Parts, Priit-Kalev (2015). *Sustainable Community Management in Estonia: Reflections on Heritage Projects on Kihnu Island, in Viljandi County, and in Various Protected Areas*. Tartu: Tartu University (doctoral thesis).
- Alatalu, Riin (2012). *Heritage Protection in Transitional Society 1986-2002: From Nation's Conscience in the Estonian SSR into the Harasser of Private Owner in the Republic of Estonia*. Tallinn: Estonian Academy of Arts (doctoral thesis).

Some examples of master thesis are as follows:

- Jeeser, Kaie (2013). *Documentation of Museum Objects in Estonian Museums: Development and Application of Museum Information System*. Tartu: Tartu University (master thesis).
- Jürgens, Maris (2013). *The Digital Photo Archives of Estonian Memory Institutions and Their Rightful Use on the Internet*. Tallinn: Tallinn University (master thesis).
- Hiiop, Hilka (2012). *Contemporary Art in the Museum: How to Preserve the Ephemeral? The Preservation Strategy and Methods of the Contemporary Art Collection of the Art Museum of Estonia*. Tallinn: Estonian Academy of Arts (doctoral thesis).
- Koov, Heiki (2012). *The Metadata Problems in Online Databases in Searching Information on Monuments*. Tallinn: Tallinn University (master thesis).
- Merila, Kadri (2009). *Digitization of Cultural Heritage: Digital Backups*. Tallinn: Tallinn University (master thesis).
- Tiidus, Marge (2007). *Digitisation of Documentary Heritage in Estonian Archives and Museums: Principles and Problems*. Tallinn: Tallinn University (master thesis).

Some examples of projects are as follows:

- *ERA Chair Project on Cultural Data Analytics* (2019–2023), coordinated by Indrek Ibrus, Tallinn University, Baltic Film, Media, Arts and Communication School, Tallinn University, School of Humanities (project). There are two main and intertwined goals in the project: 1) significant structural change within Tallinn University (TU) regarding developing a new platform and methods for facilitating collaboration between TU schools as well as with external, both private and public partners on cultural data analytics, related cultural services and policy development; 2) combination of the existing strengths at TU to build a new analytical approach that integrates cultural semiotics, data analytics, digital culture studies and creative industries studies to work with digitised cultural heritage as well as with born digital data scraped from contemporary platforms.
- *Evolution of Digital Audio-Visual Heritage Metadata Systems: Effects on Heritage-Based Innovation and Cultural Memory Curation by Creative Industries* (2016–2019), coordinated by Indrek Ibrus, Tallinn University, Baltic Film, Media, Arts and Communication School (project). This project was motivated by the currently emerging large-scale digitisation campaigns of European audio-visual (AV) heritage collections and their potential cultural and socio-economic effects. Informed by a unique conceptual and analytic approach that combines the analysis of cultural dynamics (using mainly cultural semiotics and media archaeology approaches) and techno-economic innovation studies (evolutionary economics, political economy of media) the project aimed to analyse the complex interdependencies between how AV heritage metadata standards and creation protocols evolve, how do these curate cultural memory and what are the effects to the combined operations of creative industries and educational institutions that develop innovative methods of teaching and learning. Empirical research included an international study of metadata production practices and its uses in education. A new method was developed to analyse how metadata protocols 'model' culture and curate cultural memory.
- *Innovative Digital Preservation Using Social Search in Agent Environments* (2013–2015), coordinated by Tiiu Reimo, Tallinn University, Institute of Information Studies (project). The project proposed the DURAFILE platform that can be defined as a platform made by intelligent agents that exchanges dynamic knowledge and information among them (as a type of social search) with the goal of finding suitable preservation plans for obsolete multimedia digital objects.

- *Landscape Practice and Heritage* (2007–2012), coordinated by Hannes Palang, Tallinn University, The Estonian Institute of Humanities (*project*). This project aimed at exploring landscape practice as a strategic dimension for the study of the complex interactions between landscape and heritage. To do that combined approaches of (cultural) geography, ethnology/anthropology and folklore studies were used. The hypothesis of the research framework argued that societal changes cause ruptures/discontinuities that are inscribed in landscapes through practice; the changes may result changing of patterns and representations, making of heritage, but also in changing practices themselves. Ruptures were studied in two ways: the process of the societal change: how the societal changes are transmitted into changes in the landscape (practice change) and; the consequences of the change: how the changing practices are reflected in patterns, processes, functions, contexts. Methods included in-depth interviews, open ended questionnaires, historical narrative approach, participatory observation, map and visual landscape analysis, content, discourse analysis.
- *Modelling of Ageing and Deterioration of Historical Objects* (2006–2008), coordinated by Kurmo Konsa, University of Tartu, Faculty of Philosophy (*project*). The main objective of this research was to conduct a complex study of the ageing and deterioration of historical objects (books and manuscripts, museological objects and archaeological objects). Both chemical-physical conditions of information carriers, their production history, formation of collections and preservation conditions were considered. Four main research directions under the framework of this project were set: 1) Condition surveys of culturally important collections of publications. 2) To associate gathered data about the condition of objects with their production history, collection formation and preservation conditions. The goal was to develop integrated treatment of deterioration processes of cultural heritage, which would cover chemical-physical ageing processes, as well as historical and social aspects (factors of technological, cultural and political environment). 3) Studying the dynamics of ageing and deterioration of historical objects using Markov chain methodology. 4) Exploring the burial experiments in in archaeology and to assess its potential role insofar as it may confirm or deny interpretations of data from excavations. The practical value of this research project was extremely important, as gathered information helped: 1) To assess the physical condition of cultural heritage collections; 2) To assess the capaciousness of required preservation methods; 3) To evaluate the effectiveness of different preservation arrangements; 4) To get information needed for defining preservation priorities. As a result of this project, the preservation of written cultural heritage was more effective and based on scientific grounds. During the project, new preservation scientists and specialists were taught.

The Ministry of Culture has commissioned several studies for the performance of work tasks and planning of further activities (see <https://www.kul.ee/et/uudised/uuringud>). Some examples are presented here:

- *Survey of Visitors and Non-Visitors to Museums and Libraries* (2018). The study, conducted in the spring of 2018, included museums and libraries. The main objective was to identify the reasons for visiting and not visiting museums and libraries, as well as exploring the services of the memory institutions and the need for them.
- *Business Analysis of the Lending Environment for E-publications* (2018). The aim of the analysis was to develop a public and unified e-publishing lending model that takes into account the needs of all parties, and improves service quality, conduct business analysis for the selected model and identify the key business requirements of the parties to the technical platform supporting the business model.
- *Study on Internationalization and Export in the Field of Creative Industries* (2017). The study focused on international and export topics in four creative fields - audiovisual, music, literature and publishing art. The aim of the study was to identify and analyse the internationalization strategies of these areas and their impact on the development of the reputation outside Estonia. Export activity in each area was described through a value chain consisting of four stages - creation, production, distribution and consumption.
- Media sociological study *Contents of Media Culture and User Community* (2016). The study ran from 2014 to 2016 and mapped and analysed Estonian cultural journalism (both publicly funded and private), the role of cultural publications in cultural processes and the involvement of cultural parties.

Several studies concerning cultural heritage have been prepared at the request of the National Heritage Board (<https://www.muinsuskaitseamet.ee/et>). Some examples are as follows:

- *Visiting Neighbours. 100 Treasures of Estonia, Latvia and Lithuania* (2018) has been prepared as a cooperation project between the Estonian, Latvian and Lithuanian Heritage Offices to celebrate the 100th anniversary of the three countries. The book represents 33 of the most important and diverse heritage objects in each country. The most recent, or 100th, item is the common one - the Baltic chain. The book contains beautiful photographs of heritage, supported by descriptive texts in Estonian, Latvian, Lithuanian and English https://www.muinsuskaitseamet.ee/sites/default/files/contenteditors/trykised/visiting_neighbours_web_uus.pdf
- *Restoring the Memory: Before and After 2005-2011* (2011). The heritage monuments restored and preserved with the financial support of the National Heritage Board - churches, manor houses, rural buildings, windmills, fortress ruins, residential buildings and others are collected in this book https://www.muinsuskaitseamet.ee/sites/default/files/contenteditors/trykised/malestiste_restaurimine_2005-2011.pdf
- *Estonian Cultural Heritage. Preservation and Conservation. Vol. 2, 2013-2017*. This book gives an overview of the cultural heritage activities over the past five years. <https://www.muinsuskaitseamet.ee/en/estonian-cultural-heritage-book>

The National Heritage Board organizes a research competition for students every two years. The aim of the competition is to motivate students to deal with issues related to heritage conservation and to study monuments under state protection, thus contributing to the preservation of Estonian cultural heritage. Students of higher education institutions operating in Estonia and students of Estonian citizenship studying abroad are invited to apply for the competition. In addition to topics directly related to monuments and their restoration, research on the preservation of cultural heritage is also welcome, which may be from different fields, such as economics, information technology, legislation, media, etc. (Munsuskaitseameti veebileht, 2019).

Several other institutions and authors have contributed to the cultural heritage field. For example:

- Estonian Literary Museum. Project: The Problems of Transformation and Reception of Cultural Heritage in the Digital Age (2007–2010), Marin Laak.
- Estonian Librarians Association: Conference: Preservation of Cultural Heritage in Electronic Environment: Proceedings of the 8th Congress of Baltic Librarians: May 17-19, 2007, Tallinn, Estonia. Tallinn: Eesti Raamatukoguhoidjate Ühing, Congress of Baltic Librarians.
- Estonian National Museum: Paper: Astel, E. (2014). Eesti rahvapärased hõbehedet/Estonian National Silver Jewellery. Tartu: Estonian National Museum.
- Estonian National Museum: Paper: Värvi, E. (2012). National costumes from Estonian National Museum collections - Vivid national costume, Tartu, Estonia.

To conclude, significant number of studies have been carried out in the field of cultural heritage in Estonia covering different areas and aspects of cultural heritage. These studies focus both on tangible and intangible cultural heritage as well as digital cultural heritage.

LIBRARY SERVICES REGARDING CULTURAL HERITAGE in ESTONIA

Estonia is covered with a comprehensive network of libraries, which operate on the basis of library standards and regulations. The Estonian library network comprises public, school, science and specialised libraries and the Estonian National Library. The network includes 926 libraries: 532 public libraries, 40 science and specialised libraries and 354 school libraries. Despite their varied tasks and specialisations all libraries work in close cooperation. The main objective of library services is to make information resources and information accessible to the readers. The Estonian library system has a long tradition and it is used by every second inhabitant of Estonia (Virkus, 2000, 2003, Kultuuriministeerium, 2019).

The creating of the suitable research library network started at the beginning of the 1990s (Virkus, 2000). The Ministry of Culture coordinates the development of the library network as a whole in cooperation with the Ministry of Education and Research and other ministries. The task of the state is to guarantee

equal free access to information for everyone via the library service. Loaning books and using Internet is free of charge in the libraries (Kultuuriministeerium, 2019).

Digitisation, Preservation and Access: Developmental Overview

The Estonian memory institutions preserve items from the 13th century to the present day, a total of approximately one billion pages. The systematic transition to the modern information technology in Estonian libraries started in 1992 when the plan for establishing information system for libraries was developed (Virkus, 2000). The digitisation of printed matter and making it available on the Web was started more than twenty years ago in the form of small projects which were until 2014 created mainly within ad hoc projects. Selecting objects for digitisation is based on the following principles: 1) potential for use, 2) national value or value in terms of cultural history, 3) integrity of a collection, 4) existence of meta-data, 5) lack of copyright and protection of personal data; lack of other restrictions on use, 6) existence of a web-based user environment, 7) rarity (Laak and Viires, 2015).

The Estonian Libraries Network Consortium (ELNET) was established in 1996 to manage the preservation of the print heritage in Estonian libraries. In 1998, the international software Innopac was introduced as a joint database of the 15 largest libraries and on 1 January 1999, the e-catalogue ESTER was made available to readers (Olonen 2014, pp. 68–75). The ESTER database was taken to a new level in 2014 when the databases of the libraries of Tallinn and Tartu, which had been stored in different servers, were merged (<http://www.ester.ee>). As of 19 January 2015, the e-catalogue ESTER contained about 9 million item records and 3 million bibliographic records; the database is continuously updated. The e-catalogue ESTER also includes (besides publications – books, periodicals, etc.) records of sheet music, audio discs and recordings, photographs, manuscripts and various other e-resources (Laak and Viires, 2015).

The first joint project of Estonian libraries was the *Red List of Estonian Printed Matter* that was compiled in 2001–2004 and included 413 endangered printed materials published between 1535 and 1850 (Maaslieb, 2009, pp. 208–215). The Archival Library of the Estonian Literary Museum launched project *Grafo* in 2004 to digitise old reading primers, calendars and reference books (<http://www2.kirmus.ee/graf/>). At the same time the Estonian Literary Museum began systematic digitisation of the first editions of the Estonian-language fiction of the late 19th and early 20th centuries in the Kreutzwald century information environment. (<http://kreutzwald.kirmus.ee>). The selection of authors began with F. R. Kreutzwald, and since then, all the 19th-century writers are included - therefore the “Kreutzwald century”.

An outstanding achievement in making print heritage available to the public is project DEA - *The Digitisation of Estonian Newspapers* (<http://dea.nlib.ee/>). The project started in 2002 and was developed cooperatively by the National Library of Estonia, the Archival Library of the Estonian Literary Museum and the Academic Library of Tallinn University. DEA makes available on the Internet the older Estonian-language press of 1821–1944 and the Estonian-language newspapers published outside Estonia since 1944. The newspapers are digitised from microfilm (Olonen 2014, pp. 82–83). By the end of 2014, 380 titles and 1.3 million pages of newspapers were made available as image files (Kiisa 2014, p. 201, Laak and Viires, 2015).

The University of Tartu Library launched a project called EEVA (*Digital Text Repository for Older Estonian Literature*) in autumn 2002 to make available the first works of fiction published in Estonia in the 17th to 19th centuries (<http://www.utlib.ee/ekollekt/eeva>).

The Estonian National Bibliography Database ERB (<http://erb.nlib.ee/>) was launched in 2004, and after that the National Library gradually stopped compiling paper versions of the national bibliography lists. ERB contains both retrospective and current national bibliography data and is divided into the following national bibliography collections: books, periodicals, maps, sheet music, videorecordings, sound recordings, graphic material, e-publications, Estonica and retrospective national bibliography (items published before 1940). ERB registers all publications issued in Estonia, as well as Estonian-language publications, works by Estonian authors and their translations, and foreign-language publications about Estonia and Estonians issued abroad.

SAAGA (<http://www.ra.ee/dgs/explorer.php>, released in 2005) is a collection of digitised archival records of the National Archives of Estonia and Tallinn City Archives, containing copies of the documents which have been under intensive use in reading rooms and those of great importance for users. The initial

objective of SAAGA was to enable access to the most important genealogical materials. In November 2004, the first prototype of SAAGA was released and made available in the local network in the reading room of the Estonian Historical Archives. The first public web version of SAAGA was released in May 2005. Since 2008, SAAGA comprises all the archival records digitised in the National Archives of Estonia and Tallinn City Archives, regardless of their topic and potential focus group. There are new materials being added regularly and there are more than 9 million of images at the moment.

Since 2005 the main digital archive storing digital print heritage is the National Library of Estonia's digital archive DIGAR (<https://www.digar.ee/arhiiv>). The development of the database begun in the early 2000s. DIGAR stores online publications, print files and digitised copies of publications. DIGAR contains books, newspapers, journals and magazines, maps, sheet music, photos and postcards. Archived publications can be searched via the e-catalogue ESTER and bibliographic databases created by the National Library of Estonia. The National Library of Estonia supplements the digital archive DIGAR pursuant to the Copyright Act. The material stored in the archive contains works whose author or copyright holder is unknown (<https://www.digar.ee/arhiiv>) (Laak and Viires, 2015).

Estonian university libraries store and publish their publications in digital repositories: the digital collection of the Tallinn University of Technology Library (<https://digi.lib.ttu.ee>) was established in 2005, *DSpace* of the University of Tartu Library (<http://dspace.ut.ee>) was implemented in 2006, the digital archive *DSpace* of the Library of Estonian University of Life Sciences (<https://dspace.emu.ee/>) in 2010, and e-library of the Estonian Academy of Arts (<https://www.artun.ee/en/studies/library/e-library/>) in 2014. *ETERA* – a repository of the Academic Library of Tallinn University (<https://www.etera.ee/>) was launched in 2015 which was set up in place of the repository called *E-Ait*. Digital repositories of university libraries hold bachelor's, master's and doctoral theses and e-learning materials that are freely available online. Digital archives also include other resources of libraries - books, articles, maps, photos, etc. Some of the materials can also be accessed via the e-catalogue ESTER.

The institutions responsible for the digitisation of heritage artefacts are also Estonian museums. The activities are coordinated by the Estonian National Museum. To preserve the heritage artefacts, a joint information system began to be developed which was ready for use by June 2008 – the Information System of Estonian Museums (MUIS, <https://www.muis.ee>). By the end of 2014, MUIS included information about digital heritage created by 60 Estonian museums and the Kanut Conservation Centre. There were plans to describe and digitise at least 125,400 museum items in 2014–2018. The main institutions preserving the legacy of documents are the National Archives, the Estonian Folklore Archive and the Cultural History Archive of the Estonian Literary Museum and the Manuscripts and Rare Books Department of the University of Tartu Library; a smaller number of documents are preserved in various museums. The availability of cultural heritage in a digital format has significantly increased the number of visits to the websites of memory institutions (Laak and Viires, 2015).

Since 2008 the film and video collections of the National Archives can be searched through the FIS information system (<http://www.eha.ee/fa/public/>). The collections of the Film Archives include film and video material on Estonia from the early 20th century to the present. Organised acquisition of films started in 1935 on the basis of the Archives Act, and focused on newsreels. The Film Archives hold newsreels, newsreel segments, documentaries, music films, feature films, animated films, advertisements and amateur films. The archives are the repository for more than 8,000 titles of film and close to 7,000 original video titles. The collections also include outtakes from television programmes and films, fragments of films that have not survived in their entirety, and other additional materials such as film postproduction transcripts, screenplays and posters. 5th of March 2010 the database for photos FOTIS was ready for demonstration and since November 2011, the photo collections of the National Archives can be searched through the FOTIS information system (<http://www.ra.ee/fotis/>). In addition, digitised works have been available on the programmes of national TV channels ETV and ETV2. Another initiative of incalculable worth in the field of film heritage was the establishment of the Estonian Film Database (EFDB) in 2010 (<http://www.efis.ee>). EFDB is continuously developing content and making the national filmography available on the Internet. EFDB has created the conditions for active reuse of our national film heritage for the purpose of creating new audio-visual works (TV programmes, films, multimedia texts, new media art, etc.) (Laak and Viires, 2015).

ISE (<http://ise.elnet.ee>), the database of Estonian articles, was opened for users in 2009. It contains articles, from: a) Estonian newspapers at 1900-2013, b) Estonian journals, serial publications and anthologies at 1990-2016. Starting from 1.01.2017 the database is updated selectively. Database is the

result of cooperation between 18 libraries in the ELNET Consortium. Database allowing the full-text to be accessed in free digital archives and Web publications. The official name of the database is "Eesti artiklite andmebaas Index Scriptorum Estoniae". The official name in English is "Database of Estonian Articles Index Scriptorum Estoniae".

During the years 2010-2012, the Estonian Literary Museum established the general digital repository KIVIKE (<https://kivike.kirmus.ee/>) which contains files and metadata of the heritage preserved in the museum. KIVIKE includes different types of cultural heritage: documents, audio files, films, photographs as well as art, to a lesser extent. As of December 2014, KIVIKE contained about 286,400 digitised items, and by March 2015 it held fully 1 million data records (Laak and Viires, 2015).

One important task of libraries is the archival processing of websites. The National Library of Estonia started this work and the *Estonian Web Archive* was opened to the public in November 2013. National Library of Estonia collects and stores Estonian websites that have been made available: 1) on the .ee domain or other top-level domain geographically related to Estonia; 2) on another top level domain and is important for Estonian culture. Only public recordings and sites of public authorities that have obtained the consent of the copyright holder are freely available. In 2014, there were approximately 78,000 .ee domains and 20,000 other domains (.eu, .com, etc.) on the Estonian Web (<http://veebiarhiiv.digar.ee>) (Laak and Viires, 2015). The web archive as a whole will be opened to readers in the library for on-site use in 2019.

The total number of Estonian national publications included nearly 330,000 titles (55 million pages) at the end of 2014. About 2.5% of that amount was digitised by the end of 2014 (4,000 publications per year) (Laak and Viires, 2015). Based on the Estonian Research Infrastructures Roadmap, the development of the trans-institutional portal E-Varamu was started at the ELNET consortium in 2014. E-Varamu is a semantics-based search engine, which allows accessing related information in all databases of the Estonian memory institutions and research and development institutions. It is a single e-environment, the purpose of which is the long-term preservation and making available of the digitised resources of Estonian memory institutions – libraries, archives and museums – and to increase the institutions' digitisation capacity as well as to ensure the preservation of collections that are important for Estonia (<https://www.e-varamu.ee>). E-Varamu enables the Estonian digital cultural heritage to be made accessible through Europeana (<https://www.europeana.eu/>) and other cultural heritage environments, such as the location and period-based map application Google Field Trip (<http://www.fieldtripper.com>) (Laak and Viires, 2015).

At the national level, the portal Open Data was created (<http://opendata.riik.ee>). The purpose of this portal is to make available digitised cultural heritage and to ensure the publication of information through different channels (Laak and Viires, 2015).

The field of digital humanities is also emerging in Estonia. This requires fast access to huge amounts of data (e.g. text corpora and databases) which in turn will create possibilities for the introduction of new methods. Another process is the joining of Estonian research collections with the international research database DataCite (DOI), initiated by the University of Tartu Library in 2014. The database includes an open database of articles. A number of Estonian academic journals, such as *Folklore*, *Mäetagused*, *Methis*, *Interlitteraria*, etc. have joined the open access CrossReference (DOI) database (<http://dx.doi.org>) (Laak and Viires, 2015).

The digitisation of cultural heritage is carried out in line with international quality standards, taking into account the physical state of each object. If necessary, objects are conserved (Vallner, 2012). When selecting objects from the huge collections of the Estonian memory institutions, the priority is given to those related to Estonia. By 2020, there are plans to make available as open data the materials concerning the formation of the Estonian state, from the national awakening in the 19th century to the annexation of the Republic of Estonia by the Soviet Union in 1940. The aim is to provide an opportunity to merge photographic, film, document and print heritage items to develop e-learning materials. International standards require that when huge amounts of data are archived, back-up copies must be made and held in various locations in order to minimise the risk of accidental damage and loss of data. For this purpose, an application RIIGIILV (*State Cloud*) is developed (Laak and Viires, 2015).

The creation, reading and selling of e-books became topical in Estonia in 2010. The first major e-book distributors emerged, such as *Eesti Digiraamatute Keskus* (EDRK) and Digira O. who started to promote

e-books and e-readers. Estonian libraries also quickly followed suit and started to distribute e-books. The technical literature department of the Tartu City Library was a pioneer in this field: they started to lend e-books (.epub-format) together with e-readers on 1 April 2011. Interest in e-books has been steadily increasing (Leima, 2012). The Tallinn Central Library started lending e-books after launching a dedicated lending environment ELLU in 2012. While the Tartu City Library offered e-books together with e-readers, the Tallinn Central Library made e-books available online through ELLU. Both libraries lent books for a specified period of time and with a limited number of copies. The Ministry of Culture started to support free-of charge distribution of Estonian classical literature, which carries the national cultural memory, in the epub-format in 2012. Under the programme “Estonian Literature”, a project competition was announced for the distribution of Estonian classical literature and literary works that are important from the perspective of national culture. The project was continued in 2013 and 2014. A priority of the project is “school literature”, i.e. books that are required reading (Laak and Viies, 2015).

As regards formal education, Estonia has an advantage over other countries: the reuse of heritage is permitted in the closed ecosystems of schools free of charge, without the need to pay royalties. This allows an ensured, easy access to the entirety of all digital heritage for all pupils in general education. The same goes for reuse: all available heritage resources are available to those who wish to create something new. This creates the conditions that the new generation learns from an early age to use heritage creatively and this is a good foundation for a profound knowledge of culture, as well as the skills to use heritage to create new forms, products, and services of culture. This also applies to non-formal learning: digitized heritage becomes a means of creating new works, which in turn provides a basis for new social dialogue and new methods of identity creation. International experience has shown that free access is the only thing that will ensure the extensive use of heritage and the abovementioned desired effect on the development of culture. This means, however, that the state will have to pay compensation to authors. There have been discussions of extending the tasks of the Author Compensation Fund, which is used to compensate literary authors for the potential loss of sales from their works being available in public libraries, or of developing a new similar system (Ibrus, 2017).

The potential for the reuse of heritage by creative businesses is also vast. For instance, the development of learning systems using the extensive heritage content is just beginning and if Estonian heritage were digitized quickly, Estonian education technology companies would have a head start in the development and export of new solutions. The development of educational and other services (e.g. the reconstruction of built heritage or making replicas of artefact heritage) requires access to the full heritage corpus or at least to the majority of heritage. Experiences in different countries so far have shown that digitization is too expensive and therefore too risky an investment, for the European IT sector in particular with the majority of companies being SMEs. The reuse of digitized material is expected to give rise to innovations; therefore, it is reasonable to use the ‘innovation systems’ concept for policy design (Ibrus, 2017).

Library Related Strategies and Policies

Library developments are influenced by various policies (including cultural policy, education policy, integration policy, social policy, etc.). The major strategic documents and legislative acts described in chapter 3 that regulate the cultural field and influence the cultural heritage preservation in Estonia influence also the activities of libraries and other memory institutions. However, there are also specific laws related to libraries. The activities of libraries in Estonia are regulated by the National Library of Estonia Act, the Legal Deposit Copy Act, the Public Libraries Act and the Copyright Act:

- *National Library of Estonia Act*. This act provides the legal status, purpose, functions, management, financing and administrative supervision over the activity of the National Library of Estonia and determines publications to be permanently preserved (RT I, 13.03.2014, 4 - entry into force 01.07.2014).
- *The Legal Deposit Copy Act* entered into force on 1 January 2017 and the Legal Deposit Act was repealed. The new Act established the procedure and conditions for submission to a legal deposit copy of a publication published, distributed or made accessible to the public in the Republic of Estonia and the digital dataset used for the production thereof (output-ready file) and for preservation and making accessible of a legal deposit copy, the compilers of registration and official statistics of legal deposit copies and supervision over the compliance with the law. The purpose of this Act is to ensure the creation, long-term preservation and consistent making accessible of the most comprehensive collection of the publications which are essential to the Estonian culture and their output-ready files if other copies of the publications are not available. The Legal Deposit Copy Act allows the National Library to migrate formats or use other

technologies to ensure long-term preservation. Preservation of legal deposit copies of a web publication and output-ready file shall be guided by the resolution of the Government of the Republic established on the basis of clause 43.9 (1) 4) of the Public Information Act.

- *The Public Libraries Act*. This Act provides the bases for the organisation of the activities, collections, service, management and financing of public libraries (passed 12.11.1998, RT I 1998, 103, 1696, Entry into force 10.12.1998, amended 2007, 2011, 2014, 2016, 2018, 2019). In Chapter 3, 13 it is mentioned “Items of historical value and of great cultural value located in public libraries shall be recorded and stored under the conditions and pursuant to the procedure established in legislation with regard to cultural monuments”.
- *Copyright Act* allows reproducing collections in archives, libraries and museums for preservation purposes.

The Ministry of Culture renews currently the Public Library Act. Public libraries have an important role to play in ensuring equal opportunities for all Estonian residents in order to educate themselves and participate in culture, as well as in reading habits and developing digital skills. When drafting the law, new forms of cooperation will be developed for the development of the library network and services, so that the library service as a whole becomes modern and meets the needs of the reader. The new law must be ready by the end of 2020 (Kultuuriministeeriumi veebileht, 2019).

Libraries are financed on the basis of their form of ownership – from state or local government budgets. Libraries can also receive funds from donations, paid services that are related to their main activity, allocations from foundations and endowments, and so on. The Ministry of Culture assists libraries with activity supports (Kultuuriministeeriumi veebileht, 2019).

On 21 November 2013, the Government of the Republic approved a document on the *Fundamentals of Cultural Policy*, which provides guidelines for the development of Estonian culture in 2014–2020. *The Fundamentals of Culture Policy until 2020* include principles for shaping and implementing cultural policies and sectoral priorities. At the various stages, the writing of the fundamentals was based on over four hundred proposals, involving both professional associations and government agencies. The document on the fundamentals of cultural policy was approved by the Riigikogu on 12 February 2014. The field of libraries in this document are described as follows:

- In Estonia, there is a library network based on the interests and needs of all users, consisting of libraries of the public, school, science and special libraries and the National Library of Estonia. The public library service provides free access to information and is equally accessible to all users free of charge. Broadband Internet connection has reached all public libraries all over Estonia.
- Public libraries have an important role to play in ensuring equal opportunities for all Estonian residents to educate themselves and participate in culture. As local government agencies, public libraries, in addition to providing information and guiding individual users, are also using flexible and multifunctional centers that use local sources of information to stimulate local life and culture and provide opportunities for lifelong learning.
- The Estonian book is accessible to everyone regardless of form. The state supports the acquisition of important journalism and cultural journalism for the Estonian language and culture for public libraries.
- The state attaches importance to the implementation of cultural and literary programs of public libraries and to the implementation of lifelong learning initiatives, reading programs aimed at reading and reading habits of children and young people, meetings of writers and other creators with readers, initiatives between public libraries crossing the borders of a local government, and activities directed at non-native speakers of Estonian bearing in mind also the interests of readers with special needs.
- Estonian National Library collects, preserves and makes available the most important documents published in Estonia or concerning Estonia. The National Library also acts as a parliamentary library, ensuring the Riigikogu and others as an information service for constitutional institutions and as a development center for librarianship. The National Library is one of the central institutions in its field of digitization, preservation and making available of Estonian cultural heritage (Kultuur 2020, 2013).

Standards for digitisations have been agreed within individual domains and nationally. There exists a metadata standard, approved by the Ministry of Culture, for describing the digitisation process and digitised heritage objects. However, it has not been enforced as mandatory for memory institutions. National legislation requires all public data sources to be published as open data. Following this

requirement, the content of the Museum Information System is made available as linkable open data (RDF, relying on the CIDOC-CRM model) and OAI. National Archives data are available in apeEAD standard for Europeana through Archives Portal Europe and in apeEAD and in RDF on institutional open data web page. National Library is publishing its open access digital collections as OAI-PMH sets, MARC XML and VIAF RDF sets (see: data.digar.ee). Since the beginning of 2015 every record in the Museum Information System has a permanent identifier. National Archives content uses permanent identifiers since 2014. Libraries have not agreed on a single PUID format, but for data libraries, DataCite is in use in one academic library.

Thus, the current legislation framework and policies regulate and influence the services of libraries and their role in preserving cultural heritage and making it accessible for the users.

Examples of Best Practices

An important part of Estonian cultural heritage can be accessed in a virtual environment, which is located in electronic archives, museums and libraries:

- *ESTER* is a common electronic catalogue of all Estonian libraries, established 1999 (<https://www.ester.ee/>). It is possible to find data over 90 libraries of 18 Estonian member libraries and partners in one search. In 2017, the Estonian National Archives joined as a partner. The merger achieved significant savings in hardware and software maintenance and development costs for the information system.
- *MUIS* (<https://www.muis.ee/>, was ready for use by June 2008) – is a museum information system – a web-based work environment to manage museum collections and keep track of state assets. It also helps make the information kept in the museums accessible to the public. According to the data of Statistics Estonia, there were 246 museums in Estonia as of 2016, in which about 8.7 million items were preserved. At the moment 60 museums have joined MulS and the database includes information on more than 3.2 million items and 1.2 million digital images.
- *ISE, Index Scriptorum Estoniae* (<http://ise.elnet.ee>, launched in 2009) – is a public and freely accessible Internet database of articles published in Estonian newspapers, magazines, collections of articles, and other serial publications. New material is added to the database each day by 15 Estonian libraries.
- *The Estonian E-varamu* (<https://www.e-varamu.ee/>, started in 2014 and opened in 2016) is a joint information portal of Estonian museums, libraries, archives, and other memory institutions. Through the portal one can search for information on cultural heritage items recorded in the information systems of various memory institutions. The e-repository enables to link national heritage collections with the Pan-European library Europeana.
- *Virtual Exhibition System* (<http://www.virtuaalmuuseum.ee/>) offers museums a safe and easily handled environment to present collections or exhibitions, while providing history enthusiasts with improved access to the images and recordings kept in museums. The system was a cooperation project of the Ministry of Culture, MindBridge OÜ and restoration company Kanut.
- *Kodulugu* (<https://www.kodulugu.ee/>) is a portal of regional studies. It is a common system of Estonian public libraries for storing regional information. From the system one can search for articles and other items related to a specific area, and to read longer texts and encyclopaedic materials.
- *Ajapaik.ee* - shows how places have changed over time (www.ajapaik.ee) and their crowdsourcing project Digitalgud (<https://www.facebook.com/digitalgud/>) invites old photos to be detected.
- *Portal "Estonians in Siberia"* draws together and visualizes data about Estonians deported to Siberia 1940-1960 (<http://eestlasedsiberis.spordimuuseum.ee/>).
- *Digital repositories of the National Library of Estonia* (<https://www.nlib.ee/>):
 - *DEA* (<http://dea.nlib.ee/>, Digitized Estonian Newspapers, is a public, freely accessible database of old Estonian-language newspapers. This project of three Estonian libraries started in 2002. DEA contains a selection of Estonian newspapers from the years 1821 to 1944, plus some Estonian-language newspapers issued abroad after 1944. The project coordinator is the National Library of Estonia. The Library of the Estonian Literary Museum and the Academic Library of the Tallinn University also participate in the project. The project has been supported by the Ministry of Culture as well as the Soros Foundation.
 - *ERB* (<http://erb.nlib.ee/>, launched in 2004) - the database of Estonian National Bibliography registers all publications issued in Estonia, as well as Estonianlanguage publications, works by Estonian authors and their translations, and foreign-language publications about Estonia and Estonians issued abroad.

- *DIGAR* (<https://www.digar.ee/arhiiv>, established 2005) is the digital archive, or e-library environment of the Estonian National Library, which contains books, newspapers, magazines, maps, music sheets, photos, postcards, posters, illustrations, audio books, and music files. As of the end of 2017, there are over 47,000 publications and over 82,000 web pages (approx. 375 million URLs) with 92.7 TB of data. This should be doubled by 2019 as a result of large-scale digital projects.
- *Estonian Web Archive* (<http://veebiarhiiv.digar.ee>) was opened to the public in November 2013. Estonian websites that have been made available: 1) on the .ee domain or other top-level domain geographically related to Estonia; 2) on another top level domain and is important for Estonian culture are collected and stored. Only public recordings and sites of public authorities that have obtained the consent of the copyright holder are freely available.
- *URRAM* (<https://www.lugeja.ee/>) is a web-based system created jointly by the Ministry of Culture, Vaata Maaailma SA and Urania Com OÜ, which allows the use of many library services via the Internet. URRAM provides an overview of all the items in school, museum and specialised libraries.
- *ELLU* (<http://ellu.keskraamatukogu.ee/>) is the e-library, an online e-book lending and reading environment, of Tallinn Central Library, which gives access to the work of Estonian authors and books both in Estonian and Russian. ELLU has 2001 e-books and 6307 licenses for use by 2703 readers. The public library's first foreign e-book environment, OverDrive, was launched with 338 e-books and 39 audiobooks. ELLU got EIFL's Public Library Innovation Award – for Creative use of ICT (information and communication technology) in public libraries.
- *Web Library of the Estonian Library of the Blind* (<http://www.veebiraamatukogu.ee/>). 351 readers out of 839 use the web library which includes 3903 Estonian and foreign language audio and e-books, newspapers and magazines, most of which are made or digitized in the Estonian Library of the Blind. Readers of the Library can also use the electronic text-reading system ELTE, where they can listen to daily news, newspapers and books from the speech synthesizer and audiobooks, magazines and magazines read by voice.
- *Digital Repositories of the Estonian Literary Museum* (<http://www.kirmus.ee>):
 - *BIBIS* (<http://galerii.kirmus.ee/biblioserver/>), an analytical retrospective general bibliography database of Estonian media, compiled by the Bibliographic Department of the Archival Library. The database includes Postimees 1926, 1930, 1932-1936 (1937-1939 being updated on a rolling basis), Ajalooline Ajakiri 1938-1940, Elu 1924, Sädemed 1934-1939.
 - *Doodles* (<http://www.folklore.ee/Doodles/>) - database of Estonian folklore (proverbs, sayings, puzzles, wordplay, conundrums, riddles, web humour, ethno astronomy in Estonian and English), a digital copy of the card catalogue that was compiled on the basis of manuscript collections of doodles stored in Estonian Folklore Archives. In addition to doodles from these collections, this database also contains materials that have appeared in different publications.
 - *JUSTKUI* (<http://www.folklore.ee/justkui/andmebaas.php>) - database of sayings and phraseology.
 - *LEPP* (<http://www.folklore.ee/lepp>) - portal of South Estonian folklore.
 - *Sugrimaa* (<http://www.folklore.ee/ri/folkte/sugri/>) - website of Fenno-Ugric nations.
 - *ERNI* (<http://galerii.kirmus.ee/erni/erni.html>) - Estonian cultural and literary history in texts.
 - *Estonische Sprichwörter mit der buchstäblichen Übersetzung in die deutsche Sprache* (<http://www.folklore.ee/ri/date/saksa/>) - 12,700 Estonian proverbs with translations into German; searchable by keyword and type number either among Estonian or German texts.
 - *KIVIKE* (<https://kivike.kirmus.ee/>), during the years 2010-2012, the Estonian Literary Museum established the general digital repository which contains files and metadata of the heritage preserved in the museum. KIVIKE includes different types of cultural heritage: documents, audio files, films, photographs as well as art, to a lesser extent.
 - *Grafo* (<http://www2.kirmus.ee/graf/>) is a project that was launched in 2004 to digitise old reading primers, calendars and reference books.
 - *Kreutzwald century information environment* (<http://kreutzwald.kirmus.ee>) - in 2004 the systematic digitisation began of the first editions of the Estonian language fiction of the late 19th and early 20th centuries in the.
 - *ISIK* (<http://www2.kirmus.ee/biblioserver/isik/>) - Estonian Biographical Database ISIK has been compiled on the basis of the personal and pseudonymous index of the Bibliography Department of the Archives Library of the Estonian Literary Museum. Approximately 20000 different aliases have been entered into the database for about 7,000 persons.

- *Estonian National Museum's digital collections* (<https://www.erm.ee/et>).
 - *Pildiait* (<https://pildiait.erm.ee>), in 2007, the ERM, in cooperation with the Estonian Moments Portal, started collecting people's own everyday photos to map the changes taking place in Estonia. Between 2007 and 2012, nearly 600 photographs arrived at the museum. In 2013, as a result of the Homeland Pictures collection competition, the museum was completed with more than 1,000 photos. In 2014, Pildiait was opened for further activities - the web environment of ERM imaging users.
 - *Estonian National Museum's Carpet Collection* (<http://vaibad.erm.ee/et>), there are 3,000 objects in the database: one hundred years, the carpet, deck, shawl and one diaper of the Estonian, Finno-Ugric and other peoples collected by the museum. For each object, a detailed photo with available data and legend is presented. The technique and the material are defined, the additional name written by the object collector specifies the purpose of the carpets and the local name.
- *National Archives of Estonia digital collections* <http://www.ra.ee/>
 - AIS (<http://ais.ra.ee>) - information system of the National Archives of Estonia and Tallinn City Archives. It allows users to search for documents preserved in the archives. There are about 8,4 million archival records on AIS at the moment.
 - SAAGA (<http://www.ra.ee/dgs/explorer.php>) – digitised genealogical microfilms of the Estonian Historical Archives. Saaga is a collection of digitised archival records of the National Archives of Estonia and Tallinn City Archives, containing copies of the documents which have been under intensive use in our reading rooms and those of great importance for our users. The first public web version of Saaga was released in May 2005, currently about 17 million digital images on web (ca 2,2% of the collections, ca 200 000 records).
 - FIS (<http://www.eha.ee/fa/public/>, launched 2008) - film archive of 9,5 million metres of film recordings (the oldest from 1908).
 - FOTIS (<http://www.ra.ee/fotis>, launched 2010) - more than half a million of photos (older ones from the 19th century).
 - VAU (<http://www.ra.ee/vau/index.php/en>) - virtual reading room for archival material was developed.
 - *Register of the maps* (<http://www.ra.ee/kaardid/>) - the register of maps contains the descriptions and digital images of the maps that are stored in the National Archives of Estonia and Tallinn City Archives.
 - *Stamps in the historical archives* (<http://www.ra.ee/pitserid/>) - 2200 seals.
 - *Parchments stored in the memory institutions* (<http://www.ra.ee/pargamendid/>) - in 2010-2012, the National Archives, the Estonian History Museum and the Tallinn City Archives carried out a digitization project aimed at producing high quality digital images of parchments stored in these memory institutions.
 - *ESTICA* (<http://www.ra.ee/estica/>) - Estonian-related materials in foreign archives.
 - *17th century publications* (until 1710) in the fund of the Estonia Historical Archives (<http://www.ra.ee/plakamid/>).
 - *Album Academicum Universitatis Tartuensis 1918-1944* (<http://www.ra.ee/apps/andmed/index.php/site/aaui>) – database of the study certificates of the University of Tartu supplemented with bibliographical data, located at the Estonian History Archives.
 - *Register of the manors on the Estonian territory* (<http://www.ra.ee/apps/andmed/index.php/site/mois>).
 - The National Archives has successfully launched two crowdsourcing projects where digitised content is used as the basis for enriching descriptive metadata of archival records. One project concerns soldiers in World War I (<http://www.ra.ee/ilmasoda/>) and the other project citizens of Tartu in 1867 (<http://www.ra.ee/tartu1867/>).
- *Estonian Institute's website* <https://estinst.ee>
 - *Estonica* (<http://www.estonica.org/en/>) - an encyclopaedia about Estonia in Estonian, English and Russian, created by the Estonian Institute and aiming to present a compact and systematic overview of Estonian society, culture, history, nature, education, science, state organisation and economy, and the relations between these areas.
 - *Culture.ee* (<http://culture.ee/en/>) - web portal which provides a unique event calendar, which publicises the cultural events taking place in both larger and smaller places of Estonia in all their variety. The calendar is complemented by an overview of Estonian cultural events taking place abroad. It also includes Estonian culture guide and culture blog.

- *Project SETOMAA* (<https://www.visitsetomaa.ee/en/explore-setomaa>). Project with the aim to preserve the past and present culture of Setumaa (an historical county in South-Estonia). Estonian Literary Museum in co-operation with the Chair of Archaeology, University of Tartu.
- *The MTÜ Eesti Filmi Andmebaas* (the non-profit association Estonian Film Database, hereinafter MTÜ EFA) was founded in the late autumn of 2007. The main objective of the undertaking is to form the complete Estonian national filmography within ten years (2007–2017) and make it available in a web environment to everyone interested, both in Estonian and abroad (<http://www.efis.ee>). The Estonian Film Database provides a meaningful overview of the entire film heritage. The Estonian Film Database is a world-leading example of a very thorough development of the meta-information database of film heritage and its availability to users. The Estonian television and film heritage is in good digitization readiness.
- *Database of Estonian National Broadcasting*: <https://arhiiv.err.ee/>
- Estonian National Television's website and digital collections (<https://etv.err.ee>).
- *EEVA - Digital Text Repository for Older Estonian Literature* (<http://www.utlib.ee/ekollekt/eeva>). EEVA is a joint project of the University of Tartu Library and the Department of Literature and Folklore of the University of Tartu, partnered also by the Estonian Literary Museum. EEVA was started in autumn 2002 with the support of the "Literary Classics" programme of the Ministry of Culture of the Republic of Estonia. The main goal of EEVA is to make the old rare texts that have played an important role in Estonian cultural history accessible to the users in the most sparing way that would not harm the original copies.
- *Eesti vaimse kultuuripärandi nimistu* (*List of Estonian Intangible Cultural Heritage*) <http://www.rahvakultuur.ee/vkpnimistu/>

Cooperation with other Cultural Heritage Institutions

The cooperation between Estonian research libraries became more intensive in the process of creating an information system and forming ELNET Consortium, in order to coordinate the division of resources and integration of technological solutions, in 1995. The primary task of the Consortium was to select, obtain and implement integrated library software. After lengthy discussions the software for the integrated system of research libraries - INNOPAC was selected. The implementation of a common integrated system presupposes co-operation between libraries at the highest level and creates possibilities for coordinated collections development. The implementation of a new library system will inevitably bring together many changes in people's everyday work - there will be new tasks and different responsibilities for staff, there will be changes in working routines and there will be a need for reorganizing all of the library's workflow. Since 1997 research libraries are learning, testing, adapting and implementing INNOPAC system (Virkus, 2000, p. 156).

A large number of initiatives described above have taken place in cooperation with libraries, museums, archives and other institutions. For example, the e-catalogue ESTER is a collaboration initiative among 18 major Estonian libraries who belong to the ELNET Consortium. 12 Estonian libraries are involved in compiling the database ISE - the database of Estonian articles. The Estonian e-repository E-varamu is an integrated e-environment created for digitized resources of the Estonian memory institutions: libraries, archives and museums. MUIS is the online gateway to Estonian museums developed jointly by Estonian museums. MUIS includes information about digital heritage created by 60 Estonian museums. DEA, Digitized Estonian Newspapers, is a project of three Estonian libraries: the National Library of Estonia, the Library of the Estonian Literary Museum and the Academic Library of the Tallinn University. Estonian Literary Museum has developed the project SETOMAA in co-operation with the Chair of Archaeology, University of Tartu. EEVA - Digital Text Repository for Older Estonian Literature EEVA is a joint project of the University of Tartu Library and the Department of Literature and Folklore of the University of Tartu, partnered also by the Estonian Literary Museum. Many other initiatives described above have taken place in cooperation with several libraries or archives and museums and the Kanut Conservation Centre (Kultuuriministeerium, 2019).

There are also initiatives involving local authorities or businesses. For example, digitisation of local traditions connected with place-names was a joint project between the Estonian Literary Museum in co-operation with local authorities, e.g. Lääne-Virumaa, Järvamaa and Valgamaa. Distribution of the Oldest Estonian Children's Books and making it easily available was done by the Estonian Literary Museum in co-operation with Tarkvarastuudio OÜ (Kultuuriministeeriumi veebileht, 2019).

There is also extensive cooperation at international level. The task of the Ministry of Culture is to promote the internationalisation of Estonian culture, to develop cultural relations and diplomacy between countries, and to participate in the formation of cultural and sports policies in international organisations. Estonia has concluded nearly 50 cultural cooperation contracts and joint programmes with countries all over the world. Estonia also participates in 15 international organisations, forums and cooperation programmes (Kultuuriministeeriumi veebileht, 2019).

A good example of strengthening transnational cultural cooperation is the Estonian-Finnish Cultural Foundation, where both Estonia and Finland decided to contribute financially in 2017. The aim of the Foundation is to support cultural cooperation projects between two neighboring countries in Europe and around the world. Preliminary work has also been started to create the Estonian-Latvian-Lithuanian Cultural Foundation. In 2017, a study on the internationalization of Estonian culture was prepared in cooperation with Enterprise Estonia in order to support the knowledge-based approach and internationalization of Estonian culture. The study provided an overview of the activities of four creative fields (audiovisual, visual arts, sound art and literature) (Kultuuriministeerium, 2019).

The Norwegian and European Economic Area financial mechanism has also supported collaboration and allocated money for the maintenance of cultural heritage objects in two consecutive periods (2004-2009 and 2009-2014), which has been invested in manor schools (Kultuuriministeerium, 2019).

There are also several cross-border collaborations that focused on sharing best practices and establishing uniform standards for mass digitisation:

- Swedish-Baltic seminar on text-mining services and tools that libraries should develop to serve digital humanities with their digital collections (2017).
- Lithuanian, Latvian, Estonian summer seminar of Baltic National Libraries 2016. Topic: how to ensure that our collections stay relevant to researchers and students and developments in the field of the legal deposit copy legislation.
- Lithuanian, Latvian, Estonian organises a joint museology course every year. In 2017, the topic of the Baltic Museology School was "Information Management for Museums" and it dealt with issues concerning collection, organization and use of museum related information.
- International project "Collaborative Digitisation of Natural and Cultural Heritage: CD-ETA" (Interreg) is aiming to improve adoption of the digitisation policy for natural and cultural heritage and contribute for establishing of uniform standards in the mass digitisation. Estonian War Museum is a partner from Estonia" (European Commission, 2018).

There is also a strong cooperation with international organizations and other expert organizations. In the years 2010-2013, Estonia was a member of the UNESCO World Heritage Committee. This committee manages a list that contains the world's cultural and natural objects that are significant from the point of view of the cultural and natural heritage of all of humanity. The Estonian team consisted of heritage conservation and environmental protection experts from the Ministry of Foreign Affairs, the Ministry of Culture, and the Ministry of the Environment (Kultuuriministeerium, 2019).

Estonia have participated actively in the work of the following organisations:

- *Monitoring Group on Cultural Heritage in the Baltic Sea States* – in 2014–2015 Estonia served as the Presidency of this working group.
- ICOMOS (*International Council on Monuments and Sites*) – private association of experts, which operates under the supervision of UNESCO; their purpose is to deal with immovable monuments at a state and international level.
- ICCROM (*International Centre for the Study of the Preservation and Restoration of Cultural Property*).
- *Europa Nostra* – pan-European association of voluntary heritage conservation organisations, Estonia is represented by the Estonian Heritage Conservation Society. Europa Nostra awards a very prestigious annual prize to praise the best restoration works, educational projects, and so on. Estonia has also managed to win some of the Europa Nostra heritage conservation awards. The last victory was in 2013, when Estonia won the grand prix in conservation for the restoration of hangars in the Seaplane Harbour.
- DOCOMOMO (*Working Party for Documentation and Conservation of Buildings, Sites and Neighborhoods of the Modern Movement*) – an international network to record and protect 20th-century architecture.

