



STRENGTHENING LIBRARIES EMERGENCY PREPAREDNESS AND RESPONSE

WLIC IFLA SATELLITE MEETING



IFLA Section
Preservation and
Conservation



17-18 AUGUST 2023



OBA CONGRESS AMSTERDAM

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PROGRAM

17 August 2023

- 9.00 Welcoming and Opening session
- Session 1 Preparedness, Methodology, Drafting a plan**
- 9.30 **Survey on Emergency preparedness in French Libraries**
Isabelle Duquenne Collège Bibliothèques, Documentation, Livre et Lecture publique
- 9.50 **« You should be prepared for anything » - National Library of Finland's process to update and complement preparedness plan**
Liisa Savolainen, National Library of Finland
- 10.10 **The National and University Library of Slovenia Protection and Rescue Plan**
Alenka Kavčič-Čolić, National and University Library of Slovenia
- 10.30 **Evolution of international standards and guidelines related to Emergency Preparedness**
Céline Allain, National Library of France
- 10.50 to 11.10 **Pause**
- Session 2 Preparedness, Risk mitigation, Training**
- 11.10 **Practicing Your Plan Before the Disaster Strikes**
Shelby Strommer, University of Illinois, USA
- 11.30 **Reducing the Risk: Webinar Approach to Disaster Preparedness Training**
Danielle J. Fraser, National Library and Information System Authority of Trinidad and Tobago (NALIS)
- 11.50 **SOS Heritage project**
Francesca Peyron, Massimo Cruciotti Mazzini Lab Srl Benefit, Italy
- 12.10 to 14.00 **Lunch break**

Session 3 Preparedness, Risk mitigation

- 14.00** **Use and abuse of the term Risk in volcanic events: the case study of Italian peninsula**
Carnevale Gabriele, University of Palermo, Department of Earth and Marine Science, Italy
- 14.30** **A practical method to protect water damaged documents**
Dr.Udaya Cabral, National Library of Sri Lanka
- 14.50** **Adapting High Density Collections Storage for Sustainable Energy Usage**
Jacob Nadal, Library of Congress, USA
- 15.30** **La gestion d'un bien culturel en période de crise: cas du Tombeau des Askia à Gao au Mali**
Mamadou Samake, Askia Tomb, Gao, Blue Shield, Mali
- 16.00 To 17.00** **Discussion**

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Session 4 Responding to and rebuilding after an emergency

- 9.00** **Safeguarding documentary heritage from disasters, conflicts and climate change**
Aparna Tandon, ICCROM
- 9.30** **The Role of Ukrainian Public Libraries in Preserving Cultural Heritage during the Wartime**
Ulia Gosart, Assistant Professor at School, San Jose State University, USA
Luidmila Diadyk, Library Director, Cherkasy Regional Library named after Taras Shevchenko, Cherkasy Ukraine
- 9.50** **Facing the flood: Blue Shield Belgium's recent experiences and emergency responsiveness**
Anne-Sophie Hanse and Vanessa Boschloos, Blue Shield, Belgium
- 10.15 to 10.30** ***Pause***

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| Session 5 | Responding to and rebuilding after an emergency |
| 10.30 | Safeguarding written heritage in conflict zones and post-conflict situations Gala-Alexa Amagat, ALIPH, Suisse |
| 10.50 | Against All Odds: The Inspiring Resilience of Dubrovnik Research Library in the Face of Continued Challenges Jelena Bogdanović, Library of the Faculty of Civil Engineering University of Zagreb Dragica Krstić, Croatia |
| 11.15 | The role of art after a disaster - When cultural heritage can rebuild communities Antonella Muzi, University of L'Aquila, Italy |
| 11.40 To 12.00 | Workshop on Risk assessment methodology - A web and mobile app to collect damage & risk data developed by ICCROM Jui Ambui, ICCROM |
| 12.00 To 12.30 | Discussion |

Session 1 : Preparedness, Methodology, Drafting a plan

9.30 Survey on Emergency preparedness in French Libraries

Isabelle Duquenne has been Inspector General, member of the "Libraries, documentation, books and public reading" college since November 2015, first within the General Inspectorate of Libraries and then the General Inspectorate for Education, Sport and research (IGESR). She oversaw several reports on library heritage. Previously, she directed the public Library of Lille (2009 to 2015) and held various positions in the documentation services of the universities of Lille 1 and Lille 2.

The National Library of France, territorial and academic libraries preserve the essential of the prestigious French written and graphic heritage: 70 million old, rare or precious documents scattered in more than 600 institutions. The fire that occurred at Notre-Dame de Paris demonstrated the importance of anticipation in terms of heritage preservation. The increased attention paid to heritage values in contemporary society, the increase in risks of all kinds and the fragility of "paper cathedrals" make the protection of written heritage one of the major challenges to be met. The approach is twofold: reduce vulnerabilities and set up evacuation and response protocols in the event of a disaster. The Ministries of Culture and of Higher Education and Research requested an assessment of the progress of the development and implementation of emergency plans in French heritage libraries.

The national survey highlighted the high degree of unpreparedness in the face of risks of irretrievable loss of unique or exceptional documents. Despite undeniable progress, the development of fully operational emergency plans remains below expectations, and comes up against a variety of internal or external obstacles. Thus, nearly 80% of libraries conserving heritage collections do not yet have an emergency plan.

The objective of all heritage library having an Emergency Plan has become a national priority. By summer 2023, a directive will provide a national orientation and set up a strategic framework around this obligation. As part of an action plan steered by the French Ministry of Culture's Department of Books and Public Reading, with the support of the French Ministry of Higher Education and Research, all French libraries will have to have an Emergency Plan within the next four years. A first step will involve the 54 classified public libraries.

9.50 “You should be prepared for anything” - National Library of Finland’s process to update and complement preparedness plan

Liisa Savolainen is Deputy Director of the National Library of Finland, Chair of the IFLA National Libraries Standing Committee, Ex-Officio Member of the IFLA Advisory Committee on Cultural Heritage and a President of the Bibliotheca Baltica. She has over 30 years of experience on library sector, both in public and academic libraries, last 18 years at the National Library of Finland as Department Director and Deputy Director. As a member of leadership team her main duties are in strategy work, financial planning and organizational development. Her special interests are organizations, leadership and capacity building, but also historical and legal deposit collections.

As war between Ukraine and Russia started in February 2022, Finland’s President Sauli Niinistö advised public institutions, private businesses and citizens all together “to be prepared for anything”. People were advised to keep at home enough food and water, cash money, flash lamps etc. in case of emergency situations. Public institutions were advised to check their preparedness plans. At the National Library of Finland updating of preparedness plan started in March 2022 and this first round for updating was finished in March 2023.

In the presentation, there is a description of different aspects of risk management, starting from the security of estates, updating collection security - both physical and digital collections - and ending up to cyber security. During the updating process library made several categorizations 1) prioritization of collections 2) prioritization of operations 3) prioritization of software solutions and IT-systems. All this meant analyzing of the mutual dependence of different operations and IT-solutions. Challenging for the library is, that library is an infrastructure provider for all Finnish libraries and nearly all software is based on open source software and in-house development.

During the preparedness planning it was observed how complicated the library infrastructure is; one digital service can consist of dozens of different programs and collection circulation services are based on several software with different priorities. Depending on the emergency scenario, there may be different ways to solve the situation. So, in the same time, as you need to prepare for some unexpected situation, which you try to imagine beforehand, you should face the fact, that in the real situation realities may be totally different. Important is, that in the emergency situation there is in charge someone who is capable to make decisions and that the command chain is clear.

To outline different emergency scenarios, it’s important to keep the landscape simple. Going into too detailed scenarios, there is a risk to use too much time on irrelevant planning and so to say “lose your target”. Scenario work asks certain mindset; to be able to think at the same time abstract and practical, to understand dependencies between different operations and to have good imagination about what is important in certain emergency level.

Preparedness planning lead the National Library to several conclusions:

- 1) Better documentation of IT-solutions are needed
- 2) Documentation should be on such a level that any specialist can take care of the recovery of the system
- 3) No service/solution should be dependent of only one specialist
- 4) Discussions with outside service providers are needed for minimizing risks
- 5) Geographical decentralization - how much is enough?

10.10 “The National and University Library of Slovenia Protection and Rescue Plan”

Alenka Kavčič-Čolić has been working since 2001 with the National and University Library of Slovenia (NUK) in the field of research and development. At present, she is the Head of the Library Research Department. She is in charge of coordinating all NUK’s research activities. She has been involved in many European and national research projects co-financed by the European Commission’s programs eContent, eTEN, Culture, Creative Europe, and 7th European Framework Program, and Horizon.

Alenka Kavčič-Čolić has been involved in the activities of the International Federation Library Associations and Institutions since 2016. She has chaired the IT Section and the Preservation and Conservation Section. During 2012-2015 she was the Editor-in-Chief of the main Slovenian scientific library journal *Knjižnica*. Her main interests are focused on digital preservation activities, linked to all digitization processes and projects

In February 2023 a working group at the National and University Library of Slovenia (NUK) completed the first draft of the Protection and Rescue Plan. This document is the first disaster management plan at the library, dedicated to the protection of library materials. It takes into account the possible threats at NUK and its environment and is compatible with the existing municipal and national emergency plans. The Plan was prepared according to IFLA Principles for the Care and Handling of Library Materials, ISO standards on collection management, Slovenian Law on the protection of cultural heritage and fire safety law, as well as some disaster and emergency plans from European and North American libraries. The Protection and Rescue Plan considers disasters’ risk evaluation, prevention measures, preparedness, immediate response to disasters and damage removal. The risk evaluation is based on Michalski’s risk management approach to the preservation of cultural heritage. The Plan includes staff organization and response in case of different potential disasters like fires, earthquakes, flooding, and different threats by humans like cyber-attacks, vandalism, etc.