- EAC (*Europae Archaeologiae Consilium*) – an international organisation to unite the state institutions (authorities, inspectorates, agencies, and directorates) of European countries, which handle the protection of archaeological heritage (Kultuuriministeeriumi veebileht, 2019).

Projects (incl. contributions/partnership in regional/national/multinational projects)

Several projects where Estonian libraries have participated (or participate) have contributed to preserving and making available the cultural heritage:

- 2017-2020: *Helleno-Nordica. The Humanist Greek Heritage of the Swedish Empire*, coordinated by Janika Päll, University of Tartu, Tartu University Library. The project intends to study a network of cultural, political and economic relations, united by a common idea of re-vitalising an ancient language and reusing its culture. The aim of the four subprojects of Helleno-Nordica is to discover, publish and study previously unknown material, and to open new perspectives in the understanding of the role of historical Greece and its language in the development of European cultural history, especially in the Swedish Empire. The overall ambition is to show how the Greek past and the use of Humanist Greek were central for developing a common approach to scholarship and education in the Early Modern Baltic Sea Region. Despite the different experiences of the Baltic Sea countries in the 19th and 20th centuries, these common roots are still relevant today. Tartu is responsible for fieldwork and research for data with a focus on Eastern Baltic shores. Partnership with the Lund University in Sweden and the University of Helsinki in Finland.
- 2014–2019: *Estonian E-resources and Collection Preservation*, coordinated by Liisi Lembinen, University of Tartu, Tartu University Library. The project focuses on the infrastructure of E-repository. The main functions of the E-Repository infrastructure are defined in the project as follows: 1) To ensure the existence of and access to as much information as possible in digital form. 2) Through the E-Repository portal, create a uniform and easy online access to digital collections that takes into account the needs, interests, and rights of the user as well as of the author and provider of the information; 3) By implementing mass neutralization technology, prolong the physical existence of publications of scientific and cultural value on acidic paper and to stop their degradation. This is a national level collaboration project where in addition to Tartu University Library also ELNET Consortium, National Library of Estonia, Academic Library of Tallinn University, Estonian Literary Museum and National Archives of Estonia are involved.
- 2015–2018: *OpenAIRE2020 - Open Access Infrastructure for Research in Europe 2020*, coordinated by Anneli Sepp, University of Tartu, Tartu University Library. OpenAIRE2020 expanded and leveraged its focus from (1) the agents and resources of scholarly communication to workflows and processes, (2) from publications to data, software, and other research outputs, and the links between them, and (3) strengthen the relationship of European Open Access infrastructures with other regions of the world. Through these efforts OpenAIRE2020 supported and accelerated Open Science and Scholarship, of which Open Access is of fundamental importance. OpenAIRE2020 continued and extended OpenAIRE's scholarly communication infrastructure to manage and monitor the outcomes of EC-funded research. It combined its substantial networking capacities and technical capabilities to deliver a robust infrastructure offering support for the Open Access policies in Horizon 2020, via a range of pan-European outreach activities and a suite of services for key stakeholders. It provided researcher support and services for the Open Data Pilot and investigated its legal ramifications. The project offered to national funders the ability to implement OpenAIRE services to monitor research output, whilst new impact measures for research were investigated. OpenAIRE2020 engaged with innovative publishing and data initiatives via studies and pilots. By liaising with global infrastructures, it ensured international interoperability of repositories and their valuable OA contents. A total of 65 European universities, research centres and institutions are partners in this project
- 2013–2016: *Humanist Greek in Early Modern Estonia and Livonia: A Bridge to Modern and Ancient European Culture*, coordinated by Janika Päll, University of Tartu, Tartu University Library. The project was dedicated to texts in Humanist Greek, literary and scientific production in atticizing Greek language by humanist scholars, students and literati of non-Greek origin, studying Early Modern Estonia and Livonia from 1550-1720. The goals of the project were to create a research group, based on a collaboration and exchange between researchers and libraries, to establish the position of Humanist Greek studies in the framework of the study of society and humanities in early modern period, to inventory all humanist Greek texts printed or created in or by scholars of early modern Estonia and Livonia and make these texts public with

commentaries revealing their role in early modern society. This project created an international network of researchers dealing on this topic.

- 2014–2015: *DataCite Estonia*, coordinated by Liisi Lembinen, University of Tartu, University of Tartu, Tartu University Library. In the framework of the DataCite Estonia project, an Estonian Universities DataCite Estonia consortium was established. The University of Tartu joined the DataCite umbrella organization and a DataCite Estonia server and database were created at the University of Tartu Library. By the end of the project, software were created that allowed connection to DataCite Estonia server, which allowed application of automated DOI to scientific databases. Initiated by the University of Tartu Library and the University of Tartu Natural History Museum and funded by the Estonian Research Council, the University of Tartu joined DataCite in 2014 and acquired the right to assign unique Digital Object Identifiers (DOI) to research data created in Estonia.
- 2012-2015: *Baltic Literary Research and Network Project - EEVA*, coordinated by Liina Lukas, University of Tartu, Tartu University Library. The grant project was engaged in scientific research on the earlier literature of the Baltic countries and proposed to treat the literary life of the Baltic countries up to the late 19th century as a unified multilingual “literary space” or “literary field” in the sense of Pierre Bourdieu. The project focussed on these relations and common practices proceeded from the social and discursive-historical approach. Discursive (Michel Foucault) approach to the multilingual literatures of the Baltic countries helped to understand the shaping of certain formations or utterance fields and their ways of acting in different languages, their common shares or differences. The project cooperated closely with the Under and Tuglas Literature Centre (UTKK) of the Estonian Academy of Sciences, with the University of Latvia, as well as with the Universities of Frankfurt a/M, Göttingen and Greifswald.
- 2011-2015: *Estonian e-varamu and Preservation of Collections*, coordinated by Malle Ermel, University of Tartu, Tartu University Library. The overall objective of the project was to raise the quality of scientific and educational work and to make library resources available to researchers, students, and all information users in Estonia and globally without restrictions. This is a national level collaboration project where in addition to Tartu University Library also ELNET Consortium, National Library of Estonia, Academic Library of Tallinn University, Estonian Literary Museum and National Archives of Estonia are involved.
- 2011-2012: *Preserving and Making Accessible Archival Legacies of Foreign Estonian Scientists in University of Tartu Library*, coordinated by Malle Ermel, University of Tartu, Tartu University Library. The project was describing storage items of archival legacies of foreign Estonian scientists in the online catalogue ESTER to enable researchers to order these through the internet and was processing Karl Laantee’s papers. Collaboration project between Tartu University Library and ELNET Consortium.
- 2010-2012: *Digitizing of Manuscript Source Texts of Estonian Culture and the Red Book of Estonian Publications*, coordinated by Liisi Lembinen, University of Tartu, Tartu University Library. The project was a sub-task of the Estonian Literary Museum’s project “Conservation and accessibility of manuscript source texts of Estonian culture and the Red Book of Estonian Publications.” The goal of the project was pre-scanning restoration, conservation, and digitalization of the collection of rare old books (1,000 publications, 100,000 pages) and manuscript source texts of Estonian culture (208 volumes, 140,000 pages) located in various memory institutions. Collaboration project between Tartu University Library and various memory institutions in Estonia.
- 2009-2013: *Digital Availability of Estica/Baltic’s Full-texts of Historical Texts*, coordinated by Kristina Pai, University of Tartu, Tartu University Library. The overall objective of the project was to facilitate the use of basic texts of scientific and cultural history unique to Estonian culture, to make the information needed for the work of humanitarian scientists available online and digitize and associate old Estica/Baltica high-load publications with the Internet and various databases. Collaboration project between Tartu University Library and various memory institutions in Estonia.
- 2008-2010: *The Cultural Heritage of Environmental Spaces: A Comparative Analysis between Estonia and Norway*, coordinated by Sabine Brauckmann, University of Tartu, Tartu University Library. The main goal of the project was to unveil in general how transient are human habits towards specific environmental spaces and how such imponderabilities are stored as tangible and non-tangible goods into our cultural heritage. In particular, the project demonstrated (1) how these habits built up a canon of Umwelt transitions between endangered species (wolves), domesticated animals (sheeps) and cultural change in Norway from 1840 to nowadays, and (2) how over 1,000 stereophotographs mutated to an outcry of ‘culture gulps nature’ in Estonia at the end of the 19th century. Collaboration project of the University of Oslo, Forum for University

History; University of Oslo, Centre for Development and The Environment and Tartu University Library.

- 2005-2007: TEL-ME-MOR (*The European Library: Modular Extensions for Mediating Online Resources*). The objective of the TEL-ME-MORE project was to secure better access to the digital information resources of Europe via national libraries. TEL-ME-MORE was an extension of the TEL project (The European Library), where 8 European libraries participated as partners aiming at creating a uniform environment and service (The European Library Service) to exchange digital collections. TEL-ME-MOR involved national libraries from 10 member states in order to increase the exchange of quality digital information via The European Library Service. (<http://www.theeuropeanlibrary.org/archive/projects/telmemor/index.php>).
- 2004–2006: *ReUSE* was a EU co-operation project that aimed at creating a reliable digital archive that meets the requirements of long-term storage standards. In addition to creating the technical environment and system of metadata for a digital archive, a monitoring of the public sector publishers was carried out and a co-operation network for collecting digital materials to the archive was developed. The project partners included the Innsbruck University Library (co-ordinator), National Library of Austria, National Library of Slovenia, Estonian National Library, Graz University Library, Linz University Library, Humboldt University Library, Ljubljana University Library and Die Deutsche Bibliothek (<http://www2.uibk.ac.at/reuse/>).
- 2003-2006: MIP (*Transitional Metal in Paper*). The project aimed at researching the mechanism of ink corrosion on manuscripts and working out suitable preservation methods. The project partners were the national archives, national libraries, universities and institutions of Sweden, Norway, Finland, Estonia, Poland, Germany, the Netherlands (co-ordinator), Great Britain, Slovakia, Slovenia, Italy, Spain and France. Estonia is represented by the Estonian Historical Archives.

Identified Needs and Gaps within Cultural Heritage Related Library Services

Diverse intangible and tangible cultural heritage needs both human and physical resources to reach as many people as possible and to be preserved for future generations. The digital revolution enables new and innovative forms of services and broader, more democratic access to cultural heritage as well as new ways to access and consume cultural content. Estonia as an e-country is linking the innovative cultural heritage-related library services mainly with technological innovation. Digital cultural heritage brings with it new challenges. Development of innovative user experiences in libraries related to cultural heritage is a cost intensive process. New innovative services often rely on modern mobile technologies, where interactive augmentation and virtualization of the cultural environment have shown their adaptive capabilities and potential.

The most urgent challenges and opportunities across the Estonian galleries, libraries, archives, and museums (GLAM sector) are:

- transformation of heterogeneous cultural artifacts into rich digital representations in a sustainable, efficient and cost-effective manner;
- improvement of digital content, tools and services;
- long-term preservation and access to cultural assets;
- interactive cultural heritage services: e.g. creating innovative cultural heritage experiences using adaptive game-based augmented-reality and web technologies;
- personalization in cultural heritage: creating personalized context-aware access to digital cultural heritage;
- developing smart learning environments for using gamification techniques and video game technologies for formal learning and lifelong learning purposes;
- cultural data analytics; new approaches and tools that can effectively connect datasets from different contexts and extract valuable insights from them;
- novel data mining and visualisation techniques which enable end-users to discover new perspectives from heterogeneous datasets;
- the absence of powerful tools for data enrichment and discovery prevents the sector from taking full advantage of the linked open data opportunities and puts barriers in front of end-users who want to engage with digital assets;
- the risks are also related to the collection of data on the use of culture and the related threats to privacy and reduced cultural choices if algorithms start to decide on these choices based on the collected data. Opportunities include the enrichment of culture through new formats, the tighter

integration of different spheres of culture, and their more organic development; but also the acceleration of cultural dynamics supported by improved access and participation opportunities (Ibrus, 2017).

- storytelling and immersive experiences; the availability of high-quality interlinked data and complex multimodal objects opens new gateways for presenting cultural heritage through narratives and engaging experiences - there is a need to take full advantage of this, there is a need to investigate how the emerging technological solutions can turn distributed digital assets into coherent stories and encourage deeper engagement with culture. Libraries can experiment with these new storytelling capabilities and develop platforms and services that allow audiences to visualise the past from as yet unexplored perspectives.

It should be also noted that the digitalisation of the Estonian documentary and audiovisual heritage does not take place at a sufficient pace and it will limit the re-use of heritage and heritage-based innovation. Digital access to cultural heritage and its digitalisation have not reached the desired volume to date. Coordinated mass-digitization of cultural heritage and making it digitally available is still needed.

The opportunities for cooperation between the National Library, research, school and public libraries have not been used sufficiently. There is a fragmentation of library services (in multiple administrative areas and use of multiple software - e-catalogs, search in databases, etc). There is no single country-wide system for e-libraries and there is a lack of investment in libraries (underfunding of school libraries is the most problematic). Getting to grips with new technology developments is still very expensive for libraries. Lack of cooperation between local authorities and organizations reduces the competitiveness of libraries and other memory institutions, leading to their closure and reduced regional accessibility of culture. This results that library services do not meet the expectations of users. Demographic changes also will lead to the closure of libraries which also reduces the availability of services. The decrease in support due to changes in national and local government priorities or economic recession does not allow the development of innovative technological tools and content services. The high cost of in-service training hinders the professional development of librarians. The small volume of the National Support Program for Library Development and an aging and low-paying library staff is another problem area.

Thus, there is an urgent need for collaboration between different types of libraries in the development of e-services to meet the expectations of users. By supporting the digitization of documents nationally, the availability of cultural heritage improves, the need for postcompilation is reduced and new publications can be purchased in a wider range, encouraging reading interest and habits. Supporting the development of a national web-based library system, creating a lending environment for e-publications, increasing reading opportunities for visually impaired people, and paying Estonian authors for e-publishing, provides better access to cultural heritage.

CONCLUSION

The definitions of cultural heritage in Estonia include tangible, intangible and digital heritage, from monuments and sites over expressions of human creativity to museum collections and film heritage. The protection of cultural heritage has moved from single objects to whole areas – building complexes, town quarters and settlements.

There have been important initiatives, established institutions and regulations for the protection of cultural heritage in Estonia in every period of history. The current legislation framework regulates the cultural field and several strategic documents have highlighted the importance of the preservation of and access to the cultural heritage in Estonia.

In the past decades, Estonian memory institutions have made significant progress in the digitisation of cultural heritage and making it available to the public. Heritage has always existed, but people are now aware of its existence, examine it, and try to consciously shape it. This has entailed an increased political interest in heritage. The visibility and importance of heritage in the society is growing. As a result, heritage also plays an increasingly important role in cultural policies and at various levels of society. People and the society today are not passive recipients, keepers and transmitters of heritage, but active creators and shapers of heritage. The management of heritage involves the following activities: defining, preserving, interpreting, and utilising heritage. The management of heritage occurs at all levels in Estonia, starting from individuals and ending with global international organisations (Konsa, 2013, pp. 147-148).

Estonian GLAM institutions generally have achieved good cooperation and coordination of activities. There has also been extensive international cooperation. However, the digitalisation of the Estonian documentary and audiovisual heritage does not take place at a sufficient pace and it will limit the re-use of heritage and heritage-based innovation. Digital access to cultural heritage and its digitalisation have not reached the desired volume to date. There are more than 900 million objects of importance for Estonian culture, but only 10% are digitized. Digital cultural heritage, is still created mainly within ad hoc projects. Coordinated mass digitization of cultural heritage and making it digitally available is still needed. However, the current trend shows a shift from single projects towards mass digitisation (Laak and Viies, 2015, Ibrus, 2017).

Significant number of studies have been carried out in the field of cultural heritage in Estonia covering different areas and aspects of cultural heritage. These studies focus both on tangible and intangible cultural heritage as well as digital cultural heritage.

The current legislation framework and policies regulate and influence the services of libraries and their role in preserving cultural heritage and making it accessible for the users. In Estonian libraries, there is a continuous development of library systems, databases and e-services. Thus, Estonian cultural heritage can be accessed in a virtual environment, which is located in electronic archives, museums and libraries. Library is a cultural space and learning environment and their activities are standardized and comparable to other countries. E-services and m-services (DIGAR, e-book, film, etc.) increase participation in cultural heritage. Estonia has implemented a lot of e-solutions to improve the accessibility of books. The state supports digitisation and e-publications. Estonian GLAM institutions have developed a significant number of various electronic databases and virtual environments that can be considered as a good practice.

However, many challenges remain in transforming heterogeneous cultural artifacts into rich digital representations in a sustainable, efficient and cost-effective manner, improving digital content, tools and services, developing interactive cultural heritage services, providing personalized context-aware access to digital cultural heritage, developing smart learning environments for using gamification techniques and video game technologies, developing storytelling and immersive experiences, and advancing cultural data analytics.

REFERENCES

- Alatalu, R. (2013). Kultuuripärandi aasta. Pärijata pole pärandit!<http://lib.sakuvald.ee/173.htm>
- Alatalu, R. (2012). *Heritage Protection in Transitional Society 1986-2002: From Nation's Conscience in the Estonian SSR into the Harasser of Private Owner in the Republic of Estonia*. Doctoral Dissertation. Tallinn: Estonian Academy of Arts.
- Arhiiviseadus (2011). *Riigi Teataja*, I, 1. <https://www.riigiteataja.ee/akt/121032011001>
- Astel, E. (2014). *Eesti rahvapärased hõbeehted/Estonian National Silver Jewellery*. Tartu: Estonian National Museum.
- Autoriõiguse seadus (2019). *Riigi Teataja*, I, 5
<https://www.riigiteataja.ee/akt/114062013005?leiaKehtiv>
- Council of Europe (1975). *European Charter of the Architectural Heritage*.
<https://www.icomos.org/en/charters-and-texts/179-articles-en-francais/ressources/chartersand-standards/170-european-charter-of-the-architectural-heritage>
- Digital Agenda 2020 for Estonia (2013)
https://www.mkm.ee/sites/default/files/digitalagenda2020_final_final.pdf
- Eesti kultuuripärandi hoidmise ja väärtustamise arengukava aastani 2030 koostamise ettepanek (2008).
https://www.valitsus.ee/sites/default/files/contenteditors/arengukavad/kultuurip_randi_arengukava_ettepanek.pdf
- Eesti Rahvusraamatukogu seadus (2019). *Riigi Teataja*, I, 40
<https://www.riigiteataja.ee/akt/113032019040>
- Eesti säästva arengu riiklik strateegia Säästev Eesti 21.
https://www.envir.ee/sites/default/files/elfinder/article_files/se21_est_web_1.pdf
- Eesti Vanariigi põhiseadus (1992). *Riigi Teataja*, I, 2 <https://www.riigiteataja.ee/akt/PS?leiaKehtiv>
- Emor (2018). *Muuseumide ja raamatukogude külastajate ja mittekülastajate uuring*. AS Emor
https://www.kul.ee/sites/kulminn/files/muuseumide_ja_raamatukogude_kulastajate_ja_mittekulastajate_uuringu_lopparuanne_0.pdf

- Estonian Cultural Heritage. Preservation and Conservation. Vol. 2, 2013-2017.
<https://www.muinsuskaitseamet.ee/en/estonian-cultural-heritage-book>
- Estonian Entrepreneurship Growth Strategy 2014-2020 (2013).
https://kasvustrateegia.mkm.ee/index_eng.html
- Estonian National Strategy on Sustainable Development Sustainable Estonia 21 (2005)
https://www.riigikantselei.ee/sites/default/files/contenteditors/Failid/estonia_sds_2005.pdf
- Estonian Research and Development and Innovation Strategy 2014–2020: Knowledge-based Estonia https://www.hm.ee/sites/default/files/estonian_rdi_strategy_2014-2020.pdf
- Euroopa kultuuripärandi aasta <https://www.parandiaasta.ee>
- European Commission (2018). *Cultural Heritage: Digitisation, Online Accessibility and Digital Preservation: Consolidated Progress Report on the implementation of Commission Recommendation (2011/711/EU) 2015-2017*. Luxembourg.
- European Commission (2016). *Cultural heritage: Digitisation, online accessibility and digital preservation: Report on the Implementation of Commission Recommendation 2011/711/EU 2013-2015*. Luxembourg.
- E-väljaannete laenuuskeskkonna analüüs: Analüüsi aruanne (2018)
https://www.nlib.ee/sites/default/files/e-laenusus_v7.1_puhas.pdf
- Hiiop, H. (2012). *Contemporary Art in the Museum: How to Preserve the Ephemeral? The Preservation Strategy and Methods of the Contemporary Art Collection of the Art Museum of Estonia*. Master Thesis. Tallinn: Estonian Academy of Arts.
- Ibrus, I. (2017). Eesti digikultuuri poliitika rahvusvahelises ruumis: arengud ja kitsaskohad. Eesti rändeajastul. Tallinn: Eesti Koostöö Kogu. <https://inimareng.ee/eestikultuurimuutused-avatud-maailmas/eesti-digikultuuri-poliitika-rahvusvahelises-ruumis/>
- Infotehnoloogia ja Telekommunikatsiooni Liidu visioon infoühiskonnast 2030 NUTIKAS EESTI (2018).
<https://www.itl.ee/public/files/ITL%20visioon%202018-1.pdf>
- Integrating Estonia 2020: The Strategy of Integration and Social Cohesion in Estonia (2014).
https://www.kul.ee/sites/kulminn/files/23748_en_proofreading_le2020_eng.pdf
- Jeeser, K. (2013). *Documentation of Museum Objects in Estonian Museums: Development and Application of Museum Information System*. Master Thesis. Tartu: Tartu University.
- Johanson, K. (2018). *Missing Interpretations. Natural and Residual Finds in Estonian Archaeological Collections*. Doctoral Dissertation. Tartu: Tartu University.
- Jürgens, M. (2013). *The Digital Photo Archives of Estonian Memory Institutions and Their Rightful Use on the Internet*. Master Thesis. Tallinn: Tallinn University.
- Kiisa, K. (2014). Exciting Reading from the Past: Archiving and Usability of the Periodicals stored in the Digital Collections of the National library of Estonia. In Lauristin, M. & Vihalemm, P. (eds.), *Reading in changing society*. Tartu: Tartu University Press.
- Konsa, K. (2017). Time and Space of Heritage Preservation: Conservation Theoretical Perspective. *Baltic Journal of Art History*, 13, 193-215.
- Konsa, K. (2013). Heritage as a Socio-Cultural Construct: Problems of Definition. *Baltic Journal of Art History*, 6, 125-151.
- Konsa, K. (2007). Condition survey for the Estonian national preservation policy. *Restaurator*, 28(4), 239-255.
- Koov, H. (2012). *The Metadata Problems in Online Databases in Searching Information on Monuments*. Master Thesis. Tallinn: Tallinn University.
- Kultuur 2020 = Kultuuripoliitika põhialused aastani 2020.
<http://www.kul.ee/sites/default/files/kultuur2020.pdf>
- Kultuuriministeeriumi veebileht (2019) <https://www.kul.ee>
- Kultuuriministeerium (2019). Kultuuriministeeriumi valitsemisala arengukava 2019–2022
https://www.kul.ee/sites/kulminn/files/kum_ak_2019_2022.pdf
- Kultuuriministeerium (2003). Eesti kultuuripärandi digitaalse säilitamise riiklik strateegia 2004–2007.
- Kuutma, K. (2009). Cultural heritage: an introduction to entanglements of knowledge, politics and property. *Journal of Ethnology and Folkloristics*, 3(2), 5-12.
- Kuutma, K. (2013). Concepts and contingencies in heritage politics. In *Anthropological Perspectives on Intangible Cultural Heritage* (pp. 1-15). Springer, Heidelberg.
- Kärberg, T. (2016). *Digital Preservation of Knowledge: A Theoretical-Practical Research at the National Archives of Estonia*. Doctoral Dissertation. Tartu: Tartu University.
- Laak, M, Viires, P. (2015). Digitaalkultuur Eesti kultuuriruumi osana 2004–2014: hetkeseis ja tulevikuproгноos. R. vetik (Toim). Eesti Inimarengu Aruanne 2014/2015: Lõksudest välja? Tallinn: Eesti Koostöö Kogu, 226-236.
- Lagerspetz, M., Tali, M. (2014). Estonia Country profile <http://www.culturalpolicies.net>

- Leima, L. (2012). E-lugeri ristsed möödusid valutult. *Tartu Ekspress*, 7. juuni.
- Looduskaitseeadus (2013). *Riigi Teataja*, I, 16. <https://www.riigiteataja.ee/akt/116052013016>
- The Lund Principles and the Lund Action Plan. ftp://ftp.cordis.lu/pub/ist/docs/digicult/lund_principles-en.pdf
- Merila, K. (2009). *Digitization of Cultural Heritage: Digital Backups*. Master Thesis. Tallinn: Tallinn University.
- Ministry of Economic Affairs and Communications (2005). Estonian IT policy: towards a more service-centred and citizen-friendly state: principles of the Estonian Information Policy 2004-2006/Ministry of Economic Affairs and Communications. Tallinn: Ministry of Economic Affairs and Communications.
- Muinsuskaitseeadus (2019). *Riigi Teataja*, I, 13. <https://www.riigiteataja.ee/akt/119032019013>
- Muinsuskaitseameti veebileht (2019). <https://www.muinsuskaitseamet.ee/et>
- Museumiseadus (2013). *Riigi Teataja*, I, 1. <https://www.riigiteataja.ee/akt/110072013001>
- Mälestiste restaureerimine: enne ja pärast 2005-2011 / [koostanud Britta Lainevoel ja Ülo Puustak ; toimetaja Meeli Hunt ; eessõna: Kalev Uustalu] [Tallinn] : Muinsuskaitseamet, 2011 ([Tallinn] : Vaba Maa) https://www.muinsuskaitseamet.ee/sites/default/files/contenteditors/trykised/malestiste_restaureerimine_2005-2011.pdf
- National Reform Programme Estonia 2020
https://www.riigikantselei.ee/sites/default/files/contenteditors/Failid/eesti2020/nrp_estonia_2020_30.05.2019.pdf
- Olonen, R. (2014). Infotehnoloogia kasutamisest Eesti raamatukogudes. In: Raamatukogud ja raamatukogundus Eesti 2002-2012. Koost. M. Volt. Tallinn: Eesti Rahvusraamatukogu, 65–92.
- Parts, P-K. (2015). *Sustainable Community Management in Estonia: Reflections on Heritage Projects on Kihnu Island, in Viljandi County, and in Various Protected Areas*. Doctoral Dissertation. Tartu: Tartu University.
- Pawłusz, E. (2017). *In Search of an Estonian Identity: (formal and informal) Mechanisms of Identity Construction in Estonia. The Role of Song Festivals, Popular Music and Nation Branding*. Doctoral Dissertation. Tallinn: Tallinn University.
- Puustak, Ü. (2013). The development of heritage protection in Estonia. In *Estonian Cultural heritage: Preservation and conservation*. Vol. 1 2005–2012, 5-8.
- Pärn, A. The policies of preserving Estonian cultural heritage
http://www.baacouncil.org/media/public/files/edg/The_policies_of_preserving_Estonian_cultural_heritage.pdf
- Rahvaraamatukogu seadus (2019), *Riigi Teataja*, I, 127 <https://www.riigiteataja.ee/akt/RaRS>
- Rahvusvahelistumise ja ekspordi uuring loomemajanduse valdkonnas: oktoober 2016 -oktoober 2017. Civitta Eesti AS, Tom Fleming Creative Consultancy. https://www.eas.ee/wp-content/uploads/2017/11/Loomemajanduse-ekspordiuuring_1%C3%B5pparuanne-31.10.2017.pdf
- Reimo, T. (2006). Digital preservation of printed cultural heritage in Estonia: strategy, methodology, practice. *Knygotyra*, 47(1), 262-276.
- Säilituseksplari seadus (2017). *Riigi Teataja*, I, 1. <https://www.riigiteataja.ee/akt/107072016001>
- Tamm, E. (2017). Estonian National Inventory of Intangible Cultural Heritage – crowdsourcing practising communities. *Memoriamedia Review* 1, Art. 2. 2017.
- Tamm, M. (2013). In search of lost time: memory politics in Estonia, 1991-2011. *Nationalities Papers*, 41(4), 651-674.
- Tamm, M. (2008). History as cultural memory: Mnemohistory and the construction of the Estonian nation. *Journal of Baltic Studies*, 39(4), 499-516.
- The general principles of the cultural policy up to 2020
https://www.kul.ee/sites/kulminn/files/culture2020_eng.pdf
- Tiidus, M. (2007). *Digitisation of Documentary Heritage in Estonian Archives and Museums: Principles and Problems*. Master Thesis. Tallinn: Tallinn University.
- UNESCO (2003). *Convention for the Safeguarding of the Intangible Cultural Heritage*.
<https://ich.unesco.org/en/convention>
- UNESCO (2002). *Memory of the World. General Guidelines to Safeguard Documentary heritage*.
<https://unesdoc.unesco.org/ark:/48223/pf0000125637>
- UNESCO (1972). *Convention Concerning the Protection of the World Cultural and Natural Heritage*.
<https://whc.unesco.org/en/conventiontext/>
- Vallner, U. (2012). Avaandmed – samm tuleviku internetti. – Eesti infoühiskonna aastaraamat 2011/2012. Tallinn: Director Meedia OÜ.

- Vihalemm, P., Lauristin, M., Kõuts-Klemm, R., Lõhmus, M. Uuring: meediasotsioloogiline uuring "Eesti kultuuriajakirjanduse sisu ja kasutajaskond: sügis 2014 - suvi 2016. Tartu Ülikooli ühiskonnateaduste instituut. <https://www.kul.ee/et/uudised/uuringud>
- Virkus, S. (2000). Progress and prospects for Estonian libraries. In P. Fletcher & J. Bertot (Eds.), *World libraries on the information superhighway: Preparing for the challenges of the new millennium* (pp. 221–237). Hershey, PA: Idea Group.
- Virkus, S. (2003). Academic libraries in Eastern Europe. In M. Drake (Ed.), *Encyclopedia of library and information science* (Vols. 1–4). New York: Marcel Dekker.
- Visiting neighbours : 100 treasures of Estonia, Latvia and Lithuania/[authors of texts: Aistė Bimbirytė-Mackevičienė, Janis Zilgavis, Siim Raie, Triin Reidla ; translation: Kristjan Teder, Madli Kullaste, SIA Serres, Visuomenės specialaus moky. [Tallinn] : National Heritage Board of Republic of Estonia, 2018 (Tallinn : Tallinna Raamatutrükikoda)
https://www.muinsuskaitseamet.ee/sites/default/files/contenteditors/trykised/visiting_neighbours_w eb_uus.pdf
- Värv, E. (2012). National costumes from Estonian National Museum collections – Vivid national costume, Tartu, Estonia.

FRANCE

by Joumana Boustany

INTRODUCTION

By creating the first Ministry of Cultural Affairs in 1959, André Malraux knew that this ministry could not be a ministry like the others. That its vocation would not only be to design and conduct “cultural actions”. That its primary function would be to promote the manifestation of the values of civilisation that make up the culture of a people, while taking inspiration from these same values to add meaning to the collective life. The question of heritage is, more than others, central to this vision: legacy of our history, cultural heritage is one of the traces left by this tireless and endless quest for the true civilisations in the making. This trace is not just a frozen vestige of the past. It is taking shape every day (Collinet & Metzger, 2005).

As cultural heritage is taking shape every day, it is hard to define its boundaries and many definitions prevail in literature. Cultural heritage is defined as a set of tangible and intangible elements of a cultural nature, charged with multiple meanings, with a collective dimension and transmitted from generation to generation (vie-publique.fr, 2014a).

For (Benhamou, Thesmar, & Mongin, 2011), Heritage refers to what a nation intends to conserve for future generations; it includes both a relationship to history and to the future, made up of continuity (with the passing of time, which brings new monuments into the field of heritage almost naturally) and discontinuities (with the arrival of new objects and concepts that broaden the field of heritage, gardens, cafés, landscapes, industrial sites, various places of memory, but also elements of the intangible heritage, which contribute to the elaboration of what could be described as “national novel”).

According to (Basilico, 2005), the definition of heritage evolves and changes over time. Each generation redefines the boundaries that characterise the living and evolving heritage object. The heritage has always and permanently been open and extended to the contemporary social, economic and cultural reality. We are talking about architectural, archaeological, rural, religious, maritime, industrial, urban, scientific, linguistic heritage... In all these contexts, it has always been a question of transmitting heritage, from one generation to another, that is valued at each stage.

In the Heritage Code (“Code du patrimoine,” 2019), they specified: for the purposes of this Code, heritage means all property, whether real or personal, belonging to public or private ownership, which is of historical, artistic, archaeological, aesthetic, scientific or technical interest. It also includes elements of intangible cultural heritage, within the meaning of Article 2 of the International Convention for the Safeguarding of the Intangible Cultural Heritage, adopted in Paris on 17 October 2003.

Many other French institutions use UNESCO's definitions, but within UNESCO itself, several definitions prevail:

In The [Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict](#), article 1 (UNESCO, 1954) the term “cultural property” is defined as follows:

“The term 'cultural property' shall cover, irrespective of origin or ownership:

1. movable or immovable property of great importance to the cultural heritage of every people, such as monuments of architecture, art or history, whether religious or secular; archaeological sites; groups of buildings which, as a whole, are of historical or artistic interest; works of art; manuscripts, books and other objects of artistic, historical or archaeological interest; as well as scientific collections and important collections of books or archives or of reproductions of the property defined above;
2. buildings whose main and effective purpose is to preserve or exhibit the movable cultural property defined in sub-paragraph (a) such as museums, large libraries and depositories of archives, and refuges intended to shelter, in the event of armed conflict, the movable cultural property defined in sub-paragraph (a);
3. centres containing a large amount of cultural property as defined in sub-paragraphs (a) and (b), to be known as 'centres containing monuments'.”

In another context “Cultural heritage is, in its broadest sense, both a product and a process, which provides societies with a wealth of resources that are inherited from the past, created in the present and bestowed for the benefit of future generations. Most importantly, it includes not only tangible, but also natural and intangible heritage” (UNESCO, 2014).

Always according to UNESCO (UNESCO, [1970]), “The term cultural heritage encompasses several main categories of heritage:

- Cultural heritage
 - Tangible cultural heritage:
 - movable cultural heritage (paintings, sculptures, coins, manuscripts)
 - immovable cultural heritage (monuments, archaeological sites, and so on)
 - underwater cultural heritage (shipwrecks, underwater ruins and cities)
 - Intangible cultural heritage: oral traditions, performing arts, rituals
- Natural heritage: natural sites with cultural aspects such as cultural landscapes, physical, biological or geological formations
- Heritage in the event of armed conflict

Defining cultural heritage is therefore not an easy task. The long [list of expressions](#) used in literature to designate its different aspects show this complexity.

In France, no clear definition for cultural heritage has ever really been given in legal terms. The definition given in the Heritage Code remains vague, and its second part refers to the UNESCO definition. In the first part of this report, we will present the chronology of French policy towards heritage in general, from the time of the French Revolution until today. In the second part, we will deal more specifically with written and graphic heritage policy. And in the last part, we will make a review of the best practices in the field.

CULTURAL HERITAGE POLICY IN FRANCE⁸

State policy is most often translated into legal texts. In France, laws and regulations have long been concerned with cultural heritage, but not always to its advantage. In France, each heritage sector has its own legislation. In general, the objective of heritage policy is threefold, **to preserve**, i.e., to conserve, maintain, restore and transmit, **to manage** and **to enhance** through openness to the public, animation and dissemination, in order to meet cultural, economic, tourism, educational and social challenges. According to (vie-publique.fr, 2014b), five periods characterise the history of cultural heritage in France. 1789 - 1830: creation of the heritage notion

The 1789 Revolution damaged heritage, particularly in terms of monarchy and religion. The decree of November 2, 1789, transferred the church’s property to the Nation. At that time, many voices raised to protect heritage. The following years several laws were adopted in favour of heritage: In 1790 the decree of September 7 created the National archives; on October 13, the Assembly set up the Monuments Committee to study the situation of the “monuments of art and science”; on November 22, an instruction was published concerning the conservation of manuscripts, monuments, statues, paintings, drawings and other pieces of furniture from ecclesiastical houses, which are part of national property. On September 16, 1792, the assembly voted to preserve the “masterpieces of the arts” threatened by the revolutionary movement. The years 1793 and 1794 saw the adoption of several texts to penalise heritage degradation. On October 26, 1796, a law created an archive service in each French department. The first Inventory of Monuments has been published on July 22, 1816.

1830 - 1930: Birth of the Heritage Policy

On October 23, 1830, the General inspection of historical monuments has been created. The first inspector, Ludovic Vitet, defined his mission as follows: “To list and make a critical description of all the buildings of the kingdom which, either by their date, or the nature of their architecture, or the events they had been witnesses, deserve the attention of the archaeologist, the historian, such is the first purpose of the functions entrusted to me; secondly, I must ensure the conservation of these buildings by indicating to the Government and local authorities the means either to prevent or to stop their deterioration”⁹.

⁸ This part is an adaptation, with deletion and additions, of the “Heritage Policy: Chronology” published on the “Vie-publique” website <https://www.vie-publique.fr/politiques-publicques/politique-patrimoine/chronologie/>.

⁹ Ministère de la Culture. Monuments historiques. Retrieved from <http://www.culture.gouv.fr/Thematiques/Monuments-historiques-Sites-patrimoniaux-remarquables/Presentation/Monuments-historiques>

The Commission of historical monuments, created in 1837, is at the origin of the first list of protected monuments made in 1840, although the law for the conservation of monuments and art works of historical and artistic interest was only voted on March 30, 1887. However, its scope was limited, as it only concerned monuments belonging to public persons (the consent of private owners being required for classification). Because of the defects of this law, and as a consequence of the law on the separation of the Church and State in December 1905, a new law on Historic Monuments was signed on December 31, 1913. This law complements and improves the provisions of the Historic Monuments Law of March 30, 1887, by establishing the classification body and defining the framework and status of historic monuments. It also provides a new protection measure by replacing the notion of national interest with that of public interest and infringes for the first time on the right of ownership by extending the classification to private property. This law is one of the oldest in the world in this field and often taken as a model. It was little transformed until it was incorporated into the heritage code in February 2004 and the ordinance of September 8, 2005, on historic monuments and protected areas¹⁰.

1930 - 1960: Extension of Heritage Protection

On May 2, 1930, a new law was adopted broadening the notion of cultural heritage to include the protection of natural monuments and sites of artistic, historical, scientific, legendary or picturesque nature, which extended the protection of natural heritage; the law established a list of protected sites and provided, like for historical monuments, for a double level of protection, classification and inscription. An additional clause, adopted in 1957, allowed the creation of natural reserves.

On July 21, 1936, a new decree established that all the papers of the ministries and the administrations that depended on them were to be deposited in the State Archives.

On September 27, 1941, a new law set the conditions for the exploitation of archaeological excavation sites and the safeguarding of objects and monuments discovered there.

1960 - 2003: A New Notion of Heritage

The 1960s were rich in laws related to cultural heritage:

- the act No. 60-708 on July 22, 1960, created the national natural parks, which represents a decisive step in the protection of natural heritage;
- the law No. 62-880, voted on July 31, 1962, established a programme for the restoration of major historical monuments for the period 1962-1966;
- the law No. 62-903 on August 4, 1962 (known as the Malraux Law) in safeguarded sectors, extended the notion of heritage to historic urban areas and made it possible to manage them by means of a "safeguarding and enhancement plan";
- the decree No. 63-973 on September 17, 1963, created a body for the conservation of museums in France and established its status;
- On January 29, 1964, the *Bureau des fouilles et antiquités* (Office of Excavations and Antiquities) was established. It is responsible for dealing with all administrative, financial and technical problems relating to the application of legislation and regulations on archaeological excavations and discoveries;
- the law No. 67-1174 on December 28, 1967, established the second programme on the restoration of historical monuments and the protection of sites;
- the law No. 67-1174 on December 31, 1968, aimed to promote the conservation of national artistic heritage. The donation of works of art in the form of inheritance tax payments and exemptions from transfer duties and ancillary taxes in the interest of the beneficiaries enrich national heritage.

Even if the 1970s were less prolific, several laws were adopted.

- November 16, 1972: the UNESCO General Conference in Paris adopted the Convention for the Protection of the World Cultural and Natural Heritage;
- October 12, 1977: Decree on impact studies: the code of urban planning subjects the obtaining or the refusal of the building permit to the observation of special rules if the construction risks compromising the conservation or the enhancement of site or archaeological remains.
- July 11, 1978: promulgation of the program law n ° 78-727 on the museums, for the period 1978-1982.

¹⁰ Ministère de la Culture. Centenaire de la loi de 1913. Retrieved from <http://www.culture.gouv.fr/Thematiques/Monuments-historiques-Sites-patrimoniaux-remarquables/Presentation/Focus/Centenaire-de-la-loi-de-1913>

- On August 9, 1978: The Council of Ministers declares the year 1980 Heritage Year.
- January 3, 1979: promulgation of the law n ° 79-18 on the archives.
- March 6, 1979: publication of Decree No. 79-180 instituting the Departmental Services of Architecture and Heritage (SDAP).

We have to wait until the 1980s, 15 July, to have a law on the protection of public collections against malicious acts, providing sanctions for anyone who attacks monuments or public collections, including land containing archaeological remains.

On December 15, 1982, the International Council on Monuments and Sites (ICOMOS) registered the Florence Charter for the Safeguarding of Historic gardens.

On January 7, 1983, the Law No. 83-8 on the distribution of powers between municipalities, departments, regions and the State recalls that "the French territory is the common heritage of the Nation".

On January 1, 1986, the departmental archives pass under the authority of the presidents of the general councils and the corresponding external services disappear, while the following year, on July 23, 1987, a new law (No. 87-571) is passed on the development of patronage.

On May 9, 1989, a bylaw established the *National Scientific Council for the Heritage of Public Libraries* (CNSPB). This council was responsible for issuing opinions on questions relating to the preservation and enhancement of heritage collections of public libraries. The CNSPB included a Technical Committee on Restoration to provide input on projects related to the restoration of cultural funds in territorial public libraries. On December 22, 2005, the Decree No. 225-1686, simplifying the administration, abolished the CNSPB. Since then, the opinion of the regional governor has replaced that of the Minister of Culture for restoration projects presented by libraries belonging to local authorities. Of the CNSPB, only the Technical Committee on Restoration, which has become the current Technical Committee on the Restoration of Public Library Heritage, has remained active. This committee, known by its abbreviation CTR, evaluates the quality of restoration projects submitted by territorial public libraries and provides input to the regional governor responsible for issuing opinions on these restoration projects.

In 1990, the State and the Regional Council of Brittany decided to join their financial efforts to help libraries in the region to enrich their heritage collections with "old, rare or precious" documents: the first Regional Acquisition Fund for Libraries (FRAB), financed equally by the state and the region, was created. Since then, many more FRABs have been established and the mission has been enlarged to include restoration of heritage collections. As a result, this support fund, which still exists, has changed its name to the Regional Restoration and Acquisition Fund for Libraries (FRRAB).

On May 16, 1990, a decree gave special status to the bodies of general curators and curators of heritage. It created the National School of Heritage. In 2001, this school integrated the French Institute for the Restoration of Works of Art (IFROA), created in 1977. These regrouped institutions became the [National Heritage Institute](#) (INP), which is still active. Its mission is to recruit by competition and provides initial training for curators and restorers authorised to work on public heritage collections.

The year 1994 is a milestone as far as written heritage is concerned. On January 3, the Decree No. 94-3 established the National Library of France. As we saw previously, the National Library already existed, but in 1994, its name was changed and "France" was added to it, and it was moved to a new building, the current site. Just a few months later, on August 4, the Parliament promulgated a law relating to the use of the French language (law n ° 94-665). In its article 1, the law recalls that "language of the Republic under the Constitution, the French language is a fundamental element of the personality and heritage of France".

In the following years, some actions concerning mostly historical buildings and monuments were taken, as well as towards the democratisation of cultural practices, for example, free access, one Sunday per month, to monuments managed by the National Fund for Historic Monuments (effective from October 1999) and free access, for young people under 18, to state-owned monuments (in force from January 2000).

2003 -: Heritage in the Era of Decentralisation and Globalisation

On September 17, 2003, due to the fact that nearly 20% of the listed monuments (about 2,800 out of 15,000) were at risk, the Ministry of Culture decided to launch a National Action Plan for heritage. It included 5 axes: 1. a sustainable budget effort by the State in favour of historic monuments; 2. legal and tax incentives to promote the action of private owners and associations; 3. a simplification effort by the State of procedures for the protection and work on historic monuments; 4. decentralisation measures to encourage the intervention of local authorities in favour of heritage, and to refocus the State's action; 5. promotion of a better culture of their heritage among French citizens.

Another milestone in the protection of Cultural Heritage is the year 2004. In February, an ordinance created the Heritage Code, which brings together a number of scattered texts on the protection of heritage, defined as all property, whether immovable or movable, belonging to public or private property, which is of historical, artistic, archaeological, aesthetic, scientific or technical interest.

On July 5, 2006, Law No. 2006-791 adopted the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage.

The year 2009 was prolific for cultural heritage in France. The State allocated an additional €100 million to the budget of the Ministry of Culture. The three priorities selected by the ministry through 252 projects concern historical monuments, cultural facilities in the regions and major national projects. In addition, three financing agreements were signed with the National Library of France, the Louvre and the Versailles palace as part of the Heritage component of the Recovery Plan¹¹ launched in December 2008. On January 13, 2010, the General Directorate of Heritage was created from the departments of the museums of France (DMF), the Archives of France (DAF) and the Department of Architecture and Heritage (DAPA). Today, it is one of the four main entities of the Ministry of Culture and Communication with the Secretariat General, the Department of Artistic Creation and the Department of Media and Cultural Industries.

Also, in 2010, the French Ministry of Culture and Communication published the Information Guide for Public and Private Owners concerning the security of cultural heritage, from theft prevention to the return of stolen objects (Ministère de la Culture et de la Communication, 2010).

On January 26, 2011, the Senate tabled a bill that aimed to frame the terms of transfer of national heritage, so far inalienable, for the benefit of cities and departments.

In December 2017, a draft amending finance law was adopted creating the “*lotto du patrimoine*” (Heritage Lotto). This lotto aims to collect money for the Heritage Foundation in France to ensure the maintenance of monuments considered to be in danger, whether or not they are historical monuments. Among these monuments are libraries that are in danger, such as the [Fesh Library in Corsica](#).

The Prime Minister's circular on July 24, 2018, on the territorial organisation of public services cites the preservation of heritage among the missions for which the role of the State must be reaffirmed, if necessary, reinforcing its means (Béval, 2018).

As demonstrated in this section, great importance is given to cultural heritage in France. There is a succession of laws and initiatives, but is this enough to enhance this heritage? In the field, there is often a lack of human and financial resources despite state subsidies. This aid remains insufficient and often associations and volunteers, which cannot be mentioned in this state of the art, contribute to the preservation and enhancement of this heritage.

WRITTEN AND GRAPHIC HERITAGE POLICY

Cultural heritage held in French libraries is called “*patrimoine écrit*” or “*written heritage*”. This expression goes back to 1982. It was used for the first time in the report of Louis Desgraves (general inspector of

¹¹ The 2008-2009 French Economic Recovery Plan is a programme set up by the French government to revive the French economy following the 2008-2010 economic crisis, which affects, among other things, the French labour market

libraries from 1970 to 1983). This report was an important step in raising awareness of written heritage as an object of national interest (Cohen & Yvon, 2004).

As defined by the Ministry of Culture, "The national written and graphic heritage includes a wide variety of documents held in both private and public collections: printed books, manuscripts, prints, photographs, films, musical scores, maps and plans, coins and medals, archives, etc."¹².

The heritage collections that French libraries hold are estimated at 65 million items¹³.

Written heritage in France is tightly related to the history of France. Until the French Revolution, heritage funds developed in four areas: the royal domain, of which the *BnF - Bibliothèque nationale de France* (National Library of France) is today the heiress; the ecclesiastical domain, of which universities and colleges were also part; the municipal domain with the constitution of public libraries resulting from donations or private bequests; the private domain around great noble heritages or rich individuals (Cohen, 2017). Officially, French public libraries were created between 1789 and 1803. More often, these libraries remained at the project stage or, at the best, some rather shapeless deposits. They only became a reality in the 19th century.

Three major episodes in French history contribute to the enrichment of heritage funds in these libraries:

1. The Revolutionary decree of November 2, 1789, which declared that all possessions of the Clergy, including their libraries, was national property.
2. The law of 1 July 1901 on associations, Title III, Art. 18, dissolved unauthorised or recognised religious congregations and ordered the confiscation of their property.
3. The law of December 9, 1905, on the separation of the Church and State mainly organized the recovery of revolutionary confiscations.

The funds confiscated during these three episodes were entrusted to public libraries in different French departments. At this time, the librarians throughout France had neither the skills nor the means to process and preserve around 4,168,439 printed books and 25,973 manuscripts. Many documents from this period have been lost or sold out to pay the librarians.

The decentralised funds constitute a French specificity in Europe. France is one of the few countries having a multiplicity of old collections scattered in several hundred public libraries, mainly owned by local authorities. This fact is a direct legacy of the French Revolution (Varry, 1989). According to (Robichon, 1995) nearly 300 local libraries in France hold heritage collections. Only 54 of these are classified libraries¹⁴, benefiting from special state support through the provision of curators assigned to the management of heritage collections or the management of digital projects. There are therefore about 250 libraries not covered by this system.

WRITTEN HERITAGE ACTORS

Written heritage in French libraries consists of three partially overlapping groups of documents: State funds, antique book collections and heritage collections or documents in the broad sense. **State funds** come from two confiscations, that of 1789 and that of 1901-1906; they also include ministerial concessions consisting of works acquired by legal deposit as well as a large number of copies of scientific quality or literary works granted by the State to libraries from 1809 onwards. **Antique book collections** are pre-1811 printed matter. **Heritage funds** refer to rare and precious documents or sets of documents, old or contemporary, to which a final conservation decision is attached (Cohen & Yvon, 2004).

¹² Ministère de la Culture. Patrimoine écrit. Retrieved from <http://www.culture.gouv.fr/Thematiques/Livre-et-Lecture/Bibliotheques/Patrimoine-ecrit>

¹³ Ministère de la Culture. Collections et acquisitions patrimoniales des bibliothèques françaises. Retrieved from <http://www.culture.gouv.fr/Thematiques/Livre-et-Lecture/Patrimoine-des-bibliotheques/Politiques-patrimoniales-de-l-Etat/Collections-et-acquisitions-patrimoniales-des-bibliotheques-francaises>

¹⁴ Between 1931 and 1972, the State classified 54 public libraries, mainly because they hold a notable collection considered as a cultural heritage which is a national property. These libraries do not have any particular mission, but the State made available to them a library curator free of charge. In France, a library curator is an executive of the French civil service, responsible for the direction and supervision of state or territorial public libraries.

As mentioned above, French public libraries are under the responsibility of local authorities in a decentralised context. The Ministry of Culture is the one who defines the legislative and regulatory framework, the statistical evaluation of the activity of public libraries, the technical control provided by the [Heritage Code](#), and the technical and financial support through various mechanisms. To implement its policy, it relies heavily on actors in the field assuring the liaison.

SLL - Service du livre et de la lecture (Books and Reading Service)

On November 11, 2009, the [Decree No. 2009-1393](#) on the tasks and organisation of the central administration of the Ministry of Culture and Communication abolishes the *DLL - Direction du livre et de la lecture* (Directorate of Books and Reading). Its missions are taken over by the [DGMIC - Direction générale des médias et des industries culturelles](#) (Directorate General for the Media and Cultural Industries), with an assistant responsible for books and reading. The SLL inherited the missions of the Directorate of Books and Reading created in 1975, initially without any heritage mission. Its mission has evolved over time: it is responsible for ensuring the preservation and enrichment of the heritage of libraries, and it exercises state supervision over the BnF. The Directorate of Book and Reading becomes a department of the new General Management, under the name of “Book and Reading Service”.

Several missions fall within the prerogatives of the SLL. Among others, it has to develop, coordinate and evaluate the action of the Ministry of Culture and Communication in the field of books and reading; to promote the development of reading and to evaluate policies in the field of public reading. It contributes to the modernisation of libraries, including the strengthening of cooperation networks and services. It ensures the conservation, enrichment and enhancement of their heritage; and helps to exercise the State's technical control over libraries of local authorities¹⁵.

Since March 2012, this service includes a [library department](#) composed of four offices: The Public Reading Office, the Heritage Office, the European and international library mission. Below, an overview of the missions of the Library Department as defined by the Ministry of Culture:

- supervising the *BnF* and *BPI – Bibliothèque public d'information* (Public Information Library) and coordinating the network policy conducted by these two public institutions on behalf of the State;
- exercising the State's technical control over libraries belonging to local authorities;
- preparing and publishing national statistics on the activity of public libraries;
- ensuring the preservation and enhancement of the heritage collections of public libraries, including the 54 classified public libraries. It advises librarians, particularly on heritage acquisitions by searching sales and bookseller catalogues and informing libraries of documents that may be of interest to them. It may represent the establishment at Parisian auctions, and possibly exercise the right of pre-emption for them;
- designing and coordinating the *Action Plan for Written Heritage* ([See below](#)), supporting and evaluating research and development activities;
- participating in the coordination of digitisation policies on a national level;
- monitoring the circulation of cultural property in the field of books (manuscripts, books, prints, photographs, numismatic collections, maps, etc.);
- monitoring issues relating to state aid for investment by territorial libraries (municipal libraries and departmental lending libraries) within the general decentralisation allocation (DGD): construction projects, institutional modernisation, development of computers and digital equipment (“digital contract”, “digital reference libraries”, etc.), in coordination with the Ministry of Local Government.

Working alongside the BnF in an active policy of supporting the cataloguing of public library heritage holdings (Regional Catalogues of Incunabula, Regional Music Heritage, Reporting of Manuscript and Archival Holdings), the Book and Reading Service launched in 2017 a national survey to assess the volumes of heritage printed materials, manuscripts and archives still to be catalogued, as well as the catalogues of these holdings still to be retrofitted.

The Regional Directorate for Cultural Affairs (DRAC)

DRAC is a decentralised service of the Ministry of Culture located in each region. They have been created in 1963 by André Malraux, Minister of Culture at that time. They are responsible for the implementation, on a regional level, of the priorities defined by the Ministry of Culture and

¹⁵ Ministère de la culture. Service du livre et de la Lecture. Retrieved from: <http://www.culture.gouv.fr/Thematiques/Livre-et-Lecture/Service-du-Livre-et-de-la-Lecture>

Communication. Since 1977, the Ministry of Culture has been present in each region through the DRAC. The law of 6 February 1992 organizing the territorial administration of the Republic made DRACs decentralised services under the authority of the regional commissioner.

Several missions fall within the prerogatives of the DRAC. Among others, DRAC is involved in the fields of knowledge, protection, conservation and enhancement of heritage, promotion of architecture, support for artistic creation and dissemination of all their components, development of books and reading, artistic and cultural education and transmission of knowledge, promotion of cultural diversity and expansion of audiences, development of the economy of culture and cultural industries, promotion of the French language and the languages of France. It contributes to scientific research in the areas within its competence. It also contributes to the dissemination of public data on culture in French regions and its constituent departments (Décret n° 2010-633 du 8 juin 2010 relatif à l'organisation et aux missions des directions régionales des affaires culturelles, 2010).

Within the DRAC, the book and reading advisers also provide expertise and advice to the various local authorities and local cultural partners. Their missions cover all the Ministry's sectors of activity including cultural heritage.

The Bibliothèque National Library of France (BnF)

The BnF does an outstanding work in showcasing the heritage collections it holds. It is an essential player in the field of written heritage. The BnF's heritage action is focused primarily on the collections in its possession. At the end of 2017, the BnF had more than 15 million printed documents, 370,000 manuscripts, 390,000 periodicals, 15 million prints and photographs, 900,000 maps and plans, 2 million music scores, 1.5 million audio documents, 260,000 videos, 260,000 multimedia documents, 590,000 coins and medals, 31 billion files collected (URLs) or 940 terabytes for web archives, and 5.1 million digitised documents, including 4.3 million that can be consulted freely at a distance¹⁶.

The decree n°94-3 of January 3, 1994, establishing the BnF specifies its mission, which is to collect, catalogue, preserve, enrich and communicate the national documentary heritage. It also has to ensure that as many people as possible have access to the collections. For that purpose:

- it conducts research programmes in relation to the heritage for which it is responsible, particularly in library science;
- it cooperates with other French or foreign libraries and research and documentation centres, in particular within the framework of documentary networks;
- it participates, within the framework of the policy defined by the State, in the pooling of the documentary resources of French libraries;
- it allows remote consultation using the most modern data transmission technologies.

As part of this cooperation, the BnF has many partners in the French regions and on an international level. This is clearly specified on its website: on a national level, the Library's cooperation policy is based on the network of "associated centres"¹⁷ for the printing and documentary legal deposit, the French Union Catalogue (CCFr), which is a cooperation tool for reporting collections and networking, and Gallica (See below), which now provides access to digitised documents of more than 300 partner libraries and constitutes a real digital library in France. In the BnF 2018¹⁸ annual report, the approach of the BnF is explained. It covers the entire spectrum of the creation of a digital library: identification of documentary deposits; selection of corpora, digitisation, editorial and scientific enhancements; multiplication of access, on a local (library sites and catalogues), regional (regional portals), national (Gallica), European (Europeana) and international level. To carry out these actions, an ecosystem of 393 digital partners has been created around the BnF, acting with the shared objectives of free and open dissemination of knowledge: libraries of local authorities and higher education and research, libraries dependent on ministries and constituted bodies, archives and museums, libraries of various status (associations, foundations, etc.).

¹⁶ Bibliothèque nationale de France. La BnF en chiffres: Répartitions des collections au 31 décembre 2017. Retrieved from <https://www.bnf.fr/fr/la-bnf-en-chiffres>

¹⁷ The purpose of the Regional Associated Centres of the BnF is to promote the heritage of libraries through concerted reporting and digital enhancement programmes.

¹⁸ Bibliothèque nationale de France. Rapport d'activité 2018 – BnF. Retrieved from https://www.bnf.fr/sites/default/files/2019-06/rapport_2018_0.pdf

The BnF makes its expertise available to all, both in the traditional fields of libraries and heritage (bibliographic data, restoration of works, security and conservation of collections) and in the innovation sector (excavation of texts and data, digital mediation, etc.) or in the scientific and educational support of cultural projects. The BnF supports the digitisation of the heritage collections of French libraries, with a view to the rational enrichment of online corpora and a policy of documentary completeness with digitised heritage resources from the BnF collections. The digital corpora thus created are freely distributed on Gallica and any other digital library that can be interoperable with Gallica¹⁹.

On an international level, the BnF has many cooperation agreements. This is reflected, among other things, in bibliographic achievements and the enhancement of libraries from other countries. This is the case of [Bibliothèques d'Orient](#) (libraries from the Middle East). Launched in 2017, Bibliothèques d'Orient is the result of the cooperation of the BnF and [eight](#) heritage and research libraries partners from the Middle East. These libraries website is part of the “shared heritage” collection, which illustrates the links between France, through the collections of its national library, and the whole world. Consisting of complementary thematic sets, the collection's sites provide access to documents scattered among the various partner countries and institutions. This shared heritage also exists for another region, the map could be found at <http://heritage.bnf.fr>

Another example is [France and England: Medieval manuscripts between 700 and 1200](#), created by the BnF, brings together all the 800 manuscripts, half of which are kept at the BnF and half at the British Library. [The Medieval England and France 700-1200](#) site, created by the British Library, offer a selection of manuscripts to explore.

As can be seen, the BnF is the central pivot in the conservation and enhancement of heritage not only with regard to its collections, but also with regard to the collections of regional libraries in France. This contribution is not limited to France, but also operates abroad.

Fondation du patrimoine (Heritage Foundation)

The Heritage Foundation works to safeguard and enhance the value of French heritage. Through label, public subscription and corporate sponsorship, it supports individuals, local authorities and associations in restoration projects²⁰. It has financed more than 20,500 public and private projects. It also manages the Heritage Lotto whose [mission](#) is entrusted to [Stephane Bern](#) which is a French journalist, radio host and television presenter specialist in nobility and royalty, and who gives great visibility to heritage.

Research Centres

Many research teams work on cultural heritage and several of them have a partnership agreement with the Ministry of Culture and they are called for advice both upon and during the study and conservation-restoration phases.

- [ARC-Nucléart](#) - *Atelier de Recherche et de Conservation* (Research and Conservation Laboratory). It works on the conservation and restoration of archaeological, historical or ethnographic cultural objects made of organic materials, and does research on degraded materials to develop new treatment techniques.
- [Arc'Antique](#) is a player in heritage conservation and restoration through the study, management and restoration of archaeological and historical heritage objects. It also does research to better understand and treat different materials.
- [C2RMF](#) - *Centre de recherche et de restauration des musées de France* (French museums Research and restoration centre). Depending on the Ministry of Culture, and with national competence, it works on the preservation and the study of cultural heritage preserved in French museums. The activities of the C2RMF are structured around two main axes, that of scientific research, particularly concerning knowledge of the materials that constitute the works, and that of the implementation of strategies for the conservation and restoration of museum heritage on a national level.

¹⁹ Bibliothèque nationale de France. Les partenaires de Gallica. Retrieved from <https://gallica.bnf.fr/edit/und/decouvrir-nos-partenaires>

²⁰ Fondation du patrimoine. Qui sommes-nous ? Retrieved from <https://www.fondation-patrimoine.org/fondation-du-patrimoine/qui-sommes-nous>

- [CICRP](#) - *Centre Interdisciplinaire de conservation et de restauration du patrimoine* (Interdisciplinary Centre for Heritage Conservation and Restoration). The CICRP intervenes in the fields of preventive conservation, curative conservation, and the restoration of cultural heritage in the public or private domain protected as Historic Monuments. It was created in 1999. The CICRP is managed by a public interest group of a cultural nature made up of the State (Ministry of Culture), the City of Marseille, the Conseil Régional de Provence-Alpes-Côte d'Azur and the Conseil Général des Bouches-du-Rhône (Service interministériel des archives de France, 2015).
- [CRC](#) - *Centre de recherche sur la conservation* (Conservation Research Centre). The CRC is a service and research unit associating the Muséum national d'histoire naturelle (National Museum of Natural History), the CNRS and the Ministry of Culture. It carries out research with the objective of conserving cultural property. The CRC is organized into [scientific poles](#) and transversal thematic actions (ATT): Stone, Biodegradation and environment, Ornamented cave, Paper and cellulose, etc. [Many theses](#) have been or are currently being done at this research centre.
- [Laboratoire scientifique et technique de la Bibliothèque nationale de France](#) (Scientific and technical laboratory of the Bibliothèque nationale de France). The BnF actively cooperates with many national and international institutions with expertise in heritage conservation research and thus participates in joint conservation research programmes.
- [LAM – Laboratoire d'archéologie des métaux](#) (Metal Archaeology Laboratory). The LAM is dedicated to the conservation and restoration of archaeological art objects and ethnological metals from public collections and archaeological sites.
- [LMM – Laboratoire du musée de la Musique](#) (Music Laboratory Museum). Based on the study of the Museum's collections, research activities focus mainly on musicology, organology and fine arts (musical iconography, instrument decoration).
- [LRMH – Laboratoire de Recherche des Monuments Historiques](#) (Historical Monuments Research Laboratory). This research centre is a department of the Ministry of Culture and Communication (Directorate General of Heritage) with national competence. Its mission is to provide scientific and technical assistance for the conservation and restoration of historic monuments, whether they are buildings, large ornamental complexes or movable objects.

Network and Association

Associations at the local and national levels are of great importance. The Ministry of Culture provides the opportunity for professionals in the field of cultural heritage to work together towards common goals of improvement of practices.

On a national level

Bibliopat

This association was created in May 2006. Its name is the concatenation of two French words: **Bibliothèque** and **Patrimoine**, which stand for Library and Heritage. As specified on their [webpages](#), the association purposes are

- promoting the dissemination of information relating to the management of heritage collections in libraries and to provide library staff involved in the management of these collections with a permanent platform for discussion and exchange on the exercise of their profession;
- creating opportunities for regular exchanges by organizing study and reflection days.
- more generally, undertaking collective actions likely to develop the skills of its members in the fields of conservation, treatment and enhancement of heritage funds.

BiblioPat association aims to create an active and friendly network of all persons involved in the management of heritage funds, whatever their rank or guardianship, to promote contacts and professional solidarity.

Fill - Fédération interrégionale du livre et de la lecture (Interregional Federation for Books and Reading)

Fill was created in 1985 under the title of *FFCB - Fédération française pour la coopération des bibliothèques* (French Federation for Library Cooperation). It is an association that gathers within a national network that works on a daily basis to support professionals in the field of books, reading and documentation: regional structures for books (regional book agencies and centres), local authorities, national institutions and associations, qualified people.

On a Regional Level

Regional structures for books carry out actions in favour of all actors in the book chain (authors, publishers, booksellers, libraries, etc.). They are privileged interlocutors of the DRAC with regard to issues related to book trades. These structures carry out cooperation, information, scientific and technical support, book promotion and reading development activities. These structures are subsidised by the DRACs and local authorities.

ARL - Agence du livre et de la lecture (The book and Reading Agency)

On August 7, 2015, Law No. 2015-991 on the new territorial organisation of the Republic. As a result, at the end of 2017 and the beginning of 2018, *ARL - Agence régionale du livre* (Regional Book Agency), *CRL - Centre régional du livre* (Regional Book Center) and other cultural structures located in the concerned regions have also had to merge.

- [ALCA - Agence Livre, Cinéma & Audiovisuel en Nouvelle-Aquitaine](#) (Book, Film & Audiovisual Agency in New Aquitaine). Born of the merger of [Écla](#), [Limousin CRL](#) and the [Poitou-Charentes CRL](#). This agency supports professionals through a territorial policy of support for books and reading, cinema and audiovisual, artistic and cultural education.
- [Auvergne Rhône-Alpes livre et lecture](#)
- These cooperation agencies aim to promote books and reading, to be a platform for exchanges between book professionals, to encourage networking between professional book actors, to be a resource centre and an observatory for book, reading and writing professions, to reflect and implement, alongside the Region and the DRAC, the policy of developing books, reading and writing throughout the territory.
- [Agence Livre & Lecture Bourgogne-Franche-Comté](#) (Book & Reading Agency Burgundy-Franche-County). Born from the merger of ACCOLAD (Agence Comtoise de Coopération pour la Lecture, l'Audiovisuel et la Documentation), [Bourgogne CRL](#) and Franche-Comté CRL.
- [Livre et lecture en Bretagne](#) (Books and reading in Brittany). A mechanism for cooperation between book and reading stakeholders, but also between local authorities and the State in order to put in place concerted policies in favour of the book and reading sector.
- [Ciclic Centre Val de Loire](#). According to their website, the Centre-Val de Loire Region and the State have entrusted Ciclic, the Centre-Val de Loire regional agency for books, images and digital culture, with the implementation of a dynamic policy to support the cinema and audiovisual sector in order to promote its diversity and emergence. This policy is committed to the creation and production of films to their distribution to all audiences as close as possible to the territories. Since 2006, among others, it is in charge to collect, save, digitise, index and promote the regional film and audiovisual heritage, in order to create regional film archives.
- [CORDIAL - COOPération Régionale pour la Documentation et l'Information en Alsace](#) (Regional Cooperation for Documentation and Information in Alsace). It is an association created in 1987 at the initiative of documentation and information professionals working in Alsace. The purpose is to exchange information on their practices, coordinate transversal actions, promote mutual knowledge of neighbouring professions and bring the objectives of the sector to institutional decision makers (Regional Council, local authorities, DRAC, SLL) or major operators (CNL, BnF) with one voice in relation to cooperation projects. CORDIAL carries out inter-professional actions aimed at broadening the public (cultural programming), heritage (identification, safeguarding and enhancement), training and information for professionals (study days and training). The association sets up thematic working groups and scientific committees to improve, promote, structure and lead a reflection process. Among others, CORDIAL concentrates its actions: on the coordination of heritage actions: digitisation and continuous updating of [Les Guides des fonds patrimoniaux](#)²¹ (Guide of heritage collections of Alsace libraries); enhancement of this heritage on the [Route du patrimoine écrit](#) (Written Heritage Route portal).
- [Interbibly](#) which is the professional association for regional cooperation between actors in the field of books, documentation and written heritage. It is the Champagne-Ardenne agency that brings together some sixty institutions in urban and rural areas. The aim is to participate in their

²¹ In Alsace, which was one of the cradles of printing in the 15th century and where the written and graphic heritage has suffered the vicissitudes of an eventful history, it was interesting to carry out a study on the number and characteristics of the collections of ancient books preserved, from incunabula to books by contemporary artists. The guide published in 1995, is the result of these investigations conducted in partnership with BNU and CORDIAL. It presents 202 heritage collections of more than 250 pages.

development and optimise their resources. The cooperation includes conservation, enhancement of written heritage, staff training, audience development.

- [AR2L - Agence régionale du livre et de la lecture Hauts-de-France](#) (Regional Agency of Book and Reading, Hauts-de-France). Its mission is to support and assist all professionals in the book chain in the region.
- [Normandie livre et lecture](#) (Normandy Book & Reading)
- [ArL - Agence régionale du livre PACA](#) (Provence-Alpes-Côte d'Azur Regional Book Agency)
- [Occitanie Livre & Lecture](#) (Occitania Book and Reading)
- [Mobilis](#) - Pôle régional de coopération des acteurs du livre et de la lecture en Pays de la Loire (Regional cooperation centre for book and reading stakeholders in Pays de la Loire)
- [ARLL Mayotte – Agence régionale pour le livre et la lecture de Mayotte](#) (Regional Agency for Books and Reading in Mayotte)
- [Maison du livre de la Nouvelle-Calédonie](#) (New Caledonia Book House)
- [La Réunion des livres](#) (Reunion Island book)

As we have seen with this list of actors, the Ministry of Culture in France has meshed the territory of agencies mandated to help libraries, archives and book stakeholders. As part of the enhancement of written heritage, the DRAC and Regions support the policy of enriching the heritage funds of the libraries of local authorities. They thus contribute to completing the collections of old, rare or precious documents and to ensure their entry into the collections of contemporary documents of a heritage nature. In particular, they support the creation and enrichment of local or regional funds. In some cases, DRACs and Regions also provide grants to the restoration of old, rare or precious documents. They can also assist valuation operations involving old, rare funds or precious.

THE MOST SIGNIFICANT ACTIONS IN FAVOR OF WRITTEN HERITAGE

State policy is reflected on the ground in actions in favour of the heritage.

The Action Plan for Written Heritage (PAPE)

Within “cultural heritage”, the concept of “written heritage” is the subject of all attention. The *PAPE* has been initiated on a national level at the request of the Minister of Culture and Communication in 2004 and still active until now. It aims to better understand and improve the conditions for the conservation, reporting and enhancement of written heritage in French regions. It is developed around two aspects: a survey and a regional plan led by the DRAC's. The survey aims to identify the collections and heritage items as well as the problems they raise and prepare action projects.

This Action Plan has been widely disseminated by the *Service du Livre et de la Lecture* (SLL) and the *Direction régionale des affaires culturelles* (DRAC), and presents the State's proposals for written heritage in libraries: it is based on a synthesis of reflections carried out over many years, both on the central administration level and in the regional directorates of cultural affairs and many partners. It does not claim to constitute the entire policy conducted in France in terms of written heritage: it specifies the orientations of the State, an essential but not unique actor in a landscape where architects and craftsmen are present at many levels. SLL and DRAC implement the means to bring out initiatives and facilitate connections, which, while being in line with the reality of local collections and policies, will ensure the national success of this plan.

This plan has five priorities:

1. conservation and enrichment of heritage collections;
2. the constitution of information resources: it focuses on the completion of the major catalogues in progress (in particular incunabula, music collections dating back to the 19th century) and on the extension of union catalogues, in particular the French Union Catalogue (CCFr), including the project currently undergoing retroconversion of the General Catalogue of Manuscripts in French Public Libraries;
3. enhancement of collections: the online publication of their catalogues by libraries, the creation of virtual libraries and innovation in exhibition and distribution are the three main axes;
4. the expansion of readers and audiences, based on more systematic studies and evaluations initiated by the Book and Reading Service;

5. training of staff, with the objective of reinvesting heritage issues in the field of initial and continuing training.

These priorities are reflected on the field through various actions in the form of annual events, reviews, books, articles, colloquia, conference cycles, blogs. i.e. Written Heritage Days ([Les journées du patrimoine écrit](#)).

In 2008, within this action plan the [Observatoire du patrimoine écrit en région](#) (The Written Heritage Regional Observatory) was created. It is a tool for the presentation and analysis of public policies on a regional level in the field of written heritage. The mission of this observatory is to identify in each region the actors, policies, means and achievements in the field of written heritage. It also identifies priorities to improve the preventive conservation, to report and enhance the heritage collections belonging to local authorities. The analysed information comes from data collected by the Book and Reading Service or communicated by DRACs, BnF, regional structures for books and local authorities (municipal libraries in particular).

Call for Projects & Research Projects

The number of projects related to cultural heritage is important to be listed in this state of the art. We will give some examples to illustrate.

Since 2007, the Ministry of Culture has issued several calls for written heritage projects. They are jointly organized by SLL and DRACs as part of the action plan for written heritage. The [last call](#) was published on December 18, 2018. Like the previous calls, it aims to support projects concerning the heritage collections of libraries belonging to local authorities and public institutions for intercommunal cooperation. In the call for projects, it was pointed out that they represent one of the funding methods used for cataloguing and retroconversion operations as part of the national plan for reporting the heritage holdings of territorial libraries.

The [Heritage Sciences Foundation](#) is under the high patronage of the Ministry of Culture. Its ambition is to structure and finance research around tangible cultural heritage, with three main lines of action: an intimate knowledge of heritage; improvement of conservation and restoration processes; and improvement of knowledge dissemination techniques. On their [homepage](#), they mention that they already financed 140 research projects, and 62 theses have been defended or are in progress.

- In 2008, the BnF with the University of La Rochelle and other European partners launched [NewsEye](#): “funded by the European Union’s Horizon 2020 research and innovation programme, it is a research project advancing the state of the art and introducing new concepts, methods and tools for digital humanities by providing enhanced access to historical newspapers for a wide range of users. With the tools and methods created by NewsEye, crucial user groups will be able to investigate views and perspectives on historical events and development and, as a consequence, the project will change the way European digital heritage data is (re)searched, accessed, used and analysed.
- [Memoloi](#) ([Mémoloi : programme de recherche sur la mémoire des grandes lois patrimoniales](#)). This blog documents the progress of “Mémoloi”, a research programme devoted to the study of the “great laws” that have impacted cultural heritage law in France. Launched by CÉCOJI, Mémoloi is now coordinated by the Institut des sciences sociales du politique (CNRS / ENS Cachan / Université Paris-Ouest), in close collaboration with many French cultural and scientific institutions.

The General Inventory of Cultural Heritage

In 2015, all cultural heritage in France was not identified, although a “General Inventory of Cultural Heritage” has been founded in 1964 by André Malraux, at that time Minister of Cultural Affairs. According to (Battesti, Renaud-Bouleix, & Meyer-Lerecureur, 2015) despite constant efforts to develop lighter investigative methods (since 1975) and their strategic reorientation (since 1985) in order to meet the urban and spatial planning objectives of local authorities, these objectives have not been achieved. In August 13, 2004, the law n° 2004-809, art. 95 transferred the competence of the Inventory to the local authorities. The same law defined the fundamental missions of this Inventory: to identify, study and make known heritage elements that are of cultural, historical or scientific interest. But until now, many problems slow down the completion of the inventory and more specifically problems related to budget and software incompatibility. After the decentralisation of the general inventory. Together, 25 regions have set up a project identified by the acronym GERTRUDE - Groupe d'Etude, de Recherche

Technique, de Réalisation et d'utilisation du Dossier Électronique (Study Group, Technical Research, Implementation and Use of the Electronic File). The objectives of this project are to define, develop and implement a solution for the production, management and dissemination of the digital inventory record of Cultural Heritage. Many regions have already their portal: [Alsace](#), [Auvergne-Rhône-Alpes](#), [Bourgogne-Franche-Comté](#), [Bretagne](#), [Centre-Val de Loire](#), [Champagne-Ardenne](#), [Ile-de-France](#), [Lorraine](#), [Pays de la Loire](#), [Normandie](#), [Poitou-Charentes](#), [Provence-Alpes-Côte d'Azur](#), [Pays d'art et d'histoire de la Provence verte](#). This inventory is an ongoing process, which means that France's written and graphic cultural heritage is not fully recorded yet.

Digitisation of Written Heritage

Digitisation, which appeared in the late 1990s as a reproduction project, is now a key component of the preservation and the enhancement of written cultural heritage. It can improve accessibility and lower the cost of accessing resources.

A national digitisation plan was initially launched in 1996. This plan, led by the central administration of the Ministry of Culture, focused on the digitisation of iconographic and sound collections belonging to the State (national archives, libraries, archaeological services, historical monuments, museums, etc.). From 2000 onwards, it has also covered funds belonging to local authorities, foundations and associations. Since 2010, he has been open to contemporary creation. In 2018, as part of the strengthening of resources devoted to cultural democratisation and artistic and cultural education policies, the Ministry wished to reaffirm its support for digitisation through a new mechanism entitled National Programme for the Digitisation and Promotion of Cultural Content (PNV). The first stage of this programme, which is part of a devolution process adapted to the geographical and organisational context of the new regions, is intended in particular to support the territorial policy of digitising cultural content. In 2019 the first 6 DRAC partners of the PNV are: [Auvergne-Rhône-Alpes](#), [Grand Est](#), [Hauts-de-France](#), [Nouvelle Aquitaine](#), [Pays de la Loire](#), [Provence-Alpes-Côte d'Azur](#).

A significant number of digital collections are accessible on the web. A non-exhaustive list could be found by following [this link](#).

BEST PRACTICES

Citing all the best practices in libraries to promote heritage is an almost impossible task given their number. Therefore, we will mention these practices and then illustrate with some examples.

National Events

Heritage and written heritage are promoted through national events such as “La nuit de la lecture” (the night of reading), “La nuit des musées” (the Night of Museums) or “La journée européenne du patrimoine” (European Heritage Days), “Levez les yeux” (Raise your eyes).

La nuit de la lecture (The Night of Reading)

Created by the Ministry of Culture, the first edition took place on January 14, 2017. All day and all evening, French people are invited to come and discover musical readings, theatre performances, readings in pyjamas, under the duvet or with a flashlight, exhibitions, film screenings, games around books and reading (quizzes, surveys, treasure hunts or other escape games), writing workshops or book discoveries, conferences, literary tastings. This national holiday involves booksellers and librarians in a collective celebration of writing and the pleasure of reading. Since then, this event has taken place every year and the next edition is scheduled for [January 18, 2020](#). Libraries contribute to this event and it is an opportunity to promote heritage, among other things.

La nuit des Musées (The Night of the Museums)

Initiated by the Ministry of Culture, the “Night of the Museums” event, which has succeeded the “Museums Spring” since 2005, takes place every year on a Saturday in May, at the same time as ICOM's “the International Museum Day”.

For one night, between sunset and 1 am, the public is invited to discover for free, in an unusual, festive and entertaining way, the treasures of French museums, as well as those of about thirty European countries.

[Journées européennes du patrimoine](#) (*The European Heritage Days*)

The European Heritage Days is an annual national event. These local events, which run from late August to early November, allow the public to discover many buildings and other places that are often only exceptionally open to the public, or museums whose access then becomes exceptionally free or at reduced prices.

[Levez les yeux!](#) (*Raise your eyes*)

Launched by the Minister of Culture and the Minister of National Education and Youth, this operation aims to introduce students, accompanied by their teachers, to heritage sites to learn to read architecture, decipher the landscape or decipher the city or countryside.

This year this operation will take place over 2 days, one on Friday 20 September before the weekend of the European Heritage Days, the other on 18 October on the eve of the National Architecture Days.

[Les enfants du patrimoine](#) (*Children of the heritage*)

On the eve of the European Heritage Days, the Councils of Architecture, Urban Planning and Environment (CAUE)²² offers students and their teachers, from nursery to high school, a programme of free activities adapted to young people. Many heritage libraries participate in this event. An interactive [agenda](#) gives access to all needed information. The topics of the visits are: Heritage, State and Power; Culture and Society; Fine and decorative arts; Parks and Gardens; Heritage and memory; Reading the City; Landscape and Biodiversity; Archaeology; Image, Photography and Cinema; Water and Heritage; Places of Art & Culture; Heritage and Literature; References of Architectural and Urban History; and Industrial, Scientific and Technical Heritage.

[C'est mon patrimoine](#) (*It Is My Heritage*)

This event is organized jointly by the Ministry of Culture and the *Commissariat général à l'égalité des territoires* (General Commissariat for Territorial Equality). In the call for projects they explain: this operation, which is available in all regions, intends to introduce the diversity of French heritage to the populations furthest from its access. This event is aimed at young people aged from 6 to 18, in particular adolescents - at least 60% of the beneficiaries come from priority areas of urban policy -, parents and families within the framework of social centres and, in partnership with reception structures, young people placed under the supervision of the courts, people with disabilities, as well as refugees and migrants. The activities take place during extracurricular time. The overall project consists of at least seven days of activity with participation either by day or in the form of a several-day internship. Parents and families are involved in the implementation of the project, particularly during the restitution phase, which is open to all audiences, for example during the European Heritage Days. An "Ambassador Pass" (free for two people) is offered to each young person to encourage them to return to the heritage establishment with their family.

Local Events

Some regions may create a specific promotional action around written heritage. For example, the event "Written [heritage in Burgundy-Franche-Comté](#)" takes place from July 6 to November 2, 2019. It concerns 50 institutions (libraries, museums, archives, ...) in 8 departments. On the program there are visits, exhibitions, and activities around cultural heritage.

Library Initiative on Place

Guided visits

Many libraries organize free visits explaining the history of the library, its architecture and its collections. To illustrate, we can cite:

[Bibliothèque Mazarine](#). The visit explains the origins of the Mazarine Library which are linked to the personal collections of Cardinal Mazarin (1602-1661), Richelieu's successor and principal Minister of the Minority of Louis XIV between 1643 and 1661. Opened to scholars in 1643 in the private mansion

²² Conseils d'Architecture, d'Urbanisme et de l'Environnement (CAUE). Created in 1977 and deployed throughout France, the CAUEs are responsible for promoting architectural, urban, landscape and environmental quality within the departments.

of Mazarin (which later became the historical site of the National Library of France), it is the oldest public library in France²³.

[L'heure de la découverte](#) (The time of discovery). Lyon's Libraries (16) offer a visit to discover written heritage. On the agenda of these meetings proposed by the librarians: presentations of illuminated manuscripts, photographs, rare and precious collections, visits to the silo, binding workshops...

Exhibitions

Library exhibitions have always been used to promote collections and engage communities. Although virtual exhibitions are increasingly used, they have not replaced on-site events.

For example, the National Library of France organizes many exhibitions. A [special portal](#) is dedicated to that purpose. The [agenda](#) is also accessible online. As an example, we can mention the exhibition [Science for all \(1850-1900\)](#) opened in January 2018. This exhibition is accompanied by a web series of [14 videos](#). Each episode focuses on different themes that trace the history of popular science in the second half of the 19th century, from medicine to chemistry, hygiene and aeronautics.

Some libraries set up permanent exhibitions highlighting written heritage, e.g. [Mille ans de livres à Troyes](#). This permanent exhibition presents the history of the collections held today at the Médiathèque de Troyes Champagne Métropole. It starts from the virtual library of the 21st century going back almost a thousand years, to the time of the monks of Clairvaux. This exhibition invites visitors to meet generations of men and women who, through their passion for books, have succeeded in constantly transmitting and enriching what is considered as the foundation of the common culture today.

Mobile Libraries

For several years, the Blois Library has been setting up "Les bibliothèques mobiles", which is a nomadic digital heritage library. It is intended to travel to schools, colleges, high schools, retirement homes, associations, etc., all the places where people may be interested by cultural heritage. Moving outside the library walls, the heritage becomes accessible to all. Digital presentations can also be accompanied by original documents.

Beyond these few examples, there are other ways of valuing heritage that we have not illustrated. There are games that are aimed at young people in order to make them aware of the importance of heritage at an early age. The BnF has also signed an agreement with a publisher who can print heritage documents [on demand](#), making them more easily accessible.

Conferences or Study Days

Many scientific events are organized. They aim to address a given heritage issue.

- Les journées des pôles associés et de la coopération de la BnF (Days of associated and cooperation centres of BnF). They meet each year for 3 days around a topic. The meeting of 2018, which was the 17th, addressed the theme of [Sharing, enriching, contributing](#).
- Journées du patrimoine écrit (Written heritage days). Since 2005, the SLL has organized annual study days on written heritage in the regions, in partnership with local authorities. These days are intended to bring together specialists in written and graphic heritage around scientific issues specific to library heritage collections, with the following objectives: to compare the views of specialists, give a national voice to local experiences, disseminate the latest research findings to professionals interested in preservation, encourage the development of a dynamic of exchange and networks, and make elected officials aware of heritage issues in libraries. The [2019 edition](#), the 15th, took place in Compiègne, on Wednesday 26 and Thursday 27 June on the topic of "Rules and customs".
- An example of punctual study day on "[The security of heritage collections in archives and libraries](#)". This study day took place on July 5, 2019. It was proposed by the Burgundy-Franche-Comté Book & Reading Agency and the Association of French Archivists, in partnership with the Côte-d'Or Departmental Archives and the Dijon Municipal Archives.

²³ Bibliothèque Mazarine. Histoire. Retrieved from <https://www.bibliotheque-mazarine.fr/fr/connaitre-la-bibliotheque-mazarine/histoire>

Library Friend's Association

Heritage libraries are helped by people that consider themselves library friends and help in different ways. For example

- [ABC Mines: L'association des Amis de la Bibliothèque et des Collections de l'École des mines de Paris](#) (ABC Mines : Library and Collections of Mines ParisTech School Friends Association). This association wants to contribute to the training of the public on scientific culture; participate in the enrichment of the Collections and the Library; increase the means of the library; promote all activities that may enhance the reputation and attendance of the Museum and Library.
- [Association des amis de la BnF](#) (BnF Friends Association). As explained on their website, it is an association of book and culture lovers who show their support for the work of the National Library of France through donations or simple membership.

Library Initiatives on the Web

Sharing culture and making heritage accessible to as many people as possible is an objective that seems to be a consensus within the professional community. Librarians in France use a number of communications mechanisms to promote their cultural heritage. Their numbers are so important that it is impossible to list all the initiatives in this report.

Online Catalogues, Databases and Digital Libraries

Below we list some of the resources referencing heritage collections. This list is not exhaustive due to the number of existing resources in France.

[Gallica](#) opened in 1997 and made cultural heritage collections accessible to the greatest number of people. Managed by the BnF, it offers 3,115,189 newspapers and magazines, 1,354,465 images, 50,063 music scores, 163,238 maps, 1,517 video, 126,257 manuscripts, 51,076 sound recordings, 607,610 books, and 361,422 objects²⁴.

[French Union catalogue](#) locates some 30 million documents held in French libraries. Created at the end of the 1990s as part of a joint project between the Ministries of Culture and National Education, the CCFr is managed by the BnF, in partnership with the Book and Reading Service of the Ministry of Culture. It federates 20 library catalogues: BnF General catalogue as well as BnF Archives and Manuscripts catalogue, Academic library catalogues (Sudoc and Calames), Public Library catalogues, etc. Databases allowing access to cultural heritage funds are identified separately, which enhances these funds:

- “*Base patrimoine*” gives access to more than 6.9 million documents preserved in more than 200 establishments representing one hundred heritage funds from local or specialised libraries.
- “*Manuscripts*” is a catalogue of three databases dedicated to manuscripts: The General Catalogue of Manuscripts (CGM), [BnF Archives and Manuscripts](#) and the Directory of French Literature Manuscripts of the 20th century (Palme).
- [RISM-France](#) which is an interface dedicated to texted music search. It allows a search on old music scores reported both in *Patrimoine database* and in the general catalogue of the BnF (Music Department).

In January 2018, CCFr data are put under the Open Licence Ouverte (Etalab).

[Mandragore, base des manuscrits enluminés de la BnF](#) (Mandragore, database of the BnF's illuminated manuscripts). Mandragore now has more than 170,000 records analysing works held in the Manuscript Department and the Arsenal Library, the oldest dating back to Pharaonic Egypt and the most recent to the present day. Their indexing is based on a vocabulary of more than 18,000 descriptors. Each record contains extensive data relating to the decor, including the textual environment, and the conditions of production, place and date, artist name when known. Currently, more than 80,000 of these records are accompanied by a digitised image.

[CALAMES](#) is an online catalogue describing archives and manuscripts held by French universities and research libraries and institutions (Institut de France, Muséum d'histoire naturelle, Bibliothèque Littéraire Jacques Doucet...). A part of Calames records come from two former catalogues: the national directory of 20th century French literary manuscripts (Palme: Répertoire national des manuscrits littéraires

²⁴ <https://gallica.bnf.fr/GallicaEnChiffres>

français du vingtième siècle); and the General Catalogue of Manuscripts held by French public libraries (Catalogue général des manuscrits des bibliothèques publiques de France, a printed publication started in the 1830s.

[Enluminures](#) (illuminated manuscripts) offers free consultation of more than 120,000 images, in the form of thumbnails and full screens, digital reproductions of illuminations and decorative elements of more than 5,000 medieval manuscripts kept in some 100 French public libraries.

[Bibliothèque virtuelle des manuscrits médiévaux](#) (BVMM) The Virtual Library of medieval manuscripts is developed by the Institute for Research and History of Texts (IRHT-CNRS). It provides access to a wide selection of manuscripts from the Middle Ages to the 16th century. The IRHT carries out photographic campaigns to digitise heritage collections scattered throughout France, except those of the BnF.

[INITIALE](#) is an online catalogue of illuminated manuscripts from the Middle Ages, mainly those kept in public libraries in France, excluding the French National Libraries (BnF).

[The Heritage of the Printed Book Database \(HPB\)](#). French Academic Libraries contribute to this database which “is a steadily growing collection of files of catalogue records from major European and North American research libraries covering items of European printing of the hand-press period (c.1455-c.1830) integrated into one file. This makes it possible for information to be retrieved in one single search across all files” (CERL, 2018).

[Joconde database](#) is the grouping of several catalogues of collections from French museums. It is the result of a partnership between the French museum service and the participating museums. With nearly 600,000 records of objects of all kinds (archaeology, fine arts, ethnology, history, science and technology, etc.), this catalogue is accessible to everyone. Thematic tours, zooms and virtual exhibitions enhance this ensemble.

[Patrimoine numérique](#) (digital heritage) is a portal created by the Ministry of Culture. It is a national union catalogue, a tool for steering digitisation policies. This heritage portal aims to promote France's digitised collections and promote access to digitised resources. The collections identified are the result of all the initiatives, whether they come from the State (national digitisation plan of the Ministry of Culture, programmes of major institutions, etc.), local authorities, associations or foundations. The catalogue is the national component of the European [Michael project](#), which is a Multilingual Inventory of Cultural Heritage in Europe.

[Public libraries in Paris](#) have a prestigious collection of several million documents (manuscripts, belonging to cultural heritage accessible to all through an [online catalogue](#). Around 50 000 of this collection has been digitised and are also accessible [online](#). Many [exhibitions](#) are regularly organized to promote the cultural heritage collections of these libraries.

[Diplomatic Digital Library](#) (Bibliothèque diplomatique numérique). As part of cooperation between the BnF and the Ministry of Europe and Foreign Affairs (MEAE), the Digital Diplomatic Library was inaugurated on Mars 2018. Consisting of a collection of several thousand digitised documents from the Ministry and documents from Gallica, selected for their heritage interest (diplomatic history, treaties, agreements and conventions, French protectorates and mandates, foreign and intergovernmental official publications).

Virtual Exhibitions

[Exhibitions: the virtual galleries of the Bibliothèque nationale de France](#). On this portal we can find all BnF virtual exhibitions. The exhibitions are grouped thematically: Gallery of books and writing, Gallery of writers and storytellers, Gallery of History of representations, Gallery of the arts and architecture; Gallery of photography, gallery of maps and globes. Each topic present at least 4 exhibitions.

Such a large number of libraries (public or academic) in France offer virtual exhibitions that it is quite impossible to identify all of them. As an example, we can mention the exhibitions at [Bibliothèque Mazarine](#), which is an academic library, and [Lyon's libraries](#).

Portals or websites

Some of the selected portals include a digital library, but as they enclose other information, we classified them in portals.

[Lectura+ portal](#) results from the collaboration between eight communities in the Auvergne-Rhône-Alpes region. This portal has been online since May 2017 and allows individuals and professionals to access heritage funds: old regional newspaper pages, images, portraits, old maps, archives, etc. More than 60 organisations (Libraries, Archives, Bookshops, Association, Schools, ...) are contributing to the enrichment of this portal. Each month, one of the partners publishes a [booktube](#)²⁵ which highlights an item from the heritage funds of a library in the region. They also publish [flashbacks](#) from heritage. For each flashback, a youth illustrator visits the heritage funds of a library. From his discoveries, they create a drawing echoing them. It then becomes a digital album enriched with the [Whisperies](#) tool.

[Biblissima](#). This portal invites to discover the history of some of the texts and books that have been written, translated, illuminated, collected or inventoried from Antiquity to the 18th century. It brings together the digital resources of Gallica (BnF), the Virtual Library of Medieval Manuscripts (IRHT-CNRS) and many other digital libraries around the world to build a very rich database of this period in the West.

[The treasures of higher education libraries](#).²⁶ This portal presents an overview of the remarkable documents held in the libraries of French higher education institutions. It allows to discover, in images, a selection of books, maps, photographs, rare, precious and historical objects from the documentation services. Higher education in France is rich in more than 500 libraries, which make more than 47 million printed collections available to the public, including 6 million heritage documents, as well as several million electronic resources online.

[NORMANNIA le patrimoine écrit de Normandie](#) (Normannia the written heritage of Normandia). This site was created in 2016 with the support of Europe, the State and the Normandy Region. It is administered by Normandie Livre et Lecture. As specified on the homepage of the website, for many years, librarians and archivists in Normandy have taken particular care to collect and classify books and journals relating to the culture, history and heritage of their region and communicate the findings to their users. From the first prints to the most recent publications, all the region's memory is concentrated in their collections. The Normannia site gathers and collects bibliographic references from libraries in Normandy. It is gradually building a digital library on the heritage, history and culture of Normandy at different times. It offers all types of documents: old books, periodicals, graphic documents, editions and local printing.

Blogs, Journals, Booklets

[Droit, patrimoine & culture](#) (Law, heritage & culture). This blog presents the work of a group of researchers specialising in art and culture law on a national and international level and in a comparative law perspective.

[Participer à l'inventaire](#) (Participate in the inventory). The inventory of intangible cultural heritage (ICH) has been going on in France since 2008 under the aegis of the Ministry of Culture. This blog responds to the need not only to provide the collected data but also to reflect on their social meanings, uses, contexts and challenges. Idemec is the name of the research unit welcoming this project together with the Sound Archive of the MMSH.

This booklet responds to the need not only to provide the data collected but also to reflect on their social meanings, uses, contexts and challenges.

[Patrimoines du Sud](#) (Heritage of South). Created in 2015, the objective of this journal is to contribute to the dissemination of research on the heritage of the South of France in universities, research laboratories and more generally to all Internet users.

[IN SITU](#) "Published by the Ministry of Culture since 2004, In Situ offers all heritage professionals a means to distribute the results of their research into heritage knowledge, conservation and promotion."

²⁵ BookTube is a specific subset of the YouTube community that focuses on the topic of books.

²⁶ Les trésors des bibliothèques de l'enseignement supérieur

[La lettre de l'OCIM](#)²⁷ (The Letter of the Museum Office for Cooperation and Information). This publication “is a professional journal published by the Museum Office for Cooperation and Information which, for over 20 years, has offered a mouthpiece for the whole museum sector. Every two months, it presents the current state of affairs in museums and cultural, academic and technical institutions, publishing articles written by specialists of museology, museography and conservation.”

[La revue de la BNU](#)²⁸ (The review of the National and University Library of Strasbourg). The objective of this publication “is to showcase, in conjunction with exhibitions, conferences or symposia, written and graphic heritage in an original way, by going beyond the context of libraries and the book industry to explore broader scientific, cultural and social questions. Its coverage is international in scope. The BNU’s content is both artistic and scientific, concerned with both past and future. Drawing upon the uniqueness of the BNU’s collections, it aims to provide the world of French libraries with a unique forum for reflection.”

[CEROART](#) “is a web journal and platform for multidisciplinary approaches into the issues of conservation, exhibition and restoration of art objects. It is also a forum for historians and art historians, philosophers and museologists, heritage scientists, curators, restorers, representatives of the museum and students in any one of these disciplines to share ideas and interact.”

[Documentation et Patrimoine](#) (Documentation and heritage). Created by DRAC Alsace, the purpose of this booklet is to provide partner structures (universities, archives, museums, associations, etc.) on issues related to regional heritage and its documentation, taking as a starting point the collections of the Heritage Service. It presents news and papers related to Alsatian heritage and its documentation, as well as a reflection on methods for classifying, inventorying and indexing unpublished sources in relation to heritage.

[Fondation des Sciences du Patrimoine](#) (Foundation for Cultural Heritage Sciences). “This blog presents the results of research projects led by the Foundation for Cultural Heritage Sciences. These works, mainly PhDs and postdoctoral projects, explore cultural heritage from diverse points of view, from physico-chemical composition to historical and socio-cultural significance. They also deal with conservation-restoration issues, as well as diffusion of knowledge on cultural heritage.”

[Les carnets de la sonothèque](#) (The notebooks of the sound library). The MMSH²⁹ sound library gathers sound heritage recordings from the Mediterranean area with ethnological, linguistic, historical, musicological or literary value. To develop access to these archives, which document fields not very well covered by conventional sources, the sound library team is actively monitoring the Digital Humanities field and shares it with its public through this booklet. Some of the records are accessible on the Ganoub database (South in Arabic), on Calames, Isidore, the oral heritage portal, Europeana and CLARIN.

[Épitomé](#) is the official blog of the History and Heritage Collections of Nancy Public Library. It informs about research projects or random finds in the librarians and researchers work, enlightening the history of libraries in Nancy through the ages.

[Manuscrits juridiques du Midi](#). This booklet has been created to share contents, especially publications, news, events and discoveries, related to the academic study of the production and illumination of legal manuscripts in southern France (13th-15th centuries).

[Libraria](#). For the history of ancient libraries. “Libraria is a blog dedicated to library history, from the Early Middle Ages up to the Modern Period, and the provenance of medieval manuscripts. It is a direct successor of (parts of) the website www.libraria.fr, launched in 2009. It is part of the scholarly watch of the team “Codicologie, histoire des bibliothèques et héraldique” of the IRHT”.

[Bibliomab : le monde autour des livres anciens et des bibliothèques](#) (Bibliomab: the world around ancient books and libraries). It is a librarian’s personal blog. About this blog, he explained that, since 2008, the BiblioMab blog has been featuring articles on old books and libraries, drawing on the heritage

²⁷ Office de coopération et d’information muséographiques (OCIM)

²⁸ Bibliothèque nationale et universitaire de Strasbourg

²⁹ Maison méditerranéenne des sciences de l’homme (Mediterranean House of Human Sciences)

resources available online and elsewhere, with a desire to share and be curious. This is a simple way of promoting and mediating the documentary heritage that is presented to you here.