The preparation of the Protection and Rescue Plan required a detailed analysis of the situation at NUK. It has raised many open questions and problems which NUK should address as soon as possible in order to respond properly to all potential risks. At the same time, it was an opportunity to overview existing processes and potential scenarios in case of a potential disaster.

10.30 Evolution of international standards and guidelines related to emergency Preparedness

Céline Allain, is Coordinator of the Emergency Preparedness and Response Plan at the National Library of France where she prepares action plans to mitigate risks towards the BNF' collections in case of blackout, flood or fire. She initiated and coordinated the draft of ISO 21110 – Information and documentation Emergency Preparedness and Response and participated to the revision of several standards in the conservation field. She serves as secretary for IFLA Preservation and conservation section.

IFLA's *Manual on emergency preparedness and planning* was first drafted in 2006 with knowledge that “libraries and archives need to make every effort to prepare themselves for possible disasters”. In 2023, in a context of multiple conflicts and climate change, there are still few libraries, archives and museums with operational procedures to face disasters.

A standards-based approach to emergency preparedness enables libraries to benefit from the knowledge and experience of a wide range of best practices to draft their own plan and procedures. Standards are published documents based on accepted best practices. These create methods and requirements and provide a low-cost effective way for libraries to access and use the knowledge gained over time by institutions in different contexts. But there are also factors which inhibit their use as a preservation and conservation strategy. Standards can be intimidating to read and resource intensive to implement.

Standards are not meant to provide procedures ready to implement in any emergency situation. Nevertheless they are drafted to meet the needs of libraries in different contexts. The most recent standards and guidelines demonstrate adaptation efforts to make them more useable in libraries of all type and size around the world, providing with new tools to help them draft their own emergency policies and procedures in a preparedness phase.

Session 2 : Preparedness, Risk mitigation, Training

11.10 Practicing Your Plan before the Disaster Strikes

Shelby Strommer is the Collections Care Coordinator at the University of Illinois Library in the United States. She oversees the preventative preservation of the library's circulating collections including environmental monitoring, integrated pest management, and disaster planning. She's also a member of the National Heritage Responders, a U.S.-based volunteer group that responds to the needs of cultural heritage institutions during disasters. She holds a Master of Science in Information with a specialization in Preservation.

Libraries and archives recognize the critical need for disaster response plans but in order to be optimally effective, the institution's staff must be prepared to execute the plan in an emergency. A 2019 survey of United States cultural heritage institutions shows that only

40% have disaster plans, and only 24% have staff that is trained to enact those plans. This presentation will discuss the use of tabletop training exercises to prepare staff and strengthen disaster plans before an emergency occurs.

During tabletop exercises, members of the disaster team gather to talk through how they would respond in a hypothetical emergency scenario. Each institution can customize the scope and scale of their tabletop exercise based on emergencies they are likely to face, ranging from pipe bursts to natural disasters. These exercises provide a low-stakes environment in which the participants can talk through their roles and responsibilities in a disaster, allowing them to practice collaboration, communication, and decision-making.

In addition to helping familiarize staff with the disaster plan, these exercises also help identify gaps and challenges in the plan itself and can provide an excellent opportunity expand upon existing plans or revise outdated documents. These activities also serve as an opportunity to invite others from outside the library, including first responders or disaster recovery vendors, which provides additional perspectives and helps strengthen relationships with these important resources.

This session will discuss a recent tabletop disaster training activity at the University of Illinois Library which brought together staff from across departments, including Preservation, Circulation, Human Resources, Communications, Facilities, and Information Technology, to talk through the initial response and salvage during a water incident. The presentation will describe what we learned through the process, and provide tips for planning and conducting exercises at other institutions. After the University of Illinois training, staff reported feeling more confident in their ability to understand and enact the Library's disaster plan during an actual emergency.

After this session, participants will understand the elements and benefits of a successful tabletop disaster response exercise, and will have the necessary information to plan and lead an exercise at their own institution.

11.30 Reducing the Risk: Webinar Approach to Disaster Preparedness Training

Danielle Fraser, MSIS, CAS, has served as the Library Conservator and the Head of the Preservation and Conservation (PAC) Laboratory at the Heritage Library Division, NALIS, since 2009. She was a 2008 Conservation Fellow of the Library of Congress. She has been a member of the American Institute for Conservation (AIC) and Library Association of Trinidad and Tobago (LATT).

The National Library and Information System Authority of Trinidad and Tobago (NALIS), is the country's coordinator of all library and information services as mandated by the NALIS Act No. 18 of 1998. Libraries in communities, correctional institutions, secondary and primary schools, and government ministries are all administered by NALIS. One of NALIS' key responsibilities is to promote and preserve national heritage information. Though the National Library has a comprehensive collection of paper-based items and electronic audio-visual media, at the Heritage Library Division there's a particular emphasis on materials with national and Caribbean origin, focus and authorship. The Preservation and

Conservation (PAC) Laboratory is responsible for ensuring the overall longevity of library materials, with attention to the Heritage Library Division and its collections of historical importance. Training and outreach, which have been key activities of the PAC Laboratory since its official commissioning in 2013, includes lectures, tours, exhibitions, workshops and family heirloom preservation clinics.