[Search Engine Collections](#)

The Ministry of Culture has created a semantic search engine that gives access to its digitised cultural heritage. It indexes all databases and resources internal to the Ministry of Culture but also those of local authorities, associations or other institutions that wish to be referenced in the engine. In total, more than 60 databases can be searched. It provides free access to more than 7.4 million documents and more than 5.6 million images. All artistic and cultural fields are covered.

[Open Heritage Platform \(POP\)](#)

Developed by the Ministry of Culture, the POP platform brings together the digital content of French heritage in order to make it accessible and available to the greatest number of people. It is still in beta version and allows exploring more than 3 million documents. It regroups many databases: [Joconde](#), [Palissy](#), Mérimée, Mémoire, MNR Rose-Valland, Enluminures and MUSEO.

Wikipedia

Several heritage libraries have used Wikipedia to promote themselves and their collections. This idea is clever given the popularity of Wikipedia and its omnipresence in search engine results. For example [Bibliothèque de l'hôtel de ville de Paris](#), [Bibliothèque de Rouen](#), [Bibliothèque historique de la ville de Paris](#), [Bibliothèque littéraire Jacques Doucet](#), [Bibliothèque Mazarine](#), [Bibliothèque municipale de Chambéry](#), [Bibliothèque municipale de Versailles](#), [Bibliothèque municipale du Havre](#), [Bibliothèque patrimoniale et d'étude](#), [Fonds patrimoniaux des bibliothèques de l'université de Bordeaux](#), [Les Dominicains de Colmar](#).

Libraries are also using Wikimedia Commons as well as archives and museums. For that purpose, we can look at [GLAM in France](#).

Short Videos

These video aims to enhance written cultural heritage. For some of them, they are part of the action plan for written heritage.

- Video presenting the history of the library, the collections and the services.
- [Bibliothèque Mazarine](#), [La bibliothèque musée de l'opéra Garnier](#), [La bibliothèque historique de Paris](#), [La bibliothèque de l'Arsenal de Paris](#), ...
- Video presenting the collections of a Library
- [Fonds patrimoniaux médiathèque de Poitiers](#) (Heritage funds Poitiers Library)
- Video exploring a historical topic based on heritage in libraries or archives
- [Archives départementales de Charente-Maritime](#)
- [Médiathèque de la Rochelle. Presentation of the heritage collections of Michel-Crépeau multimedia library in the agglomeration of La Rochelle \(17\)](#)
- A specific subject concerning written heritage.
- [The place of cartoons in the press](#) and [Literary serials in the 19th century](#) by [Occitania Book and Reading](#)
- A material to accompany an exhibition
- Webserie [Sciences pour tous](#) (Sciences for all)

When we examine the number of hits for each video, it will be interesting to promote these videos to reach their aim.

Library Initiatives on Social Media

Facebook, Twitter, Instagram and Pinterest are used by many libraries. These communication channels are used to promote cultural heritage funds. They also announce exhibitions or special events related to their library. Social media offer direct interaction with the followers, and which allows libraries to enlarge their public and gain in visibility.

Tools

Many tools are developed to enhance or work with cultural heritage. We can cite:

[Aïoli](#). “This tool, which is anchored in the development of citizen science, aims to create new methodologies for multidisciplinary work, and put forward new scenarios of comparative and cooperative analysis of heritage objects”. This platform is developed in the [MAP](#) laboratory (Models and simulations for Architecture and Cultural Heritage), a joint research unit of the [CNRS](#) (National Centre for Scientific Research) and the Ministry of Culture.

[Docexplorer](#) which is a free, open-source, cross-platform software suite enabling anyone to create rich interactive digital books. This software, intended for archivists, librarians, and historians, is the result of an academic project initiated by computer science laboratories [LITIS](#) and EDA [EDA](#) (University of Kent, the U.K.) in 2009.

[Gallica studio](#). Opened in 2017, Gallica Studio is part of the school's public policy. It aims to promote the appropriation of Gallica by its users. The objective is to encourage the emergence of new uses of common heritage online and to create tools for them.

CONCLUSION

Through this state of the art we have traced the evolution of the State's policy in favour of both tangible and intangible cultural heritage. As we noticed, the concept of cultural heritage spans many fields and it is difficult to trace all the aspects. In the French law, there is no precise definition of cultural heritage and more often the UNESCO definition is used. Since the 1960s, several efforts have been made to preserve and enhance cultural heritage, the most recent being the lotto for heritage.

Written and graphic heritage, which is the main focus of this report, is decentralised throughout French regions, and the libraries managing these collections are under the responsibility of local authorities, themselves under the surveillance of the State and, more specifically, the Ministry of Culture. Many actors come into play to ensure that the State's policy and strategy are relayed, like the Directorate of Regional Cultural Affairs (DRAC), the BnF and the book and reading agencies. In addition to managing the nation's heritage, the BnF provides expertise to regional libraries and archives in the field of heritage preservation and digitisation. The Gallica digital library is one of the most important in Europe and, with other European libraries, the BnF is one of the main sources for the European library, Europeana.

The action plan, introduced in 2004 and still active, has made it possible to finance several projects to digitise heritage holdings by libraries and institutions in the French regions, which has resulted in a significant number of digital libraries. It has also made it possible to finance projects to enhance heritage, like the many videos that highlight or present different aspects of heritage. Unfortunately, these videos, though interesting, are not very much visualised. It is important to set up a communication strategy around these productions in order to make them more visible, otherwise this will be all wasted money.

All these, plus many initiatives and events on a national and local level, help bring cultural heritage available to the general public. As it is known, written heritage is a common good and must be shared. The ability to access knowledge is a human right and the large number of heritage collections accessible online via the Internet promotes this right. Despite all these efforts and despite the establishment of the general inventory to identify cultural heritage, part of it remains unknown.

Many research centres are active with cultural heritage as their main focus. Nine of them are under the aegis of the Ministry of Culture. Their research is in line with innovation for the restoration and preservation of objects belonging to the cultural heritage. Several calls for research projects, both French and European, contribute to the dynamization of this research and several theses are being prepared in this field. Moreover, this is reflected by a large number of journals, blogs and research notebooks accessible online covering a majority of topics related to heritage. It is also the case with conferences and study days.

Heritage, of a global or local historical interest, makes it possible to bring audiences closer together around significant objects from the history of their territory and thus to be a vector of social cohesion. “It is by taking heritage out of its reserves and transmitting it to the public that we will avoid it being perceived as an impedimentum, a financial pit or a cash cow” (Balley, 2008).

Table 1. Expressions related to cultural heritage

Bien culturel	Cultural property
Patrimoine agricole	Agricultural heritage
Patrimoine archéologique	Archaeological heritage
Patrimoine architectural	Architectural heritage
Patrimoine artistique	Artistic heritage
Patrimoine bâti	Built heritage
Patrimoine balnéaire	Seaside heritage
Patrimoine biologique	Biological heritage
Patrimoine culturel écrit	Written heritage
Patrimoine culturel ou Héritage culturel	Cultural heritage
Patrimoine ethnographique	Ethnographical heritage
Patrimoine ethnologique	Ethnological heritage
Patrimoine faunistique et floristique	Fauna and flora heritage
Patrimoine graphique	Graphic heritage
Patrimoine géologique	Geological heritage
Patrimoine historique	Historical heritage
Patrimoine immatériel	Intangible heritage
Patrimoine immobilier	Heritage property
Patrimoine intellectuel	Intellectual heritage
Patrimoine industriel et technique	Industrial and technical heritage
Patrimoine livresque	Book heritage
Patrimoine logiciel	Software heritage
Patrimoine maritime	Maritime heritage
Patrimoine matériel	Tangible heritage
Patrimoine minéralogique	Mineralogical heritage
Patrimoine mobilier	Movable heritage
Patrimoine national	National heritage
Patrimoine naturel	Natural heritage
Patrimoine paysager	Landscape heritage
Patrimoine piscicole et des milieux aquatiques	Fish and aquatic environment heritage
Patrimoine religieux	Religious heritage
Patrimoine rural	Rural heritage
Patrimoine vivant (EPV)	Living heritage

REFERENCES

- Balley, N. (2008). Le puzzle, la coquille et le Lego: Constructions patrimoniales. *Bulletin des Bibliothèques de France*, 53(6). Retrieved from <http://bbf.enssib.fr/consulter/bbf-2008-06-0006-001.pdf>
- Basilico, S. (2005). Redéfinir le Patrimoine culturel à l'heure de la globalisation. In P. Lardellier (Ed.), *Logiques sociales. Des cultures et des hommes: Clés anthropologiques pour la mondialisation*. Paris: L'Harmattan. Retrieved from https://archivesic.ccsd.cnrs.fr/sic_00490004/document
- Battesti, J.-P., Renaud-Bouleix, B., & Meyer-Lerecureur, C. (2015). *Bilan de la décentralisation de l'inventaire général du patrimoine culturel*. Paris. Retrieved from <https://www.ladocumentationfrancaise.fr/var/storage/rapports-publics/154000836.pdf>
- Bélaval, P. (2018). *Mission sur le Patrimoine: Des outils au service d'une vision*. Paris.
- Benhamou, F., Thesmar, D., & Mongin, P. (2011). *Valoriser le patrimoine culturel de la France: Rapport (Les Rapports du Conseil d'analyse économique)*. Paris. Retrieved from <https://www.ladocumentationfrancaise.fr/rapports-publics/114000512/index.shtml>
- Code du patrimoine: Version consolidée au 1 août 2019. (2019). *Journal Officiel de la République Française*. Retrieved from https://www.legifrance.gouv.fr/affichCode.do;jsessionid=EEF97DB5241D2F5B61A2D7DF2808BAA.C.tplgr33s_2?cidTexte=LEGITEXT000006074236&dateTexte=20190806
- Cohen, G. (2017). 1. Le droit du patrimoine écrit : d'où il vient ? Où il va ? In D. Coq (Ed.), *Apprendre à gérer des collections patrimoniales en bibliothèque*. Villeurbanne: Presses de l'enssib. Retrieved from <https://books.openedition.org/pressesenssib/650?lang=fr>
- Cohen, G., & Yvon, M. (2004). Le Plan d'action pour le patrimoine écrit. *Bulletin des Bibliothèques de France*, (5), 48–50. Retrieved from <http://bbf.enssib.fr/consulter/08-cohen.pdf>
- Collinet, J.-F., & Metzger, H.-A. (2005). *Ethique de la conservation et de l'enrichissement du patrimoine culturel*. Paris. Retrieved from Ministère de la Culture et de la Communication website: <https://www.ladocumentationfrancaise.fr/rapports-publics/064000565-ethique-de-la-conservation-et-de-l-enrichissement-du-patrimoine-culturel>
- Ministère de la Culture et de la Communication (2010). *Guide d'information à l'usage des propriétaires publics et privés: Sécurité des biens culturels, de la prévention du vol à la restitution de l'objet volé*. Retrieved from Direction générale des patrimoines website: http://www.culture.gouv.fr/var/culture/storage/pub/catalogue_securite_des_biens_culturels/files/doc_s/all.pdf
- Décret n° 2010-633 du 8 juin 2010 relatif à l'organisation et aux missions des directions régionales des affaires culturelles, *Journal Officiel de la République Française* (2010).
- Robichon, F. (1995). *Patrimoine des bibliothèques de France: Un guide des régions*. Paris: Payot.
- UNESCO (1954). Convention for the Protection of Cultural Property in the Event of Armed Conflict with Regulations for the Execution of the Convention. Retrieved from http://portal.unesco.org/en/ev.php-URL_ID=13637&URL_DO=DO_TOPIC&URL_SECTION=201.html
- UNESCO ([1970]). Illicit Trafficking of Cultural Property: What is meant by "cultural heritage". Retrieved from <http://www.unesco.org/new/en/culture/themes/illicit-trafficking-of-cultural-property/unesco-database-of-national-cultural-heritage-laws/frequently-asked-questions/definition-of-the-cultural-heritage/>
- Culture for Development Indicators: Methodology Manual*. (2014). Paris.
- Varry, D. (1989). Il faut que les lumières arrivent par torrents: La Révolution française et la création des bibliothèques publiques : projets et réalités. *Bulletin des Bibliothèques de France*, 34(2-3). Retrieved from <http://bbf.enssib.fr/consulter/bbf-1989-02-0160-010.pdf>
- Vie-publique.fr (2014a, March 10). La politique du patrimoine: Glossaire. Retrieved from <https://www.vie-publique.fr/politiques-publiques/politique-patrimoine/glossaire/>
- Vie-publique.fr (2014b, March 10). Politique du patrimoine : chronologie. Retrieved from <https://www.vie-publique.fr/politiques-publiques/politique-patrimoine/chronologie/>

LATVIA

by Marta Dziļuma, Signe Mežāne and Kristina Papule

DEFINITION of CULTURAL HERITAGE in LATVIA

The definition of cultural heritage is given in the National programme “Culture” (sub-programme “Cultural heritage”, 2000): *“material or non-material evidence of the spiritual activity of human”*. This formulation is widely used in official documents, municipal information materials and other publications (including library websites).

Tangible vs. Intangible Cultural Heritage

While the detailed definition of tangible cultural heritage in Latvian legislative acts is still missing, the concept of intangible cultural heritage is described in the ***Intangible Cultural Heritage Law*** (2016). According to it, intangible cultural heritage is *“a part of the cultural heritage of Latvia, which represents the cultural traditions of Latvia and consists of the knowledge, skills, values and behaviour models passed down from generation to generation, defined by the surrounding environment and developed by interaction with history, nature and creativity, including oral traditions and expressions, performing arts, social practices, rituals, festive events, knowledge concerning nature and the universe, traditional craftsmanship, as well as instruments, objects, artefacts and cultural spaces associated therewith”*.

PRIORITY and IMPORTANCE of CULTURAL HERITAGE in LATVIA

Policies related to cultural heritage have more than a century of history in Latvia. Soon after independence was achieved in 1918, concerns about the identification and consolidation of cultural heritage became integral to policy development in such areas as culture, education and scholarship. The continuation of these policies only became possible in 1991, when Latvian independence was re-established (Vaivade, 2015). As a result, cultural heritage is an essential part of both history and modern daily life in Latvia. The society has recognised its value for the reason that culture provided the opportunity for Latvia to regain its independence.

In 2018 the Republic of Latvia celebrated its centenary. The celebration commemorated most important events and personalities related to founding and developing of the State of Latvia. As a result, the role of cultural heritage in strengthening the national identity was confirmed and the importance of cultural values for society was emphasized. Since culture builds higher quality of life and helps to develop creativity of inhabitants of Latvia, next years the significance of cultural heritage is going to increase.

NATIONAL FRAMEWORKS, PROGRAMMES, POLICIES and STRATEGIES REGARDING CULTURAL HERITAGE

The legal framework of the cultural heritage preservation and popularization in Latvia is based on several documents:

1. ***Sustainable Development Strategy of Latvia until 2030 (2010)*** defines preservation, interaction and enrichment of culture space as one of the most important priorities for the future of Latvia. As stated in this document, strengthening of the sense of belonging to the culture space of Latvia is a priority long-term action direction. In order to preserve both tangible and intangible cultural heritage and make it more accessible it is important to use new technologies and to create new cultural products and services. It is also essential to use the potential of cultural heritage for the development of creative tourism. Other measures concerning cultural heritage include creating competitive offer of cultural and educational programmes and increasing range of cultural institutions' activities.
2. The ***National Development Plan 2014–2020 (2012)*** is the highest national-level medium-term planning document which defines that *“state pays special attention to the preservation, maintenance and promotion of the fundamental treasures of the Latvian cultural heritage.”* (p.8). The practical significance of cultural heritage is also mentioned: along with the newly created

culture it represents a unique and enduring resource which can shape Latvia's recognition globally.

3. The **Cultural Policy Guidelines 2014-2020 "Creative Latvia" (2014)** focus on the value of culture for diverse and sustainable development of the country. According to the vision and the aim of guidelines, it is necessary for Latvia to preserve and cultivate its cultural heritage, promote creative processes and develop diverse cultural environment. As a result, the task of cultural and cultural heritage institutions is defined: "*to promote individual growth, education and unlocking of the creative potential of any person, as well as the participation of as large audience in cultural processes as possible.*" (p. 6). The guidelines include action directions and tasks for achieving these priorities, and the list of responsible and involved institutions. Libraries are included in this list mainly in context of restoration of cultural heritage objects (books, manuscripts etc.), digitisation and offering cultural education programmes.
4. **Information Society Development Guidelines for 2014–2020 (2013)** include an action direction "Digitalisation and Availability of Cultural Heritage". The main measures to be performed in this field are digitisation, long-term preservation, incorporation in international cultural resources and exploitation of cultural heritage in education processes. It is also crucial to develop services which would ensure digital heritage and cultural content resources availability to the public as widely as possible. To achieve these goals, creation of a publicly accessible digital collections, cultural heritage inclusion into the international cultural resources, and using of cultural heritage in both in formal education and lifelong learning activities are required.

Along with guidelines and strategies mentioned above, there's a set of laws and regulations covering preservation of both tangible and intangible cultural heritage in Latvia.

Tangible Cultural Heritage

1. The law **On Protection of Cultural Monuments (1992-)** describes a system of measures, which ensures preservation of the cultural and historical heritage. This law covers such topics as ownership rights, use, state registration and preservation of cultural monuments, and state supervision and control of cultural monuments' protection.

The law focuses on tangible cultural heritage. According to it, there are two types of cultural monuments: immovable and movable. Immovable cultural monuments include such individual and complex objects as buildings, architectural ensembles, cultural landscapes and memorial places. The list of movable cultural monuments covers such materials as archeological findings, antiquities, works of art, manuscripts, rare printed matter, cinema, photos, video documents and phonograms. Complex objects include holdings and collections of separate objects that have cultural and historical value. As a result, archives, museums and libraries can be seen as cultural heritage institutions which focus on preservation of both individual and complex movable cultural monuments. The role of each type of institution is determined by the following laws (see *paragraphs below*).

2. **Archives Law (2010-)**: The purpose of the law is to ensure main processes of archives' management, including creation, accumulation, appraisal, preservation an accessibility and use of the national documentary heritage of Latvia. As stated in the law, national documentary heritage is a part of the national cultural heritage, which is formed by the institutional and private records with archival value and the records of permanent retention.
3. **Law on Museums (2005-)**: The *Law on Museums* specifies public relations in the field of museums in order to ensure the operation and development of these institutions. It's main purpose is to promote the preservation of the cultural heritage of Latvia. The law covers such topics as concept, core functions and mission of museums, procedures for foundation, reorganization and liquidation of public museums, accreditation and registration etc.

While the museums are mainly associated with the storage and conservation of tangible cultural heritage objects, intangible cultural heritage is also included both in the concept of museums and museums' holdings.

4. **Library Law (1998-) and The Law On the National Library of Latvia (1992-):** The *Library Law* considers that cultural heritage is a core concept of libraries' functionality. To the purposes of the present study it is notable that in this case the concept of cultural heritage differs from the one mentioned in previous laws. It is not limited to Latvia or any other geographic area. According to the text, Latvian State and local governments “*shall ensure that the library shall be the repository of the cultural heritage of the world*”. This definition is also included to the description of the set of library functions: “*cultural heritage of the world - printed publications, electronic publications, manuscripts and other documents - the collection, systemisation, cataloguing, bibliographic classification and storage thereof*”.

The national significance of a library as an institution for collecting and storing historical and cultural monuments is emphasized in the law *On the National Library of Latvia (NLL)*. The main functions of NLL include:

- 1) creation of a collection of literature that are being used and will be preserved for future generations;
- 2) acquisition of publications which are significant for the development of Latvian statehood, science, the national economy, education and culture.

The activities of NLL and other Latvian libraries are also regulated by *Legal Deposit Law (2006-)* and *Copyright Law (2000-)*.

Other elements of tangible cultural heritage protection system include laws about specific historical areas, cultural organizations and institutions, for example: *Law on Preservation and Protection of the Historic Centre of Riga (2003-)*, *State Culture Capital Foundation Law (2003-)*, *Latvian National Opera Law (2002-)*.

Intangible Cultural Heritage

While tangible cultural heritage is widely presented in a number of laws, intangible cultural heritage has not been a specific subject of Latvian legislation till 2016, when the ***Intangible Cultural Heritage Law*** was passed. The objective of the law is “*to create institutionally organisational system to provide the environment and conditions necessary for targeted support to the safeguarding of the intangible cultural heritage, as well as to initiate a public dialogue*”. The law covers such topics as planning, financing and participation of communities in the safeguarding of intangible cultural heritage.

National Library of Latvia (NLL) is mentioned in the law as a holder of Collection of the Archives of Latvian Folklore. This collection includes recorded items of intangible Latvian culture with a cultural, historic and scientific value – manuscripts, printed documents, audio and visual materials. Storage of this collection in the NLL, its maintaining, preservation and availability to the public, is paid from the State budget.

Another legislative act for preservation of intangible cultural heritage is ***Song and Dance Celebration Law (2005-)***. This law defines that the Song and Dance celebration is national value of Latvia, unique tradition of Latvian culture and an integral part of Latvian national identity that needs be preserved, developed and passed on to future generations.

CULTURAL HERITAGE LITERATURE and RESEARCH

During last years a significant number of researches was implemented in a variety of fields of cultural heritage of Latvia. The topics cover both tangible and intangible cultural heritage as well as the role of libraries and other cultural institutions in its preservation and popularization. Here are some examples:

1. ***Protection of Cultural Heritage Latvia*** (Dambis, 2018) describes such aspects as the concept of cultural heritage, different historical periods in the protection of cultural heritage, Latvian heritage protection system (laws and other legislative documents), examples representing practice of heritage protection and vision for the future.

2. ***Safeguarding Intangible Cultural Heritage: Latvian Experiences*** (Veinberga, 2015) came into being through the collaboration of administrative and academic institutions involved with the safeguarding of intangible cultural heritage. It represents contributions, initiatives, and practices of Latvian NGOs, ethnic culture centers and societies for traditional culture.
3. ***Creative Cultural Heritage Communication in Local Communities (2015)*** is dedicated to projects and initiatives of Latvian National Commission for UNESCO and includes both description of participants' experience and examples of good practice in preserving and promoting cultural heritage. The activities described include storytelling, digitisation, organisation of cultural events and creative projects for students. The list of participants includes 28 Latvian libraries of various types (public, school, academic and national), museums, schools and local governments. While the National Library of Latvia is represented by creating and maintaining "The Lost Latvia" digital collection (see the section "*National Library of Latvia Services Regarding Cultural Heritage*"), other libraries are popularising cultural heritage mainly by the storytelling activities.

Cultural heritage also became a topic of interest in a number of academic studies in regional development and rural tourism:

1. ***Decision Making on the Use of Cultural Heritage in Rural Tourism Development in Latvia*** (Jeroščenkova, Rivža, & Rivža, 2016). This paper focuses on the problem of use of cultural heritage in the rural tourism development and defines three scenarios for the use of cultural heritage: 1) the initiative of entrepreneurs, public organisations and residents; 2) the programme funded by national and regional institutions; 3) the European Union fund for preservation of cultural heritage. To make a decision on the best scenario, there were engaged several experts who represented rural craftsmen, municipalities, rural tourism and other relevant organisations. The results of the study show that scenario of the EU fund for preservation of cultural heritage was evaluated by the experts as the most appropriate. The importance of the financial support for cultural heritage activities is also emphasized by the authors: "*since the preservation of cultural heritage is a priority of all European countries in the era of globalization, a proposal on special support to preserve cultural heritage is increasingly voiced*" (p.235).
2. ***Intangible Cultural Heritage in Promotion of Development of Location*** (Smukā, 2016). The author of the study analyzes the impact of the use of intangible cultural heritage on development of the territory. After studying academic literature, legal documents on cultural heritage protection, local and international experience she came to several conclusions which are of particular interest to the purposes of the present study.
 - Nowadays the role of using cultural heritage in the development of tourism has increased: "*tourists have started to prefer activities and attractions that are based on authenticity, cultural heritage and uniqueness*" (p.161). International practices also show trends of offering experience through engagement in cultural heritage popularization events and processes.
 - Cultural heritage popularization events in Latvia are similar in form to each other. The lack of innovations has become an obvious problem in using intangible cultural heritage for tourism development. The author notes that traditional approach doesn't meet the needs of potential users anymore: "*the tourist is looking for new attractions and adventure*" (p.161).
 - Preservation of intangible cultural heritage impacts awareness of the national identity of local communities. As a result, using intangible cultural heritage for tourism promotion may improve both social and economic development of local regions.
3. ***Use of cultural heritage for balanced regional development*** (Līviņa, Veliverronena, Krūzmetra, Grīnfelde, Buholcs, Smaļinskis, & Vasile, 2016). The aim of this study is to examine the use of cultural heritage for balanced regional development. Data were gathered through observations and interviews and focus groups with local inhabitants, entrepreneurs, and officials from different regions of Latvia. The results demonstrate that despite the diversity of the studied territories, they have a lot in common with regard to the potential of the use of cultural heritage resources. However, the ability of the region to make use fully of them depends on the state of infrastructure, employment and education opportunities, and other factors that influence the quality of life and attractiveness of the territory in the eyes of local inhabitants and guests. The authors note that cultural heritage popularization in Latvia is mostly based on traditional

approach, existing industries and technologies. However, if the region has an economic potential, it may become attractive for entrepreneurs developing new businesses and services that are not based on local traditional industries.

In conclusion, it is crucial to mention two papers that focus on cultural heritage digitization in Latvian libraries.

1. ***A Conceptual Model for the Strategic Planning of Digitization on National Level*** (Zariņš, 2013). This study represents a conceptual model, which describes the main properties of the documents used for strategic planning of digitization of cultural heritage on a national level and goals and tasks defined in these documents. According to this study, every aim or task of digitization has to answer three questions: 1) to which area of digitization does it relate; 2) what benefit does it bring; 2) what is the character of the aim or task. This finding allows to create a conceptual model which consists of three main classes with subclasses. It describes the areas of digitization, benefits of digitization and types of goals and tasks. As a result, this model helps to evaluate the tasks of digitization more accurately and organize digitization process more effectively.
2. ***Case study: Towards a Linked Digital Collection of Latvian Cultural Heritage*** (Bojārs, 2016). This paper describes "Rainis and Aspazija 150" - a digital collection dedicated to the 150th anniversary of famous Latvian poets and politicians Rainis and Aspazija. The collection is being developed in the National Library of Latvia. It contains annotated works of both poets, a part of their correspondence and various related materials (documents, photos, posters, audio and video files).

The main feature of "Rainis and Aspazija 150" is that it allows users to discover new information by exploring links between the objects. During the processing of digital content, new entities (such as people, organizations and events) and links to the objects representing these entities are being added to the collection. For example, if there's an image (like portrait or photograph of a specific person) mentioned in a digitized text, a link to a digitized version of this image is being added. As a result, the collection lets its users to study all relevant documents in a wider context and makes it possible to "travel" between the objects and discover new content.

Cultural Heritage Literature and Research: A Conclusion

From the studies analyzed, it can be concluded that cultural heritage is a topic of interest in such various fields as activities of Latvian governmental and non-governmental organizations and institutions, regional development and tourism, and digitization of cultural heritage materials. A significant part of these studies emphasizes the necessity of both conceptual and practical innovations in preservation and popularization of cultural heritage in Latvia.

NATIONAL LIBRARY of LATVIA SERVICES REGARDING CULTURAL HERITAGE

Preservation, Digitization and Access

National Library of Latvia (NLL) maintains Latvian National Digital Library (LNDL), which includes 18 digital collections (www.lnb.lv/en/resources/digital-library). The Academic repository Academia includes (<https://academia.lndb.lv/>) Doctoral Thesis, Master's Thesis, Thesis, collections of scientific articles, scientific journals, studies and publications. In the digital collection it's possible to search by field, institution and language. The Books (<http://gramatas.lndb.lv/>) collection includes digitized books and The Periodicals (<http://www.periodika.lv/>) collection includes almost 3000 newspapers and magazines of various titles - more than 2.5 million pages published both in Latvia and exile. Periodicals show history of Latvia - "tsar period", "time of the first freedom of Latvia", "the times of Ulmanis rule", "German period", "Russian period" and "nowadays".

All periodicals undergo automatic text recognition process. There is collection The Reading Tree (<https://lasamkoks.lv/>) which includes digitized books for kids. The G.F. Stenders's Literary Heritage (<https://stenders.lndb.lv/en/>) collection includes books, articles and preserved manuscripts, published within the lifetime of the pioneer of Latvian secular literature Gothard Friedrich Stender (1714 – 1796). Original materials are kept in various libraries, repositories and memory institutions in Latvia and abroad. The Image (<https://atteli.lndb.lv/en/>) collection with 19 217 records includes postcards, posters, estamps, ex libris and portraits. Latvia in the 16th-18th Century Maps (<http://datatest.lnb.lv/nba05/kartes/frame.htm>) collection was formed after the establishment of the Library in 1919. Maps of the 16th and 17th centuries and some of the 18th century imprints are stored at the Department of Rare Books and Manuscripts of the NLL and recent maps dating from the 18th century are stored at the Department of Cartography. Latvia's Historical Sound Recordings (<https://audio.lndb.lv/en/>) collection with 3346 records takes as its basis the production of "Bellaccord Electro" and shellac records issued in Riga after World War II. This collection aims to reflect and document the music scene of Latvia in the first half of the 20th century in a wide variety of genres. The Latvian Handwritings of the Moravian Brethren (<https://braludraudze.lndb.lv/en/>) collection compiles a unique collection of Latvian cultural history materials of Brethren texts which were influenced by the Hernhutist movement in the 18th and 19th century by average Latvian farmers. The Latvian Song Celebration Festival (1864–1940) (<https://dziesmusvetki.lndb.lv/>) collection includes materials about the Latvian Song and Dance festival songs, dances, personalities, national costumes and festival celebration in other countries. The Rainis and Aspazija (<https://runa.lnb.lv/>) collection reveals the diversity of legacy left by both Latvian poets. Collection includes first editions with contemporary annotations, a small amount of correspondence with scientific commentary, archive documents, photographs, posters, audio - speech and video - snippet of cinematic chronicle. Collection is designed to develop as a resource for human resource researchers and students, as well as for anyone interested in Rainis and Aspazija in Latvia and beyond (National Library of Latvia, 2019).

The aim of the LNDL is to provide access to digitized content of the NLL and partner organizations by making them available online. Currently contents of the LNDL cover all most common document types such as books, periodicals, maps, sheet music, audio recordings and images. LNDL make stocks available to various groups of society thus facilitating comprehension of the Latvian culture, history, geography, economy and politics. Digital collections offers new research instruments for the scientists.

The Head of Digital Heritage Center Jana Ķikāne defines digitization of materials which are damaged or highly demanded as the most important priority. Digitization demolishes the boundaries between library, museum and archive stocks. Regional libraries have an opportunity to use NLL's digitized materials in order to improve and develop their own local collections.

Library Related Strategies and Policies

In 2018 National Library of Latvia prepared **Guidelines for Digitizing Cultural Heritage Materials**. The aim of the document is to promote standartization of cultural heritage digitisation in different types of institutions. It covers three topics:

1. **Organisation of Digitisation**. This part includes a description of the roles of relevant institutions in digitisation-related decision-making, organization of digitisation process, outsourcing, roles of digitisation experts, technologies, quality control etc.
2. **Digital Object Management**. The section contains detailed technical information on a variety of digital object management aspects, such as archive files and user files, folder names, metadata creation and import, and distribution of digital objects
3. **Digital Objects Types** section offers recommendations for digitising various types of materials (texts, images, video, audio, 3D objects, born-digital documents etc.).

The **Guidelines for Digitizing Cultural Heritage Materials** are used mainly by libraries and museums. The document is maintained by the Digital Heritage Center of the National Library of Latvia and is updated every two years.

NLL Library Development Centre is the unit responsible for methodological support for all libraries in the country. It organizes annual local history conference and has published the **Guidelines for Local**

History Work in the Libraries of Latvia. The local history work is carried out by public libraries of the country and the purpose of these Guidelines is to improve local history work in libraries, to introduce common operating principles in order to create preconditions for the development of integrated, up-to-date and accessible collections of local history resources and services.

Collecting and Organization

One of the most successful ways for collecting and promoting cultural heritage is crowdsourcing. This sourcing model has been used in such projects as “The Lost Latvia” (www.zudusilatvija.lv), Digital Archives of Latvian Folklore (www.garamantas.lv) and “Landscape treasures” (<https://ainavudargumi.lv/en/>). LNDL also partly includes items from private collections, which represent valuable cultural heritage.

The Lost Latvia is LNDB Letonica project combining unified information and changing Latvian cultural and historical values. The project is being developed by the NLL in cooperation with Latvian memory institutions - libraries, museums, organizations for the protection and preservation of cultural heritage, as well as individuals. Latvia's cultural landscape has changed considerably over time. Natural, historical, architectural objects and economic and public buildings have not survived. Lost Latvia contains digitized copies of ancient drawings, postcards and photographs from the late 19th century to the present and descriptions of objects:

- architectural and artistic monuments (churches, manors, mounds and medieval castle ruins);
- city and community views;
- public buildings (municipal buildings, schools, association houses);
- commercial buildings (factories, mills, kilns, artisan workshops);
- infrastructure facilities (post offices, shops, pubs, horse and railway stations, railways and roads, bridges);
- Latvian residents' homes; farm buildings (rills, barns, barns and stables);
- natural objects (landscapes, river valleys, rocks, noble trees, noble stones) (Landscape treasures, 2019).

The Lost Latvia invites everyone to get involved in updating the descriptions of the objects and uploading new pictures and photos. Collaboration contributes to the development of the project, enables the content of the project website to be improved and supplemented (Lost Latvia, 2019).

Ginta Zalcmāne, coordinator of “The Lost Latvia” project argues that the usage of cultural heritage may vary because it depends on the needs of specific groups of society. For example, cultural and historical information can be used in scientific research, developing information resources, creating multimedia works, or illustrating various activities.

One of crowdsourcing projects is Landscape treasures (<https://ainavudargumi.lv/en/>) digital collection developed by Ministry of Culture Republic of Latvia, Ministry of Environmental Protection and Regional Development Republic of Latvia and National Library of Latvia. Landscape treasures are sites and areas in Latvia's countryside, villages and cities which are considered to be of special worth to Latvia, regardless of their protection status or splendour. The project title is reproduced in the handwriting of notable Latvian landscape artist Vilhelms Purvītis (1872-1945). In 2017 all Latvia's residents were invited to submit their landscape treasure at www.ainavudargumi.lv and were received 928 submissions. By grouping the submissions The Landscape Expert Council nominated 243 landscapes for further evaluation and posted on www.ainavudargumi.lv which received 45 382 votes from all over Latvia. Taking into account the results of the vote and the opinions of experts the Landscape Expert Council selected 50 landscapes. Each of Latvia's five planning regions is characterised by ten landscape treasures. In 2018 individuals, museums, libraries, tourist information centres and municipalities sent in nearly 1000 photographs, recollections and information publications (Landscape treasures, 2019).

The Archives of Latvian Folklore (ALF) (<http://en.lfk.lv/news>) has retained its three main fields of activities: archiving of folklore (collection, processing and storage), along with publication of folklore and its studies. Folklore archiving is still a current task, now using modern methods and technologies, including material digitisation and on-line publication. The ALF includes The Cabinet of Folksongs collection (www.dainuskapis.lv). Krišjānis Barons (1835-1923) started work at the edition of Latvian folksongs in 1878. The collected song texts were sent to him to be organised according to the developed principles of the edition. Between 1998 and 2006 the contents of the cabinet were scanned (each slip

into a separate file), the song texts have been transcribed into machine readable form, thus allowing the material to be accessed at www.dainuskapis.lv. Since 4 September 2001 Dainu skapis is part of the world culture — on this date it was inscribed on the UNESCO Memory of the World list. The Cabinet is located in the NLL on the fifth floor (Archives of Latvian Folklore, 2019).

In 2014 the digital archive of the ALF was opened www.garamantas.lv, with the aim to make the materials of the Archives holdings — manuscripts, images, audio and video recordings, and other valuable collections of folklore materials with 3 million folklore items available on-line and easily usable. Collections are continuously enlarged. The digital archives of the ALF are free of charge. Anyone has the opportunity not only to read, view and listen to folksongs, legends, folk-tales, and material of other genres, but also to discover the collections of folklore material as a unique valuable heritage. Everyone is welcome to participate in the further development of the digital content in the following ways: transcribing of manuscripts, so these become searchable by automatic means, translating materials into other languages, recognising and describing the people and places depicted in the images, adding personal details of folklore informants and collectors (Archives of Latvian Folklore, 2019). Regional public libraries in Latvia play the role both of local cultural centers and the centers for local studies. They maintain special collections and databases containing cultural heritage materials relating to specific region and organize various events to popularize these resources. Intangible cultural heritage is promoted mainly by organizing storytelling activities.

Projects and Promotion

NLL organizes various events and exhibitions to promote cultural heritage. Since 2016 NLL offers to visit permanent exhibition “Book in Latvia”, which is dedicated to history of Latvian book in a global context. The exhibition was inspired by the new image of the library.

In 2017 NLL launched “Cultural Canon” – an orientation game for promoting cultural heritage. Children and teenagers are the target group of the game, and it’s purpose is to find information, materials and cultural heritage objects stored in NLL. At the entrance the map of the game with assignment is distributed and participants can start an individual tour in the library and find the objects included in Latvian Cultural Canon - that can be found in different forms and different places (previous national currency Latvian Lat, famous choir song recording, advertising materials of “Minox” photo camera, produced in Latvia in 1930s, digital images of national costumes included in digital collections etc.). Anita Smeltere, coordinator of the “Cultural Canon”, emphasizes several points for promoting cultural heritage effectively:

- 1) organizing creative workshops in libraries;
- 2) offering a possibility to discover cultural heritage online via social media such as *Facebook, Instagram* and *Twitter*;
- 3) understanding that cultural heritage represents not only the past, but also the present. It can inspire children and young adults to explore different professions and to create new values of cultural heritage.

Examples from the Best Practices

NLL stock materials are used in a wide range of projects for example cinematographic works “Eight Stars” (2017). Movie is directed by Askolds Saulītis in co-production with studio Terra Europa and supported by National Film Centre of Latvia and State Culture Capital Foundation. The movie tells about the most striking and tragic phenomenon during the development of the self-awareness of the Latvian nation – the Latvian Riflemen (National Film center of Latvia, 2019). “Song Power” (2018) movie directed by Askolds Saulītis in studio “Centrum” and supported by National Cultural Center and State Culture Capital Foundation. The film portrays attempts to subject the Song Celebration to different ideological goals and the ingenuity of the people to prevent it (Nacionālais kino centrs, 2019).

Exhibition “Latvian Century” in National History Museum of Latvia is a joint contribution of Latvian museums to reveal 100 years of Latvia and to provide an opportunity to see excellent historical objects stored at the museums in all regions of Latvia – Kurzeme, Sēlija, Vidzeme, Zemgale and Riga. These objects reflect the history of the Latvian people, land and country over the past centenary (Latvija 100, 2019). Exhibitionm “Portrait in Latvia. 20th century. Expression”. Facial Expressions produced by the Latvian National Museum of Art (LNMA) offers an encounter with a selection of the finest portraits from a whole century. A huge number of artists have portraits in various techniques but not all of them can

be described as masters of the portrait. The exhibition poses the question of the portrait's status in the 20th century and the present day (Latvian National Museum of Art, 2019).

The book "Latvia 100" (2018) by Peter Apinis is free narration and visualization of Latvian centenary history in photographs and works of art. More than 1000 Latvian residents, photographers and Latvians from all over the world have contributed to the creation of the book, with the added photos being the authors of the book. NLL provides various types of cultural heritage materials also to other national-level projects.

Co-operation with Other Cultural Heritage Institutions

Within the framework of service execution good mutual co-operation between memory institutions was formed and the basis for successful information services was established. NLL co-operates with a big number of partners: the University of Latvia Academic Library, National History Museum of Latvia, National Film center of Latvia, National Museum of Art, Latvia State Archive of Audiovisual Documents, State Inspection for Heritage Protection etc.

Exhibitions created by NLL mostly are made in co-operation with other Cultural Heritage Institutions. Cultural Heritage is a broad concept and contains diverse materials and in this visual perception era it's important to offer fascinating exhibitions with different types of objects.

Identified Needs and Gaps within Cultural Heritage Related Library Services

In NLL and other libraries the most important challenges are as follows:

- The ability of children and young adults to use cultural heritage. Since NLL is interested in promoting both printed and digitized cultural heritage objects, librarians need to find a new approach to this audience.
- Young adults are too busy to take part in cultural heritage promotion events, because they have too many activities in school.
- Lack of time, staff and other resources for developing cultural heritage related services and activities.
- Technical complications in searching for cultural heritage information online. For instance, large amount of valuable NLL items is stored in the Rare Books and Manuscripts section. Most of these documents are not catalogued and therefore are not easily accessible.
- Evaluation, preservation and promotion of born-digital cultural heritage.
- Necessity to find the best way how to document individual memories, psychology skills for interviewing.
- Ability to present culture heritage as a unique "product" to attract more audience in different age groups.

Conclusion

Since cultural heritage is an essential part of history and modern life in Latvia, its preservation and promotion are important priorities for all the cultural institutions, including libraries. Libraries collaborate with other institutions to create complete collections and provide a wide range of materials. Various activities are being organized to attract customers to the study of cultural heritage. Last years NLL have faced such challenges as promotion of cultural heritage for young audiences, lack of resources for developing innovative cultural heritage related services, technical complications in searching for cultural heritage related information and preservation of born-digital documents. In order to improve the situation, innovative approaches and services are needed.

References

Archives Law. (11.02.2010). Retrieved from: <https://likumi.lv/ta/en/id/205971-archives-law>

Archives of Latvian Folklore. (2019). Retrieved from <http://garamantas.lv/?lang=en>

- Bojārs, U. (2016). Case Study: Towards a Linked Digital Collection of Latvian Cultural Heritage. *CEUR Workshop Proceedings, 1608*, 21.-26. Retrieved from: <http://ceur-ws.org/Vol-1608/paper-04.pdf>
- Centenary of the Republic of Latvia*. (2018). Retrieved from <https://www.km.gov.lv/en/ministry/centenary-of-the-republic-of-latvia>
- Copyright Law*. (06.04.2000). Retrieved from: <https://likumi.lv/ta/en/en/id/5138-copyright-law>
- Cultural Policy Guidelines 2014-2020 "Creative Latvia" (Informative part)*. (29.07.2014). Retrieved from <https://likumi.lv/ta/en/id/267970-cultural-policy-guidelines-2014-2020-creative-latviainformative-part>
- Dambis, J. (2018). *Protection of Cultural Heritage Latvia*. Riga: State Inspection for Heritage Protection.
- Information Society Development Guidelines for 2014–2020 (Informative part)*. (14.10.2013). Retrieved from http://www.varam.gov.lv/eng/darbibas_veidi/e_gov/?doc=13317
- Intangible Cultural Heritage Law*. (29.09.2016). Retrieved from: <https://likumi.lv/ta/en/id/285526-intangible-cultural-heritage-law>
- Jeroščenkova, L., Rivža, B., Rivža, P. (2016). Decision Making on the Use of Cultural Heritage in Rural Tourism Development in Latvia. *Research for Rural Development*, 2, 233.-237.
- Landscape treasures. (2019). Retrieved from <https://ainavudargumi.lv/en/>
- Latvian National Opera Law*. (22.05.2002). Retrieved from: <https://likumi.lv/ta/en/id/63108-latvian-national-opera-law>
- Latvija 100. *Latvia's Century - A Joint Exhibition Curated by the Museums of Latvia*. (2019.) Retrieved from <https://lv100.lv/en/programme/calendar/latvia-s-century/>
- Latvijas kultūras kanons. (2019). Retrieved from <https://kulturaskanons.lv/>
- Latvijas Nacionālā bibliotēka. (2018). *Kultūras mantojuma digitalizācijas vadlīnijas. V.1.1*. Retrieved from https://www.lnb.lv/sites/default/files/media/aktualitates/Digitalizācijas_vadlinijas_v1.1_280518.pdf
- LNB Bibliotēku attīstības centrs. (2017). *Latvijas bibliotēku novadpētniecības darba vadlīnijas*. Retrieved from <https://dom.lndb.lv/data/obj/file/2963519.pdf>
- Latvian National Museum of Art. *Portrait in Latvia. 20th century. Expression*. (2019). Retrieved from <http://www.lnmm.lv/en/visit/exhibitions/3977-portrait-in-latvia-20th-century-facial-expressions>
- Law on Museums*. (15.12.2005). Retrieved from: <https://likumi.lv/ta/en/id/124955-law-on-museums>
- Law on Preservation and Protection of the Historic Centre of Riga*. (29.05.2003). Retrieved from: <https://likumi.lv/ta/en/id/76001-law-on-preservation-and-protection-of-the-historic-centre-of-riga>
- Library Law*. (21.05.1998). Retrieved from: <https://likumi.lv/ta/en/id/48567-library-law>
- Līviņa, A., Veliverronena, L., Krūzmetra, Ž., Grīnfelde, I., Buholcs, J., Smalīnskis, J. & Vasile, R. (2016). Use of Cultural Heritage for Balanced Regional Development. *Latvijas Zinātņu Akadēmijas Vēstis, A.daļa, Sociālās un humanitārās zinātnes*, 70(3), 91.-101.
- Lost Latvia. (2019). Retrieved from <https://zudusilatvija.lv/>
- Nacionālais kino centrs. *Dziesmuvara*. (2018). (2019). Retrieved from <https://www.filmas.lv/movie/4036/>
- Nacionālā programma "Kultūra". Apakšprogramma "Kultūras mantojums"*. (08.02.2000). Retrieved from <https://likumi.lv/doc.php?id=1351>
- National Library of Latvia. (2019). *Digital library*. Retrieved from <https://www.lnb.lv/en/resources/digital-library>
- National Library of Latvia. (2019). *Permanent exhibition "Book in Latvia"*. Retrieved from <https://www.lnb.lv/en/book-latvia/permanent-exhibition-book-latvia>
- National Film center of Latvia. *Eight Stars*. (2019). Retrieved from <http://nkc.gov.lv/en/get-to-know-a-film/latvian-films-for-latvian-centenary/eight-stars/>
- Obligāto eksemplāru likums [Legal Deposit Law]*. (18.05.2006). Retrieved from: <https://likumi.lv/doc.php?id=136682>

- On Protection of Cultural Monuments*. (12.02.1992). Retrieved from: <https://likumi.lv/ta/en/id/72551-on-protection-of-cultural-monuments>
- On the National Library of Latvia*. (16.12.1992). <https://likumi.lv/ta/en/id/62905-on-the-national-library-of-latvia>
- Radošā kultūras mantojuma komunikācija vietējā sabiedrībā*. [Creative Cultural Heritage Communication in Local Communities]. (2015). Rīga: UNESCO Latvijas Nacionālā komisija.
- Saeima of the Republic of Latvia. (2010, June). *Sustainable Development Strategy of Latvia until 2030* (Latvia 2030). Retrieved from https://www.pkc.gov.lv/sites/default/files/inline-files/LIAS_2030_en_1.pdf
- Saeima of the Republic of Latvia. (2012, December). *National Development Plan 2014–2020*. Retrieved from http://www.pkc.gov.lv/sites/default/files/images-legacy/NAP2020%20dokumenti/NDP2020_English_Final.pdf
- Smukā, I. (2016). Intangible Cultural Heritage in Promotion of Development of Location. *Economic Science for Rural Development*, 42, 157.-163.
- Song and Dance Celebration Law*. (16.06.2005). Retrieved from: <https://likumi.lv/ta/en/id/111203-song-and-dance-celebration-law>
- State Culture Capital Foundation Law*. (30.10.2003). Retrieved from: <https://likumi.lv/ta/en/id/81064-state-culture-capital-foundation-law>
- Vaivade, A. Introduction. Stories of Individual and Joint Experience. (2015). In Veinberga, D. (Ed.). *Safeguarding Intangible Cultural Heritage: Latvian Experiences* (pp. 7-11). Rīga: Latvian National Centre for Culture.
- Veinberga, D. (Ed.). (2015). *Safeguarding Intangible Cultural Heritage: Latvian Experiences*. Rīga: Latvian National Centre for Culture.
- Zariņš, U. (2013). A Conceptual Model for the Strategic Planning of Digitization on National Level. *Informācija un sabiedrība*, 3, 26.-35.
- Zudusī Latvija. (2019). Retrieved from <https://zudusilatvija.lv/cms/>

THE NETHERLANDS

by Daniel Weiss

INTRODUCTION

The Netherlands has a rich cultural heritage. It can be found in the country's numerous museums, libraries, archives, in the historic town centres, in the nature as well as in traditions, rituals, and stories. Cultural heritage also manifests itself in many different ways. It comprises of tangible and intangible resources, created by people, and passed on from one generation to the next.

The importance of the cultural heritage has long been recognized in the Netherlands as proven by the cultural policies, strategies and actions taken. Measures have been taken by many public and private institutions to preserve cultural heritage. Memory institutions, including libraries, have been in the forefront of the preservation efforts. These efforts mainly are digitisation centric in most of the libraries and archives.

DEFINITION of the CONCEPT

The Netherlands has no national definition of culture. The terms *culture*, and *cultural sector* are interpreted in different ways. In most cases, the term *cultural sector* is used to indicate the sector as a whole, including (Council of Europe/ERICarts, 2016):

- *Arts and cultural heritage*: Visual arts, performing arts, arts education, museums, historic buildings, landscapes and sites, archaeology, archives, libraries, literature.
- *Media and entertainment*: Broadcasting, printed and other media, film and photography.
- *Creative commercial design disciplines (applied arts)*: Graphic and industrial design, architecture, urban development, landscape design, fashion, e-culture, and gaming.

As for the *cultural heritage* concept, there was two separate definitions for *tangible* cultural heritage: *movable* and *immovable* within Dutch legislation before the new *Heritage Act* was launched. Dutch law did not contain a definition or description of the concept of *intangible* cultural heritage until the above mentioned law is put in force.

The concept of *immovable* cultural heritage was outlined in the *Monuments Act in 1961*. It was defined as "objects that have been created at least fifty years ago and that are of public interest due to their beauty, their scientific/academic relevance or to their cultural-historical value" (Lubina, 2009). Although it referred to monuments, the definition was interpreted more generally, yet limited with man-made assets and included an age limit.

Movable cultural heritage was defined first time under the *Cultural Heritage Preservation Act 1984*, as movable objects of particular cultural-historical or scientific value that must be considered as irreplaceable and indispensable for Dutch cultural heritage (Lubina, 2009).

For the *intangible cultural heritage*, the definition of Frijhoff (2005), has received general support in the Dutch academic circles. According to Frijhoff (2005), intangible cultural heritage consist of three components: "first, it is something transmittable, ranges from a past performance, via an experience, idea, custom, spatial element, building or artefact, to a set of these. Second, one can only speak of (intangible) cultural heritage provided that a human group exists that is able and ready to recognize these assets as a coherent unit, to transmit and to receive them. Third, there must be a set of values linking the object inherited from the past to a future use, in a sense of meaningful continuity or equally meaningful change" (Lubina, 2009).

The definition of cultural heritage in the new legislation (new integrated *Heritage Act*, 2016) is inspired by the broad approach to cultural heritage in the Council of Europe's Faro Convention. It is defined as "tangible and intangible resources inherited from the past, created in the course of time by people or arising from the interaction between man and the environment that people, irrespective of the ownership thereof, identify as a reflection and expression of continuously evolving values, beliefs, knowledge and traditions, and that offer a frame of reference to them and to future generations" (Cultural Heritage Agency, 2016).

IMPORTANCE of CULTURAL HERITAGE

The importance of cultural heritage is expressed in the new Dutch *Heritage Law* document as follows (Cultural Heritage Agency, 2016).

Cultural heritage is the source for the narrative of the country's history, making the past visible and therefore strengthening cultural and historical awareness. Through cultural heritage, people are connected with one another and with the past, and develop sense of belonging. Cultural heritage is an important source of inspiration for innovation in design and spatial development. Cultural heritage is also of major economic value. It attracts countless tourists from the country and abroad thus forming a source of income for the national and local economy.

There is widespread awareness that cultural heritage represents an important social value. Numerous initiatives by Dutch government as well as public and private institutions to preserve national cultural heritage and make it accessible were carried out since the nineteenth century. In the past, care for cultural heritage expressed itself primarily in great concern about what was being lost through modernisation, industrialisation, and urban expansion and renewal. This is no longer the case. Today, caring for Dutch cultural heritage has become an established and broadly supported interest, whose value is widely recognised and acknowledged. Many volunteers work at museums and for heritage organisations, *National Heritage Day* attracts nearly a million visitors annually, and the number of visitors/users of cultural heritage is increasing year by year.

PRIORITY and POLICIES

In the Netherlands, in 1970s, cultural policy became an increasing part of the government's welfare policy. The benefits and relevance of culture to society as a whole became a priority, particularly in terms of cultural participation. The 1990s witnessed a change in the attitude of the Ministry of Education, Culture and Science. Cultural organisations were encouraged to become more independent financially and to cater to the needs of their users/customers (in particular new and young users as well as the ones from ethnic minorities). In addition to the contributions of the state, private initiatives and private funding were welcomed (Council of Europe/ERICarts, 2016).

According to the *Cultural Policy Act 1993*, the Minister of Education, Culture and Science is obliged to present a policy memorandum every four years. This policy plan reviews all foreseen and completed cultural policy activities. It was extended to become today's *Culture Memorandum*, a four-year planning document on cultural policy spending, to include the arts, museums, monuments, archives, libraries, performing and creative arts, film and literature, architecture and urban planning (Council of Europe/ERICarts, 2016).

Although Dutch cultural policy is being reformulated every four years, there is a high degree of continuity in practice. Internationalisation, participation, education, innovation, talent development, entrepreneurship and the preservation of cultural heritage have long been priority areas. Recently (for the 2017-2020 period) however, the main focal points have shifted to reaching a diverse audience, regional distribution, quality and collaboration within and outside the cultural sector. It is also noted that, in the new period, cultural institutions will be judged on quality, social values, education and participation (Council of Europe/ERICarts, 2016).

Digitization, which is seen as a new opportunity on the distribution and accessibility of culture, is another major theme of cultural policies. Cultural heritage policy, however, focuses more on the public and on the possible uses of artifacts, rather than on the artifacts themselves (Council of Europe/ERICarts, 2016).

Cultural heritage policy is developed and carried out by the *Cultural Heritage Agency*³⁰ of the Netherlands which is the Netherlands' centre of expertise for heritage. It is an executive body of the Ministry for Education, Culture and Science. The varied work of the Cultural Heritage Agency includes generating and disseminating knowledge, implementing policy and legislation, administering guarantees and subsidies, searching for innovations in heritage care and providing practical advice. Three key

³⁰ <https://english.cultureelerfgoed.nl/>

elements of the Agency which are mutually reinforcing are indicated as practical expertise, scientific knowledge and government policy (The Cultural Heritage Agency, 2019). The Cultural Heritage Agency is involved in listing, preserving, and providing access to cultural heritage assets which have to be preserved on account of their cultural and historic value (Council of Europe/ERICarts, 2016).

In 2009, the Ministry of Education, Culture and Science formulated a policy letter. The document states the following goals: (1) stimulating and supporting work in target areas; (2) integrating the importance of cultural history in regional planning; (3) formulating a vision of heritage; and (4) reducing the administrative burden. As a follow-up to this policy letter, the policy-vision document *Character in Focus* was formulated in 2011. This document focuses on the connection between safeguarding the cultural heritage as an integral part of regional-development challenges in the fields of economics, safety and sustainability. The economic value of cultural heritage was emphasized by this new policy (Council of Europe/ERICarts, 2016).

NATIONAL STRATEGIES and LEGISLATION

The protection of cultural heritage, under Dutch law, until very recently, was to a great extent structured along the classical lines, based on several isolated protection regimes applicable to only one category of cultural heritage (either movable or immovable) or one specific context of cultural heritage (either protection in times of war or in times of peace, either cultural heritage located on land or underwater). Which means, there was a strict separation between the protective regimes for different types of cultural assets. The conservation and management of the Dutch cultural heritage was governed by various regulations and laws (each one of which had its own specific heritage definitions, procedures and protection measures). While tangible cultural heritage was protected by designation as Dutch cultural heritage and entry into national inventories, such an approach was rejected for the protection of intangible cultural heritage. The protection of intangible cultural heritage was not law-based. Instead, the Dutch system protected intangible cultural heritage indirectly by supporting museums and research institutes dedicated to studying and imparting intangible cultural heritage (Lubina, 2009).

In 2016 a new *Heritage Act* was launched. The new integrated Heritage Act puts an end to past fragmentation. The sectoral fragmentation (mentioned above) of the heritage legislation and the necessary adjustments to ensure the quality of the work, were the reasons to establish one integral cultural *Heritage Act*. This act integrates and replaces six laws and regulations in the field of cultural heritage, including the *Cultural Heritage Preservation Act 1984*. The Cultural Heritage Act regulates matters for both movable and immovable tangible heritage and is an integral part of the Environment Act (Council of Europe/ERICarts, 2016). Although, the concept of cultural heritage is approached from a wider angle in the new act, intangible cultural heritage is still dealt with a limited way, mainly by keeping it alive by giving heritage associations the opportunity to pass it on to future generations. This involves surveying it, disseminating knowledge of it, and by implementing model practices for its protection (Cultural Heritage Agency, 2016).

The protection of tangible cultural heritage is essentially also based on a number of international binding legal instruments. The Ministry of Education, Culture and Science is responsible for compliance with international treaties, such as those of UNESCO. Some examples of the international conventions the Netherlands takes part are as follows (Lubina, 2009):

- Convention for the Protection of Cultural Property in the Event of Armed Conflict (1954)
- Protocol for the Protection of Cultural Property in the Event of Armed Conflict (1999)
- UNESCO Convention on the Protection of World Cultural and Natural Heritage (1972)
- UNESCO Convention on Prohibiting and Preventing the Illicit Import, Export and Transfer of Cultural Property (1970).

The *Cultural Heritage Inspectorate* ensures compliance with the law and promotes improvements in the management and safeguard of cultural heritage. In the event of incidents and calamities, the inspectorate takes the necessary action. It also advises the Minister of Education, Culture and Science about the quality and effectiveness of cultural heritage legislation (Council of Europe/ERICarts, 2016).

In January 2015, a new *Libraries Act* is implemented. This new act defines the five core functions of public libraries as to promote reading and a taste for literature; facilitate learning; make available knowledge and information; promote art and culture; and organise social encounters and debate. The act also addresses the digitisation of the sector, which started in the late 1990s. To streamline and co-

ordinate this process the Dutch public libraries set up the foundation *Bibliotheek.nl* (2009). They build a digital infrastructure in order to create one Dutch national digital library by connecting all (digital systems of the) Dutch public libraries. The law finally defines the roles of the various players within the national network. The National Library of the Netherlands is coordinating the new system to be more efficient, cost effective and user friendly (Council of Europe/ERICarts (2016).

In March 2015 a *National Digital Heritage Strategy* was published. The strategy is developed and implemented by the *Digital Heritage Network* (NDE), together with the Ministry of Education, Culture and Science. This strategy offers a perspective on developing joint services and methods for improving the sustainability, usability and visibility of digital cultural heritage. The strategy is being translated into general principles for managing and connecting cultural heritage collections. Some results are (Progress report, 2017):

- The Digital Heritage Reference Architecture (DERA 1.0; in Dutch) provides a set of principles and requirements that enable cultural heritage institutions to work together.
- The position paper towards a distributed network of heritage information proposes an approach for connecting heritage information using state of the art concepts and technologies, such as linked data.
- A draft functional design of the distributed network of digital heritage information
- CultuurLINK³¹ helps cultural heritage institutions in linking their vocabularies with the Dutch cultural heritage Hub. Such linking of vocabularies improves search results across collections, without compromising the richness of vocabularies developed for a specific organisation or domain.

The *National Strategy for Digital Heritage* aims, among other things, to improve access to digital heritage. In the current situation, a large number of heritage institutions and (inter)national cooperation initiatives are actively collecting, transforming and enriching digital heritage information and make them accessible and available to the public. Many projects involve investments in and construction of various types of technical infrastructures that are difficult to connect. This approach, consisting in gathering and collectively presenting digital heritage, is inefficient, leads to unnecessary doubling of efforts and investments, and produces too little added value for the end user. The core of the solution lies in stimulating the publication of Linked Data straight from the source. It is aimed to improve the usability of the collection data at the source by implementing Linked Data principles in the collection registration systems. The maintainers of the collections are urged to align their data with formal Linked Data resources, like thesauri (people, place, periods, concepts) and to publish data as Linked Open Data. With this new approach it is hoped to move away from a traditional repository centric approach to a more web centric approach where optimizing the usability of resources in their original environment is the starting point (Progress report, 2017).

LIBRARIES and CULTURAL HERITAGE

Dutch library history begins with the medieval church and cloister libraries which were closed during the Reformation, instead publicly-accessible municipal research libraries were formed in the large towns and cities. University libraries grew on the model of German university libraries. The Royal Library, the Dutch National Library, was founded in 1798. England and the United States were the models for the development of public librarianship in the nineteenth century, which went through a great development in the twentieth century. The war years were characterized by collaboration in the public library domain. In the 1960s The Netherlands began to apply information technology in scholarly and then public libraries (Schneiders, 1998). Today, the Netherlands is famous for its strong and well developed libraries with cultural heritage holdings in their collections. Libraries play an important role, from the beginning, in safeguarding cultural heritage with different methods and techniques including creating microfilm and CD-ROM copies. Today, the focus of preservation is mainly on digitisation, several aspects of which will be discussed in the following sections.

³¹ <http://cultuurlink.beeldengeluid.nl/app/#/>

DIGITISATION

Digitisation has radically changed the world of information: information is now faster, broader, more accessible, more international, and more personal. At the same time, there are concerns about the quantity (which is too much) and quality (which is sometimes too poor) of that information. In other words, digitisation means that more information is accessible, is more rapidly available and can be personalised to a much greater degree. A point for concern is how users can find their way through the huge volume of information. In this changing context, the function of the library as a source of reliable information is important, but it is also a challenge to continue playing a relevant role. The library has an important function as a source of reliable information, but it must keep its services socially relevant. Digitisation means that libraries are having to fulfil their custodian task in a new way. Technological developments not only create the possibility of converting materials to digital format, thus protecting them and rendering them easier to make available to others, but also create a need, with the continuous renewal of applications and versions, to ensure the accessibility of digital material. The National Library of the Netherlands addresses this problem through its e-depot, though this is limited mainly to scientific publications (Huysmans & Hillebrink, 2008).

Heritage institutions (including libraries) are making enormous efforts to digitise their materials. Some examples are *Digital Heritage Netherlands*, the digitisation and online availability of the Rijksmuseum collection, and the collaboration between the National Library and Google on digitising books published before 1870. In order to stimulate and increase digital access to cultural content, closer cooperation was initiated between the memory institutions. A bill concerning collaboration and coordination between the national digital library and physical library facilities was announced based on the belief that digital content can make physical facilities, such as museums and libraries, more attractive and meaningful (Council of Europe/ERICarts, 2016).

More information about some of the projects/initiatives on digitisation are provided below:

Digital Heritage Netherlands (DEN) is a national clearinghouse, established by the Ministry of Education, Culture and Science. DEN disseminates knowledge about digitisation in the heritage sector (Progress report, 2017). Since 1999, DEN has been supporting archives, museums and other heritage institutions in improving their digital strategies and services. DEN encourages, and safeguards the quality of digitisation and digital services in the heritage sector (Council of Europe/ERICarts, 2016). As from 2016 the role of DEN is extended to support also digitisation in the living arts (Progress report, 2017).

The Memory of the Netherlands³² is a service of the Dutch National Library. It is a database containing paintings, drawings, photographs, sculptures, ceramics, stamps, posters and newspaper clippings from more than a hundred Dutch museums, archives and libraries. It consists of 799263 objects from 132 collections of 92 institutions (August 2019). The website *Delpher* offers a great supplement to the illustrations contained in The Memory of the Netherlands. *Delpher* gives access to four centuries of digitized news from newspapers, periodicals and radio bulletins, and to hundreds of thousands of books. The Memory of the Netherlands is one of the oldest and most frequently visited databases on the art, culture and history of the Netherlands. It developed from a digitization programme aimed at enabling Dutch heritage institutions to gain experience with digitization and making collections accessible through the Internet. The programme was funded by the Ministry of Education, Culture and Science. Where possible, The Memory of the Netherlands supplies images to the European database (The National Library of the Netherlands, 2019; Crijns & Rademakers, 2009).

Databank Digital Newspapers is a project from library sector. Within this historical newspaper project over 8 million pages of newspapers were planned to be digitised by the National Library of the Netherlands (Progress report, 2008).

Metamorfoze is the Netherlands' national programme for the preservation of paper heritage through microfilming and digitisation. The programme started in 1997. It is a collaborative effort of the National Library and the National Archives of the Netherlands. The programme is an initiative of the Ministry of Education, Culture and Sciences. The purpose of the programme is to engage in the struggle against

³² <https://www.geheugenvannederland.nl/en>

acidification and other forms of paper decay: ink corrosion and copper corrosion. From 2008 on Metamorfoze has been using digitisation as *image preservation* (Progress report, 2008).

Michael+ is a project the National Library of the Netherlands participated in, the main aim of which was gathering information on the availability of digitised collections (Progress report, 2008).

Images for the Future is a largescale digitization program of audio, video, photo and film, (it was completed in late 2014). Within this program, total of 91.183 hours of video, 22.086 hours of film, 98.734 hours of audio and 2.5 million photos from audiovisual archives were restored, preserved, digitised and distributed through various services. This material is now easily accessible for target groups such as schools and other educational institutions, as well as for the general public and the creative sector (Council of Europe/ERICarts, 2016). Many organisations joined forces within this program to digitise and to ensure the future accessibility of the digitised information. The project also explored the economic potential of digital audiovisual material (Progress report, 2008).

The Digital Heritage Network (NDE) is launched in 2015. The key players of the Network are five large, national institutions that get government funding from the Ministry of Education, Culture and Science. This network strives to preserve and manage digital cultural data (Progress report, 2017):

- The National Library of Netherlands
- The Netherlands Institute for Sound and Vision
- The Netherlands Cultural Heritage Agency
- The National Archives
- The Royal Netherlands Academy of Arts and Sciences

These five key members take the lead and assist smaller organisations in their respective disciplines. A small bureau coordinates the activities of the Network. A growing number of organisations from within and outside the heritage sector participate in activities (Progress report, 2017). In 2016 NDE published *National Digital Heritage Strategy* which offers a perspective on developing a national, cross-sector infrastructure of digital heritage facilities Council of Europe/ERICarts (2016).

Data Archiving and Networked Services (DANS), is another relevant organisation founded in 2008, serves for long-term preservation of digital scientific data and collaborates with the Digital Heritage Network key partners. The growth of the digital collection of research datasets at DANS is more than 10% per year. In 2016 DANS received over 2000 data sets, together containing over half a million data files. The growth rate is expected to increase as data management policies in the research domain get implemented (Progress report, 2017).

Additionally, in the humanities several large government-funded programs are in place to build and maintain research infrastructures aiming to provide access to digitized and born-digital texts and objects, in combination with the development of tools for analysis and visualization (e.g. Nederlab, The Language Archive, CLARIN, CLARIAH) (Progress report, 2017).

Quantitative Targets

No quantitative targets for the digitization of cultural heritage are set by the Dutch Government. Focus has shifted from volumes to usability and visibility of digitised cultural works. However, some targets are set by individual organisations such as the National Library and the National Archives. In its strategic plan for 2015-2018, the National Library targeted digitisation of 90% of all books and the most relevant journals and magazines published in the Netherlands before 1940. A long term target is digitizing all Dutch printed material by 2030 (at the moment the total number stands at about 15%). Digitisation of 10% of the archival collection in the period 2014 – 2029 is a target set by the National Archives Progress report, 2017).

Quality Assurance

Digital Heritage Netherlands (DEN) helps with the quality assurance. DEN publishes information about standardisation and best practices regarding the digitisation of cultural heritage. The information published focuses on four main subjects (Progress report, 2017):

- The overview of ICT standards and guidelines provides up to date information about ICT standards used by Dutch heritage institutions, including links to important documentation, relevant institutions, and projects that make use of certain guidelines.

- Information about practices is published in DEN's project inventory. It is linked to the database with standards and guidelines in order to show the implementation of ICT standards in running projects. The project database is also used as a tool to monitor the development of a Dutch national Digital Heritage Collection.
- The inventory of cultural heritage institutions contains profiles with information about digitisation activities, involvement in projects, the implementation of standards and guidelines, and examples of digitisation plans.
- The subject files provide information about a wide variety of subjects such as copyright, digital preservation, business models, findability, 3D digitization and (web) statistics.

DEN also manages THE BASICS; a set of minimal requirements for digitisation activities within the context of the national infrastructure for digital heritage. Application of THE BASICS guarantees quality, interoperability, sustainability and efficiency during the entire digitisation life cycle (Progress report, 2017).

Monitoring the Progress and Use

Facts and figures on progress in digitisation of heritage in the Netherlands are published in a country report of the European ENUMERATE research. There is a high level of participation in the Enumerate surveys from Dutch cultural heritage institutions. DANS does not participate in the ENUMERATE surveys, but contributes to European and World-Wide overviews of research data by exposing the metadata of its holdings to international aggregators such as OPENAIRE, DATACITE, Google Scholar, etc. (Progress report, 2017).

There is a lack of systematic research into audience interest for digital cultural heritage. Organisations do have standard web statistics for their own websites, but one cannot easily combine and compare these. Moreover, such web statistics measure internet traffic of machines not people; in order to know who is visiting and for what reasons, panel research is needed. It is also difficult to track and trace the use of digital heritage on platforms of third parties, especially social media. Recognizing these challenges, the *Digital Heritage Network* planned to initiate a study for measuring audience reach of digital heritage (Progress report, 2017).

Another study combined web traffic measurement with a representative panel having tracing tools installed on their devices. The study had a very broad definition of "websites with digital heritage", including over 2000 websites in the study. These websites reached 89% of the population (visiting one of the websites at least once a year). A deep dive into the panel data showed that visitors of digital heritage websites were slightly younger and better educated than the average population (Progress report, 2017).

Collaboration and Partnership

Various initiatives were/are taken to strengthen cooperation and collaboration among different heritage sectors and to achieve standardised services. The *Digital Heritage Network* is one of the best example for cooperative initiatives in this field. As mentioned above major memory institutions including the National Library of Netherlands, the Netherlands Institute for Sound and Vision, the Netherlands Cultural Heritage Agency, the National Archives and the Royal Netherlands Academy of Arts and Sciences cooperate with each other as well as with other various memory institutions.

Cooperation with private sector and also on international level is also crucial for innovation in the cultural heritage sector. Some examples of such cooperation initiatives are listed below (Progress report, 2017, 2015, 2013, 2008):

- The National Library cooperates with Proquest and Google for the digitisation of printed material. The Google programme is entering its last phase; around 50.000 books will be digitized by the end of 2019 in this programme.
- In 2017, an agreement was signed between the National Library and the publisher Persgroep for digitisation of newspapers collections from after WWII.
- Several museums and galleries work with Google Cultural Institute and use this platform for virtual exhibitions and tours.
- Within the Digital Heritage Network, dialogue takes place with a group of IT companies which sell collection management systems and web services in the heritage sector.

- As from October 2016, the first five Dutch archives are protected against link rot through SURFsara's Persistent Identifier (PID) service, based on an agreement with software vendor Picturae.
- In 2015 DANS negotiated a contract with Elsevier's Mendeley Data to offer a data vault solution for long-term preservation. In 2017, a similar contract was made with the international not-for-profit research repository DRYAD.
- Excavation data by private archaeological companies is stored at DANS.
- The *Multimedial Research Project* (not only aimed at cultural research) is an example of a multidisciplinary R&D project where private and public sector join forces and work towards ways to improve accessibility of digitized collections. The multimedial demonstrator developed within this project was awarded the semantic web challenge in 2006
- In 2007 an innovation platform for the creative industries was installed through the *Netherlands ICT Research and Innovation Authority*. In this platform the creative industry set up a research agenda to promote and streamline the sector. Co-operation with cultural heritage sector and availability/re-use of digital heritage is one of the key issues on the agenda.
- The National Library of the Netherlands has entered into an agreement with OCLC to add four important collections of digitized resources from Dutch-speaking countries to WorldCat for discovery of these valuable resources worldwide. The extensive and historically significant data comprise large numbers of digitized books, journals, newspapers and parliamentary papers, aggregated from libraries across the Netherlands. The arrangement directs users searching WorldCat to more than 2 million pages from some 11,000 books published in the Dutch-speaking world from 1781–1800, 80 journals from 1840–1940, parliamentary papers from 1814–1995, and more than 6 million digitized newspaper pages. The content originates from the Netherlands, the Dutch East Indies, Suriname, the Netherlands Antilles and the United States. WorldCat searchers can get to full-text content made available by the National Library through its Delpher service (Spolanka, 2014).
- The Netherlands and Flanders collaborate in an organisation for the Dutch language, the Nederlandse Taalunie. A special commission (for digital heritage) of the Nederlandse Taalunie prepared a report to evaluate the success of large digitization projects in the last decade. Based on the findings, recommendations were formulated to both ministries of Culture. The Nederlandse Taalunie also funded cooperation on (linking of) vocabularies between heritage organisations in the Netherlands and Flanders.
- Planets: Preservation and Long-term Access through Networked Services, is a four-year project cofunded by the European Union under the Sixth Framework Programme to address core digital preservation challenges. The primary goal for Planets is to build practical services and tools to help ensure long-term access to digital cultural and scientific assets. Planets started on 1st June 2006. This website makes available project documentations and deliverables as Planets progresses so that these can be shared with the libraries, archives and digital preservation community.
- Digital Repository Certification Task Force: The National Library participates in the international workgroup, initiated by RLB and NARA. Objective of which is certification of reliable digital archives.
- The European Task Force Permanent Access aims at developing a strategy for a European infrastructure to assure the long term access to digital scientific resources.
- DANS and NCDD work with international partners on software sustainability, such as the Software Heritage Archive (at INRIA, France) and the Software Sustainability Institute (Edinburgh, UK). (Progress report, 2017).
- **The Dutch Caribbean Digital Platform**³³ of the Leiden University and the University of Curaçao with more than half a million scans that were made of old books, magazines, articles, manuscripts, newspapers, photos, maps and charts was launched in 2016. It consists of the combined digital Dutch Caribbean collections up to the year 1954 of the Royal Netherlands Institute for Southeast Asian and Caribbean Studies (KITLV), the Royal Netherlands Institute for the Tropics (KIT) and the Leiden University Libraries. These historic, fragile and highly important collections, together with the digitised archive of the University of Curaçao, are now accessible for the larger public for study purposes. This exercise produced a total of 546,000 scans from the collections of the involved partners.

³³ <https://dcdp.uoc.cw/>

- **Center for International Heritage Activities**³⁴ (CIE) is a dynamic, international and independent non-profit knowledge centre and leading advocate for multilateral heritage cooperation. With its collaborative, participatory and inclusive approach towards heritage, CIE has built up a strong reputation for cooperating with stakeholders and local partners in helping to improve heritage management practices through capacity-building and awareness raising initiatives. CIE is an internationally orientated organization which strives to inspire and foster co-creative heritage activities and research across the globe. Its mission is to facilitate multidisciplinary cultural heritage projects, to encourage and develop skills and capacities, and to move beyond the Eurocentric origins of the heritage industry. CIE has been involved in the preservation of the cultural heritage in Sri Lanka. There are many remnants of the relationship and interactions between the Dutch and Sri Lankan people. This is evident in both tangible and intangible heritage. There are many mixed heritage buildings e.g. churches, forts, libraries, warehouses, dams, houses, cemeteries and sewerage systems. There is also a wealth of intangible heritage in the stories, traditions, songs, customs and social traditions. Sri Lanka has been chosen as one of the Priority Countries for the Netherlands in line with the Dutch Mutual Cultural Heritage Policy.
- Certainly, on an international level one of the biggest cooperations is with Europeana. NDE and individual heritage organisations contribute to Europeana and participate in activities of the Europeana Foundation and the Europeana Network Association. The Netherlands contribute to Europeana with books, paintings, films, museum objects and archival records from digitised collections of cultural and scientific organisations (Council of Europe/ERICarts, 2016). More than 10 million digital content, majority of which –about 8 million- are images, contributed to Europeana by the Netherlands by 2018. In 2017 2,3 million of these records were delivered to Europeana through the “dark” aggregator *Digital Collection*, which was established in 2015 and is managed by the core members of the Digital Heritage Network. Records are furthermore delivered through European projects, such as EU Screen, Europeana Sounds, Europeana Fashion, Archives Portal Europe and Carare. The National Archives present their content via Archives Portal Europe to Europeana. DANS is one of the 29 partners in CARARE, providing professional archaeological and architectural information to Europeana. DANS also participated in the Europeana Cloud project, a key strand of which is the creation of services and tools targeted at researchers, collectively labelled Europeana Research, to allow scholarly use and re-use of the data held in the newly-built Europeana cloud. The Netherlands Institute for Sound and Vision and the Film museum EYE have been contributing to audio recordings, video and films in Europeana. There is a substantial availability of masterpieces (high quality digital content) from The Netherlands through Europeana (e.g. collections from Teylers Museum, Van Gogh Museum, Rijksmuseum).

Intellectual Property Related Issues

This area covers mainly the following: Intellectual property issues regarding public domain works after digitisation and intellectual property issues regarding works under copyright protection, in particular orphan works and out-of-commerce works, as well as the exceptions for cultural heritage institutions for digitisation, licensing for the large-scale digitisation and rights databases.

When public domain works (works that are no longer protected by copyright) are digitised, most Dutch heritage organisations do not claim any *new* intellectual property rights, for example on metadata or images of these works. A good example in this respect is Rijksstudio³⁵ launched by the Rijksmuseum in Amsterdam in 2014. On this website, everybody can download high resolution images of paintings and use these – as a whole or as fragments - for private, creative and commercial purposes (Progress report, 2017).

Key issue of orphan works is, especially in the situation of mass digitisation, that the search for rightsholders is very time consuming and expensive (Progress report, 2008). The Netherlands has implemented the *Orphan Works Directive* in national legislation in 2014, by creating a copyright exception allows Cultural Heritage Institutions (publicly accessible libraries, educational establishments, museums as well as archives or film or audio heritage institutions) to digitize and display (off line and online) orphan works in their collection in order to achieve aims related to their public-interest missions. These missions include preservation and accessibility of cultural heritage. Under this *orphan works exception* the Dutch National Library and the EYE film institute have made some works available (in total about 800, majority is from EYE) (Progress report, 2017).

³⁴ <https://www.heritage-activities.org/>

³⁵ <https://www.rijksmuseum.nl/en/rijksstudio>

The Netherlands Cultural Heritage Agency (RCE) promotes the use of common international and national rights databases for diligent search, as well as the Orphan Works database at the European Intellectual Property Office (Progress report, 2017).

According to 2017 progress report, 43,2% of the 6,4 million objects in Europeana provided by the Netherlands (by then) is openly licensed such as Creative Commons (CC BY-SA, CC BY, CC0).

There are also some activities to facilitate the use of works that are out of print or out of distribution. Activities in this field are undertaken by the National Library of Netherlands include digitisation of special collections such as 18th century books, out of print 19th and 20th century books. Moreover, in co-operation Sound and Vision in the Netherlands with broadcasting organisations and the music industry, a webservice has been developed where Dutch musical recordings and audiovisual works that are out of distribution can be ordered by the public (www.fonos.nl) (Progress report, 2008).

Access and Re-use

Improving access, usage and usability of the digital collections is one of the main goals the National Digital Heritage Strategy (March 2015). One way of doing this is through Europeana. The *Digital Collection* is a *dark aggregator*³⁶ delivering data to Europeana. The data are also available for reuse by third parties through Application Programming Interfaces (API) (Progress report, 2017).

Several heritage organisations publish on the government's open data portal³⁷. This portal also contains data of municipalities and provinces on monuments, cultural landscape and archaeological sites. In 2016, 900.000 items from Dutch heritage collections were available for re-use on Wikipedia Commons (2% of total). 60.000 of these items were used in 900.000 Wikipedia articles. These articles generated 220 million page views a month. This is certainly way beyond the audience reached by heritage organisations own web sites (Progress report, 2017).

There are also several thematic initiatives which are feeding into the National Strategy. Some examples are:

- Netwerk Oorlogsbronnen: Over 430 different organizations manage sources over and from the period 1940 - 1945 in the Netherlands. Using Linked Data techniques, NOB brings millions of scattered WWII sources together.
- Netwerk Zuiderzeecollecties: 20 museums and small heritage organizations are working together to open up digital collections on the history of the Zuiderzee, using Linked Data techniques and standard thesauri.
- ModeMuze: Under Modemuze, twelve Dutch museums with a unique fashion and costume collection are collaborating to present these collections online.
- Because of historical ties, Dutch archives and museums hold sources relevant also to Indonesia, Australia, Ghana, Suriname, Sri Lanka, Japan, Brazil, South Africa, Canada, the United States, NewZealand and Australia. The Netherlands and the World Exchange Platform³⁸ brings together demand and supply for collections) (Progress report, 2017).

DANS has been set up to guarantee the long-term access to digital research data. In 2012 the percentage of openly accessible data in EASY was less than 50%, in 2016 this had increased to 70%. Between 2007 and August 2017, a total of 223,258 datasets, containing 2,361,588 files have been downloaded from EASY. The re-use of datasets has increased in a fairly similar way as the growth of the archive until 2013. In 2007 only about 750 datasets were downloaded for reuse, a number which grew to around 30,000 in 2013. Since then, the number of downloads per year has stabilized (Progress report, 2017).

³⁶ A dark aggregator employs a dedicated tool that harvests the repositories' selected content directly to Europeana, or stores it temporarily in order to perform research on the collected data (e.g., the Linked Heritage project). A dark aggregator mainly has technical requirements to comply with the ingestion specifications, in this case the Europeana portal.

³⁷ https://data.overheid.nl/data/dataset?theme_facet=http://standaarden.overheid.nl/owms/terms/Cultuur_en_recreatie

³⁸ <https://netherlandsworld.nl/page/ads>

Digital heritage data is used in many ways, mostly in government services or new media services of heritage organisations, including dedicated access to digitised material for researchers and schools (Progress report, 2017).

Long-term Preservation

Digital files vulnerable. They consist of sequences of digits and the loss of one of those characters, for example due to a malfunction, is enough to render the entire file useless because the information will be unreadable. Digital files only work well with the computer and software on which they were created. When a new computer is introduced, there is a chance that the old files will no longer work. Of course suppliers try to provide facilities for converting files to the new computer, but those conversion tools are still far from being perfect and errors are almost inevitable. In addition to the vulnerability of the files themselves, there is the vulnerability of the carriers on which the information is stored. They can fall into disuse (diskettes, floppy disks) or simply break down. Information that is on the internet is also at risk (404 – *File not found* error message is widely known). The information chain is broken when a website is moved or discontinued without providing a removal notice. Online information often does not have a unique location or unique immutable number to which you can refer. This is annoying for all internet users, but disastrous for the scientific community: references in scientific articles can no longer be consulted (Dutch Digital Heritage Network, 2019b).

Thus digital long term preservation is an important issue. Digital preservation is defined as a “series of managed activities necessary to ensure continued access to digital materials for as long as necessary” This definition is made up of three parts: To be able to oversee the long-term consequences, a constant awareness of digital sustainability is needed. This awareness manifests itself, among other things, in the distribution of tasks within the organisation, in the definition of a strategy for sustainable access to owned digital data and in the search for partnerships at a national or international level to promote sustainable data storage. Only when such choices are explicitly made can data be managed sustainably and a long-term approach be guaranteed (Dutch Digital Heritage Network, 2019b).

In the Netherlands, efforts have been made in recent years to guarantee sustainable access to digital information, including digital heritage information. Long term preservation and sustainability are among the objectives in the National Strategy formulated in 2015. The *National Coalition for Digital Preservation* (NCDD) taking responsibility for sustainability under the national strategy. With support from the Ministry of Education, Culture en Science *National Coalition for Digital Preservation* was established in 2007. Its aim was to ensure that within five years a national organisational and technical infrastructure was in place, which secures the long term accessibility of scientific, commercial, governmental and cultural data (Progress report, 2008). In the NCDD programme plan 2013-2018³⁹ the strategic agenda is translated into concrete activities. Recent publications on sustainability in English include (Progress report, 2017):

- Together where possible, individually where necessary⁴⁰. Constructing a network of nationwide facilities together (2015): This research was awarded an international Digital Preservation Award in the category Research and Innovation in 2016.
- Born digital cultural heritage is endangered heritage⁴¹ (2016).
- The factsheet tools and tricks for sustained access to your collections⁴² (2017).
- Summary of the report on the cost of digital preservation⁴³ (2017).
- Final report CD-ROM archiving: archiving and distribution of CD-ROM artworks, a study of the Emulation as a Service (EaaS) tool and other proposals⁴⁴ (2016).
- Final report Software Sustainability⁴⁵ (2016).

Legal deposit is an important feature that promotes long term preservation. There are no legal deposit obligations in the Netherlands, but several voluntary arrangements which include the digital legal deposit (Progress report, 2017):

³⁹ <http://ncdd.nl/site/wp-content/uploads/2014/06/NCDD-programma-2013-2018.pdf>

⁴⁰ http://ncdd.nl/site/wp-content/uploads/2014/06/summary_NCDD_research_DEFWEB.pdf

⁴¹ http://www.ncdd.nl/wp-content/uploads/2016/07/Born_Digital_Heritage_summary_ENG_web.pdf

⁴² http://www.ncdd.nl/wpcontent/uploads/2017/09/Factsheet_Tools_Ticks_Sustainable_Digital_Heritage_DEF.pdf

⁴³ http://www.ncdd.nl/wp-content/uploads/2016/02/Factsheet_Cost_Digital_Preservation_sum_DEF.pdf

⁴⁴ http://www.ncdd.nl/wp-content/uploads/2015/11/201611_DE_Houdbaar_Final_report_CD_ROM_Archiving_DEF.pdf

⁴⁵ http://www.ncdd.nl/wp-content/uploads/2016/11/201611_DE_Houdbaar_final_report_software-sustainability_DEF.pdf

- The National Library has a long-standing agreement with publishers for the deposit of (almost) all printed publications published in the Netherlands (and publications about the Netherlands in third countries). They are working on similar agreements for the deposit of e-books. The National Library of the Netherlands was founded in 1798. Since 31 August 1993 it has been an autonomous administrative body, financed by the Ministry of Education, Culture and Science. One of the main functions of which is preservation, management, documentation and accessibility of the national cultural heritage. In contrast to most other national libraries, the Dutch National Library archives Dutch publications on a voluntary basis; publishers are free to decide whether to donate publications to the library. In many other countries, this deposit function is a mandatory one. This notwithstanding, some 95% of all Dutch publications are deposited in the National Library (Savenije, 2011).
- The Institute for Sound and Vision preserves audio-visual productions, also born-digital, of public service broadcasters and (selectively) commercial broadcasters, and to some extent video and games from other organisations.
- EYE has similar voluntary arrangements with the film industry.
- The Dutch funding organisation for research NWO, the academy (KNAW), and the universities have developed research data management policies, which include policies with respect to long-term preservation of research data.
- The National Library has been working intensively to create a digital library that will offer everyone access to all digital and printed publications appearing in the Netherlands. This implies the increasing acquisition of born-digital publications, in parallel with the digitisation of the existing print collection. Another priority is the long-term archiving of digital information. Since 2002 the National Library has had a depository (e-depot) for digital publications, and ensuring long-term archiving and access is one of its priorities. Also archived in the digital depository of the National Library are digital periodicals from the large academic publishers, ensuring permanent access to international academic publications. The National Library, together with the public libraries and the university libraries, work intensively on the improvement of the national infrastructure. In the area of cultural heritage material, it is working closely with other cultural institutions to build a shared infrastructure for digital cultural heritage (Savenije, 2011).

As for the long-term preservation of the web content:

- The National Library preserves a selection of Dutch websites. There is no legal deposit obligation for this activity (either), which precludes harvesting of the NL.domain. The opt-out method is used after asking permission from the website owner by letter.
- The Institute for Sound and Vision selectively archives video's and games from the world wide web.
- LIMA and the Nieuwe Instituut aim to preserve also web-based media art and digital "documentation" for architectural design.
- Under the 1995 Public Records Act, government organisations are obliged to select and transfer all kinds of information to the national, regional and local (public) archives, including on carriers such as websites and social media. Methods for doing so in the most efficient manner are now being developed and tested.
- The Digital Heritage Network has run a project called "Coordinated web archiving". This project aims to take the first steps towards a more integrated approach to web archiving in the Netherlands. Such an approach would allow website-based collections to be securely archived in one of several e-depots. To achieve this, collaboration is required on both the organisational and operational level. Participating institutions are, among others, the National Library, the National Archives and the Netherlands Institute for Sound and Vision (Progress report, 2017).

BEST PRACTICES

KB Lab: The KB Lab was founded in 2014 within the research department of the National Library of the Netherlands to showcase the tools that are built for and by users of the digital collections of the library. Next to this, datasets that are derived from research projects or are experimental representations of Delpher collections are made public. With this service, the National Library wishes to offer better access to its digital collections and promote the use of the digitised content. KB Lab tools are published under open licenses (National Library of the Netherlands, 2014).

Hackathon: This is a yearly event organized by the National Library in which a large number of people meet to engage in collaborative computer programming. It focuses on linking cultural heritage collections. The 2016 edition was won by developer Hay Kranen who built the *Erfgoedbot*: a Facebook Messenger bot that gives users access to cultural heritage artefacts, retrieved from Wikidata. Since the National Library promotes sustainability of tools developed during the Hack-a-LOD, the first prize was 60 hours of development time by a developer of the National Library of Netherlands. The aim of these available hours was twofold: To bring the winning idea of the *Erfgoedbot* to the next level: a working prototype of a Facebook Messenger bot, called the *KB Lab Bot*; and to build an open source Content Management System (CMS) called *Chatbot Builder*, allowing other cultural heritage institutes to build their own (Facebook) Messenger bots (Ark, Kranen, Kleppe & Lucas, 2017).

KB Lab Bot⁴⁶: The KB Lab Bot is a working prototype of a Facebook Messenger Bot that allows users to retrieve Dutch cultural heritage masterpieces from the Dutch website *Memory of the Netherlands*. This website is a database containing paintings, drawings, photographs, sculptures, ceramics, stamps, posters and newspaper clippings from more than a hundred Dutch museums, archives and libraries. The KB Lab Bot only shows images of collections that are copyright-free. The bot is a showcase of an open source content management system that allows users to build their own chatbot. The KB Lab Bot is a result of the *Hack-a-LOD 2016* (Ark, Kranen, Kleppe & Lucas, 2017).

Digital Library for Dutch Literature⁴⁷: Digital Library for Dutch Literature (Digitale Bibliotheek voor de Nederlandse Letteren,) site provides access to many primary and secondary sources on Dutch cultural history. A start was made in 2006 on the *Thousand Masterpieces* project, in which approximately 300,000 pages of material are being converted to digital format. Not only important literary works have been chosen for this project, but also important non-fiction works from the Middle Ages to the present day (Huysmans & Hillebrink, 2008).

GLAMetrics: Initiatives in the cultural sector such as making its collections available as *open data* and *open content* bring along the growing need of measuring their impact. On either a national or international level, there currently is no single body that tracks this type of data across collections. In 2014, the *Open Culture Data* network therefore started an exploratory research project on the possibilities of measuring the impact of open cultural data. The project was called *GLAMetrics* – metrics for gallery, library, archive and museum collections. This initiative meant the beginning of a quantitative analysis of the consequences of opening cultural data – an evolution that affects the entire sector, both nationally and on an international level. The initial outcomes of the research into the reach and reuse of culture heritage from The Netherlands through Wikimedia projects are: At the time the research was carried out (23 June 2015), there were close to 580,000 Dutch digital heritage objects have been added to Wikimedia Commons. This means that from the total collection of media items on Wikimedia Commons – close to 24.5 million – around 2.4% consists of Dutch digital heritage. The large majority of this Dutch offer are images, but it also holds close to 2,000 audio recordings and 4,500 videos. In total, Dutch digital heritage objects have been reused close to 100.000 times on a Wikimedia project page and for the entire measurement period (about a year), pages reusing Dutch digital heritage have been consulted 1.9 billion times in total (Brinkerink, 2015).

Open Culture Data: *Open Culture Data* is a network of cultural professionals, developers, designers, copyright specialists and open data experts, that opens data from the cultural heritage sector and encourages the development of valuable cultural applications that started in September 2011. This makes culture accessible in new ways to a broader public. The network has been awarded in 2012 with the European Public Sector Information Platform *Trailblazer* award as an initiative which has done something new and exciting with open data in Europe over the past year. Cultural institutions (museums, archives, heritage organizations, theater companies, libraries, etc.) have a wealth of information locked up in their vaults. They preserve and store unique collections, they have an enormous amount of knowledge about these collections (context, metadata), produce information on current events and exhibitions, keep up visitors information, collect reactions from visitors and for example hold financial information. More and more cultural institutions make this information digitally accessible. This creates many new opportunities – for the institutions themselves but also for third parties – to use this information to create new applications and websites, allowing people to participate in arts and culture in new ways. However, this data is often very difficult to access for others. End users are often limited to (re-)use the

⁴⁶ <https://lab.kb.nl/tool/kb-lab-bot>

⁴⁷ www.dbnl.org

data and often the data is technically badly approachable. Institutions sometimes manage data of which they don't yet know the full potential and (social) value. *Open Cultuur Data* supports the cultural heritage sector in the release of culture data in the following way: encourage making more open culture data available; collecting and disseminating open culture data via an open digital infrastructure; collecting and sharing knowledge and experience with open culture data; encouraging the making of new applications based on open culture data. The aim of Open Cultuur Data is to anchor the cultural sector in the international open data movement. 39 datasets of 22 cultural institutions, including the Rijksmuseum, the Regionaal Archief Leiden and Visserijmuseum Zoutkamp and 40 apps made with Open Culture Data (Open Cultuur Data, 2019).

Blue Shield Netherlands: The Dutch Committee of the Blue Shield is working together with the Netherlands National Commission for UNESCO and the Cultural Heritage Agency in developing a tool to help cultural heritage institutions in the country during large(r) scale crises such as wildfire, terrorism and flooding. The project aims to answer questions such as: what do you need to be prepared to deal with such crises, how do you connect with existing emergency services, who are your partners and what can they do and what can and what must you do. The realisation of this tool will provide an invaluable instrument for heritage professionals in the country to deal with possible crises by guiding to the adoption of efficient and proactive emergency measures (Blue Shield Netherlands, 2019).

Dutch Graffiti Library⁴⁸ is an extensive private collection of photos, sketches, articles, books, magazines, posters, screen prints and blackbooks. The collection consists of graffiti recorded and documented by Dutch twin brothers (and their network) who actually started their collection about three decades ago. This private collection became a library collection which can be accessed digitally (as well as physically) by anyone in 2014. Although different from the traditional sense of art, graffiti is accepted as art and a subculture to be preserved and pass on to future generations.

VanGo Yourself⁴⁹ is a service which allows users to recreate a painting with his/her friends, which is then twinned with the original and shared on social media. The body of re-usable digitized original artwork to be used in these recreations has been made available through the Europeana Creative project. The site won Best Digital Exhibition at the 2015 International Museums and the Web conference in Chicago, and the People's Choice award voted for by the international community, and it was also shortlisted for the prestigious Innovation award at the Museum and Heritage Show awards 2015 (Marie, 2015).

VanGoYourself Crowdfund⁵⁰ is being facilitated through Goteo, but the aim of the crowdfund isn't merely to fund the further development of VanGoYourself. The team behind the project intends to use the crowdfund to add even more paintings from museums, galleries and collections from all over Europe. This will fill in the gaps in the existing, available collection and help people who love the idea of recreating paintings. The team will also offer support to museums and galleries across Europe to run their own VanGoYourself events, which will help create a more interactive engagement and to develop new audiences based on open digitised content online, following the example of Europeana. The doors of the galleries, libraries, archives and museums have now opened wider, and the keys to the glass cases are increasingly in reach of anyone with an interest in participating. A project such as VanGoYourself offers people several levels of engagement with digital cultural heritage, from the simple re-creation of a painting through their app, up to the sponsoring additional works of art through their crowdfund, in turn making them available for more people to re-create. Cultural innovation projects like this one, emerging from larger efforts such as Europeana, have been born in co-creation laboratories and designed as experimental efforts in order to see what comes of all this; what's practical, what's desirable, what's sustainable in the use of digitalized cultural heritage (Marie, 2015).

CONCLUSIONS

Based on the overview presented in this report, a few important aspects which need further development can be pointed out such as management of intellectual property rights especially from the perspective of mass digitisation; providing permanent access to digitised resources and innovation of public services

⁴⁸ <https://www.dutch-graffiti-library.nl/>

⁴⁹ <https://vangoyourself.com/>

⁵⁰ goteo.org/project/vangoyourself

(as indicated in progress reports starting from 2008). From the innovation point of view, new business models are needed. The availability of digital content to facilitate innovation and the cooperation with creative industries is another area to focus on. External developments, such as changing user behaviour patterns (prosumer), semantic web, multilinguality, open infrastructure, web 2.0 developments and mobile internet (ubiquitous computing), needs to be closely followed for innovation.

Civic/crowd engagement with cultural heritage called *Digital Crowd Heritage* is also important to consider. As Marie (2015) pointed out while the technology and management of information we use have changed radically in the last 2000 years, many of our institutions (including museums, private collections and libraries) continue to follow in the footsteps of their predecessors (not much change). Which is why being open, civic-oriented and crowd-powered is critically important in the development of future models in cultural heritage.