During the pandemic, the PAC Laboratory launched its Preservation Webinar Series in 2021, with the aim to further empower viewers with information and techniques for caring for their collections. Following the success and positive feedback, the Series was renewed for another season with hopes of becoming an annual feature. During its first two seasons the Preservation Webinar Series explored a number of topics ranging from dealing with dust and particulates to COVID-19 and library and archival collections. However, one important topic was explored in multiple webinars - risk. These webinars covered methods of assessment, identification and reduction of risk. In this paper the author explores the approach and impact of NALIS' Preservation Webinar Series in raising awareness of this key element of disaster preparedness.

11.50 SOS Heritage project

Massimo Cruciotti has been working in the archival sector for over 25 years, and for 20 years as a consultant for BUCAP Spa (a document management services company), in the following business areas: corporate, finance, industry and public administration. Following the 2009 earthquake in L'Aquila, coping with the demand for specialist advice for retrieving and saving archival heritage and libraries, together with a team of entrepreneurs, he founded and was appointed Secretary of the no-profit Association SOS Archivi. In 2014, he is elected President of the Association, a position he still holds. Since 2013, he is a member of the Cultural Heritage Committee of the Italian National Biologists Order (ONB - Ordine Nazionale dei Biologi).

Since 2017 he is a member of the Blue Shield Expert Network.

The SOS HERITAGE (Agreement n. 101055573) project's objective is to build the heritage sector's capacity to face challenges and opportunities of digitalization, digital access and risk management of cultural heritage. The project has been designed to develop innovative tools to build the capacity of cultural heritage in assessing, managing and preventing risk caused by climate change, and by collecting best practices for promoting heritage and engaging audiences with digital technologies.

The SOS HERITAGE (SOS-H) project moves from the described context, to undertake concrete actions to build the capacity of the heritage sector in facing the challenges and opportunities of digitalization, digital access and risk management of tangible cultural heritage. The SOS-H project has been designed to develop and mainstream innovative tools to build the capacity of the cultural heritage sector in assessing, managing and preventing risk to their patrimony caused by natural disasters and climate change, and by collecting and experimenting best practices for promoting tangible cultural heritage and engaging audiences with digital technologies. This will be accomplished through three Specific Objectives: to share and test best practices of digital content creation and communication for successful stakeholders and community engagement; to develop and test a web app, designed to help professionals handle their risk assessment procedures and produce risk management plans in a quick, digital way; to build and test a training course on "Risk management of cultural heritage" targeted at owners, managers and professionals. The risk posed by climate change and the impact of COVID-19 on the digitalization processes of

cultural heritage have to be understood and addressed in their complexity, adopting a multi-level approach. With regards to the digitalization processes in cultural heritage, the bottom-up approach isn't just the most effective: we believe it's the only approach possible. Only the actual staff of a gallery, a museum, or an archive, working every day on protecting this heritage can have a sense of what their documents, artworks and manufactures mean what type of history they can tell, and how technologies can help to distribute that message to citizens. With regards to climate change, we believe that policies at the International, European and National levels need to change and adapt to the issues: however, a lot can be accomplished from bottom to top, equipping cultural heritage professionals of tomorrow with the necessary skills to handle this situation. Institutions, managers and owners, as well as the High Education Institutions and VET providers training and educating their future and present staff, need to be fully aware that skills and competencies needed to manage and promote tangible cultural heritage have to be integrated with risk assessment and prevention.

Session 3 : Preparedness, Risk mitigation

14.00 Use and abuse of the term Risk in volcanic events: the case study of Italian peninsula

Carnevale Gabriele Bachelor's degree in Geology, Master's degree in Volcanology, and PhD in Petrology of volcanic rocks. I am currently a researcher of Palermo University (Italy), with several collaborations with different Research Institutes and Universities. Passion for the scientific research and preservation of scientific and cultural heritage

During the last two decades several terms such as climate change, natural disaster, risk and hazard, are becoming common not only among the scientific community, but they are increasingly used also by political entities, reporters, and mass media.

The concept of risk is one of the most important scientific issues for those organisms involved in risk mitigation, and it is often used incorrectly or perceived in a reductive and superficial way. Risk (R) is a real mathematical equation given by the product of three different parameters: Threat (T, the frequency of potentially adverse events), Vulnerability (V, the probability of success of a threat against people, monuments, buildings), and Exposed Value (Ev, the estimated economic value of the resources exposed to the risk).

Among the various natural events, volcanic eruptions represent one of the most fascinating and at the same time dangerous phenomena, and Italian peninsula host some of the most important and studied volcanoes in the world such as Etna, Stromboli, and Vesuvius with Phlegraean fields. Volcanic eruptions become disasters when people's lives and livelihoods are destroyed. In order to prevent these natural disasters, the scientific community has created a monitoring network able to constantly monitor volcanic activity using advanced technological instruments and investigations: (i) seismic stations to monitor any earthquakes linked to volcanic dynamics, (ii) gps/radar to monitor any movements of the volcanic system, (iii) petrological and geochemical investigations of the composition of the gases and volcanic products that give us information on volcanic activity, are just some of the monitoring techniques that are carried out. One of the most dangerous consequences of an active explosive volcano activity is the formation of pyroclastic flows, a "river" of

fragmented volcanic material (tephra) and volcanic gases, which can reach speeds of over 500 km/h and temperatures of up to 700-800 °C. An emblematic example is the historical eruption of Vesuvius (79 A.D.) that destroyed Pompeii and Herculaneum population.

In Italy the important and hard work of continuous monitoring of volcanic systems is entrusted to the National Institute of Geophysics and Volcanology (INGV) with the main location in Rome and different subordinate locations throughout the peninsula (Palermo, Catania, Naples, Bologna, Pisa, Milan), and to the Etnean and Vesuvian Observatories. The INGV works closely with the Civil Protection, which has the even more difficult task of managing communications with local government and activating the Emergency Preparedness and Response Plan. The national plan provides maps with different zones identified with red (high risk) and yellow (moderate risk) colors. In case of “alarm” (the President of the Council of Ministers officially gives the state of alarm) the red zones are preventive evacuated in 24 hours. During the previous 48 hours (“pre-alarm” phase), hospitals, non-self-sufficient people, prisons, are also preventive evacuated, while all cultural heritages such as archives and libraries are transported to other regions.

14.30 A practical method to protect water damaged documents

Dr. Udaya Cabral is serving as an assistant director and head of the conservation and preservation division at the National Library of Sri Lanka. In addition, he has been serving as a director of the IFLA (PAC) Sri Lanka Centre since 2015. He has been engaging in different research projects on the conservation of palm leaf manuscripts and paper materials.

The documentary heritage that is systematically deposited in archival repositories may be accidentally damaged due to human error. The National Library of Sri Lanka (NLSL) had a renovation of its central air conditioning system in 2018, and suddenly water leakage occurred from its duct’s line to the newspaper collection deposited on the ground floor. The leakage had occurred from the night to the morning for 8 hours when the incident was detected by the maintenance team of NLSL. Fortunately, the newspapers were deposited on shelves, enclosing them in archival boxes.

The six newspaper boxes kept on the ground temporarily were more badly damaged than the three boxes deposited on the bottom of the shelves. The archival boxes served as a buffer to minimise the damage to the newspaper bundles. The newspaper bundles were classified according to their damage level: high, medium, and low. Drying documents within 72 hours to inhibit mould growth on the newspaper is the main strategy used by conservators to preserve wet documents. The natural air drying was impossible due to the continuous rain that fell during that period, which saturated the environment with moisture. During that time, the southwest monsoon rains were boosted. Even though natural air drying is preferred, the technical refining version of freeze drying or vacuum freeze drying is recommended as a conservation treatment for water-salvaged documents a newly designed air-drying tunnel was used due to a lack of technical instruments and because it was impossible to carry out the natural air-drying process in bad weather conditions.

The water-damaged newspaper bundles (each bundle contains 15 newspapers) were placed on an archival board, which was placed on the ground underneath a wooden bench (2 W x 2 H x 7 L feet). The four newspaper bundles were kept underneath the bench, with three

inches between them. Then, a wooden bench was covered by a 1 mm-thick black polyethylene sheet so that a tunnel could be opened from both ends. A 100-watt tungsten bulb was fixed 11/2 feet away from one opening. A table fan was fixed next to it. The newspaper bundles did not get direct light because black polythene was the outer layer of the tunnel. The archival board (4 mm) was laid on each newspaper bundle, and a 2 kg wooden brick was placed on it. The dry air generated as a result of the heat emitted from the tungsten bulb and blown by the table fan completely dried the most damaged newspaper bundles after 10 hours of operation. The medium-damaged newspaper took 7 hours, and the rest took 5 hours to dry completely. The newspaper bundles were flattened to avoid wrinkling under the weight placed on them.

This artificial air-drying tunnel can be used in small libraries and archives whenever necessary instruments or natural air drying are not practical. Over-dehydration damages the documents; therefore, careful monitoring is essential when operating the system.

15.00 **Adapting High Density Collections Storage for Sustainable Energy Usage**

Jacob Nadal is the Director for Preservation at the Library of Congress. He was appointed to the position in July 2017. He manages the work of the Directorate's four Divisions - Collections Management, Conservation, Preservation Services, and Research and Testing - and provides leadership for the Library's stewardship of the national collections. Before joining the Library of Congress, he was Executive Director of the Research Collections and Preservation Consortium (ReCAP) and he has served in leadership roles and developed preservation programs for the Brooklyn Historical Society, UCLA, New York Public Library, and Indiana University, where he received his Master's Degree in Library Science. His work has involved developing large-scale cooperative programs to share and preserve research materials, organizing preservation efforts in the aftermath of natural disaster or armed conflict, and developing professional capacity through his service as an educator and work on standards development for many aspects of physical and digital preservation.