REFERENCES

- Ark, R. Van der, Kranen, H., Kleppe, M., Lucas, A. (2017). KB Lab Bot. KB Lab: The Hague. Available at <https://lab.kb.nl/tool/kb-lab-bot>
- Blue Shield Netherlands (2019) Tool for protecting heritage in crisis. Available at <https://theblueshield.org/blue-shield-netherlands-involved-in-the-production-of-a-tool-to-help-protecting-heritage-in-crises/>
- Brinkerink, M. (2015). Dutch cultural heritage reaches millions every month. Available at <https://openglam.org/2015/06/23/dutch-cultural-heritage-reaches-millions-every-month/>
- Crijns, H., & Rademakers, A. (2009). Memory of the Netherlands: Past and Future of the Dutch National Database on Cultural Heritage. *Alexandria*, 21(2), 1–17 Available at <https://doi.org/10.7227/ALX.21.2.2>
- Council of Europe/ERICarts (2016). *Compendium of Cultural Policies and Trends in Europe: Country profile: The Netherlands, 18 th edition"* Available at: https://www.culturalpolicies.net/down/netherlands_112016.pdf
- Cultural Heritage Agency. (2016). Heritage Act. Available at https://en.unesco.org/sites/default/files/nl_newheritageact_16entof
- Cultural Heritage Agency (2019?). Available at <https://english.cultureelerfgoed.nl/about-us>
- Dutch Digital Heritage Network (2019a). The 16th International Conference on Digital Preservation. Available at: <https://ipres2019.org/>
- Dutch Digital Heritage Network (2019b) Sustainable Digital Heritage. Available at <https://www.netwerkdigitaal erfgoed.nl/en/knowledge-services/sustainable-digital-heritage/>
- Frijhoff W., "Cultural Heritage in the Making: Europe's Past and its future Identity", 2005, in Vos J.v.d. (ed.) *The Humanities in the European Reserach Area - International Conference* Amsterdam, The Netherlands 2 September 2004.
- Huysmans, F. & Hillebrink, C. (2008). *The future of the Dutch public library: ten years on*. The Hague: Netherlands Institute for Social Research.
- Lubina, K. (2009) Protection and Preservation of Cultural Heritage in the Netherlands in the 21st Century. *Electronic Journal of Comparative Law*, 13(2).
- Marie, A.(2015). Putting the Crowd in the Picture: Crowdfunding and Cultural Heritage. Available at <http://fundacion.goteo.org/blog/putting-the-crowd-in-the-picture-crowdfunding-and-cultural-heritage>
- The National Library of the Netherlands (2014). KB LAB Available at: <https://lab.kb.nl/about-us>
- The National Library of the Netherlands (2019). The Memory of the Netharlands. Available at <https://www.geheugenvannederland.nl/en/geheugen/pages/webpage/over%20het%20geheugen>
- Open Cultuur Data (2019) Available at <http://www.opencultuurdata.nl/english/>
- Price, G. (2016). Cultural Heritage: Dutch Caribbean Digital Platform Goes Live With More Than 500,000 Items. *Curaco Cbronicle*:. Available at <https://www.infodocket.com/2016/12/07/cultural-heritage-dutch-caribbean-digital-platform-goes-live-with-more-than-500000-items/>
- Progress report on cultural heritage: digitisation, online accessibility and digital preservation 2015-2017: The Netherlands*. (2017). Available at <https://ec.europa.eu/digital-single-market/en/news/2017-national-reports-digitisation-online-accessibility-and-digital-preservation>
- Progress report on cultural heritage: digitisation, online accessibility and digital preservation: The Netherlands*. (2015). Available at <https://ec.europa.eu/digital-single-market/en/news/2015-national-reports-digital-preservation>
- Progress report on cultural heritage: digitisation, online accessibility and digital preservation: The Netherlands*. (2013). Available at <https://ec.europa.eu/digital-single-market/en/news/2013-national-reports-digital-preservation>

- Progress report on cultural heritage: digitisation, online accessibility and digital preservation: The Netherlands.* (2008). Available at <https://ec.europa.eu/digital-single-market/en/news/2008-national-reports-digitalisation-and-digital-preservation>
- Savenije, B. (2011), Libraries in the information society: cooperation and identity. In Edited by D. Baker and W. Evans (eds). *Libraries and Society: Role, responsibility and future in an age of change* (pp.203-218). Chandos Publishing
- Schneiders, P. (1998). A brief overview of Dutch library history. Paper presented at the 64th IFLA General Conference August 16 - August 21, 1998, Amsterdam. Available at <https://archive.ifla.org/IV/ifla64/053-138e.htm>
- Spolanka (2014). Four centuries and 2 million pages of Dutch cultural heritage added to WorldCat. No Shelf Required. Available at <https://www.noshelfrequired.com/four-centuries-and-2-million-pages-of-dutch-cultural-heritage-added-to-worldcat/>

SERBIA

by Jasmina Ninkov, Marjan Marinković, Stanka Jovičić and Bojan Kundačina

DEFINITION OF CULTURAL HERITAGE

Strictly terminologically speaking, we can say that there is no official definition of cultural heritage in the Republic of Serbia because there is no legal act devoted to cultural heritage. The term currently used in the Serbian legislation to denote cultural heritage is “*kulturno dobro*” or in English cultural property. Given that these terms can be considered synonyms, the definition of cultural heritage in the Republic of Serbia is provided in the current Cultural Property Law (Official Gazette of the Republic of Serbia No. 71/94, 52/2011 - other law and 99/2011 - other law) from 1994, which was partially amended in 2011. Article 2 of the Law states:

Cultural property shall include objects and products of material and spiritual culture of general interest placed under special protection determined by this Law.

Depending on its physical, artistic, cultural and historical features, cultural property shall include: cultural monuments, spatial cultural-historical units, archaeological sites and landmarks – immovable cultural property; works of art and history, archival material, film material and old and rare books – movable cultural property.

Depending on its importance, cultural property shall be classified into: cultural property, cultural property of great importance and cultural property of exceptional importance.

We note that this definition divides all cultural property (cultural heritage) into movable and immovable property. Intangible cultural heritage is not recognized in this or any other law. However, in May 2010, the Republic of Serbia ratified the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage, and since then the definition of intangible cultural heritage contained in this convention applies in Serbia.

Both, the Ministry of Culture and Information, and cultural institutions and the experts in this field recognize the need to draft a new law, which would determine the use of the term cultural heritage, as the term that is commonly used in practice, and to ensure the terminological compliance with international regulations. The drafting of the Cultural Heritage Law is highlighted as one of the measures in the draft version of *Strategy for Cultural Development in the Republic of Serbia for the 2019–2029 period* (2019).

A different definition of cultural heritage is given in an earlier version of this draft strategy (*Proposed Strategy for Cultural Development in the Republic of Serbia for the 2017-2027, 2017*), which states that: Cultural heritage represents a group of resources inherited from the past which people recognize as a reflection and expression of their values, beliefs, knowledge and traditions, it is a key component and the foundation of cultural identity. However, in the final version of the document (*Draft Strategy for Cultural Development in the Republic of Serbia for the 2019-2029*) this definition is omitted.

It should be noted that the *Draft Strategy for Cultural Development in the Republic of Serbia for the 2019-2029* recognizes the intangible cultural heritage, as a special form of cultural heritage.

PRIORITY AND IMPORTANCE OF CULTURAL HERITAGE IN SERBIA

(National Legislation, Policies and Strategies)

The importance of cultural heritage is recognized in the Republic of Serbia, and this area has been regulated by a series of laws and secondary legislation. Cultural institutions are systematically engaged in the preservation and promotion of heritage, there are state mechanisms for permanent financing of projects and jobs in this field, a great number of different national and international projects dedicated to cultural heritage are being implemented, civil society organizations and endowments actively contribute to the promotion of cultural heritage, various foreign and domestic donors have programs to support heritage conservation and promotion projects.

At the international level, the Republic of Serbia actively participates in all major cultural processes, initiatives and programs - Creative Europe Programme, European Capital of Culture, European Cinema Support Fund – Eurimages and others. Serbia is a signatory to all UNESCO conventions on cultural heritage. Serbia has been a member of the Council of Ministers of Culture of South East Europe since its establishment in 2004, and one of the leaders in the Central and Eastern Europe and China Mechanism (16+1) and a signatory to all Council of Europe conventions dealing with culture and cultural heritage.

However, there is a need to improve the legislative framework in the field of cultural heritage, strengthen the institutional framework, and above all the need for a national strategy that would allow the matter of cultural heritage to be addressed in a comprehensive, systematic way.

Legislation Framework

General legislation in force on cultural heritage is Cultural Property Law (Official Gazette of RS, No. 71/94, 52/11 – other law, 92/11 – other law) enacted in 1994 and amended in 2011. Article 1 of the Law states: *This law shall regulate the system of the protection and use of cultural property and define conditions for the implementation of activities relating to the protection of cultural property.*

Article 2 states the (aforementioned) definition of cultural property, its types (cultural monuments, spatial cultural-historical units, archaeological sites and landmarks – immovable cultural property; works of art and history, archival material, film material and old and rare books – movable cultural property) and classification of cultural property depending on its importance (cultural property, cultural property of great importance and cultural property of exceptional importance).

Article 10 emphasizes that *activities relating to the protection and use of cultural property shall be performed by institutions established for that purpose (hereinafter: protection institutions), in line with this law.*

Chapter 2 of the Law provides a precise description of the types of cultural property as well as those that enjoy prior protection. Old and rare books are defined in Article 26 as follows: *An old and rare book shall include: manuscripts, handwritten and printed books, periodicals and other library material created until the end of 1867, rare books, specimens of periodical editions and other rare library material created after 1867, library material submitted, under this Law, to an authorised library as an obligatory copy and documentation on such material, as well as special library lots important for science and culture owing to their content, artistic, cultural and historical value.*

Chapter 3 of the Law defines rights, obligations and responsibilities of owners and legal entities using and managing cultural property. Article 31 states that the owner shall: *1) keep and maintain cultural property and implement the determined protection measures, 2) immediately inform a protection institution of all legal and physical changes occurring in relation to cultural property, 3) allow scientific and professional research, technical and other recording, and implementation of technical protection measures on cultural property, in line with this Law, and 4) ensure public availability of cultural property.* Chapter 5 which deals with entry in the cultural property register and defines that central register shall be maintained for each type of cultural property by central protection institutions.

The Law determines that central cultural property protection institutions shall be: Republic Institute for the Protection of Cultural Monuments, Serbian Archives, National Museum in Belgrade, National Library of Serbia and Yugoslav Film Archive (Article 79). Central protection institutions shall: *1) examine the state of cultural property and take measures relating to its protection and use, 2) provide expert assistance and promote the work relating to cultural property protection, particularly in regard to contemporary methods of professional work, 3) ensure professional training of staff engaged in activities relating to cultural property protection, 4) maintain central registers by type of cultural property and documentation on such property, and 5) set up and maintain a computer information center of cultural property by type (Article 79).*

Chapter 6, Article 65 states that activities relating to cultural property protection shall consist of: *1) research and recording of property under prior protection; 2) proposing and designation of cultural property; 3) maintaining the register and documentation on cultural property; 4) providing expert assistance in keeping and maintenance of cultural property to owners and users of such property; 5)*

ensuring the use of cultural property for the purposes set by this Law; 6) proposing and monitoring the implementation of cultural property protection measures; 7) collecting, arranging, keeping, maintaining and using movable cultural property; 8) implementing measures of technical and physical protection of cultural property; 9) issuing publications on cultural property and on results of its protection; 10) exhibiting cultural property, organizing lectures and other appropriate forms of cultural-educational activities, and 11) other activities relating to cultural property protection determined by this Law and based on it.

Article 70 of the Law declares that protection institutions shall be: institute for the protection of cultural monuments, museum, archives and film archive. In addition, it is stated that the *library protecting old and rare books* shall have the status of a protection institution. Further, this article states that other legal entities fulfilling the conditions under this Law may also engage in the activities relating to cultural property protection.

Article 74 determines (regulates) protection institutions by the type of cultural property, and states that: an institute for the protection of cultural monuments shall protect cultural monuments, spatial cultural-historical units, archaeological sites and landmarks; a museum shall protect works of art and history; archives shall protect archival material and active records; a film archive shall protect film material, while *the activity of protecting old and rare books shall be carried out by libraries with holdings of old and rare books and staff with an appropriate educational background, trained to perform activities of cultural property protection.* Article 86 states that these libraries are obliged to collect, take over, keep, professionally process movable cultural property and ensure its use. Central cultural property protection institution in the domain of old and rare books and other library material is the National Library of Serbia (Article 83).

Remaining chapters of the Law regulate the protection measures and other works on cultural property; trade and expropriation of cultural goods; foreign exhibitions guarantees; monitoring over the implementation of laws and penal provisions for violations of the Law.

Law on Culture (Official Gazette of the RS, No. 72/2009, 13/2016 and 30/2016 - corrected.), main (principal) law in the domain of culture in the Republic of Serbia contains segments in regard to cultural heritage. In this law, the preservation of cultural and historical heritage is defined as one of the principles of cultural development. Within the specific areas of cultural activities, the law specifies following activities related to the cultural heritage: *discovering, collecting, researching, documenting, examining, evaluating, protecting, preserving, presenting, interpreting, using and managing cultural heritage* (Article 8).

The following activities related to cultural heritage (Law on Culture, Article 6) are recognized as particularly important segments of cultural activity (so-called general interest in culture) and include:
3) discovering, collecting, researching, documenting, examining, evaluating, protecting, preserving, presenting, interpreting, using and managing cultural heritage
7) securing conditions for public availability of cultural heritage;
13) stimulating the use of new technologies in culture;
13a) stimulating the digitalization process and the development of digital research infrastructure in the field of protection of cultural heritage and the arts;
15) developing and improving a single information system in the field of cultural heritage protection;
15a) creating and improving a network of institutions in the field of cultural heritage protection.

Article 6 of the aforementioned law also emphasizes that funds for the fulfilment of general interest in the field of culture shall be secured from the budget of the Republic of Serbia, autonomous province and local self-government units.

Article 25 of the Law states that the Government shall establish a central protection institution according to the type of cultural property, while the local self-government unit shall establish protection institutions for the territory of the local self-government unit. The law also states that one of the main obligations of all cultural institutions established by the Republic of Serbia or local self-government units is *to contribute with their work to the conservation, research, study, presentation, collection, and promotion of domestic cultural and artistic heritage* (Article 25a).

The Law also anticipates the possibility of establishing representative cultural associations in the field of research, protection, use, collection and presentation of immovable, movable and intangible cultural heritage.

Law on the Library and Information Service (Official Gazette of the RS, No. 52/11), principal law for the librarianship, refers to cultural heritage, or cultural property in several articles.

Article 7 emphasizes that *library and information materials and sources that are representative of cultural heritage are protected by the law and are kept and utilised in accordance with the law*, while Article 8 states that *libraries with holdings of old and rare library materials also carry on the service of legal and technical protection of these materials in accordance with the Law*.

Article 28 states that *with the purpose of supporting the appropriate development of the library and information service in the Republic of Serbia and to meet the information needs of the people, the Republic of Serbia secures the funds (among other things):*

- for the digitalisation of library and information materials and resources and enabling of remote access to cultural and scientific heritage.

Article 44 underlines that one of the obligations of the libraries is *to continuously work on the digitalisation of library and information materials and resources as a part of the cultural heritage of Serbia*. The same article states that *the National Library of Serbia performs and coordinates the tasks pertaining to the digitalisation of library and information materials and resources in the Republic of Serbia*, and that *more detailed requirements for the digitalisation of library and information materials and resources are prescribed by the minister in charge of culture*.

Law on Old and Rare Library Materials (Official Gazette of RS, No. 52/11) governs the protection of old and rare library materials as part of cultural heritage, their keeping, preparation and processing, as well as the conditions and the manner of their use.

The Law specifies in Article 7 what can be categorized as old and rare library material: old Serbian and foreign manuscripts and printed books; rare books; special collections: collections of literary and other manuscripts and archival materials, maps and charts, photographs, engravings, musical scores, posters, electronic publications (including publications on the Internet), library catalogues and special libraries of notable individuals i.e., library collections of historical, artistic, scientific, or technical significance.

Depending on its significance, old and rare library materials are categorized as 1) cultural property of exceptional importance; 2) cultural property of great importance; 3) cultural property (Article 8). The law sets out in detail the criteria that library materials must meet in order to be classified into one of these three categories.

The Law also prescribes in more detail the conditions for storing, using and exhibiting this material.

The Law further outlines the activities that the public library should carry out in order to promote old and rare material in its possession. Article 48 states following:

- 1) *A public library shall organize exhibitions, lectures, professional and scientific events, and perform other forms of cultural and educational activities in order to promote interest and awareness of the general public in relation to the significance of old and rare library materials as cultural property.*
- 2) *A public library cooperates in the country and abroad with other cultural institutions, scientific and related institutions and information and documentation centers in order to improve the efforts that pertain to the protection, keeping and presentation of old and rare library materials as cultural property.*

In addition to the aforementioned laws, the entire set of rules, guidelines and solutions regulate more closely individual segments of library and information activities related to cultural heritage:

- Rulebook on detailed conditions and manner of use of old and rare library material (Official Gazette of the RS, No. 22/13);
- Rulebook on measures of technical protection of old and rare library material (Official Gazette of the RS, No. 22/13);

- Rulebook on detailed conditions for the digitization of cultural heritage (Official Gazette of the RS, No. 76/2018);
- Rulebook on Detailed Conditions for digitization of library material and resources (Official Gazette of the RS, No. 102/17);
- Rulebook on the content and manner of keeping registers of categorized old and rare library material (Official Gazette of the RS, No. 22/13)
- Rulebook on the data that are entered into the register, method of keeping the register and central register of immovable cultural property and on documents related to such cultural property (Official Gazette of the RS. No. 30/95 and 37/95)
- Rulebook on the storage, protection and use of the mandatory copy of publications in deposit libraries (Official Gazette of the RS. No. 98/11);
- Guidelines for digitization of cultural heritage in the Republic of Serbia (2017);
- Decision on designation of libraries performing activities of general Interest in the protection of old and rare library materials (Official Gazette of the RS No. 14/13) - This Decision designates 26 public parent libraries that perform these activities.

From the listed secondary legislation, we emphasize the importance of *Guidelines for Digitization of Cultural Heritage in the Republic of Serbia*, published by the Ministry of Culture and Information in September 2017. This document defines for the first time at the national level the processes and standards to be followed when digitizing cultural heritage.

Part of the normative framework of the Republic of Serbia regarding cultural heritage is represented by the international conventions. As the legal successor state of Yugoslavia, Serbia has ratified these acts as an independent state and has to abide by:

- Convention for the Protection of Cultural Property in the Event of Armed Conflict, Hague 1954 (Official Gazette of the FPRY, No. 4/56);
- Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, UNESCO, Paris 1970 (Official Gazette of the SFRY, No. 50/73);
- Convention Concerning the Protection of the World Cultural and Natural Heritage, Paris, 1972, ("Official Gazette of the SFRY" – International treaties, No. 56/74);
- Convention for the Protection of the Architectural Heritage of Europe, Granada, 1985 (Official Gazette of the SFRY, No. 4/91).
- The European Convention for the Protection of the Archaeological Heritage (revised), Valletta, 1992 [2007] (Official Gazette of the Republic of Serbia, No. 42/09);
- The Convention on the Protection and Promotion of the Diversity of Cultural Expressions, UNESCO, Paris, 2005 (Official Gazette of the RS – International treaties, No. 42/09);
- Convention on the Value of Cultural Heritage for Society, Council of Europe, Faro, 2005 ("Official Gazette of the RS – International treaties", No. 1/10);
- Convention for the Safeguarding of the Intangible Cultural Heritage, UNESCO, Paris 2003 (Official Gazette of the RS – International treaties, No. 1/2010).
- European Landscape Convention (Florence, 2000) (Official Gazette of the RS – International treaties, No. 4/11).

Strategic Framework

The Republic of Serbia has not adopted a strategy of cultural development. However, the Ministry of Culture and Information has initiated the development of this strategy, and in 2017 drafted a proposal of Strategy for Cultural Development in the Republic of Serbia for the 2017-2027 period. Since this proposal has not yet been adopted by the government, in 2019 the Ministry prepared a new, slightly modified draft, for a validity period from 2019 to 2029. The Strategy is accompanied by a 10-year Action plan that defines the implementation of the Strategy.

Although this new draft has not yet been adopted, the Ministry of Culture and Information, which is the highest state body in charge of the field of culture and thus of cultural heritage, has been pursuing for many years a policy that is in line with the text of the draft Strategy. In that sense, it is valid that we interpret the treatment of cultural heritage at the national level based on what is written in the draft Strategy.

Within the draft Strategy for Cultural Development in the Republic of Serbia for the 2019-2029 period, cultural heritage occupies an extremely important place. The Strategy defines two priority areas in the field of culture: cultural heritage and contemporary creativity, and seven general objectives: 1.

development of a regulatory framework; 2. improvement of the institutional framework, human resources and management capacities and funding system in culture; 3. development of a system of investment in cultural institutions and protection of cultural heritage; 4. development of production, cultural needs and equal citizens' participation in cultural life; 5. improving international cooperation and European integration processes; 6. digitization in culture; 7. nurturing Serbian language and Cyrillic alphabet and connecting Serbian cultural space.

Within each general objective, specific objectives are defined, and within each specific objective are listed corresponding measures. Within each of the general objectives are specific individual goals and measures concerning the cultural heritage:

Measures within general objective 1

1.1.4. Enactment of the new laws in the field of cultural heritage: 1. Law on Cultural Heritage; 2. Law on Protection of Immovable Cultural Property; 3. Law on Museum Service; 4. Law on Archival Material and Archival Service; 5. Law on Amendments to the Law on Protection of Old and Rare Library Materials and related secondary legislation.

Measures within general objective 2

2.2.3. Connecting cultural heritage protection institutions (institutes for protection of cultural heritage, archives, museums and libraries) in the system of communication, professional exchanges and coordination of activities

2.2.4. Analyzing the needs for a reorganization of administrative and professional functions in the service of protection of cultural property

2.2.5. Standardization of protection and conservation processes

2.2.6. Improvement of the program and manner of taking professional exams in the field of cultural heritage protection and redefining the criteria and rules for gaining higher professional titles

2.2.7. Adoption of management plans for immovable cultural heritage

2.3.4. Revision and improvement of the central registers of immovable cultural property, works of art and history, archival material, film material, and old and rare library materials

2.3.5. Mapping the cultural heritage and integration into the National Geospatial Data Infrastructure

2.3.6. Creating a register of stolen cultural property

2.3.7. Creating a register of cultural heritage at risk and risk mapping

2.3.8. Creating a register of Serbian cultural heritage outside the borders of the Republic of Serbia

2.4.12. Mapping and development of key cultural-tourism products and destinations attractive to local and foreign tourists in collaboration with the Ministry of Culture and Information, Ministry of Trade, Tourism and Telecommunications and National Tourism Organization of Serbia

2.4.13. Formation and certification of new national cultural routes, development of existing European cultural routes on the territory of the Republic of Serbia and joining the new ones, by supporting the projects for the protection, revitalization and presentation / interpretation of cultural heritage in their composition

2.4.14. Increase the visibility of cultural property and cultural institutions (modernization of tourist signage)

2.4.16. Create a register/catalog of tangible and intangible cultural heritage in protected natural areas, and mapping of areas where cultural and natural heritage coexist

Measures within general objective 3

3.1.6. Perform conservation and restoration projects for the revitalization of cultural property in the field of cultural property protection according to the list of priorities

3.1.7. Technical and technological modernization of relevant institutions dealing with the digitization of cultural heritage and contemporary creativity

Measures within general objective 4

4.2.7. Implementation of interactive, contemporary ways of interpreting cultural heritage that include audience participation

4.2.8. Supporting projects and events that develop citizens' awareness that cultural heritage belongs to them and that they are connected through cultural heritage.

4.2.9. Supporting the film and television production of content interpreting the cultural heritage of the Republic of Serbia

4.2.10. Encouraging digital and virtual museums and other forms of cultural heritage presentation at the Open Calls of the Ministry of Culture.

4.3.2. Developing awareness of the importance of cultural heritage in children and young people

Measures within general objective 6

6.1.1. Developed guidelines, recommendations, regulatory framework for digitization of material that defines the rights and obligations of participants in the process of digitization, through the existing system of cultural institutions, and delegation of competencies to the parent, regional and local institutions

6.1.2. Defining the priorities of digitization and adoption by central institutions according to the Plan of Digitization of Cultural Heritage and Contemporary Creativity

6.2.1. Defining the procedures, tools and methods for connecting existing information systems and developing a national aggregator - a unique information systems search engine; creating a register of digitized material, a database

6.2.2. Developed a vocabulary system of controlled terms and metadata to describe digitized cultural heritage and contemporary creativity in accordance with international terms

6.3.1. Establishment of a unique National Cultural Portal of the Republic of Serbia as a system of active, continuous and intensive presentation of digitized material with an established information system that would monitor the respect of copyright and related rights.

In the domain of innovative promotion of cultural heritage, the measures 2.4.13, 4.2.7, 4.2.8, 4.2.10. and 6.3.1. are particularly significant.

Among the most important needs in the field of cultural heritage, in the draft Strategy, the following is noticed:

- Strengthening of the institutional framework - create conditions for establishing a stable and reliable institutional framework for effective care of the cultural heritage, its identification, research, evaluation, protection, presentation, interpretation and integration into the modern life-styles
- Cultural heritage as a development resource - provide a basis for using cultural heritage as a resource for economic and social development
- Cultural heritage and knowledge - contemporary protection institutions require professional development and specialization of personnel, versatility and ability to work in teams. The new fields of operation of protection institutions require general and specific education as well as continuous training
- Gaining public support - to raise awareness about the value of cultural heritage, which connects them with their environment (surroundings) and history, and helps in the transmission of value system across generations
- Intersectoral cooperation - establishing a stronger partnership between the administrative and professional institutions for the protection of cultural heritage with other factors that can contribute to its more effective protection, revitalization and utilization.

The Ministry of Culture and Information of the Republic of Serbia

The most important government body dealing with the cultural heritage affairs at the national level is the *Ministry of Culture and Information of the Republic of Serbia*⁵¹. Within the Ministry operates Sector for Cultural Heritage Protection which, among other things, is in charge of: monitoring and analyzing the situation in the domain of protection and preservation of immovable, movable and intangible cultural heritage, endowments and foundations; development of a unique program and financial plan related to the work of libraries and protection institutions; resolving administrative matters in the field of library, archive and museum service and archaeological research, as in protection and use of cultural heritage; monitoring of the state and supervision of the implementation of relevant programs for cultural heritage protection; proposing strategies and measures for their improvement and financing.

A few years ago, the Ministry also established a Sector for the Digitization of Cultural Heritage and Contemporary Creativity, which deals with matters of national importance in the field of digitization.

The Ministry also establishes various working groups, like the Commission for the protection of cultural property of exceptional importance and property of Serbian origin abroad, and the National Committee for Intangible Cultural Heritage, which deals with strategic, legislative and other professional activities related to intangible cultural heritage.

⁵¹ "the Ministry" in following paragraphs

The Ministry announces annual open calls to support projects in the field of cultural heritage and digitization. These open calls are intended primarily for cultural institutions, but also other entities dealing with cultural heritage, that is, digitization. The majority of projects in these areas that are being implemented in Serbia are (co)funded through these competitions.

The overall activities of the Ministry, especially in the last few years, show that this government body is devoting considerable attention to cultural heritage.

The Cultural Heritage Browser

In 2019, The Cultural Heritage Browser (<https://kultura.rs>), a unified national portal for searching and presenting the digitized cultural heritage of the Republic of Serbia, was created and put into operation. Portal's development was managed by the Ministry of Culture and Information. The portal aims to present, in one place, the diverse digitized funds to the general public and to provide information on the heritage kept by libraries, archives, museums, galleries, institutes for the protection of monuments and other cultural entities.

CULTURAL HERITAGE LITERATURE AND RESEARCH

Many cultural institutions are devoted to the presentation and popularization of Serbia's cultural and historical heritage through the publication of monographs, proceedings, journals and catalogs from such institutions as the Serbian Academy of Sciences and Arts; Republic Institute for the Protection of Cultural Monuments of Serbia; Belgrade City Institute for the Protection of Cultural Monuments; along with museums, archives, and libraries. In addition to these institutions several publishing houses as well, pay special attention to the publication of books related to cultural heritage. However, most of these editions are monographic publications dedicated to certain significant cultural monuments (sacral and important secular objects, medieval fortresses, architectural ensembles, etc.). Rarely, these monographs are dedicated to particular elements of cultural heritage (i.e. a book on the uniforms of the Serbian Army in the 2014-2018 period, a book on textile handicrafts, or a book on folk costumes). In the following review, the focus will be solely on scientific/professional publications dealing with cultural heritage, which primarily includes doctoral dissertations and master's theses, proceedings, and professional journals. Certain departments at the faculties are conducting scientific-research work on cultural heritage, starting with the Department of Ethnology and Anthropology at the Faculty of Philosophy, as well as some institutes like the Institute for Byzantine Studies and the Institute for Balkan Studies. When it comes to cultural institutions, also engaged in scientific-research work are those that are designated by law as central cultural property protection institutions, namely: The Republic Institute for the Protection of Cultural Monuments, Serbian Archives, National Museum in Belgrade, National Library of Serbia and Yugoslav Film Archive. Furthermore, we call attention to the Ethnographic Museum in Belgrade, under which the Center for Intangible Cultural Heritage of Serbia was established. Along with those mentioned above, other museums, archives, libraries, and institutes for the protection of monuments (mainly in the large cities where the institutions have a higher number of employees) are also involved in these activities to a certain extent.

In the last decade, especially in the last five years, there has been a significant number of professional meetings dedicated to cultural heritage. Many of these gatherings had the digitization of heritage as their theme. Below is an overview of the most important seminars and conferences held in the last five years.

Doctoral Dissertations, Master's Thesis

Vučetić, Snežana (2017). *Degradation and protection of the immovable cultural heritage materials* Novi Sad: University of Novi Sad, Faculty of Technology. Available at: <http://nardus.mpn.gov.rs/handle/123456789/8120>.

Obradović, Marija N. (2017). *Cultural routes and improvement of conservation and presentation of medieval sacral heritage in Serbia*. Belgrade: [M. N. Obradović], 2017. Available at: <http://phaidrabg.bg.ac.rs/o:16768>.

Ležaja, Željko J. (2016). *Protection of cultural heritage in international law*. Belgrade: [Ž. J. Ležaja], 2016. Available at: <http://phaidrabg.bg.ac.rs/o:13767>

Živanović, Katarina D. (2014). *The heritage interpretation: a prerequisite for the use of the archaeological heritage in the socio-economic development of the community*. Belgrade: University of Belgrade, Faculty of Philosophy. Available at: <http://phaidrabg.bg.ac.rs/o:9512>

- Antonijević, Snežana V. (2013). *The possibilities for improving the protection and preservation of Serbian national heritage in the region of Metohija at the beginning of the 21st century*. Belgrade: [S.V. Antonijević], 2013. Available at: <http://phaidravg.bg.ac.rs/o:6953>
- Kuzmanović, Zorica (2012). *The reflexive character of archaeological reasoning: a case study of hellenistic finds in Serbian archaeology*. Belgrade: University of Belgrade, Faculty of Philosophy. Available at: <http://phaidravg.bg.ac.rs/o:5644>
- Vukićević, Dejan R. (2009). *Local history funds*. Belgrade: [D. R. Vukićević], 2009.
- Bazić, Miloško M. (2002). *The role of cultural monuments in the preservation of Serbian national identity*. Belgrade: [M. Bazić], 2002.

Proceedings

- Cultural heritage - risks and perspectives: proceedings* / [editor Svetlana Dimitrijević Marković], Belgrade : Belgrade City Institute for the Protection of Cultural Monuments, 2019.
- Serbia's cultural and historical heritage in the world [Electronic resource]* / edited by Nenad A. Vasić, Belgrade : Institute of International Politics and Economics, 2019.
- Monasteries and libraries guardians of cultural heritage: proceedings of the professional conference held on May 10, 2018 in the monastery Velika Remeta* / [editor Vesna Petrović], Irig : Srpska čitaonica; Velika Remeta : Monastery Velika Remeta, 2019.
- Libraries and identity: proceedings of the scientific conference held on May 25-26, 2017 in Pančevo* / editor-in-chief Gordana Stokić Simončić ; managing editor Goran Trailović, Pančevo : Pančevo City Library : Center for Culture and Ecology Panart ; Novi Sad : Faculty of Philosophy ; Sombor : Faculty of Education, 2018.
- Cultural heritage, modernization and culture: proceedings* / [editors Marko Škorić, Pavle Sekeruš], Novi Sad : Faculty of Philosophy, 2018.
- Aspects of cultural heritage: proceedings* / [editors Marko Škorić, Pavle Sekeruš], Novi Sad : Faculty of Philosophy, 2018.
- Cultural heritage: theory, perception and participation: proceedings* / [editors Marko Škorić, Pavle Sekeruš], Novi Sad : Faculty of Philosophy, 2017.
- The Legal aspects of digitization of cultural heritage* / edited by Dragan Prija, Belgrade : Institute for Comparative Law : Serbian Academy of Science and Art, Audiovisual archive and Center for Digitization of SASA, 2017.
- Cultural property today - value and meaning: proceedings* / [editor Nada Živković], Belgrade : Belgrade City Institute for the Protection of Cultural Monuments, 2017.
- Digital libraries and digital archives* / editors Aleksandra Vraneš, Ljiljana Marković, Belgrade : Faculty of Philology, 2015.
- Digital collections in Serbian libraries: proceedings* / editor Svetlana Jančić, Belgrade : Parent Library Community of Serbia ; Novi Sad : City Library of Novi Sad, 2014.
- Proceedings* / 5th International Conference on Cultural Tourism "Branding Cultural Heritage", Sremska Mitrovica, 2014.
- National Commission for UNESCO* / [Predrag J. Markovic, Vera Pavlović Loncarski, Jasna Zrnovic], Belgrade : P. Markovic, 2014.
- Digital libraries, digital repositories, digital presentation* / editors Aleksandra Vraneš, Ljiljana Marković, Gwen Alexander, Belgrade: Faculty of Philology; [Wichita] : Emporia State University ; Belgrade : National Library of Serbia, 2012.
- Digitalisation of cultural and scientific heritage* / editors Aleksandra Vraneš, Ljiljana Marković, Gwen Alexander, Belgrade: Faculty of Philology ; [Wichita] : Emporia State University ; Belgrade : National Library of Serbia, 2012.
- Serbian oral tradition in an intercultural code: proceedings* / [editor Boško Suvajdžić], Belgrade : Institute for Literature and Arts, 2012.
- The world and European horizons of librarianship in digital age*, Belgrade: Serbian Library Association, 2011.
- Serbian oral tradition: proceedings* / [editors Nenad Ljubinković, Snežana Samardžija], Belgrade : Institute for Literature and Arts, 2008.

Journals

The Ethnographic Museum in Belgrade began publishing in 1926, when the first issue of the *Glasnik Etnografskog muzeja* (*Bulletin of the Ethnographic Museum*, <https://etnografskimuzej.rs/en/o-muzeju/izdavastvo/periodika>) was printed. The serial publication has been published without interruption, and it is one of the most important ethnological-anthropological publications in Serbia.

The scientific journal *Nasleđe* (Heritage, <http://beogradskonasledje.rs/casopis-nasledje>) was created at the Belgrade City Institute for the Protection of Cultural Monuments with the idea that the results of the research, study, valorization, and conservation of objects of cultural and historical importance should be published and made available to both professionals and the general public, in order to promote cultural heritage, and the Institute's efforts to preserve and present it. The chapters – “Monumental Heritage”, “Conservation Approach”, “Lost Heritage”, “Critical Review and Additions”, contain papers on historical, archeological, historical-artistic, architectural, and other research as well as valorization of cultural and historical heritage.

Arheografski prilozi (*Archeographical Papers*) is the annual publication of the Archeographical Department of the National Library of Serbia dedicated to numerous aspects of research of the oldest Serbian printed and manuscript books (<https://www.nb.rs/publications/publication.php?id=15147>). Authors in the journal are mostly members of the Archeographical Department and are national experts; and with the rise of the magazine's reputation over the years, the response of foreign authors has increased as well.

Arhaika (*Archaica*, <http://www.f.bg.ac.rs/archaika/>) is the Journal of the Department of Archaeology, Faculty of Philosophy, University of Belgrade. Through independent and themed issues, it is focused on original scientific contributions, covering a broad chronological span from prehistory to recent periods and includes the following: review articles, articles addressing specific archaeological problems, and case studies concerned with resolving relevant archaeological issues.

The Serbian Academy of Sciences and Arts (SASA) issues regular and occasional publications from the fields of science, culture and the art, and publishes scientific works by SASA members and other scientists related to all fields of knowledge, contemporary, or historical material of exceptional importance for science and art (<https://www.sanu.ac.rs/izdanja-sanu/>).

Publications of the Serbian Academy of Sciences and Arts are traditionally published as a series. The first series of the Academy, *Glas* (*Voice*), *Godišnjak* (*Yearbook*) and *Posebna izdanja* (*Special Editions*), represent the foundations of publishing and were initiated in 1887 and 1888. These series have been published continuously for 130 years, with major or minor interruptions imposed by historical events and hardships of war. These first series publications of the Academy were succeeded by: *Srpski etnografski zbornik* (*Serbian Ethnographical Journal*, since 1894), *Srpski dijalektološki zbornik* (*Serbian Dialectological Journal*, since 1905), *Južnoslovenski filolog* (*South Slavic Philologist*, since 1913), *Bilten* (*Bulletin*, 1933) and many other journals and series, which are still current.

Institute for Balkan Studies of the Serbian Academy of Sciences and Arts publishes the annual peer-reviewed journal *Balcanica* (<http://www.balcanica.rs/>) and the book series *Special Editions* from all fields of research about the Balkans.

The Institute for Byzantine Studies of the Serbian Academy of Sciences and Arts publishes two series of publications: *Zbornik radova Vizantološkog instituta* (*Journal of the Institute for Byzantine Studies*, <http://www.byzinst-sasa.rs/zrvi.html>), a notable international journal with 55 volumes published to date, and *Special editions*, currently numbering 47 monographs.

The Republic Institute for the Protection of Cultural Monuments of Serbia has a vast list of publishing activity. Since 1956 and the first issue of the annual publication *Saopštenja* (*Announcement*), the Institute has begun to systematically publish the outcomes of research, protection and presentation of cultural monuments (http://www.heritage.gov.rs/latinica/biblioteka_i_izdavacka_delatnost_sva_izdanja_zavoda.php). The Institute is also publishing a series of scientific monographs, special studies, a corpus of medieval architecture, murals, and many other publications.

Kultura (*Culture*, <http://casopiskultura.rs/>) - journal published by the Center for Studies in Cultural Development is an interdisciplinary scientific journal for the theory and sociology of culture and cultural policy. The journal's focus is on culture in the general sense of the word which implies that science, education, and the whole of human activity are perceived as its constituent parts. It was launched in 1968 to encourage an integrated, analytical, and critical interpretation of contemporary cultural phenomena. Since 1971, it has established the practice of editing thematic issues that continue to dominate the magazine to this day in order to enrich the presence of specific thematic areas in our

cultural and scientific environment. Beginning in July 2012, by the decision of the authoritative body of the Ministry of Education, Science and Technological Development of the Republic of Serbia, the magazine was assigned a category of the journal of national importance (M51). From 2001, the Ministry of Culture and Information of the Republic of Serbia has supported its printing.

Etnoantropološki problemi (*Issues in Ethnology and Anthropology*, <https://eap-jea.org/index.php/eap/about>) is the journal of Faculty of Philosophy, University of Belgrade – Department of Ethnology and Anthropology. The first number was printed in 1987, and the journal continued to be published until 1998. Since 2006, however, it came out as a new series, and it has 4 issues per year. This peer-reviewed scientific journal is devoted to the advancement and dissemination of scientific knowledge in the fields of ethnology, anthropology, cultural studies, archaeology, folklore, history, art, and other humanities. Articles are published in Serbian, English and French.

Antropologija (*Anthropology*, <http://www.anthroserbia.org/Main/About>) is a journal of the Center for Ethnological and Anthropological Research (CEAR) Faculty of Philosophy, University of Belgrade. The first issue was published in 2006. Now the journal has two issues per year with the articles printed in both Serbian and English.

Seminars and Conferences

Cultural heritage - risks and perspectives, The Tenth Conference organized by the Belgrade City Institute for the Protection of Cultural Monuments, 2019.

Monasteries and libraries guardians of cultural heritage: professional conference, Velika Remeta, 2019.

Application of preventive conservation in libraries and archives, National Library of Serbia, 2019.

Seminar *Libraries, archives and remembrance in contemporary teaching and learning about the Holocaust*, Historical Archive of the City of Novi Sad, February 22, 2018 ; University Library "Svetozar Marković", 2018.

Digital repositories in the library and information service, University Library "Svetozar Marković", 2018.

Manuscripts and old printed books – XII Biblionet 2018, Professional-Scientific Conference of the Parent Library Community of Serbia – Biblionet, Parent Library Community of Serbia, Novi Sad, 2018.

Conference of Creative Industries KreNI *Digitalization of cultural heritage - presentation and promotion of creative industries as one of the tools for solving problems in society (architecture, design, advertising, film, photography and information technology)*, Niš, 2018, <http://www.institutfrancais.rs/konferencija-kreni-digitalizacija-kulturnog-nasledja/>, <http://kreni.org/2018/>

International Scientific Conference *Serbia's cultural and historical heritage in the world*, Belgrade, 2018
New digitization processes in Serbia, University Library "Svetozar Marković", 2017.

Conference *Cultural heritage counts for (South-East) Europe* organized by Europa Nostra, Europa Nostra Serbia and South East European Heritage Network in partnership with the Creative Europe Program and European Commission, Belgrade, 2017, <http://europanostraserbia.org/en/cultural-heritage-counts-for-south-east-europe/>

Conference *Culture and IT Sector*, organized by the Ministry of Culture and Information and the Serbian Chamber of Commerce, Belgrade, 2017.

Cultural property today - value and meaning, VIII Conference, organized by the Belgrade City Institute for the Protection of Cultural Monuments, 2017.

International Scientific Conference *Special collections in the context of the protection of cultural heritage and as an incentive for cultural development*, Belgrade, 2017.

Seminar *Digital tools in culture: funds, projects, audience*, jointly organized by the Creative Europe Desk Serbia and the Sector for the Development of Digital Research Infrastructure in the Fields of Culture and Arts of the Ministry of Culture and Information of the Republic of Serbia, Belgrade, 2017, <http://kultura.kreativnaevropa.rs/eng/2017/11/08/digital-tools-in-culture-funds-projects-audience/>

Conference *The legal aspects of digitization of cultural heritage*, Institute for Comparative Law: Serbian Academy of Science and Art, Audiovisual archive and Center for Digitization of SASA, Belgrade, 2017.

Creating digital collections on Cloud Platform, Belgrade City Library, 2016.

Conference *Digitization of cultural heritage, old records from the natural and social sciences and digital humanities*, XV International Scientific Professional Conference organized by National Center for Digitization, Faculty of Mathematics (University of Belgrade), Ministry of Education, Science and Technological Development of Republic of Serbia, Belgrade, 2017, http://www.ncd.matf.bg.ac.rs/conferences/ncd15_2017.html

Digital libraries dedicated to World War I as teaching aids, Belgrade, Institute for the Advancement of Education (accredited seminar for school year 2014/2015 and 2015/2016)
The Ninth SEEDI (South-Eastern European Digitization Initiative) Conference *Digitization of cultural and scientific heritage*, organized by National Center for Digitization, Belgrade, 2014, <http://seedi.ncd.org.rs/seediConference9.htm>
Digital collections in Serbian libraries – VIII Biblionet 2014, Professional-Scientific Conference of the Parent Library Community of Serbia – Biblionet, Parent Library Community of Serbia and City Library of Novi Sad, Novi Sad, 2014, <https://www.kcns.org.rs/vest/biblionet-2014/?script=lat>

LIBRARY SERVICES REGARDING CULTURAL HERITAGE IN SERBIA

Introductory Remarks

Note 1:

If we look at cultural heritage in the narrow sense, as defined by the Cultural Property Law, as objects and products of material and spiritual culture of general interest that enjoy special protection, then the cultural heritage relevant to libraries primarily includes old and rare library materials. The laws regarding libraries regulate their activities when it comes to cultural heritage in a framework which covers only old and rare library materials.

However, cultural heritage can also be seen in a broader context, as property inherited from previous generations or property that is created in the present, and has a specific value for the people (community) and should be preserved for future generations, whether or not it is under official protection. In addition to the material, the intangible cultural heritage, which includes oral tradition, language, performing arts, traditional crafts, social practices and rituals, is extremely important. Perceived in this way, cultural heritage can be any type of cultural/artistic/social event or cultural/artistic production, regardless of a form and date of origin. Every good book by a contemporary author, every great concert or performance becomes a cultural good. As an example, we can refer to the video recording of a 1969 concert in Woodstock that is, as time has shown, now certainly a cultural asset of exceptional importance, although the recording was made for entirely different reasons.

Therefore, if we look at the cultural heritage in this broader context, the scope of libraries' activities in this field is far greater than what is specified by law. Libraries themselves produce a large number of cultural and artistic programs, which in time are becoming a testimony of the cultural life of one period, one city and one community. Thematically, these programs are often connected with cultural heritage, because talking about a good book is actually a conversation about cultural heritage, since that good book becomes, or already is, part of the cultural heritage of the immediate or wider community in which it was created.

In this chapter, we will focus primarily on the activities of libraries concerning the cultural heritage found in its holdings and collections, but at the same time, we will take a look at examples of the good practices where libraries are dealing with a different type of cultural heritage.

Note 2:

For the purpose of writing this chapter, during May and June 2019, a survey entitled "Status, activities and library services regarding cultural heritage" was conducted with the support of the Ministry of Culture and Information of the Republic of Serbia. The survey included almost all libraries that have substantial collections of cultural heritage and are proactive in preserving and promoting heritage. A total of nineteen most significant and major Serbian libraries of different types responded to the survey: National Library of Serbia, Matica Srpska Library, University Library "Svetozar Markovic", library of the Serbian Academy of Sciences and Arts, library of the Ethnographic Museum of Serbia, library of the Belgrade City Institute for the Protection of Cultural Monuments and thirteen parent public libraries. The survey consisted of thirty closed-ended and open-ended questions. The survey results have been incorporated in this report.

Cultural Heritage Related Library Services – Short History

Cultural heritage related library services have been developed almost from the very moment public libraries were founded. Every major library, i.e. each library that owns cultural heritage (primarily old and rare library materials) as part of its regular activities (as provided by the law), preserves that material, allows users to have access to it and promotes it. These activities have traditionally been fulfilled in one of the following ways: allowing users to have an insight into the cultural property within the library itself (in special reading rooms); printing publications (reprint, etc.); organizing exhibitions; organizing different programs (lectures, discussions, etc.); printing brochures and catalogs, etc. As it will be seen later, the conducted survey shows that these activities are still heavily represented today.

When it comes to innovative services and ways to promote cultural heritage, the biggest leap in Serbia, as in other countries, has been made with the development of technology and the Internet. The digitization of cultural heritage is the activity which changed greatly, i.e. enhanced opportunities to develop new library services related to preserving, utilizing and promoting heritage.

In that sense, historically, the most important activities in Serbia started happening fifteen years ago. The first serious attempt to institutionalize the digitization of cultural and scientific heritage is the initiative to establish a National Center for Digitization (NCD). This initiative was launched in 2002 and it was initiated by eight large institutions, including the National Library of Serbia (NLS). However, this Center didn't start off in a desired form and scale, thus its significance is rather small.

Among the libraries, National Library of Serbia was the the first one to begin with digitization in 2004. The first professional scanner was acquired in 2005. Prior to that digitization was done on ordinary office scanners. Digital Library of the National Library of Serbia (<http://digitalna.nb.rs/>) today contains 1.2 million documents of various types: books, newspapers and magazines, manuscript magazines, rare manuscripts, audiobooks, engravings and art materials, cartographic material, comic books and graphic novelties, almanacs and yearbooks, local history collections, etc.

National Library of Serbia enables parent public libraries to place their digitized local history collections on its digital platform, making them significantly more visible.

The Matica Srpska Library (the second most important library in Serbia, after the NLS) began digitization in 2006 by recording old and rare publications with a digital camera, as part of the publication protection process. It has around 16.000 publications in its Digital Library, which is one of the largest in Serbia today (<http://digital.bms.rs/ebiblioteka/>). The total number of pages in the Digital Matica Srpska Library by mid-December 2018 was approximately 1.35 million, pertaining to more than 5.000 monographs and almost 10.700 periodicals.

University Library "Svetozar Marković" in Belgrade (ULSM), the parent library for academic libraries in Serbia, started digitization in 2008 (<http://www.unilib.rs/sadrzaji/digitalna-biblioteka/>). It is the only library in Serbia that has its entire collection digitized and available online. Today, it also digitizes collections from other cultural institutions or manifestation.

Among the public libraries, the Public Library "Vladislav Petković Dis" from Čačak was the first to start digitization, by establishing the Center for Digitization at the beginning of 2008 (<http://www.cacak-dis.rs/digitalizacija/centar-za-digitalizaciju/>). In that way, the work on digitization of the local history collections was institutionalized, and it has been carried out in this library since 2006. The Belgrade City Library (BCL) began digitization in 2009, by creating an online audio archive, which contained a collection of audio recordings from the most interesting programs organized by the library. Several public libraries will later start creating their own audio collections of this type. BCL actively began digitizing old and rare library materials in 2012, when the library gained the digital platform DLibra through a large European project. BCL currently has one of the largest digital library collections in the country (<http://dlibra.bgb.rs/dlibra/>). When it comes to public libraries, "Milutin Bojić" Library (Belgrade, Palilula Municipality) should also be mentioned. In 2014, the Library started a strong digitalization process, by placing one of the first searchable digital libraries on the open source platform ResCarta, in whose development it actively participates (<https://milutinbojic.digitalna.rs/>).

Digitization of cultural heritage in Serbia has been particularly in focus since 2016 when a special sector was established within the Ministry of Culture and Information (http://www.kultura.gov.rs/lat/zastita-kulturnog-nasledja/o_sektoru). Through its substantial activities in recent years, the Ministry has laid the

systemic foundations and launched several specific initiatives (such as financial support) to encourage the digitization process.

Currently, almost all major libraries in Serbia are digitizing cultural heritage, primarily focusing on old and rare library materials, local history collections or special collections in their holdings. Participation of libraries in digitizing some other types of heritage, e.g. intangible heritage, is minimal, at the case level, and occurs only within the framework of some individual projects.

Libraries' Strategies and Policies Regarding Cultural Heritage

When it comes to the strategic documents of libraries regarding cultural heritage, most libraries define their activities in this field on an annual level, within the annual work plan of the institution. The activities are mainly focused on the protection of endangered materials (restoration and conservation), improvement of technical conditions for the preservation of the materials and digitization of the materials. The survey shows that the largest number of libraries (95%) have a strategic plan in place regarding the digitization of cultural heritage they own. More than half of them (56%) have this plan on an annual basis, within the annual work plan, while the multiannual digitization plan has 39% of libraries in Serbia. In most of the libraries surveyed, strategic documents (either annual or multiannual) contain a cultural heritage promotion plan, while 11% of libraries do not have a cultural heritage promotion plan.