This presentation describes a study in which facilities engineers and preservationists collaborated to evaluate the effects of energy saving measures on collections preservation factors inside of a high-density ("Harvard Style") collection storage facility. The study evaluated changes for seasonal relative humidity (RH) levels and changes to filtration to eliminate pollutants from the outside air. Facilities engineers, conservators, and preservation scientists evaluated the rate of change inside a storage enclosure compared to the ambient air, gradations of environmental measurements from top to bottom within the facility, the level of pollutant filtration, and the impact on preservation metrics. The study aimed to find energy-efficient operating solutions that also maintained an effective environment for the preservation of library collections.

The study produced meaningful results, showing that significant reductions in energy consumption—approximately 20% year over year—were possible without compromising the preservation environment. By adjusting seasonal humidity set-points and eliminating redundant filtration (a distinctive feature in the design of these facilities), the study showed a significant reduction in terms CO2 emissions, gallons of gasoline consumed, and the equivalent number of homes powered per year. These reductions were achieved while maintaining a Time-Weighted Preservation Index (TWPI) well in excess of 200, ensuring the

preservation of library materials for an extended period. Furthermore, the projected lifespan of materials exceeded the projected lifespan of the facility itself, ensuring that library collections would remain preserved for future generations.

The collaboration between facilities engineers and preservation staff was vital in identifying and implementing these energy-saving solutions while maintaining the preservation requirements. The facilities engineers provided their expertise in HVAC systems and energy efficiency, while preservation staff provided their knowledge of library materials and preservation requirements. The joint effort between these two groups resulted in practical solutions that balanced energy efficiency with the preservation of library collections. These solutions have the potential to be implemented in other high-density library storage facilities, resulting in long-term energy savings and improved preservation of cultural heritage materials while maintaining preservation requirements.

15.30 **Management of a cultural property in times of crisis: the case study of Tomb of Askia in Gao, Mali**

Mamadou Samake is currently head of the Cultural Mission of Gao, decentralized structure of the Ministry of Crafts, Culture, Hotel Industry and Tourism, responsible for the management of cultural property, the Tomb of Askia in Gao. M. Samake is a member of ICOMOS-Mali, vice-chairman of the ICOM-Mali committee and Chairman of the Blue-shield national Committee. He previously was in charge of digitization and conservation projects of manuscripts at the manuscripts Library in Djenne.

Entirely built of local materials (clay and wood), the Tomb of Askia is an example of the mud-building traditions. It combines several elements: a 17 meter high pyramidal tower, two mosque buildings, a necropolis and an open-air assembly zone. It was inscribed on the World Heritage List in 2004. The plastering of the Tomb of Askia is a cultural event of social cohesion and living together, organized by the local community for more than five centuries. It has made it possible to preserve and protect the property against degradation and climatic hazards.

The national Committee of the Blue Shield in Mali, in collaboration with the Tomb of Askia management committee and the Cultural Mission of Gao, organize guided tours on the site to raise awareness among young populations in order to strengthen their involvement in the protection of the Tomb of the Askia, classified in the national cultural heritage since 2003.

18 August 2023

Session 4: Responding to and rebuilding after an emergency

9.00 **Safeguarding documentary heritage from disasters, conflicts and climate change**

Aparna Tandon is Project Manager and Leader of the First Aid to Cultural Heritage in Times of Crisis Programme at ICCROM's Collections Unit. Aparna specialises in crisis response and disaster risk management for cultural heritage. As a Project Manager at ICCROM, she is coordinating its international capacity development programme on Disaster Risk Management and leading its flagship initiative on First Aid to Cultural Heritage in Times of Crisis.

The presentation will focus on Managing risks to documentary heritage in times of crisis, and highlight the methodology of safeguarding heritage during crises in the framework of ICCROM's flagship programme, First Aid and Resilience for Cultural Heritage in Times of Crisis (FAR). It will bring together experiences and share stories from the field projects implemented by ICCROM-FAR's network of cultural first aiders from various parts of the world, as well as showcase some tools and resources to protect heritage, as well as reduce risks to heritage from cascading and complex hazard events

An interactive workshop will be proposed for a select number of participants.

9.30 **The Role of Ukrainian Public Libraries in Preserving Cultural Heritage during the Wartime**

Ulia Gosart, Assistant Professor, School of Information, San Jose State University, San Jose, CA, USA. ulia.gosart@sjsu.edu;

Luidmila Diadyk, Director, Taras Shevchenko Regional Universal Scientific Library of Cherkasy, Cherkasy, Ukraine

This presentation focuses on the role of public libraries in preservation of cultural heritage of Ukraine during the ongoing, as of April 2023, war with Russia. It assesses the role and practices of libraries, and significance of digital technology in preserving textual components of heritage.

The presentation starts with Ulia Gosart's overview of the state of public libraries in Ukraine. She assesses the damage to the public libraries' by examining the system as a component of the country's cultural heritage infrastructure. She employs data reported by the Ministry of Culture and Information Policy of Ukraine. In December 2022 the Ministry reported that devastation of Ukrainian libraries constituted close to 40% of all damage to the country's cultural heritage infrastructure, including 155 fully-destroyed libraries. Ulia

also employs national surveys of public libraries conducted by the Yaroslav Mudryi National Library of Ukraine.

Next, Luidmila Diadyk presents on the work of public libraries in Cherkasy region, Central Ukraine. This system is consisted of 645 libraries of different types, depending on the territorial community they serve: village, city, district (rayon), or regional (oblast'). The system is coordinated by the Taras Shevchenko Regional Universal Scientific Library of Cherkasy that functions as a scientific and methodological center, and a book repository. Luidmila details the efforts of the Cherkasy library in preserving cultural heritage of the region by using digital technology. She highlights the library collaboration with Saving Ukrainian Heritage Online (SUCHO) initiative. SUCHO supported Cherkasy library among dozens of other Ukrainian libraries in their struggle to preserve culturally and historically significant content by equipping these libraries with digital technologies.

The presentation concludes by highlighting the significance of the role of libraries in preserving cultural heritage of Ukrainian nation during the war. While no definitive data exist as to whether libraries have been deliberately targeted in attacks, given the war's ethno-cultural character the destruction of some libraries have been intentional. Libraries' collections bear testament to Ukrainians' distinct history and cultural identity that present counterevidence to the logic deployed by the Russian government to legitimate its war against Ukraine.

9.50 **Facing the flood: Blue Shield Belgium's recent experiences and emergency responsiveness**

Vanessa Boschloos (Blue Shield Belgium & Ghent University, Belgium) is an archaeologist, art historian and provenance researcher specialized in the art, history and archaeology of Western Asia and northern Africa. She obtained her PhD at the Vrije Universiteit Brussel and worked as a researcher at the Royal Museums of Art and History in Brussels and the Metropolitan Museum of Art. Committed to the protection of endangered heritage, Vanessa Boschloos is currently assistant manager of the secretariat of the Belgian Committee of the Blue Shield. She is also guest professor at Ghent University

Anne-Sophie Hanse. Graduate in conservation and restoration of graphic heritage, she is the Collections manager of the Museum of Medecine at the Brussels University. She is also active as restorer of graphic art, notably at the Royal Library (KBR) and the Moretus Plantin University Library at the University of Namur. In this context, she followed a training in the restoration of spines and shoulders at the Strebel workshop in Switzerland with the support of the King Baudouin Foundation. Member of Blue Shield Belgium since 2014, she started as a volunteer during the floods in July 2021. She soon became in charge of coordinating the work of the volunteers so that the institutions affected would be spared of this task, and afterwards was responsible for ensuring the continuity of actions on the ground.

Floods caused by heavy rainfall affected the eastern part of Belgium in July 2021. As a non-profit organisation committed to the protection of endangered heritage, the Belgian committee of the Blue Shield offered support to various institutions and authorities, and actively participated in saving and salvaging movable and immovable heritage. We were a part of the Crisis Committee and coordinated the many volunteers who answered the calls to action. After an introduction on the mission and activities of Blue Shield Belgium, this contribution presents actions carried out during and after the disaster, including the networks that were created between institutions and the organisation of field schools.

Session 5 : Responding to and rebuilding after an emergency

10.30 Safeguarding written heritage in conflict zones and post-conflict situations

Gala-Alexa Amagat is a project manager at ALIPH, where she oversees projects related to (audio-visual, photographic, archaeological) archives and libraries. Prior to joining ALIPH, she was working in the field of cultural diplomacy and international museum cooperation.

The International alliance for the protection of heritage in conflict areas (ALIPH) is the main global fund exclusively dedicated to the protection and rehabilitation of cultural heritage in conflict zones and post-conflict situations. It was created in 2017 in response to the massive destruction of cultural heritage over the past two decades, predominantly in the Middle East and the Sahel. ALIPH is a public-private partnership, based in Geneva, assembling several countries and private donors. To date, ALIPH has supported nearly 200 projects in 31 countries on 4 continents. ALIPH finances concrete projects carried on the ground, hand-in-hand with local partners, authorities, and communities. Its mission places cultural heritage protection as a central contributor to peace and sustainable development. ALIPH's three areas of intervention are: preventive protection to limit risks of destruction; emergency measures to ensure the security of heritage; and post-conflict actions to enable local populations to enjoy their cultural heritage. ALIPH seeks to work directly with local professionals, based on the principle that funds should be allocated for capacity-building, in association with concrete projects.

To date, ALIPH has funded several projects focusing on the safeguarding of documentary heritage in Haiti, Iraq, Lebanon, Mali, Sudan and Ukraine.

10.50 Against All Odds: The Inspiring Resilience of Dubrovnik Research Library in the Face of Continued Challenges

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The Dubrovnik Research Library, which is an organizational unit of an independent cultural institution, Dubrovnik Libraries, was established in 1936 and started operating in 1941 at

the Duke's Palace. Over time, the library collections, consisting of approximately half a million units, including more than 30 000 units of the cultural heritage of the Republic of Croatia that are located in the collections of incunabulas, manuscripts, correspondence, old and rare books from the nobles of the Dubrovnik Republic and their private libraries, as well as collections from the former library of the Society of Jesus "Collegium Ragusinum" and other library holdings that belong to the national cultural heritage, have been relocated multiple times.