It is realistic to assume that the strategic approach to the libraries' operation regarding cultural heritage will be applied increasingly, as the Ministry of Culture and Information is making special efforts in this direction. In the last two years, the Ministry has issued two regulations - Rulebook on Detailed Conditions for Digitization of Library Materials and Resources (2017) and Rulebook on Detailed Conditions for the Digitization of the Cultural Heritage (2018). Both regulations require from protection institutions to strategically plan digitization operations: the first requires libraries to produce annual digitization plans as part of their annual work plans, and the second to digitize the entire heritage they own within the next five years (until 2023). In line with this, the Ministry requested earlier this year, through the National Library of Serbia, all libraries to prepare five-year digitization plans for the 2019-2023 period.

However, the general problem with this issue is that library staff does not have experience in strategic planning, so it raises the question of the quality of strategic plans they make. These strategic documents are produced without any additional accompanying analyzes (environmental characteristics, institution capacities, stakeholders, SWOT analysis, cost-benefit analysis, users' needs, financial potentials, etc.) that are the basis for the development of a solid multiannual plan.

Types of Cultural Heritage Owned by Libraries

Libraries in Serbia have a highly valuable cultural heritage in their heritage collections. This heritage mostly consists of old and rare library materials - all surveyed libraries have this type of material in their holdings. Among the most significant/oldest examples of these materials are: the Belgrade Prophetologion, the oldest handwritten Cyrillic book after Miroslav's Gospel, made at the beginning of the 13th century; book "The Apostlos of Matica srpska" written on parchment in the 13th century (Matica Srpska Library); the incunabula Appian's Roman History (1477) and Lucan's Pharsalia (1498), both printed in Venice (Library of the Serbian Academy of Sciences and Arts); The Apostle's Gospel passage, a Cyrillic manuscript from the 13th century, written on leather (University Library "Svetozar Marković"); Belgrade Four Gospels, the first book printed in Belgrade, 1552 (Belgrade City Library), Shedel's "Chronicle" from 1493 (Subotica City Library), etc.

Other types of cultural heritage (immovable cultural heritage, audio and/or videos of cultural programs organized by libraries, special collections of contemporary art, special local history collections, collections of intangible heritage, etc.) are to a lesser extent represented in the libraries. Half of the surveyed libraries have some of the other types of heritage. These are most often the library building itself, as many libraries are housed in older representative buildings that are indeed a cultural property, and collections of paintings. Several libraries have created a collection of audio/video recordings of the cultural and educational programs they organize.

Libraries are constantly working on the acquisition of cultural heritage. As the survey shows, the most common way to acquire a cultural property in Serbian libraries is through gifts from citizens and prominent individuals (57.7%), then purchase (33.3%), and to a small extent through exchange between institutions (10 %).

Organization

When it comes to organizing activities related to cultural heritage in libraries, larger libraries have a separate department dealing with cultural heritage, while smaller libraries do not have a separate department, sometimes not a staff member designated to deal with this heritage. The survey (which primarily included large, parent libraries) shows that 39% of large/parent libraries in Serbia have a separate department, while 34% of libraries have an employee whose part of the job is dealing with the cultural heritage which library owns. In 5% of libraries, the library has an employee working exclusively with cultural heritage, while 11% of libraries do not have a single employee working with cultural heritage. Article 6 of the Rulebook on Detailed Conditions for Digitization of Library Materials and Resources states that each library has to provide staff for doing the work of digitization of cultural heritage, namely: parent libraries - at least two staff members, and other libraries - at least one employee. Unfortunately, such regulation cannot be implemented in practice in most cases.

Preservation

The protection of cultural heritage is a legal obligation of libraries which, according to the Cultural Property Law, have the status of protection institutions. The Law on Library and Information Service states that *Libraries which have old and rare library materials in their holdings also perform the service of legal and technical protection of these materials in accordance with the law.* The Law on Old and Rare Library Materials prescribes in more detail the conditions for keeping, protecting, processing, exhibiting and using this material. Among the most commonly implemented measures for the protection of materials are restoration and conservation of materials, digitization of materials, and provision of appropriate technical conditions for the placement of materials. According to the survey, one-third of the libraries preserve old and rare materials in the conditions that are fully prescribed by law, while 67% store the material in conditions that only partially meet the regulations.

Digitization

As noted above, digitization of cultural heritage is one of the most important contemporary processes for protection and promotion of heritage. As such, it has been recognized by Serbian libraries, so digitization has become a trend in the last ten years. With the enactment of the new Law on Library and Information Service in 2011, and relevant regulations in the last two years, digitization has become an obligation in library operations.

Today, in Serbia, almost all major libraries are digitizing cultural heritage. All the libraries that responded to the survey and have old and rare materials indicated that they were digitizing it. A total of 39% of libraries also digitize some cultural heritage items/collections that do not belong to old and rare library materials. These are usually some particularly interesting and significant collections that do not have the status of old and rare library materials, local history collections, or cultural and educational programs organized by the library (digitization through photographs, audio and/or video recordings). As we have already noted, the participation of libraries in digitizing some other types of heritage, not related to their holdings, is very rare and happens only in the context of some individual projects. We can highlight the example of the Public Library of Bor that digitizes photographic negatives (which were once used in photography) and strongly promotes and artistic (re)contextualization of that digitized material (<http://www.digitalnizavicaj.org.rs>).

However, much work is still needed to digitize completely the most valuable cultural heritage in libraries. According to the survey, 35% of libraries believe that the most valuable part of the cultural heritage they possess has already been digitized, while 65% believe it still needs to be done.

When it comes to availability of materials, the survey shows that in half of the surveyed libraries, digitized materials are fully publicly available, while in other half - only partially accessible. More than half of libraries (56%) have digitized material available online (on the Internet) and on special computers/devices within the library itself; in slightly less than one-third of libraries (31%), material is only available online; while in 13% of libraries, digitized materials are available only on special computers/devices in the library.

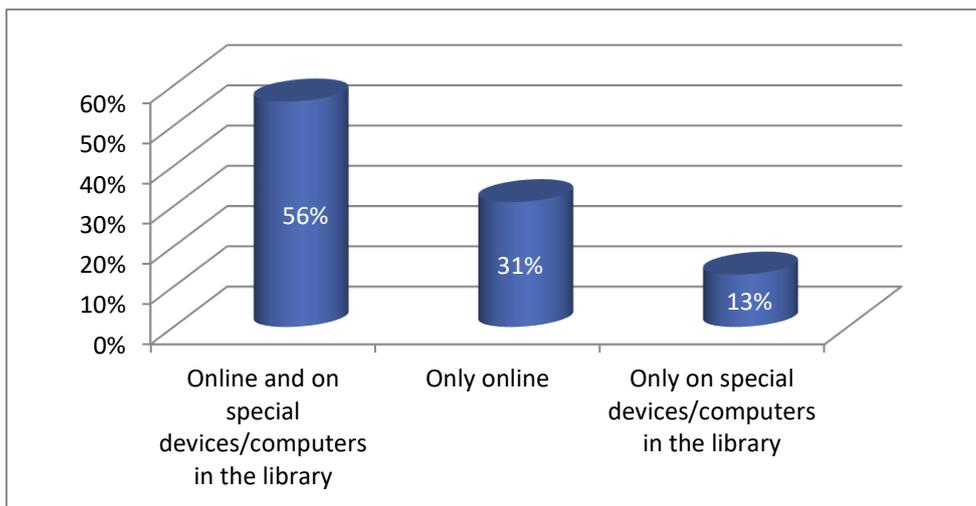


Figure 1. Availability of Digitized Materials

A total of 70% of the surveyed libraries have their own digital library, 12% place their digital collections on the platform of the National Library of Serbia, while 18% neither have their own digital library nor their digital material is available within the digital NLS.

Only one library – the Matica Srpska Library, has developed a mobile application for its digital library. All libraries in Serbia that have their own digital libraries allow all citizens, whether or not they are members of the library, to use these digital libraries. There are no restrictions on the availability of the materials - everything in the digital library can be viewed without any financial compensation or other prerequisites. There is no practice in the Serbian librarianship for charging a digital collection browsing service.

Providing Access to the Cultural Heritage

One of the basic library services is providing access to the cultural heritage, allowing users to access it in one way or another. The largest number of libraries (89%), as the survey shows, allow users to use the material in the library. A significant number of libraries (78%) digitize the material and thus make it accessible. A total of 72% of libraries combine these two types of services - both digitizing the material and making it available within the libraries themselves. Several libraries (39%) make valuable materials from their holdings widely available by publishing it (reprint, facsimile editions, etc.).

Certain libraries make the material accessible in other ways. For example, Library in Kraljevo, digitizes the selected material (not yet digitized), sends it to the user by email or saves it on the memory card. University Library “Svetozar Marković” also provides on-demand digitization service. Users of the Public Library in Požarevac can receive, free of charge, a CD containing digitized old and rare materials from the library holdings.

Promotion

The promotion of cultural heritage (primarily old and rare library materials) is also a legal obligation of libraries. The Law on Old and Rare Library Materials states the following: *A public library shall organize exhibitions, lectures, professional and scientific events, and perform other forms of cultural and educational activities in order to promote interest and awareness of the general public in relation to the significance of old and rare library materials as cultural property.*

Further, we have already written about digitization as an excellent contemporary resource for promoting heritage, and we have mentioned laws and secondary legislation that bound libraries to digitize their valuable collections.

A wide range of library activities which promote cultural heritage includes: digitization, organizing exhibitions, organizing various programs (lectures, discussions, workshops, etc.), printing brochures and catalogs, appearances in the media and media texts, production of promotional materials (T-shirts, badges, mugs, caps, etc.), institution's profiles on social media platforms, social networks specifically dedicated to cultural heritage, website or blog specialized in cultural heritage created by the library,

interactive promotional touchscreen kiosks, Magic box and similar digital devices, participating in professional conferences. The survey showed that the most common ways of promoting heritage are through digitization (94%), organizing exhibitions (82%), appearances in the media and media texts (82%), printing brochures and catalogs (76%), attending professional conferences (76%) and through social media platforms (70%).

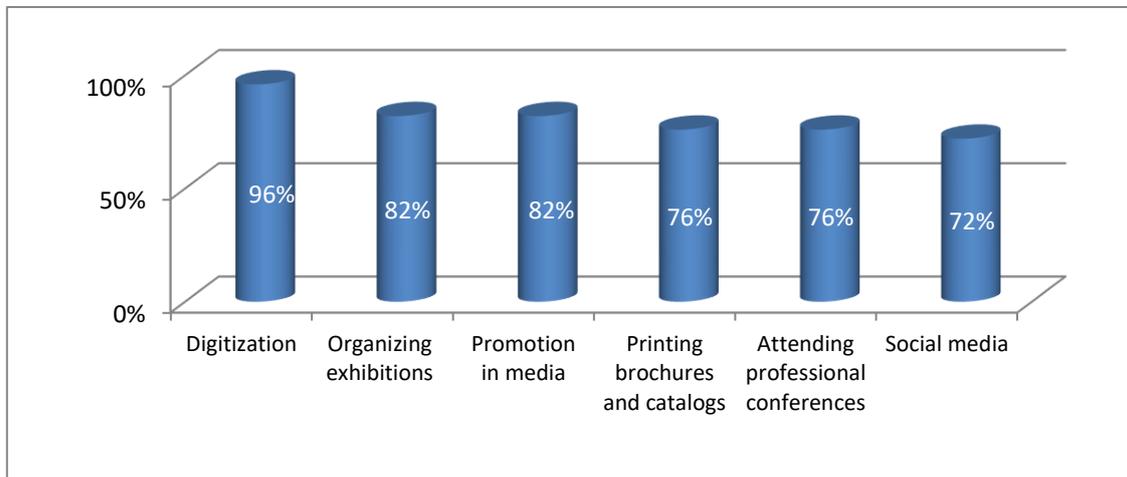


Figure 2. The most common ways of promoting heritage

When it comes to promoting cultural heritage through social media platforms, the most common is promotion through Facebook, 72% of libraries using social media are using this particular platform. All other social platforms are far less used: Instagram uses 27%, YouTube 16% and Twitter 11% of libraries surveyed.

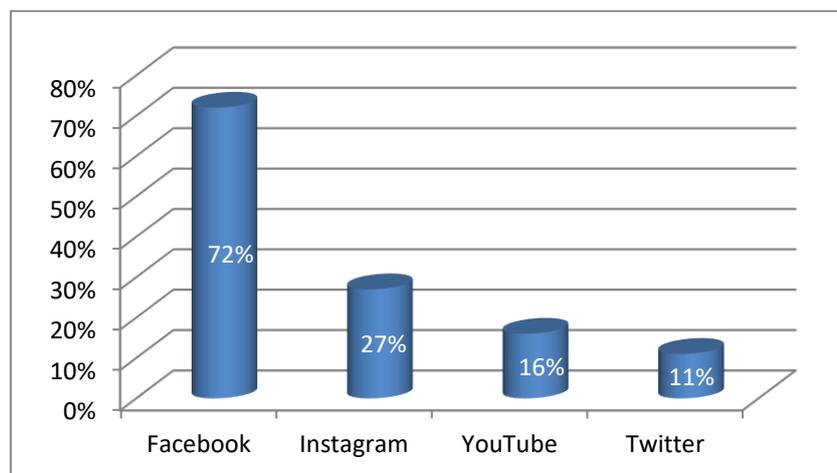


Figure 3. Use of social media platforms in the promotion of cultural heritage

Projects and Examples from Best Practices

Given that the Ministry of Culture and Information of the Republic of Serbia every year announces Open Calls in the field of preservation and promotion of cultural heritage, as well as in the field of digitization of cultural heritage, libraries are implementing a significant number of projects related to cultural heritage. For example, in 2019, at the open call for the digitization of cultural heritage and contemporary creativity, the Ministry supported 65 projects for digitization of cultural heritage, out of which 11 are implemented by libraries. These are mostly small-scale projects that strengthen the libraries' technical capacities for digitization or enable digitization and promotion of certain valuable collections. A small number of libraries, mainly the largest ones, participate in international projects.

The following section shows only projects/examples of best practice, implemented by libraries, that we consider as the most significant in promoting cultural heritage.

The National Library of Serbia (NLS) has implemented many significant projects and is currently included in several representative projects.

Since 2005, when NLS became a full partner of The European Library - TEL project, all NLS digital collections have been featured on the TEL portal. Since 2008, when the Europeana portal was launched, all NLS digital collections have been included on this portal. NLS's most significant digital collections are also part of the World Digital Library, a project initiated by UNESCO and the Library of Congress.

The first European project of the NLS to receive the support of the program Culture 2007-2013 (EMBARK, 2010-2012), marked the beginning of intensive digitization, regarding Serbian manuscripts. Through the framework of the project Europeana Collection (2011-2014), 2.000 objects related to the World War I were digitized, including several films in cooperation with the Yugoslav Film Archive.

One of the current projects of the NSL is the Digital Research Infrastructure for the Arts and Humanities project (DARIAH-EU), so far, the most important and ambitious European project dedicated to creating the conditions for a long-lasting and sustainable digital approach to the research results in the field of humanities and arts. Serbia is one of the fifteen founding countries and the only country outside the EU participating in the project.

The project Rise of Literacy focuses on the development of literacy in Europe in the broadest sense and refers to a dozen different digital collections that have been selected by librarians who are in charge of them and deal with specific topics. It was imperative that these collections should mostly be text collections.

The international project Migration in the Arts and Sciences, in which the NLS is participating as a partner, enables digital collections about migration to, from and through Europe to be included in the Europeana Collection. Within the project, three NLS's collections that were identified as relevant to this topic have been included in Europeana: Jewish Periodicals, Roma Culture and the Miloš Crnjanski Collection.

Project Europeana Common Culture (January 2019 - June 2020) aims to develop a harmonized and coordinated environment for Europeana's national aggregators, to collaborate, share resources and technical means, and agree on common recommendations and standards. Additionally, the project will improve the quality of content and metadata available on the Europeana portal, aiming to expand the range of users and ways of using the content.

University Library "Svetozar Marković" (ULSM) is another library that stands out for its contemporary approaches to promoting cultural heritage.

ULSM has participated as one of 18 partners in the Europeana Newspapers project. More than 18 million newspaper pages from library collections across Europe were digitized within this project. The library is making available to its users an advanced portal for viewing the digitized collection of Serbian historical press, which includes 400.000 searchable pages from 45 issues of newspapers from the late 19th and the first half of the 20th century (<http://www.unilib.rs/istorijske-novine/pretraga>).

ULSM is also a partner in the READ project supported by EU program Horizon2020. This project focuses on the recognition of handwritten text, that is, the development of digital tools for the recognition and reading of the handwriting of a particular person. The Transcribus platform for the automatic recognition, transcription and retrieval of historical documents was developed within the project. One segment of the project is dedicated to the development of the DocScan mobile application and the ScanTent portable device, which are used to digitize materials through a smartphone. In this way, every citizen is enabled to perform the digitization process easily, therefore and through this the democratization of digitization of the cultural heritage is carried out.

ULSM staff participates in the COST Action Evolution of reading in the age of digitization (E-READ). The goal of this action is to improve scientific understanding of the implications of digitization, hence helping individuals, disciplines, societies and sectors across Europe to cope optimally with the effects. E-READ comprises a number of projects and initiatives at different levels and scientific scope.

In cooperation with the Association "Book and Travel Museum - Adligat", ULSM has implemented the project "Safeguarding the Fragile Collection of the Private Archive of the Lazic Family", by digitizing part

of this private archive. The project was implemented within the Endangered Archives Program of the British Library.

ULSM is the only library in Serbia that owns a so-called Magic Box, a modern digital presentation device that can fit both the physical object and its digital version. This interactive display cabinet has a special transparent screen with a built-in touch screen for viewing digital content that visitors can browse, while at the same time having complete insight into the original placed behind the glass. The exhibited objects can be combined with videos and 3D animations, thus improving the understanding of their functionality and history. The Magic Box was purchased as part of the "Magical Digital Serbia" project supported by the Ministry of Culture and Information.

ULSM actively use Twitter to promote its digital collections. On the occasion of the centenary of the end of World War I, ULSM launched a Twitter account [@1918nadSrbijom](#), with the subtitle "Report from Salonica Front". Mentioned Twitter account tweets events from Salonica Front as if they were happening today. This project is inspired by the [@RealTimeWWII](#) project. The materials uploaded through the [@1918nadSrbijom](#) account are based on the ULSM searchable digital library. As part of this project, ULSM has released the world's first Twitter book - a print version of the [@1918nadSrbijom](#) account⁵². One of the main goals of managing a Twitter account and printing a book was to promote in an innovative way the use of the digital collection that this library owns.

NLS and ULSM are collaborating with the daily newspaper *Danas*, which daily publishes the most important news that happened 80 years ago on that day. This is the news that used to be published in former newspapers *Vreme* and *Pravda*, which do not exist today but were very influential in the past. NLS and ULSM are providing this material from their digital archives and thus promoting them.

The Belgrade City Library has also implemented several innovative projects that promote cultural heritage.

BCL participated as one of the 48 partners in the three-year European project [Europeana Awareness \(2012-2014\)](#). The project aimed to promote Europeana's portal through a large partner network, as well as to establish partnerships and encourage cultural institutions to place their collections on the portal. As part of the project, a sub-project called the [Mobilization of Memory](#) was realized. Within this project, a collection dedicated to World War I - Europeana 1914-1918 was enriched and promoted. After a large-scale campaign to animate citizens, on selected days, descendants of those people who participated in the war or lived during that period, brought to the BCL photographs, documents and various items from their personal collections regarding their ancestors. This material was digitized on-site (photographed or scanned), and the stories-memories of those people related to their ancestors, and what they had told them about their war experience, were recorded by librarians. In this way, a unique electronic archive of the World War I, named [Europeana 1914-1918](#), was created, containing the recorded family histories of the residents of eighteen European countries.

BCL participated, as a partner, in another great European project called [LoCloud](#) (2013-2016). The main objective of the project was to use cloud technology to enable smaller institutions in charge of cultural heritage preservation to create their digital collections and make them visible through Europeana. The project was particularly focused on small cultural heritage institutions that do not have the technical capacity and the human resources to build their digital collections. The project envisaged adding around 4 million new objects to Europeana through the creation of these local collections. A Help Center was created within the project - complete online support for digitalization: various documentation, e-courses, help desk, Q&A database, etc. Since it already had its own developed digital library, BCL created a collection of photographs from the cultural and educational programs organized in the library (<https://bgb.locloudhosting.net>). This collection, unique in Serbia, is regularly updated after the completion of the project.

⁵²The book is full of interesting photographs and forgotten events of the past, which can be read in old newspaper articles. One of those articles is about the event that happened in Washington in 1918 on "Vidovdan". That day, in the largest park there, the daughter of the American president played the role of chained Serbia, and a hundred daughters of the most prominent Washington families sang the Serbian national anthem and other songs until Serbia broke those chains, that is, until the president's daughter freed herself, thus symbolically announcing Serbia's liberation, which happened several months later.

In 2018, through a project supported by the Ministry of Culture and Information, BCL procured an interactive presentation kiosk which is used to promote BCL's digital collections in an attractive way. A large touchscreen kiosk is placed in the busiest area of the library and visitors actively use it.

As we have already mentioned, Public Library of Bor is conducting the digitization of its rich collection of photographic negatives. This collection contains negatives of photographs of everyday life in the city of Bor and pictures related to the Mining and Smelting Basin Bor, a giant factory that has essentially marked the life of this city. The photographs cover the period from 1903 to 2004. The Library is implementing very interesting projects related to this material, such as "Bilo – biti" (or in English "Used to be - to be") project. Within the framework of this project, ten writers were hired to write stories based on digitized old photographs. Afterwards, the library has published a book containing photos and stories dedicated to each of them. Based on the photographs from this collection, the library has published another book, an anthropological study, "The Bor Almanach: Street Photography as Shared Anthropology". Using this collection, the library implemented several other projects where contemporary artists have (re)contextualized digitized material, and ethnologists and sociologists have written scientific studies.

As indicated earlier, library operations related to the promotion of cultural heritage which by type does not belong to library and information materials have not been developed. However, there are several good examples that we can point out.

Firstly, we should mention again that several public libraries have developed audio or video archives - digital collections of recordings of programs they organize. These collections, which capture the cultural life of an era and personalities that participate in it, will surely become more valuable in time.

An interesting example of the promotion of the immovable (monumental) heritage is the cooperation of the Belgrade City Library with two travel agencies that have included in their "Belgrade underground tour" a BCL's program hall called Roman Hall. This unique hall is a cultural monument because it contains the remains of a Roman fortified military camp - *castrum* (2nd century AD) as well as a part of the Roman water supply system. Through this cooperation, many local and foreign tourists visit the Roman Hall and the library itself.

BCL has an innovative model of cooperation with the Tourist Organization of Belgrade (TOB). The library has rented part of its space to TOB. In this way, most tourists who come to Belgrade, by visiting the TOB to find out about the city's tourist offer, also enter the BCL. Through this collaboration, BCL indirectly promotes the cultural heritage of entire Belgrade.

Several public libraries in Serbia are implementing programs and smaller projects that promote a cultural heritage which is slowly being forgotten, such as customs and old crafts. Libraries usually organize educational workshops or presentations. We would like to highlight weaving and spinning workshops, as well as a spinning competition organized by the Public Library in Osečina (<http://biblioteka-osecina.org/>). Also, this library has published an educational coloring book and picture book through which the youngest users are introduced to the intangible heritage of their area.

The Belgrade City Library, in partnership with the Ministry of Culture and Information, Faculty of Philology in Belgrade and Radio-Television of Serbia, implements the project "Cherish the Serbian language", which deals with the nurturing and protection of the Serbian language, script, general linguistic culture and literacy. The project gained remarkable visibility at the national level. Over thirty public figures (popular actors, athletes, journalists, writers, etc.) have participated in promotional campaigns that raise citizens' awareness of the importance of language and the Cyrillic alphabet. Within the campaign, a large number of educational and promotional posters were made and widely distributed, large billboards were put up, several advertising campaigns were created, a speech culture wagon was launched and it included lectures and workshops on proper expression that were held throughout Serbia. This project demonstrates how a public library can manage the promotion of language as an intangible cultural property of every nation.

We believe that there is room for a stronger libraries' activity regarding collecting and promoting intangible cultural heritage, based on the fact that according to the existing regulations not a single type of cultural institution is specifically responsible for dealing with this heritage.

Cooperation

The Law on Old and Rare Library Materials stipulates that libraries develop national and international cooperation in the field of cultural heritage: *A public library cooperates in the country and abroad with other cultural institutions, scientific and related institutions, and information and documentation centers in order to improve the efforts that pertain to the protection, keeping and presentation of old and rare library materials as cultural property.*

Libraries in Serbia are relatively well cooperating on this matter, especially in the field of digitalization. This cooperation consists of: mutual knowledge exchange, organized educational workshops and meetings, participation in seminars, organization of guest exhibitions, etc. Libraries with greater digitalization expertise (more knowledge and experience), such as ULSM and NLS, selflessly share this knowledge with colleagues across the country. Also, sometimes they even assign its resources - we mentioned that NLS provides an opportunity for the other parent public libraries to place their local history collections on its platform. What should be improved in mutual cooperation is the joint development and realization of projects, since libraries generally implement projects independently (unless it is an international project).

Unlike inter-sectoral, cross-sectoral cooperation in the field of cultural heritage has not been developed. Very few libraries collaborate with other institutions or private businesses on matters related to cultural heritage. One of the most significant projects in this area was the one between the NLS and the most famous daily newspaper in the country *Politika*. Through the framework of this project, all issues of this newspaper from 1904 to 1941 were digitized.

Among the rare positive examples is a current project "Digital Cultural Heritage Searchability in Practice: implementation of the recommendations of the National Framework for the Digitization of Periodicals in the Republic of Serbia", jointly implemented by nine partners (six libraries, two museums and one theatre festival). There are also already mentioned project of the BCL "Cherish the Serbian language" and cooperation between NLS and ULSM with the daily newspaper *Danas*.

Only a few of the most important libraries in Serbia have developed international cooperation in the field of cultural heritage, and as a rule, it has been developed through joint participation in international projects. There is almost no strategic international partnership in this area, either with a foreign library or with another institution or company.

Problems and Needs within Cultural Heritage Related Library Services

The main problems and needs regarding cultural heritage related library services are as follows:

- Poor infrastructure. The draft Strategy for Cultural Development states that one of the biggest problems of the cultural system in the Republic of Serbia is the underdeveloped infrastructure of cultural facilities, lack of adequate and purpose-built facilities for cultural institutions and their poor and inadequate equipment, lack of space and valid conditions for basic activities of cultural institutions, which include preservation of library materials that belong to cultural heritage. These problems directly affect the protection of cultural heritage by the cultural institutions, libraries in particular. Concerning this, there is a need for targeted capital investments in cultural institutions and protection of cultural heritage, as well as investment maintenance of cultural infrastructure and technical and technological modernization based on clearly defined priorities.
- Lack of adequate personnel, particularly for digitization jobs. At the end of 2013, the Decree banning employment in state and public institutions, including libraries, was adopted in Serbia. These measures made it difficult to recruit new library staff, so that many libraries do not have the human resources that would deal with cultural heritage or its digitization. Also, IT professionals, whose knowledge is best suited for the jobs in the field of digitalization, prefer to work in a different industry than in the librarianship, since salaries in this sector are significantly lower than in the IT industry. Many libraries believe that it is precisely the impossibility to recruit adequate personnel for digitization jobs a key problem in this area. A systemic solution to this problem is needed, as it has national proportions.
- Lack of appropriate knowledge among the library personnel. A very small percentage of librarians have adequate knowledge of the digitization process, technological capabilities and current global trends in promoting cultural heritage. Therefore, continuing education of librarians regarding this matter is necessary.
- Lack of technical equipment and software to carry out the process of digitization and presentation of digitized material in a modern, appealing manner. Due to insufficient funding, many libraries

are unable to obtain the necessary technical equipment and appropriate digitalization software. Libraries did not perform the cost-benefit analysis that would show whether it was more cost-effective to digitize on their own or to hire/outsource a company to do this for them.

- Lack of financial resources. Most libraries' budgets are rather limited which is reflecting on the potential for their greater involvement in the cultural heritage promotion.
- Absence of the national strategy for cultural development. The Draft Strategy has not yet been adopted, leaving the area of cultural heritage insufficiently regulated.
- Inadequate legal framework. As stated in the Draft Strategy for Cultural Development, it is necessary to enact the new laws in the field of cultural heritage: Law on Cultural Heritage, Law on Protection of Immovable Cultural Property, Law on Museum Service, Law on Archival Material and Archival Service, Law on Amendments to the Law on Protection of Old and Rare Library Materials and related secondary legislation.
- In addition, there are certain problems with the interpretation of the Law on Copyright and Related Rights, which are directly related to the digitization and publication of digitized objects.
- Lack of a unique portal with digitized collections of all libraries in Serbia.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The importance of cultural heritage is recognized in the Republic of Serbia, and this area has been regulated by a series of laws and secondary legislation. Cultural institutions are engaged in the preservation and promotion of heritage, there are state mechanisms for permanent financing of projects and jobs in this field, a great number of different national and international projects dedicated to cultural heritage are being implemented, civil society organizations and endowments actively contribute to the promotion of cultural heritage, various foreign and domestic donors have programs to support heritage conservation and promotion projects. At the international level, the Republic of Serbia actively participates in all major cultural processes, initiatives and programs. The Ministry of Culture and Information of the Republic of Serbia, as the most important government body dealing with the cultural heritage affairs at the national level, has been giving special attention to cultural heritage.

However, there is a need to improve the legislative framework in the field of cultural heritage, strengthen the institutional framework, and above all, the need for a national strategy that would allow the matter of cultural heritage to be addressed in a comprehensive, systematic way.

Cultural heritage related library services have been developed almost from the very moment public libraries were founded. Every major library, namely, each library that owns cultural heritage (primarily old and rare library materials) as part of its regular work activities (as provided by the law), preserves that material, allows users to have access to it, and promotes the material. Library services and activities are mainly focused on the cultural heritage found in their holdings - old and rare library materials, local history collections or other special collections.

A wide range of library activities which promote cultural heritage include: digitization, organizing exhibitions, organizing various programs (lectures, discussions, workshops, etc.), printing brochures and catalogs, appearances in the media and media texts, production of promotional materials (T-shirts, badges, mugs, caps, etc.), institution's profiles on social media platforms, social networks specifically dedicated to cultural heritage, specialized website or blog created by the library which is devoted to the cultural heritage, interactive promotional touchscreen kiosks, Magic box and similar digital devices, participating in professional conferences. The survey showed that the most common ways of promoting heritage are through digitization, organizing exhibitions, appearing in the media and media texts, printing brochures and catalogs, attending professional meetings and through social media platforms.

When it comes to innovative services and ways to promote cultural heritage, the biggest leap in Serbia, as in other countries, has been made with the development of technology and the Internet. The digitization of cultural heritage is the activity which greatly changed, i.e. enhanced opportunities to develop new library services related to preserving, utilizing and promoting heritage.

Currently, almost all major libraries in Serbia are digitizing cultural heritage, primarily focusing on materials from their holdings, as we have noted already. Participation of libraries in digitizing some other

types of heritage, e.g. intangible heritage, is minimal, at the case level, and occurs only within the framework of some individual projects. We may highlight the digitalization of cultural-educational programs organized by the library (photographs, sound and/or video recordings). We can conclude that there is space for increased libraries' involvement in digitizing and promoting intangible and other types of heritage that do not belong to library materials.

The analysis shows that much work is still needed to completely digitize the most valuable cultural heritage in libraries. The Rulebook on Detailed Conditions for the Digitization of the Cultural Heritage requires cultural institutions to digitize the entire heritage they own within the next five years (until 2023). However, we believe that this expectation is not realistic knowing what problems and needs libraries have.

Promoting cultural heritage through digital libraries is popular in Serbia, but it's not sufficiently developed, neither quantitatively nor qualitatively. Although, a significant number of large libraries have their own digital libraries, they are not compatible with each other, since they have been created on different digital platforms and since official standards or guidelines for digitizing and producing metadata did not exist. The standards have been adopted in the past two years, but most of these digital libraries do not meet the required standards. For example, many digital collections of text (books, periodicals, documents) are not text-searchable (no OCR was done). Also, websites that host digital libraries are outdated. The Matica Srpska Library is the only library in Serbia that has developed a mobile application of its digital library.

When it comes to promoting cultural heritage through social media platforms, 72% of libraries use their official Facebook page for this purpose. Other social media platforms are far less used. None of the libraries (except one with a Twitter account) have a specialized page on social media dedicated exclusively to the promotion of cultural heritage.

On the bright side, in 2019 a conjoint national portal for searching and presenting the digitized cultural heritage of the Republic of Serbia, was created and put into operation, thus creating the basis for the promotion of digital collections at the national level.

Given that the Ministry of Culture and Information of the Republic of Serbia every year announces Open Calls in the field of preservation and promotion of cultural heritage, as well as in the field of digitization of cultural heritage, libraries are implementing a significant number of projects related to cultural heritage. These are mostly small-scale projects that strengthen the libraries' technical capacities for digitization or enable digitation and promotion of certain valuable collections. A small number of libraries, mainly the largest ones, participate in international projects.

Several libraries in Serbia that actively promote cultural heritage have implemented innovative projects and activities in this area, such as University Library "Svetozar Marković", which has acquired the Magic box and creatively uses Twitter to promote its digital collections.

Regarding the cooperation of libraries in the field of cultural heritage, it can be said that there is a relatively good inter-sectoral cooperation, primarily in the field of digitization, while cross-sectoral cooperation has not been developed. Very few libraries cooperate with other institutions, civil society organizations or private companies in matters related to cultural heritage. International cooperation in this area is also weak - only a few of the largest libraries have this type of cooperation through activities on international projects.

Among the various problems regarding cultural heritage related library services are: poor library infrastructure; lack of adequate personnel, in particular for digitization; lack of appropriate knowledge among the library personnel; lack of technical equipment and software to carry out the process of digitization and presentation of digitized materials in a modern, appealing manner; lack of financial resources; inadequate legal framework and lack of a national strategy; lack of examination of audience's/users' needs regarding cultural heritage.

Recommendations

- Advocate for planned capital investments in the libraries and protection of cultural heritage, for the improvement of their infrastructure and modernization of technical capacities based on clearly defined priorities.

- Libraries need to develop quality multiannual strategic plans related to cultural heritage, that will contain various analyzes (institutions' capacities, SWOT analysis, cost-benefit analysis, users' needs, financial resources, etc.) and based on them develop a realistic action plan.
- It is necessary to systematically resolve the problem of the lack of adequate library personnel that would work in the field of cultural heritage, particularly in the field of digitization. Temporarily, this problem can be compensated through joint projects by several libraries, especially in the designing of various online services.
- In a time of constant technological changes, it is very important to educate librarians in the field of (innovative) cultural heritage promotion: digitalization, new technological possibilities and modern digital tools, social media, existing world trends, project-based work, teamwork, etc.
- It is necessary to create a virtual online place where knowledge and best practices in the field of cultural heritage promotion will be exchanged, nationally and internationally.
- In accordance with the developed strategic plan, obtain the appropriate technical equipment and software to carry out the process of digitization and presentation of digitized material in a modern, attractive manner; libraries where it is not profitable to perform digitization on their own, should do this by outsourcing.
- Develop innovative ways of promoting cultural heritage, in line with the spirit of the times and modern technological capabilities; focus on interactive methods that include audience participation, also on the opportunities offered by social media platforms.
- Perform the digitization of cultural heritage and its promotion through digital libraries in accordance with the standards and best practices.
- Implement existing quality programs that promote cultural heritage, while permanently adjusting them to the users' needs.
- Conduct media, marketing and educational activities that heritage owned by libraries make more visible and through these activities raise awareness among citizens (especially children and young people) of the importance and values of cultural heritage.
- Strengthen inter-sectoral and establish cross-sectoral cooperation between libraries and other institutions (in the field of culture, art, education, science, etc.), business entities, media and civil society organizations.
- Participate in the cultural heritage promotion projects at national and international competitions.
- Examine the possibilities of engaging libraries to promote intangible cultural heritage, and other types of heritage that do not belong to library materials.
- To lobby and advocate for the improvement of the legal framework and enactment of a cultural development strategy.

REFERENCES

- Belgrade City Institute for the Protection of Cultural Monuments at <http://beogradskonasledje.rs/>
- Belgrade City Library at <https://www.bgb.rs/>
- Center for Studies in Cultural Development at <http://zaprokul.org.rs/>
- The Cultural Heritage Browser at <https://kultura.rs>
- The Ethnographic Museum at <https://etnografskimuzej.rs/>
- The Government of the Republic of Serbia. (1994, 2011). *Cultural Property Law*. (Official Gazette of the Republic of Serbia No. 71/94, 52/2011 - other law and 99/2011 - other law. Retrieved from <http://www.kultura.gov.rs/docs/dokumenti/propisi-iz-oblasti-kulture/zakon-o-kulturnim-dobrima.pdf>
- The Government of the Republic of Serbia. (2019). *Draft Strategy for Cultural Development in the Republic of Serbia for the 2019-2029*. Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/-strategija-razvoja-kulture-republike-srbije-od-2019--do-2029->
- The Government of the Republic of Serbia. (2009, 2016). *Law on Culture*. (Official Gazette of the RS, No. 72/2009, 13/2016 and 30/2016 - corrected.). Retrieved from <http://www.kultura.gov.rs/docs/dokumenti/propisi-iz-oblasti-kulture/zakon-o-kulturi.pdf>
- The Government of the Republic of Serbia. (2011). *Law on Library and Information Service*. (Official Gazette of the RS, No. 52/11) Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/-zakon-o-bibliotecko-informacionoj-delatnosti>
- The Government of the Republic of Serbia. (2011). *Law on Old and Rare Library Materials*. (Official Gazette of RS, No. 52/11). Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/zakon-o-staroj-i-retkoj-biblioteckoj-gradji>
- The Government of the Republic of Serbia. (2017). *Proposed Strategy for Cultural Development in the Republic of Serbia for the 2017-2027*. Retrieved from

<http://www.kultura.gov.rs/docs/dokumenti/nacrt-strategije-razvoja-kulture-republike-srbije-od-2017--do-2027-/-nacrt-strategije-razvoja-kulture-republike-srbije-od-2017--do-2027-.pdf>

- The Government of the Republic of Serbia, Ministry of Culture and Information. (2013). *Decision on Designation of Libraries Performing Activities of General Interest in the Protection of Old and Rare Library Materials*. (Official Gazette of the RS No. 14/13). Retrieved from <http://www.kultura.gov.rs/cyr/dokumenti/propisi-iz-oblasti-kulture/resenje-o-odredjivanju-biblioteka-koje-obavljaju-poslove-od-opsteg-interesa-u-zastiti-stare-i-retke-bibliotecke-gradje->
- The Government of the Republic of Serbia, Ministry of Culture and Information. (2017). *Guidelines for Digitization of Cultural Heritage in the Republic of Serbia*. Retrieved from <http://www.kultura.gov.rs/cyr/dokumenti/propisi-iz-oblasti-kulture/smernice-za-digitalizaciju-kulturnog-nasledja-u-republici-srbiji>
- The Government of the Republic of Serbia, Ministry of Culture and Information. (2013). *Rulebook on the content and manner of keeping registers of categorized old and rare library material*. (Official Gazette of the RS, No. 22/13). Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/pravilnik-o-sadrzini-i-nacinu-vodjenja-registara-kategorisane-stare-i-retke-bibliotecke-gradje->
- The Government of the Republic of Serbia, Ministry of Culture and Information. (1995). *Rulebook on the data that are entered into the register, method of keeping the register and central register of immovable cultural property and on documents related to such cultural property*. (Official Gazette of the RS. No. 30/95 and 37/95). Retrieved from <http://www.kultura.gov.rs/cyr/dokumenti/propisi-iz-oblasti-kulture/pravilnik-o-podacima-koji-se-upisuju-u-registar-nacinu-vodjenja-registra-i-centralnog-registra-nepokretnih-kulturnih-dobara-i-o-dokumentaciji-o-ovim-kulturnim-dobrima->
- The Government of the Republic of Serbia, Ministry of Culture and Information. (2013). *Rulebook on Detailed Conditions and Manner of Use of Old and Rare Library Material*. (Official Gazette of the RS, No. 22/13). Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/pravilnik-o-blizim-uslovima-i-nacinu-koriscenja-stare-i-retke-bibliotecke-gradje->
- The Government of the Republic of Serbia, Ministry of Culture and Information. (2018). *Rulebook on Detailed Conditions for the Digitization of Cultural Heritage*. (Official Gazette of the RS, No. 76/2018). Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/pravilnik-o-blizim-uslovima-za-digitalizaciju-kulturnog-nasledja>
- The Government of the Republic of Serbia, Ministry of Culture and Information. (2017). *Rulebook on Detailed Conditions for the Digitization of Library Material and Resources*. (Official Gazette of the RS, No. 102/17). Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/pravilnik-o-blizim-uslovima-za-digitalizaciju-bibliotecko-informacione-gradje-i-izvora>
- The Government of the Republic of Serbia, Ministry of Culture and Information. (2013). *Rulebook on Measures of Technical Protection of Old and Rare Library Material*. (Official Gazette of the RS, No. 22/13). Retrieved from <http://www.kultura.gov.rs/cyr/dokumenti/propisi-iz-oblasti-kulture/pravilnik-o-merama-tehnicke-zastite-stare-i-retke-bibliotecke-gradje->
- The Government of the Republic of Serbia, Ministry of Culture and Information. (2011). *Rulebook on the storage, protection and use of the mandatory copy of publications in deposit libraries*. (Official Gazette of the RS. No. 98/11). Retrieved from <http://www.kultura.gov.rs/lat/dokumenti/propisi-iz-oblasti-kulture/pravilnik-o-cuvanju-zastiti-i-koriscenju-obaveznog-primerka-publikacija-u-depozitnim-bibliotekama->
- A Guide to the Digitization of Culture in Serbia (2018, December). Retrieved from <http://www.seecult.org/sites/default/files/attachments/vodic-kroz-digitalizaciju-e-publikacija.pdf>
- Masliković, D. (2017, November 30). To new form of our heritage (S. Ćirić, Interviewer). *Vreme* 1404. Retrieved from <https://www.vreme.com/cms/view.php?id=1551004>
- Matica Srpska Library at <https://www.bms.rs/>
- Milutin Bojić Library at <https://milutinbojic.org.rs/>
- National Library of Serbia at <https://www.nb.rs/>
- Ognjanović, Z., Marinković, B., Šegan-Radonjić, M., and Masliković, D. (2019). Cultural Heritage Digitization in Serbia: Standards, Policies, and Case Studies. Retrieved from <https://www.mdpi.com/2071-1050/11/14/3788>
- Public Library of Bor at <http://www.biblioteka-bor.org.rs/>
- Public Library of Osečina at <http://biblioteka-osecina.org/>
- The Public Library "Vladislav Petković Dis" Čačak at <http://www.cacak-dis.rs/>
- The Republic Institute for the Protection of Cultural Monuments of Serbia at www.heritage.gov.rs
- Sector for Cultural Heritage Protection at <http://www.kultura.gov.rs/lat/kontakt/sektor-za-zastitu-kulturnog-nasledja>

Sector for the Digitization of Cultural Heritage and Contemporary Creativity at http://www.kultura.gov.rs/lat/razvoj-digitalne-istrzivacke-infrastrukture-u-oblasti-kulture-i-umetnosti/o_sektoru

Serbian Academy of Sciences and Arts at <https://www.sanu.ac.rs/>

The University Library "Svetozar Marković" at <http://www.unilib.rs/>

University of Belgrade, Faculty of Philosophy, <http://www.f.bg.ac.rs/>

Vukićević, V. (2011). Digitization of Cultural Heritage in the Function of Achieving the Cultural Policy Objectives. *Culture*, 130, 165-182. Retrieved from <https://scindeks-clanci.ceon.rs/data/pdf/0023-5164/2011/0023-51641130165V.pdf>

TURKEY

by Yurdağül Ünal

INTRODUCTION

Turkey is a very rich country in terms of its tangible and intangible cultural heritage. National governments are responsible for protecting all kinds of cultural heritage for their respective countries, and transferring it to future generations. On the other hand, as the most important stakeholders of this responsibility, cultural memory institutions such as libraries, archives, and museums must recognize the importance of the conservation, promotion, and transfer of cultural heritage.

Within the scope of cultural heritage in Turkey, the services of libraries and archives generally focus on the protection of special collections (such as manuscripts, rare books, and documents) through digitization. Unfortunately, most of the digitized works are not accessible on the web. But the work of cultural memory institutions within the scope of cultural heritage should go beyond physical protection, and should include creative services, as stated in UNESCO's priorities concerning cultural heritage: protect that heritage and promote awareness of it.

DEFINITION OF CULTURAL HERITAGE

In Turkey the description and understanding of the laws on cultural heritage were first implemented during the Ottoman Empire. Early legal arrangements on the subject began with an antiquities regulation developed in 1869. In 1874 it was reviewed and included in a description of antiquities, which produced a classification of movable and immovable cultural assets. In 1884 a much more comprehensive law was implemented, which contained a detailed description of "cultural assets". It relied upon the assumption that antiquities can be found not only under the ground, but also under water, and included related activities. Types of movable and immovable cultural assets were also defined in the law of 1884 (Ünsal & Pulhan, 2012, p. 40-41).

The current Turkish law governing cultural heritage is named *The Protection of Cultural and Natural Properties*⁵³. In 2004, this foundational law was amended to reflect the changing consciousness of the protection of cultural heritage, and the concepts of "cultural assets", "natural assets", "protected areas", and "archaeological sites" were defined for the first time (Ünsal & Pulhan, 2012, p. 41). According to the new understanding, which sees cultural property as a whole, expressing scientific and cultural values (Ünsal & Pulhan, 2012, p. 41), the relevant definitions in the new law⁵⁴, were codified as follows:

"Cultural assets"; all tangible and intangible assets above ground, underground, or under water, which are related to science, culture, religion, and fine arts, belonging to prehistoric and historical periods, or which have been subject to social life in prehistoric or historical periods, and which have scientific and cultural value."

"Natural assets"; belong to geological, prehistoric, and historical periods and are rare, or must be protected in terms of their characteristics and beauty above ground, underground, or under water."

"Protected area"; the product of various civilizations from pre-history to the present day, reflecting the social, economic, architectural, and similar features of the times they lived, the city and its ruins, the social life in which the cultural assets were intensely experienced, or places where important historical events took place, and their protection."

"Archaeological site"; the product of various civilizations from prehistoric times to the present day, which is sufficiently distinctive and exquisitely characteristic features which can be defined topographically, as well as remarkable historical, archaeological, artistic, scientific, social, or technical aspects. These are the areas where cultural assets and natural assets merge."

In addition to the definitions given in the new law, Turkey accepts categories and definitions of cultural heritage provided in the relevant UNESCO conventions. The Convention Concerning the Protection of World Cultural and Natural Heritage dated 16 November 1972 classifies cultural heritage into three

⁵³ In Turkey, in some laws and documents, the term "cultural assets" is used instead of "cultural heritage."

⁵⁴ <http://www.mevzuat.gov.tr/MevzuatMetin/1.5.2863.pdf>

categories: “monuments”, “groups of buildings”, and “sites”. The definition of these categories is given as follows:

monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art, or science;

groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;

sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view (UNESCO, 1972).

The "cultural heritage" that UNESCO sets out and aims to preserve with this Convention refers to tangible assets. The definition of cultural heritage in the Convention brought out the idea that intangible cultural heritage should also be protected, and since 1973 the concept of the conservation of folklore has been discussed in UNESCO documents (Oğuz, 2009, p. 8). As a result of all these considerations, the 2003 Convention on the Preservation of Intangible Cultural Heritage was prepared. In the period following the adoption of the 1972 Convention, UNESCO documents used terms such as folklore, popular and traditional culture, intangible heritage, and oral and intangible cultural heritage, respectively. However, it was concluded that the most appropriate term to cover the area to be protected by the Convention was “intangible cultural heritage” (Oğuz, 2013, p. 5).

In the related Convention intangible cultural heritage is defined as follows:

The “intangible cultural heritage” means the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity (UNESCO, 2019a).

PRIORITY AND IMPORTANCE OF CULTURAL HERITAGE

Throughout history, the region of Anatolia, where modern day Turkey is located, became home to many cultures starting from 3000 BC including the Trojans, Hattis, Hittites, Lycians, Phrygians, Lydians, Persians, Macedonians, Galatians, Romans, Byzantians, Seljuks and Ottomans (Tonta, 2015, p. 6).

Therefore, the protection, development, and transfer of cultural heritage to future generations should be the basis for cultural policies, and one of the priority policy areas in Turkey.

Turkey's cultural heritage is the property of the state, which is responsible for its management. The principles of management are determined by the Cultural and Natural Assets Protection Act. Federal institutions such as the Ministry of Culture and Tourism, the General Directorate of Foundations, the General Directorate of National Palaces and the Ministry of National Defense, and at the local level, municipalities and special provincial administrations are responsible for cultural heritage within public administration (Ünsal & Pulhan, 2012). In addition, due to the limited amount of funding allocated to the maintenance of cultural heritage by the state, various incentive laws came into force in order to attract the support of the private sector and to ensure its participation in cultural heritage management (Ünsal & Pulhan, 2012, p. 52).

Turkey has signed many international treaties and participates in many conventions concerning cultural heritage. In accordance with these treaties and conventions, Turkey consented to endorse development

plans⁵⁵ relative to tangible and intangible cultural heritage, targeting protection, publication, and promotion in the context of “cultural development,” and putting into effect an inclusive perspective regarding cultural heritage in its widest sense (Ortakçı, 2017, p. 1756).

In recent years Turkey's visibility in UNESCO cultural heritage lists and programs has increased. In August, 2019 Turkey had 18⁵⁶ entities on the UNESCO World Heritage List, 16⁵⁷ entities in the Intangible Cultural Heritage list, and seven⁵⁸ in the Memory of the World list. There are many significant works performed by the Turkish National Commission for UNESCO. “With its passage of revised conservation legislation, Turkey today not only participates fully in, but stands as a leader of the transnational forums UNESCO has created with its heritage programming” (Human, 2015, p. 176).