Currently, the library operates at two locations: baroque palace Bassegli-Caboga in the historical core of the city of Dubrovnik and Stjepović-Skočibuha summer house on Boninova. The library is faced with a permanent problem of inadequate space, particularly at the summer house, which has now become critical. This historic complex, erected in the late 16th century, has experienced several instances of damage and reconstruction throughout its existence. Significantly, the structure suffered severe damage due to earthquakes in 1979 and 1996, and artillery bombardment during the Homeland War (1991-1995) in June 1992.

Dubrovnik's history allows us to identify the primary risks that should be considered when preparing a disaster management plan for the World Heritage site. The risks from the past include earthquakes, fire caused by the earthquake, floods, and armed attacks. The entire historic city is vulnerable to damage from weather and climate-related events (aging and weathering processes of building materials).

Preservation of library collections becomes a particularly challenging task when the collections are housed in historic buildings with inadequate storage space. In such instances, the conservation of heritage collections pertains to both the library materials and the buildings themselves. The authors emphasize the importance of documenting heritage assets, their significant attributes, and the history of disaster response for appropriate planning and risk reduction.

This paper highlights how the Dubrovnik Research Library has withstood crises and continuously faces challenges in preserving and conserving library materials.

11.15 The role of art after a disaster - When cultural heritage can rebuild communities

Antonella Muzi is Professor of Didactics of Art at University of L'Aquila and curator of museum educational projects. Her research fields range from museology to museum education and the enhancement of cultural heritage. PhD in Art History, she has been Professor of Museum Education for 5 years at Sapienza, University of Rome. She is among the Experts of the Masters: "Scientific tools to support the knowledge and protection of cultural heritage", "Experts in cultural heritage evaluation and protection activities", "HERITAGE CULTURE" of the Roma Tre University. She was senior heritage educator of the MAXXI Museum from 2005 to 2015. She was scientific manager of the educational project of the exhibition "Da io a noi" at the Quirinale in Rome and of the exhibition "KRONOS e KAIROS" at the Colosseum, both curated by the Italian Ministry of Culture.

In 2009 an earthquake destroyed L'Aquila, in Italy. With the destruction of the practical and symbolic life of an entire community the Associazione Amici dei Musei d'Abruzzo wondered how cultural heritage could return to play a role in the reactivation of meaningful cultural processes and re-create a sense of identity and participation in the community. We came up with "RE_PLACE", a project with which we bring contemporary art into the historic center of the destroyed city, through educational paths of shared work between community and artists.

In the first edition held in 2010 we commissioned the artist Mario Airò, and the project concept was first presented to the people in the tent cities, where citizens were living after the earthquake, and to the students of the Academy of Fine Arts of L'Aquila. The methodology used for creation of the artwork was to carry out weekly shared planning meetings, inspections, interviews, and brainstorming sessions. The artist and community closely collaborated: the community with its experience, memories, desires and the artist with his skills and imagination.

A year later we worked on the second edition with four artists. The goal was to reconstruct the sense of belonging to a city that was no longer inhabited. We decided to involve the largest secondary school in the city which had started to function again. The methodology used was cooperative learning between students, artists, teachers, parents of students, creating paths of education and identifying locations that were meaningful. This time there were other contributors that entered the project: The National Fire Brigade which helped artists install their artworks. During the entire duration of the exhibition young students played the role of mediators for the public and explained the meaning of the artworks.

In the third edition, secondary school students were again involved, the aim was to stimulate the spirit of citizenship and encourage participation in the reconstruction process. Working with Studio Annunziata & Terzi five lighting projects were designed for the largest city garden: the Parco del Sole annex to the ancient Basilica of Santa Maria di Collemaggio.

In the fourth edition the great artist Michelangelo Pistoletto gave a stunning performance called "Il Terzo Paradiso". There was a collective performance that became a permanent installation in the square in front of the auditorium built by Renzo Piano after the earthquake. During the performance hundreds of citizens came together to unite in a circle and then colored the ground where they stood, symbolic of the "Terzo Paradiso". Representative of life, energy, commitment and participation for a more just and ethical society: and this has become a wish for the reconstruction of the city.

In 2015, the fifth edition took the form of a competition for young artists who were called to realize artworks sitespecific in the city. The committee selected seven artists who worked in the city and offered creative workshops to all the inhabitants and then installed their site-specific artworks. In summary, the artworks created by the artists were manifestations of dreams for the future, feelings, reconstruction, love for the city and its citizens.

The project had as strengths:

- Strengthening reinforcement of the spirit of belonging and the sense of citizenship
- Community involvement
- Discovery of the values disseminated by contemporary art

Among the weaknesses it is necessary to point out:

- Logistical and organizational difficulties due to the city's reconstruction
- Financial difficulties
- Impossibility of evaluation learning

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