Turkey's rich archaeological and architectural heritage faces serious challenges. Many sites and monuments are inadequately protected or conserved (Bonini Baraldi, Shoup & Zan, 2013, p. 728). It is not possible to argue that Turkey fully benefits from its rich cultural heritage in terms of economic, social, and cultural relations that Turkey performs activities to increase the sustainable accessibility and visibility of its heritage at national and international levels, and that the policies in this field that have been implemented up to now are sufficient (Akça, 2017, p. 1).

Based on the report by the UNESCO Turkish National Commission, namely *Turkey's World Heritage Areas: Current Status in Protection and Management* (UNESCO, 2009, p. xviii) the sites covered in the *World Heritage* list are described as follows:

“There are no management plans; no visitor management plans, no buffer zone descriptions; field security is not enough; there is no social awareness about the field; all areas are under the authority and responsibility of the two ministries separately, and authority is not coordinated in most of them; all national legislation on conservation does not facilitate but, on the contrary, makes management progress difficult; our national legislation on conservation is not in line with the legislation of the World Heritage Center.”

The common finding of the studies carried out in Turkey concerning intangible cultural heritage is that in order to protect intangible cultural heritage, national awareness must be increased significantly (Turhan Tuna & Saral, 2018, p. 68).

NATIONAL FRAMEWORKS, PROGRAMMES, POLICIES AND STRATEGIES

The first law on the protection of the cultural heritage of the Republic of Turkey adopted on April 25, 1973 was the Antiquities Act⁵⁹ (Law No.1710). In this law, movable and immovable antiquities were described, and “monument”, “külliye”, “protected area”, “historical protected area”, “archaeological protected area”, “archaeological site”, “natural protected area” were defined. General provisions on antiquities were described and codified in the law. In the law, the provisions regarding the determination, registration, protection and repair works, and ownership of immovable antiquities, historical and natural monuments were codified (Eski Eserler Kanunu, 1973).

Article 63 of the Constitution of Turkey provided a constitutional guarantee for the protection of historical, cultural and natural assets (T.C. Anayasası, 1982).

In 1983 the Law on the Protection of Cultural and Natural Assets (Law No. 2863) was passed.⁶⁰ The law defines *cultural property*, *natural assets*, and *protected areas*, lists movable and immovable cultural properties that need to be protected, and identifies matters related to these properties, duties, and

⁵⁵ <http://www.sbb.gov.tr/kalkinma-planlari/>

⁵⁶ <https://whc.unesco.org/en/statesparties/tr>

⁵⁷ <https://ich.unesco.org/en/lists>

⁵⁸ <http://www.unesco.org/new/en/communication-and-information/memory-of-the-world/register/access-by-region-and-country/tr/>

⁵⁹ <http://www.resmigazete.gov.tr/arsiv/14527.pdf>

⁶⁰ <http://www.resmigazete.gov.tr/arsiv/18113.pdf>

responsibilities of natural and legal persons. The responsibilities of the Ministry of National Education were assigned to the Ministry of Culture and Tourism with this law (Kültür ve Tabiat Varlıklarını, 1983).

In 1987 some articles of the Law No. 3386 and Law No. 2863 on the Protection of Cultural and Natural Assets were amended and some new articles were added⁶¹ (Kültür ve Tabiat Varlıklarını, 1987).

In 1989, a lawsuit was filed for cancellation on the grounds that some of the articles of Law No. 3386⁶² were unconstitutional, some articles were rejected, and some were accepted, as a result of the investigations (Anayasa Mahkemesi Kararları, 1989).

In 2004 some articles of the Law No. 2863 on the Protection of Cultural and Natural Assets were modified through Law No. 5226⁶³. For instance, the former law defined “*cultural property*” as “...all movable and immovable assets above ground, underground, or under water related to prehistoric and historical eras of science, culture, religion and the arts.” It was modified as follows: “...all movable and immovable assets above ground, underground or under water which are related to science, culture, religion and fine arts belonging to prehistoric and historical periods, or which were subject to social life in prehistoric or historical periods with scientific and cultural value.” In addition, the modifications ensured the establishment of conservation, implementation, and supervision offices within the municipalities and governorships to carry out the transactions and practices related to cultural property (Kültür ve Tabiat Varlıklarını, 2004).

Besides laws and regulations, issues related to cultural heritage are also included in Turkey's Five Year Development Plan(s):

In the First Five Year Development Plan (1963-1967)⁶⁴ cultural heritage was not mentioned. The only expression that referenced the preservation and protection of historical monuments and architectural structures fell under the category of infrastructure development.

In the Second Five Year Development Plan (1968- 1972)⁶⁵ the section on *cultural activities* stated that antiquities, excavation sites, and archaeological sites have cultural value. It was stated that the protection, evaluation and limitation of archaeological activities were the main issues addressed, and that there was a shortage of skilled expertise. In the plan it was also stated that antiquities were open to other negative effects besides destruction caused by time. Legislation would be enacted for better protection, and efforts would be made for maintenance of assets. Necessary measures would be taken to prevent smuggling abroad.

Although “intangible cultural heritage” was defined later, in the Second Five Year Development Plan there was a section dealing with the preservation, evaluation, and transfer of the “traditional cultural heritage and folklore” of the people to future generations.

In the Third Five Year Development Plan (1973-1977)⁶⁶, there was a section stating that “the methods of protection and improvement of historical monuments, works of art, ruins, and other cultural remnants would be explored, and their eradication, destruction, and smuggling abroad would be prevented.” Manuscripts⁶⁷ were also addressed in the Plan.

In the Fourth Five Year Development Plan (1979-1983)⁶⁸ related problems were emphasized. There was a section clearly stating that attempts to prevent the eradication, destruction and smuggling of historical monuments, works of art, archaeological sites, and other cultural remnants have been limited

⁶¹ <http://www.resmigazete.gov.tr/arsiv/19497.pdf>

⁶² <http://www.resmigazete.gov.tr/arsiv/20043.pdf>

⁶³ <http://www.resmigazete.gov.tr/eskiler/2004/07/20040727.htm#1>

⁶⁴ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/Birinci-Be%C5%9F-Y%C4%B1ll%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-1963-1967%E2%80%8B.pdf>

⁶⁵ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/%C4%B0kinci-Be%C5%9F-Y%C4%B1ll%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-1968-1972%E2%80%8B.pdf>

⁶⁶ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/%C3%9C%C3%A7%C3%BCnc%C3%BC-Be%C5%9F-Y%C4%B1ll%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-1973-1977%E2%80%8B.pdf>

⁶⁷ A similar article in the Second Five-Year Development Plan is given with the explanation of “antiquities”

⁶⁸ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/D%C3%B6rd%C3%BCnc%C3%BC-Be%C5%9F-Y%C4%B1ll%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-1979-1983%E2%80%8B.pdf>

in the past. The plan argued that one of the main causes of the problem was the lack of coordination between organizations that provide the services related to antiquities. As in previous plans measures to prevent the smuggling of antiquities were also included.

In the Fifth Five Year Development Plan (1985-1989)⁶⁹ the only statement regarding cultural heritage referred to public and private institutions continuing to carry out the identification, registration, and repair of preservation activities.

In the Sixth Five Year Development Plan (1990-1994)⁷⁰ manuscripts and rare books were emphasized. It was stated that to protect them a Rare Books Pathology and Restoration Research Center would be established in Istanbul, and that these rare books would be given protection by using technological methods (microfilm). Within the scope of the protection of cultural heritage, it may be noted that technological developments were reflected in the plan for the first time. The fight against the smuggling of antiquities was another recurring issue of the plan.

In the Seventh Five Year Development Plan (1996-2000)⁷¹ in general, it was stated that the protection of movable and immovable cultural properties would be given importance.

The Eighth Five Year Development Plan (2001-2005)⁷² covered somewhat different topics, which were not included in the previous plans in order to protect the cultural assets of the country, educational facilities would be expanded, aiming at raising the awareness of the general public and public servants, thus helping to prevent the smuggling of historical items. Another new topic included in the plan was the following: In order to preserve and maintain natural and cultural assets as a whole, information, documents, and visual materials on cultural assets that are subject to protection, and are owned by various individuals and institutions would be brought together and conserved, and thus made available to users. The plan also included a significant statement: The Law on the Protection of Cultural and Natural Assets would be updated.

In the Ninth Five Year Development Plan (2007 – 2013)⁷³ it was stated that protection was the ultimate goal, and that activities towards the identification, exploration, maintenance-repair, and restoration of Turkey's cultural assets both within and outside the country would continue. Emphasis was placed on raising public awareness through non-formal education in the protection of cultural heritage.

In the Tenth Five Year Development Plan (2014-2018)⁷⁴ it was stated that under the protection of cultural heritage, domestic and overseas inventories are being prepared, and restoration work is being done. The World Cultural Heritage List cited the increase in the number of assets from Turkey. In the Sixth Five-Year Development Plan, it was stated that manuscripts and rare books would be protected with the help of technology, and in the Tenth Plan it was stated that the digitization of these works would be carried out.

The Eleventh Five Year Development Plan (2019-2023)⁷⁵ includes an article stating that within the scope of policies and measures related to "Culture and Art", cultural heritage would be preserved in a way that improves the cultural, historical, and aesthetic awareness of the society, and contribute to "cultural tourism" with an eye toward minimizing "disaster risk". Expressions such as *cultural tourism* and *disaster risk* are noteworthy issues in the Plan. One section indicates that the thematic cultural routes for archeology, literature, history, and nature would be identified and promoted, especially in the areas protected by UNESCO, which would be regarded as a contribution to cultural tourism. The plan also states that National Restoration Centers of Excellence would be established in universities, the quality

⁶⁹ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/Be%C5%9Finci-Be%C5%9F-Y%C4%B1I%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-1985-1989.pdf>

⁷⁰ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/Alt%C4%B1nc%C4%B1-Be%C5%9F-Y%C4%B1I%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-1990-1994%E2%80%8B.pdf>

⁷¹ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/Yedinci-Be%C5%9F-Y%C4%B1I%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-1996-2000%E2%80%8B.pdf>

⁷² <http://www.sbb.gov.tr/wp-content/uploads/2018/11/Sekizinci-Be%C5%9F-Y%C4%B1I%C4%B1k-Kalk%C4%B1nma-Plan%C4%B1-2001-2005.pdf>

⁷³ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/Dokuzuncu-Kalk%C4%B1nma-Plan%C4%B1-2007-2013%E2%80%8B.pdf>

⁷⁴ <http://www.sbb.gov.tr/wp-content/uploads/2018/11/Onuncu-Kalk%C4%B1nma-Plan%C4%B1-2014-2018.pdf>

⁷⁵ <http://www.sbb.gov.tr/wp-content/uploads/2019/07/On-Birinci-Kalkinma-Plani.pdf>

and quantity of restoration and repair activities would be improved, inventory studies would continue, and relevant cultural data would be transferred to digital platforms. Unlike other plans, there is a clause in this plan concerning the research of cultural heritage which gives priority to cultural heritage belonging to different periods of Turkish-Islamic history.

Turkish National Commission for UNESCO was founded on August 25, 1949, and is one of the oldest National Commissions. The Commission carries out tasks such as disseminating education, preserving and disseminating culture, supporting information and science in line with the objectives of UNESCO, informing relevant organizations in line with UNESCO's activities, raising awareness in the community, and advising the government (UNESCO, 2019b). The Commission was elected as a member of the UNESCO Executive Board for the period 2017-2021. The first official participation in the UNESCO cultural heritage conventions with Turkey as a member took place in 1983.

UNESCO accepted the Convention on the Protection of World Cultural and Natural Heritage in its 17th General Conference on November 16, 1972, and Turkey confirmed it through the Law No: 2658⁷⁶ on April 14, 1982. It came into force when it was published on February 14, 1983 in the Official Gazette⁷⁷. Thus, the Republic of Turkey officially became a party to the Convention within the context of cultural and natural heritage for the first time in 1983.

On October 17, 2003 UNESCO's 32nd General Conference held in Paris signed the "Convention on the Protection of Intangible Cultural Heritage". This convention was unanimously confirmed on January 19, 2006 by the National Assembly of Turkey, and the Law on the Approval of the Convention for the Protection of Intangible Cultural Heritage (Law No: 5448⁷⁸) became valid. The first representative list concerning intangible cultural heritage was made in 2008 (UNESCO, 2019c).

Turkey was also twice elected to the UNESCO World Heritage Committee for the periods of 1983-1989 and 2013-2017. In 2016 Turkey hosted the World Heritage Committee (Ürün, 2016, p. 10).

Turkey is a member of the ICOM (International Council of Museums) which is an "international organization consisting of museums and museum staff aiming to preserve, maintain and transfer the present and future tangible and intangible natural, and cultural heritage to society". *ICOM Turkey National Committee* was founded in 1956 through a regulation based on a law concerning the membership of Turkey to UNESCO (ICOM Turkey, 2019).

Turkey is also a member of ICOMOS (International Council on Monuments and Sites) which is a non-governmental organization having ties to UNESCO. Its mission is to promote the conservation, protection, use, and enhancement of monuments, building complexes, and sites. ICOMOS is an Advisory Body of the World Heritage Committee for the implementation of the World Heritage Convention of UNESCO. As such, it reviews nominations for Cultural World Heritage status, and ensures the conservation status of properties. The ICOMOS Turkey National Committee was established in 1974 through a law which attached it to the Ministry of Culture, as a semi-official council (ICOMOS, 2019).

In 1969, Turkey became a member of the ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property) which encourages states to protect cultural heritage (ICCROM, 2019).

Today, the body, which is responsible for the official protection of the cultural heritage of Turkey, is the Ministry of Culture and Tourism. Within the Ministry, it is the General Directorate of Cultural Heritage and Museums⁷⁹, whose mission is to "determine, protect, and evaluate movable cultural and natural assets and immovable cultural assets, and to transfer them to future generations".

⁷⁶ <http://www.resmigazete.gov.tr/arsiv/17670.pdf>

⁷⁷ <http://www.resmigazete.gov.tr/arsiv/17959.pdf>

⁷⁸ https://www.tbmm.gov.tr/tutanaklar/KANUNLAR_KARARLAR/kanuntbmmc090/kanuntbmmc090/kanuntbmmc09005448.pdf

⁷⁹ <https://kvmgm.ktb.gov.tr/TR-43036/misyonumuz-ve-vizyonumuz.html>

LITERATURE AND RESEARCH

Over the years, a significant number of studies have been carried out in the field of cultural heritage in Turkey. Many authors and institutions have contributed to the field. Cultural heritage studies cover different areas and aspects of cultural heritage. The studies focuses on tangible and intangible cultural heritage, as well as digital cultural heritage. Some studies have a more theoretical focus, others, more practical implications. Most of the research is carried out in universities, where many doctoral and master's theses focus on cultural heritage.

On August 18, 2019, a search for the keyword "cultural heritage" at the Council of Higher Education Thesis Center Database returned 51 PhD, 160 MA, and 3 MFA theses. *Architecture* (PhD, N=18; Master Thesis, N=31) is the field in which most graduate level (Doctoral and Masters) research on cultural heritage is conducted. Following this on the Master's level are *Tourism* (N=21), *Education and Training* (N=18), *Folklore* (N=17), *Archeology* (N=16), and *Museology* (N=13)⁸⁰.

Some examples of Doctoral theses are:

- Akyol Kasapoğlu, P. (2015). *Intangible cultural heritage (ICH) and education: Example of folk culture course*. Unpublished Phd Dissertation, Hacettepe University, Ankara.
- Arı, İ. (2009). *Cultural heritage management in prehistoric sites: Cultural heritage management plan of Kırklareli Archaeological Site*. Unpublished Phd Dissertation, İstanbul University, İstanbul.
- Çakmak, T. (2016). *Digitization and digital preservation policies in cultural memory institutions in Turkey: A proposed model*. Unpublished Phd Dissertation, Hacettepe University, Ankara.
- Eryazicioğlu, M. E. (2018). *Investigation of the conservation system in Turkey in the context of cultural heritage and human rights: The Historical peninsula case, İstanbul*. Unpublished Phd Dissertation, Yıldız Teknik University, İstanbul.
- Öztemiz, S. (2016). *Open access to digitized cultural heritage products in Turkey: A model offer*. Unpublished Phd Dissertation, Hacettepe University, Ankara.
- Şahin, N. (2016). *Constestations, conflicts and music-power: Mevlevi sufism in the 21st century Turkey*. Unpublished Phd Dissertation, Middle East Technical University, Ankara.

Some examples of Master theses are:

- Altunç, B. (2016). *Preservation of cinematographic heritage and film restoration*. Unpublished Master Thesis, Gazi University, Ankara.
- Çakır, N. (2016). *Investigation of intangible cultural heritage in museology memory of Turkey*. Unpublished Master Thesis, İstanbul University, İstanbul.
- Demir, E. S. (2015). *Evaluation of intangible cultural heritage in the context of ecotourism in Turkey*. Unpublished Master Thesis, Gazi University, Ankara.
- Şimşek, C. N. (2019). *Displaying heritage in contemporary Turkey*. Unpublished Master Thesis, Kadir Has University, İstanbul.
- Seyhan, B. (2014). *Assesment of cultural heritage tourism in Phrygia*. Unpublished Master Thesis, Anadolu University, Eskişehir.

Some examples of Proficiency in Art theses are:

- Eren, E. (2012). *Preserving the cultural heritage of cinema and the effects of digital technological improvements on film archiving*. Proficiency in Art Thesis, Mimar Sinan Güzel Sanatlar University, İstanbul.

⁸⁰ Other areas where academic research on cultural heritage is conducted are as follows: *Ancient Linguistics and Cultures, Anthropology, Archaeometry, Archeology, Architecture, Archive, Art History, Business Administration, Civil Engineering, Communication Sciences, Computer Engineering and Computer Science and Control, Crafts, Eastern Linguistics and Literature, Education and Training, Engineering Sciences, Fine Arts, Folklore, Geodesy and Photogrammetry, Geography, History, Industrial Design, Information Management, Interior Design and Decoration, International Relations, Journalism, Landscape Architecture, Law, Linguistics, Museology, Music, Performing and Visual Arts, Public Administration, Public Relations, Radio and Television, Religion, Science and Technology, Sociology, Tourism, Turkish Language and Literature, Urban and Regional Planning*

- Kandemir, Ö. (2013). *Adaptation of buildings devoted to cultural heritage to the museum through contemporary approaches 'new' spatial experiences*. Proficiency in Art Thesis, Anadolu University, Eskişehir.

On August 28, 2019, a search using “cultural heritage” in the topic field, and “Turkey” in the address field at the Web of Science (WoS) Core Collection returned 520 results. Of these search returns, 70% (N= 364) were composed of articles, and 28% (N=148) were composed of proceeding papers. The variance of the search results according to the WoS category of topics is shown in Table 1.

Table 1. The variance of publications, according to the WoS category of topics

Categories	N	%	Categories	N	%
Folklore	79	15	Environmental Studies	22	4
Architecture	72	14	Education Educational Research	21	4
Engineering Civil	55	11	Chemistry Analytical	20	4
Environmental Sciences	46	9	Green Sustainable Science	20	4
Geosciences Multidisciplinary	40	8	Technology	20	4
Archaeology	37	7	Spectroscopy	17	3
Construction Building Technology	37	7	Geography Physical	15	3
Art	35	7	Regional Urban Planning	14	3
Materials Science Multidisciplinary	30	6	Social Sciences Interdisciplinary	12	2
Humanities Multidisciplinary	24	5	Hospitality Leisure Sport Tourism	12	2
Imaging Science Photographic	24	5	Information Science Library Science	11	2
Technology	24	5	Computer Science Interdisciplinary	11	2
Urban Studies	24	5	Applications	10	2
Remote Sensing	23	4	Engineering Environmental	10	2

The publication dates show that the number of publications indexed at WoS has increased in recent years, with 50% of them published in the last 4 years (2016-2019) (Table 2).

Table 2. The variance of publications indexed at WoS, according to the year of publication

Publication Years	N	%
2019	33	6
2018	81	16
2017	67	13
2016	76	15
2015	55	11
2014	32	6
2013	37	7
2012	38	7
2011	17	3
2010	28	5
2009	20	4
2008	16	3
1997-2007	20	4
Total	520	100

15% (N=78) of these publications are featured in the WoS indexed journal *Milli Folklor*, in Turkish. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences* (3%, N=17) and *Journal of Cultural Heritage* (3%, N=17) are the other journals where these publications appear.

Some examples of articles are:

- Guler-Biyikli, S. and Aslan, C.C. (2013). A Review of Cultural Heritage Education in Turkish Schools (1962-2011). *Public Archaeology*, 12(4), 255-270.
- Karadag, R. and Torgan, E. (2016). Advantages and Importance of Natural Dyes in the Restoration of Textile Cultural Heritage. *International Journal of Conservation Science*, 7, 357-366.

- Metin Başat, E. (2013). Safeguarding the Tangible and Intangible Cultural Heritage Together. *Milli Folklor*, 100, 61-71.
- Ozdemir, N. (2009). The Relation Between Cultural Economy and Cultural Industries with Cultural Heritage Management. *Milli Folklor*, 84, 73-86.
- Tonta, Y. (2008). Libraries and museums in the flat world: Are they becoming virtual destinations? *Library Collections Acquisitions & Technical Services*, 32(1), 1-9.
- Yastikli, N. (2007). Documentation of cultural heritage using digital photogrammetry and laser scanning. *Journal of Cultural Heritage*, 8(4), 423-427.

Other than the WoS indexed journals, research on cultural heritage in Turkey is published in university journals. In addition to these publications, there are also numerous research projects sponsored by government agencies, universities, scientific institutions, and research centers, such as The Scientific and Technological Research Council of Turkey (TÜBİTAK), and other non-profit organizations.

Some examples of projects are:

- **AccessIT (Accelerate the Circulation of Culture through Exchange of Skills in Technology)** (Funded by European Union 7th Framework Programme) (2009-2011). AccessIT is an international project, and Turkey, the UK, Poland, Greece and Serbia are among the partners. The main objective of the Project is to digitize a certain amount of item from cultural heritage of partner countries Turkey, Greece and Serbia, to transfer it into Europeana, and to create the required education infrastructure. Hacettepe University is the institutional owner of the project in the name of Turkey” (Yılmaz, Külcü, Ünal, and Çakmak, 2013, pp. 10-11).
- **LoCloud (Local Content in a Europeana Cloud)** (Funded by EU CIP ICT-PSP Programme) (2013-2016). LoCloud is a Best Practice Network co-funded under the CIP ICT-PSP programme of the European Commission which enriched Europeana content by adding over 4 million digitised items from European cultural institutions. LoCloud supports small and medium-sized institutions in making their content and metadata available to Europeana, by exploring the potential of cloud computing technologies. A cloud-based technology infrastructure will enable the aggregation of local content and a number of micro-services will help to reduce technical, semantic and skills barriers and to render the content more discoverable and interoperable. Hacettepe University is the institutional owner of the project in the name of Turkey, and it is task coordination of content provision and dissemination for Turkey and engagement of small and medium-sized institutions (LoCloud, 2019). Content offered by Turkey within the scope of the project was provided from Koç University, Vehbi Koç Ankara Studies Research Center (VEKAM).
- **Development of a Mobile and Distant Augmented Reality System for Cultural Heritage Sites** (Funded by The Scientific and Technological Research Council of Turkey (TÜBİTAK) 3001:215E156), (2016-2018): The use of Augmented Reality for cultural heritage is an important means to enhance interest in historical sites. It is a troublesome and costly task to reconstruct historical buildings that have traces of ancient civilizations. Ruined by the destructive effect of time, few ancient buildings have survived. With Augmented Reality, it is possible to virtually overlay the historical buildings in situ, without requiring physical reconstruction. In this project a Mobile Location Based Augmented Reality Application Prototype was developed and a Distant Augmented Reality System was presented for the Roman Baths in Ankara (Ankara Üniversitesi, 2019).
- **INDICATE** (Funded by EU FP7-INFRASTRUCTURES), (2010-2012): INDICATE (International Network for a Digital Cultural Heritage e-Infrastructure) is a Project whose main objectives are on the one hand the coordination of cultural heritage research opportunities opened by e-Infrastructures in countries all around the Mediterranean and on the other, the development of consistent policies and best practices governing such research (CORDIS, 2019).
- **EU - Turkey Anatolian Archaeology and Cultural Heritage Institute Project** (Funded by EU Instrument for Pre-Accession Assistance-IPA), (2014-2020): The objective of the project is to provide accessibility, by means of collaborative activities, to the archaeological and historical heritage of Ancient Anatolian Civilizations by collecting, preserving, and promoting the shared values and common cultural heritage of the EU and Turkey. The project will be implemented by

the Ministry of Culture and Tourism, and Gaziantep Metropolitan Municipality (Civil Society Sector, 2019).

- **Aspendos Cultural Heritage Management Project** (Funded by The British Institute at Ankara (BIAA), The Headley Trust), (2013-2016): The joint CHM project of the BIAA and the archaeology department of Hacettepe University (Ankara) ran between 2013 to 2016, building on the results of the Aspendos Archaeological Project. A first phase of the project was dedicated to the preparation of sustainable development for the cultural and natural heritage of Aspendos and its surroundings, and dealt with the parallel realities of a highly touristic site within a rural environment. The project aimed at merging preservation of the site with the interests of local inhabitants and tourists, set against the wider background of the historic landscape (BIAA, 2019a).
- **Safeguarding Archaeological Assets of Turkey (SARAT)** (Funded by The Cultural Protection Fund / British Council (CPL-O69-16)), (2017-2020): Lead Institution: The British Institute at Ankara (BIAA), Partner Institutions: Koç University Research Centre for Anatolian Civilizations (ANAMED), International Council of Museums (ICOM) UK. The aim of the project is to increase the knowledge, capacity, and awareness of the protection of Turkey's archaeological assets. SARAT engages in many different education and research-related activities in line with this goal (BIAA, 2019b).
- **Renewal, Innovation and Change: Heritage and European Society (RICHES)** (Funded by EU Seventh Framework Programme, No: 612789) (2013-2016). The main project objective was to reduce the distance between people and culture, recalibrating the relationship between heritage professionals and heritage users, in order to maximise cultural creativity and ensure that the whole European community can benefit from the social and economic potential of CH (CORDIS, 2019b).
- **Turkish and Macedonian Common Cuisine Culture Project** (The project has been implemented with the cooperation of the Turkish National Commission for UNESCO and the Macedonian National Commission for UNESCO, with the participation of the Turkish Ministry of Culture and Tourism and the National Museum of Macedonia) (2009). The purpose of this project is to record and document the shared historical culinary heritage of the two countries with an emphasis on shared values, and with the greater aim of building understanding and tolerance between the two societies, in accordance with UNESCO philosophy (Oğuz, 2013b, p. 14).
- **Project on the Music Culture of the People of the Border Regions of Turkey and Bulgaria** (The project has been implemented by the Turkish National Commission for UNESCO and the Bulgarian National Commission for UNESCO, with the contribution of the Turkish Ministry of Culture and Tourism and the Institute of Folklore at the Bulgarian Academy of Sciences) (2009-2010). This project, focusing on music, was an intangible way of cross-cultural dialogue and communication, which promoted both friendship and cooperation between Turkey and Bulgaria, and created a cultural experience of working together in a scientific field (Oğuz, 2013b, p. 15).
- **Ankara Intangible Cultural Heritage Museum Project (Gazi University, Altındağ Municipality and the Ankara Development Agency)** (2013). The mission of this museum is to help make Ankara a cultural center, and to design field research to document the city's historical and cultural values, so that the findings can be turned into applied models for the access of younger generations (Yakıcı, 2013, p. 32).

LIBRARIES AND CULTURAL HERITAGE

The most widespread services and projects of cultural memory institutions, such as libraries and archives, have always been activities related to manuscripts and rare book collections. In the past, the majority of these activities struggled with recording and cataloguing these items. Indeed, the first recording and cataloguing was carried out in the 1940s with the print manuscript holdings of the libraries in İstanbul. Today, however, the majority of the services offered at libraries regarding cultural heritage are digitization-related. The fact that Turkey is rich in manuscripts and rare book collections has prompted digitization services at libraries.

TÜYATOK (The Union Catalogue of Manuscripts in Turkey), initiated in 1978 by the Ministry of Culture, has been one of the most comprehensive projects in terms of bibliographic control and recording. The bibliographic records which were created as a part of this project began to be transferred into the CD format starting in 2004.

Planned in 1946 and legally opened in 1950, the National Library has since been home to various activities related to cultural heritage. The 27,464 manuscripts in its collection have been digitized. Its collection of non-book materials also constitutes a body of cultural heritage. Turkey's richest collection of vinyl records (all of those records have been digitized and have public access), a poster collection of Turkish theater and movie, as well as some other posters, which reflect political and commercial life in Turkey (20 thousands kinds of posters + 11,646 lobby posters), paintings of famous painters (542 pieces), Turkish and Ottoman maps (4585 maps) of Misak-ı Milli (National Pact) borders, especially from the Republic period, maps of the War of Independence and war plans, old housing and local plans, cartographic materials, stamps printed since 1933, reproductions, First Day Covers, brochures, illuminations, postcards, depictions of Hacivat-Karagöz characters (traditional Turkish shadow puppetry), and national lottery tickets are just some of the materials in this collection (National Library of Turkey, 2019).

One of the major developments concerning the preservation of manuscripts in Turkey is the founding of the Manuscript Institution of Turkey in 2010. With the founding of this institute, manuscripts previously located in the collections of manuscript libraries affiliated with the Directorate General of Libraries and Publications and other libraries have been transferred to the institute. The institute is now in charge of 18 manuscript libraries, supervising their cataloguing, facsimiling, transcription, digitalization, preservation, restoration, and purchase. The manuscripts in the collections of libraries affiliated with the Institute, the National Library, and the Ministry of Culture and Tourism, plus some private libraries, are partially accessible at <http://yazmalar.gov.tr/>. By August 2019, the number of open access bibliographic records was 208,560, and the number of visual items, 80,563 (Türkiye Yazma Eserler Kurumu Başkanlığı, 2019).

Cultural heritage institutions other than libraries affiliated with the Manuscript Institution of Turkey and the Ministry of Culture and Tourism, also hold numerous manuscripts of value in their collections. Boğaziçi Kandilli Observatory Library, Ankara University DTCF Library, İstanbul University Library of Rare Books, Topkapı Palace Museum Manuscript Library, Religious Affairs Administration, Turkish Historical Institution Library, Parliamentary Administration of Library and Archive Services, Sadberk Hanım Museum, and Sakıp Sabancı Museum are but a few of those heritage institutions.

Other than the libraries and archives that hold items such as manuscripts and rare books, there are other types of libraries, the missions and services of which relate to cultural heritage, such as Literary Museum Libraries. There are 7 Literary Museum Libraries affiliated with the Ministry of Culture and Tourism (Adana - Karacaoğlan, Ankara- Mehmet Akif Ersoy, Diyarbakır - Ahmed Arif, Erzurum - Erzurumlu Emrah, İstanbul - Ahmet Hamdi Tanpınar, Kütahya - Evliya Çelebi ve Trabzon - Muhibbi Edebiyat Müze Kütüphanesi). Literary Museum Libraries are founded in independent buildings that reflect the cultural texture and architectural characteristics of the city in which they are located. Their private collections consist of the authors' works, and works on the authors, in addition to books about the philosophy of museum librarianship, facsimiles of manuscripts created in that specific region, and authors' ephemera (pens, typewriters, etc.) (T.C. Kültür ve Turizm Bakanlığı, 2019).

City Archives and City Museums also play a role in preserving and transmitting cultural heritage. One of the best models for such institutions is the *Ahmet Piriştina City Archive and Museum* (APİKAM), founded in 2004 by the İzmir Metropolitan Municipality, is fully equipped with an archive, a museum, and activities such as urban culture education and thematic exhibitions. Its mission is to collect and organize any material that reflects the city's history and culture and to make it available for researchers. The archival materials (documents, notebooks, albums, books, periodicals, manuscripts and rare books) in their holdings are open access (İBB Ahmet Piriştina, 2019).

It is also necessary to note the cultural heritage activities of research centers and institutes such as *Koç University, Research Center for Anatolian Civilizations (ANAMED)*; *Koç University, Vehbi Koç Ankara Studies Research Center (VEKAM)*, British Institute at Ankara (BIAA). Carrying out crucial activities such as sponsoring projects, research and training, and holding exhibitions and workshops, these centers all

have libraries or archives which consist of special collections of uncommon items. Some of their collections (photographs, slides, maps, etc.) are digitized and are open access online.

It is common procedure that the Ministry of Culture and Tourism and the Information Management departments at universities cooperate with libraries, archives, and museums on cultural heritage research, projects, and other related activities. A selection of cultural heritage related activities carried out in Turkey by cultural memory institutions (especially libraries and archives) or their partners (university departments, the Ministry of Culture and Tourism) are listed below:

Presidency State Archives Administration: Approximately 60 million documents have been digitized. Nearly 40 million of these are open access online. In addition, the restoration and conservation of materials such as documents, notebooks, orders, warrants and maps are being carried out. One of the administration's services that can be evaluated in the context of cultural heritage are exhibitions inside and outside of the country that display archival materials such as documents, notebooks, orders, warrants, and maps. In 2018, 35 such exhibitions were held. There are also publications on various topics, introducing similar archival materials. Some digitized documents are organized as virtual exhibitions on the web, such as *Osmanlı Arşivinde Ebrular*. However, information beyond the thematic topic is not available (T.C. Cumhurbaşkanlığı Devlet Arşivleri, 2019).

Religious Affairs Administration Central Library: The library holds a rich collection of manuscripts on topics such as religion, literature, history, medicine, and astronomy as they relate to Islamic Civilization. The entire collection is digitized and open access (Diyanet İşleri Başkanlığı, 2019).

Parliamentary Administration of Library and Archive Services: The manuscript, rare book, and newspaper holdings of the library are being digitized.

İstanbul Metropolitan Municipality Atatürk Library: The library holds 4,760 volumes of manuscript, more than 12,500 postcards, more than 10,000 maps, and 704 albums that contain 65,000 visual items. For the preservation of heritage in print, items such as maps, postcards, and manuscripts are digitized respecting copyrights, and metadata is created in accordance with the Dublin Core standards. 6.5 million of digitized pages of rare books are open access (İstanbul Büyükşehir Belediyesi, 2019). The library also holds exhibitions and similar activities, such as *Karagöz*, a cultural heritage topic.

Turkish Religious Foundation Islamic Research Center: The Center contains collections such as Kemal Batanay Musical Archive and Cüneyd Kosal Turkish Musical Archive. Considered to be Turkey's richest musical score archive, due to the 150,000 scores it holds, the Cüneyd Kosal collection is digitized and is open access (ISAM, 2019).

Ankara University Library Faculty of Languages History and Geography: The inclusive renovation started at the beginning of the 2000s to create bibliographic identifications of the library's manuscripts, which resulted in the publication of the two-volume 'Ankara University Faculty of Languages, History, and Geography Manuscript Catalogue' in 2006 and 2008. The cataloguing is considered to be exemplary in terms of its qualifying information, and bibliographic control (Odabaş, 2017).

Sakıp Sabancı Museum (SSM): This museum carried out a pioneering project (the first one in Turkey) in cooperation with Sabancı University Information Center called *digitalSSM*, the result of which was the transfer of all the collections and archives of the museum into a digital medium. All the information on the museum's Book Art and Calligraphy Collection, Painting Collection, Abidin Dino Archive and Emirgan Archive, along with over 77,000 high resolution visual items are available at the digitalSSM website. digitalSSM started providing services on its physical premises in 2019. In addition to the exhibitions and other activities held since the founding of SSM, the permanent collections such as the Book Art and Calligraphy, and Painting collections have been displayed on the premises where researchers can benefit from the museum archives (Sakıp Sabancı Museum, 2019).

Public Theaters Refik Ahmet Sevengil Theater Library: One of its kind in Turkey, this library specializes in theatre arts. In addition to books and periodicals, its collection also includes the texts of approximately 4,000 plays. In terms of cultural heritage one of its outstanding services is that it provides access to all the plays staged by the Public Theaters since 1946, including additional information such as posters, leaflets, photographs, reviews, videos, records/materials of special effects and music,

creative crew, actors and actresses, and technical crew through its *Digital Play Information System*. The full videos of the plays, however, are not available online (Devlet Tiyatroları, 2019).

TRT (Turkish Radio Television Corporation) Archive: The Archive holds copies of radio broadcasts beginning in 1927, and also a major part of television broadcasts beginning in 1968. It would not be incorrect to define TRT Archive as Turkey's audio-visual memory. The films made by TRT, and the visuals that date earlier than TRT's foundation and provided from state-owned sources are online open access on the website <https://www.trtarsiv.com/>, free of charge.

MUES (Museum National Inventory System): This national database is designed to keep the records of all items at the museums affiliated with the Directorate General of Cultural Assets and Museums. This project, started in 2014, is still under construction, and is not yet able to provide services for researchers. The goal is to identify all of the museum's holdings according to defined standards (item type, period, material, technique, etc.) and transfer it to the inventory system.

Koç University Vehbi Koç Ankara Studies Research Center (VEKAM): With a rich library and archival collection that consists of various information sources, VEKAM functions as a civic memory of the capital of Ankara. For example, rare etchings, photography and postcards, maps, plans, and detailed partial maps constitute a special place in the archive. VEKAM serves cultural heritage by having digitized its rich collection, the items of which can stand alone as heritage gems, by sponsoring numerous heritage-related projects (e.g. LoCloud) and research, and by organizing unconventional activities (e.g. Cultural Heritage Studies for Children Workshop) (VEKAM, 2019).

Koç University Research Center for Anatolian Civilizations (ANAMED): The center aims to develop and facilitate research projects that are dedicated to the history, art, architecture, and archaeology of Anatolian civilizations in Turkey through exhibitions, symposiums, fellowships, and publications. ANAMED Library is a branch of Koç University's Suna Kiraç Library. The library contains collections related to history, art, archaeology, architecture and civilizations in Anatolia, in support of the research interests of its fellows, who by their research projects at ANAMED, deal with the past two and a half millennia, in order to investigate and preserve Turkey's cultural heritage. Some of the collections, such as the Hatice Gonnet-Bağana Collection, found under the ANAMED special collections, have been digitized by the Suna Kiraç Library and turned into open access (ANAMED, 2019).

The efforts and services of the libraries in Turkey with regard to cultural heritage are usually limited to the digitization of materials such as manuscripts and rare books. This approach comes from the concept of the "preservation" or "protection" of cultural assets. To give an example, there are seven items that are listed in the UNESCO Memory of the World Register. The first item to be registered is the collection of *Kandilli Observatory and Earthquake Research Institute Manuscripts*. This rare collection is kept and administered at a different location than the library. Since the collection is not digitized, only physical access is possible. Collection such as *Evlîya Çelebi's "Book of Travels," The Piri Reis World Map of 1513, Compendium of the Turkic Dialects*, which are recognized as parts of World Heritage from Turkey, are digitized but open access to researchers only after a special permission process. Unfortunately, the visibility and accessibility of such sources with cultural and historical significance are limited.

Standards are not always met on issues such as digitization, the preservation of the item's digital entirety, sustainability, and the metadata standards necessary for their identification. Ambiguity about copyright law stands out as another serious problem. There are also deficiencies in inter-institutional cooperation. Joint services and activities are very few, both among different libraries, and between libraries, and archives and museums. Archives and museums are two vital partners with which libraries should develop joint services and activities.

CONCLUSION

Turkey is in an advantageous position with its rich cultural heritage, however it is not possible to argue that the policies and efforts to preserve, publicize, and promote this heritage, and to transfer it to younger generations are sufficient.

The general understanding of cultural heritage used to center on "physical preservation." The same approach continues in the present with a focus on digitization. Innovative and creative policies and services are needed for the *awareness, visibility and accessibility* of cultural heritage. For instance, it is

not enough for institutions to publicize their services only through their website. They should be accessible via search engines like google, or visible and accessible on social media sites, and they should participate in heritage-related projects such as *Europeana*, or *Google Cultural Institute*. A heightened awareness of the personnel working in memory institutions is vital for the services to be creatively developed.

Policies should urge the identification of standards regarding digitization, digital preservation and sustainability. Institutions should make use of innovative attitudes, such as developing computer and communication technologies, and digital humanities. It is also necessary to standardize the use of metadata systems for the purpose of inter-operability. Ambiguities in the law concerning the regulation of cultural heritage, especially regarding copyright, should be eliminated. Libraries should cooperate with other libraries, as well as other memory institutions, such as museums and archives, and also with ministries and UNESCO to better their services, their management of sources, and the provision of public access.

REFERENCES

- Akça, S. (2017). *Increasing the visibility and usage of cultural heritage objects with the digital humanities approach: A proposal of a conceptual model for Turkey* (Unpublished PhD Thesis). Hacettepe University, Ankara.
- ANAMED: Koç University Research Center for Anatolian Civilizations. (2019). Available at: <https://anamed.ku.edu.tr/en/>
- Anayasa Mahkemesi Kararları. (1989, January 8). *T.R. Official Gazette* (Number: 20043). Available at: <http://www.resmigazete.gov.tr/arsiv/20043.pdf>
- Ankara Üniversitesi. (2019). *Mühendislik Fakültesi Bilgisayar Mühendisliği Bölümü*. Available at: <http://comp.eng.ankara.edu.tr/arastirma/laboratuvarlar/saat/215e156/>
- BIAA. (2019a). *Aspendos cultural heritage management project*. Available at: <https://biaa.ac.uk/research/item/name/cultural-heritage-management-projects>.
- BIAA. (2019b). *Safeguarding Archaeological Assets of Turkey (SARAT)*. Available at: <https://biaa.ac.uk/research/item/name/sarat>
- Bonini Baraldi, S., Shoup, D. & Zan, L. (2013). Understanding cultural heritage in Turkey: Institutional context and organisational issues. *International Journal of Heritage Studies*, 19(7), 728-748. doi:10.1080/13527258.2012.700283
- Civil Society Sector. (2019). *EU-Turkey Anatolian Archaeology and Cultural Heritage Institute*. Available at: <http://siviltoplumsektoru.org/program/ab-turkiye-anadolu-arkeolojisi-ve-kulturel-miras-enstitusu/>
- CORDIS. (2019a). *International Network for a Digital Cultural Heritage e-Infrastructure*. Available at: <https://cordis.europa.eu/project/rcn/95210/reporting/en>
- CORDIS. (2019b). *Renewal, Innovation and Change: Heritage and European Society*. Available at: <https://cordis.europa.eu/project/rcn/111390/reporting/en>
- Devlet Tiyatroları Refik Ahmet Sevengil Tiyatro Kütüphanesi. (2019). Available at: <http://31.145.174.244:8088/userPandtgm/kutuphane.php>
- Diyanet İşleri Başkanlığı Kütüphanesi. (2019). Available at: <https://kutuphane.diyanet.gov.tr/>
- Eski Eserler Kanunu. (1973, May 6). *T.R. Official Gazette* (Number: 14527). Available at: <https://www.resmigazete.gov.tr/arsiv/14527.pdf>
- Human, H. (2015). Democratising world heritage: The policies and practices of community involvement in Turkey. *Journal of Social Archaeology*, 15(2), 160-183. Available at: <https://journals.sagepub.com/doi/pdf/10.1177/1469605314566557>
- İBB Ahmet Piriştina İzmir Kent Arşivi & Müzesi. (2019). Available at: <https://www.apikam.org.tr/>
- ICCROM. (2019). *What is ICCROM*. Available at: <https://www.iccrom.org/about/overview/what-iccrom>
- ICOM Turkey. (2019). *ICOM Tüzüğü*. Available at: <https://icomturkey.org/tr/icom-t%C3%BCz%C3%BC%C4%9F%C3%BC>
- ICOMOS. (2019). *ICOMOS*. Available at: <http://www.icomos.org.tr/?Sayfa=Icomos&dil=tr>.
- İSAM. (2019). Available at: <http://www.isam.org.tr/>
- İstanbul Büyükşehir Belediyesi Atatürk Kitaplığı. (2019). Available at: <http://ataturkkitapligi.ibb.gov.tr/ataturkkitapligi/index.php?dil=en>
- Kültür ve Tabiat Varlıklarını Koruma Kanunu. (1983, July 23). *T.R. Official Gazette* (Number: 18113). Available at: <http://www.resmigazete.gov.tr/arsiv/18113.pdf>
- Kültür ve Tabiat Varlıklarını Koruma Kanununun Bazı Maddelerinin Değiştirilmesi ve Bu Kanuna Bazı Maddeler Eklenmesi Hakkında Kanun. (1987, June 24). *T.R. Official Gazette* (Number: 19497). Available at: <https://www.resmigazete.gov.tr/arsiv/19497.pdf>

- Kültür ve Tabiat Varlıklarını Koruma Kanunu ile Çeşitli Kanunlarda Değişiklik Yapılması Hakkında Kanun. (2004, July 14). *T.R. Official Gazette* (Number: 5226). Available at: <https://www.resmigazete.gov.tr/eskiler/2004/07/20040727.htm#1>
- LoCloud. (2019). Available at: <https://locloud.eu/>
- Natioanal Library of Turkey. (2019). *Dijital kütüphane*. Available at: <http://www.mkutup.gov.tr/tr/Sayfalar/Koleksiyonumuz/Dijital-Kutuphane.aspx>
- Odabaş, H. (2017). Competencies and new approaches in management of manuscripts and rare books. Presentation in: *The International Symposium on Management of Cultural Heritage and Libraries in Local Governments, 6-8 September 2017, Bursa, Turkey*.
- Oğuz, M. Ö. (2009). Somut olmayan kültürel miras ve kültürel ifade çeşitliliği. *Millî Folklor*, 21(82), 6-12.
- Oğuz, M. Ö. (2013a). Terim olarak somut olmayan kültürel miras. *Millî Folklor*, 25(100), 5-13.
- Oğuz, M. Ö. (2013b). Fieldwork and international cooperation projects. In: Oğuz, M. Ö., Özünel, E. Ö. & Teke, S. G. (eds.). *The future of intangible cultural heritage: Turkey's experience* (pp. 13-18). Ankara: Turkish National Commission for UNESCO.
- Ortakçı, A. (2017). Beş yıllık kalkınma planlarında kültür ve kültürün korunması üzerine bir inceleme. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 10(2), 1725-1758.
- Sakıp Sabancı Museum. (2019). Available at: <https://www.sakipsabancimuzesi.org/en>
- T.C. Cumhurbaşkanlığı Devlet Arşivleri Başkanlığı. (2019). Available at: <https://www.devletarsivleri.gov.tr/>
- T.C. Kültür ve Turizm Bakanlığı: Ahmet Hamdi Tanpınar Edebiyat Müze Kütüphanesi. (2019). *Edebiyat müze kütüphaneleri*. Available at: <http://ahtem.kutuphane.gov.tr/TR-201954/edebiyat-muze-kutuphaneleri.html>
- Tonta, Y. (2015). The future of cultural heritage. Presentation in: *1st International Conference DIM'2015: The Commonwealth and its People: Diasporas, Identities, Memories, 24-26 June 2015, Valletta, Malta*. Available at: <http://yunus.hacettepe.edu.tr/~tonta/yayinlar/tonta-future-of-cultural-heritage-20-january-2015.pdf>
- Turhan Tuna, S. & Saral, E. (2018). Somut olmayan kültürel mirasın korunması bağlamında Türkiye'de eğitim alanında yapılan bilimsel çalışmalar üzerine bir bibliyografya denemesi. *MSKU Journal of Education*, 5(1), 68-78.
- Türkiye Cumhuriyeti Anayasası (Constitution of the Republic of Turkey). (1982). *T.R. Official Gazette* (Number: 2709). Available at: <https://www.mevzuat.gov.tr/MevzuatMetin/1.5.2709.pdf>
- Türkiye Yazma Eserler Kurumu Başkanlığı. (2019). Available at: <http://yazmalar.gov.tr/>
- UNESCO. (1972). *Convention concerning the protection of the world cultural and natural heritage*. Available at: <http://whc.unesco.org/archive/convention-en.pdf>.
- UNESCO. (2009). *Türkiye'nin dünya miras alanları: Koruma ve yönetimde güncel durum*. Available at: http://www.unesco.org.tr/Content_Files/Content/Yayinlar/dma.pdf
- UNESCO. (2019a). *Text of the convention for the safeguarding of the intangible cultural heritage*. Available at: <https://ich.unesco.org/en/convention>
- UNESCO. (2019b). *UNESCO Türkiye Millî Komisyonu*. Available at: <http://www.unesco.org.tr/Pages/112/135/UNESCO-T%C3%BCrkiye-Mill%C3%AE-Komisyonu%27nun-Yap%C4%B1s%C4%B1>
- UNESCO. (2019c). *Somut olmayan kültürel miras listelerinde Türkiye*. Available at: <http://www.unesco.org.tr/Pages/126/19>
- Ünsal, D. & Pulhan, G. (2012). Türkiye'de kültürel mirasın anlamı ve yönetimi. In: A. Aksoy and D. Ünsal (eds.). *Kültürel miras yönetimi*. Eskişehir: Anadolu University.
- Ürün, Ş. (2016). *Convention concerning the protection of the world cultural and natural heritage: Application, nomination and evaluation processes of natural heritage site* (Unpublished Thesis). Turkish National Commission for UNESCO, Ankara.
- VEKAM. (2019). Available at: <https://vekam.ku.edu.tr/en/vekam>
- Yakıcı, A. (2013). The activities carried out at scientific organizations for the safeguarding of intangible cultural heritage. In: Oğuz, M. Ö., Özünel, E. Ö. & Teke, S. G. (eds.). *The future of intangible cultural heritage: Turkey's experience* (pp. 31-41). Ankara: Turkish National Commission for UNESCO
- Yılmaz, B., Külcü, Ö., Ünal, Y. & Çakmak, T. (2013). Distance Education on Digitization: Evaluation of an Application in Turkey. *Aslib Proceedings*, 65(4), 336-357.