

Editorial: The role of heritage preservation in peacebuilding: an interview with Maria Luisa Russo



Dr Maria Luisa Russo, an academic and experienced book conservator, serves as a coordinator/research associate at the University of Hamburg's Centre for the Study of Manuscript Cultures [1]. With over two decades of experience in project design and oversight, she is an active member of the Blue Shield International [2] and an internationally recognized expert in protecting and conserving libraries and archives in conflict and post-conflict zones.

Dr Russo's professional and academic efforts are focused on two main areas: preserving written cultural heritage (like ancient manuscripts and documents) and sharing knowledge related to this field. She applies these efforts both in the locations where the

cultural heritage project is based and in her home country of Italy, specifically through her lectures at the University of Turin.

Maria Luisa Russo led a significant United Nations-backed initiative focused on training young individuals in the preservation, cataloging and digitization of the Timbuktu manuscripts [3]. These African manuscripts, written in Arabic script and recognized by UNESCO as World Cultural Heritage, were impacted by the 2012 jihadist invasion which deprived the city of them. They cover a broad spectrum of topics, from Islamic theology and jurisprudence to philosophy, astronomy, medicine, mathematics, history, art and geography, showcasing the rich cultural legacy of the Mali and Songhai empires.

Digitization is recognized as an essential tool for access and a "protective shield" for heritage at risk, as it allows for the preservation of content that would otherwise be irretrievably lost. However, Russo highlights the limitations of digitization, emphasizing that it cannot replicate the original physical object, and firmly insists on the importance of physical conservation.

Q1. Dr Russo, your work in digitizing manuscripts in conflict areas is extraordinarily unique and courageous. Could you start by telling us what motivated you to dedicate yourself to this type of activity and what your first experiences were in such delicate contexts?

My journey began with a strong interest in the conservation of written cultural heritage, but what truly motivated me were the conflict events in Mali, and specifically in Timbuktu, in 2012: the destruction and damages to cultural heritage, including manuscripts, deeply affected me and led to a lasting engagement in the protection of written heritage in vulnerable areas. I served as project manager and instructor in the project "Safeguarding the manuscripts of Timbuktu," a project led by the Centre for the Study of Manuscript Cultures (CSMC) of the University of Hamburg. The highest priority was the physical safeguard of collections, in an area where political instability compounded the already harsh environmental conditions, posing serious threats to long-term conservation.

That experience was transformative. It allowed me to gain a deeper understanding of the local context, the communities involved, and their relationship with cultural heritage.



The work of safeguarding cultural property took on a growing human dimension for me, revealing its significance not only as a technical task, but as a support to local resilience.

Over the years I designed and managed safeguard and preservation plans for library and archival collections, as well as training programs, not only in Timbuktu but also in other places of Mali and in the Middle East. It was difficult, and dangerous in certain areas, but deeply meaningful.

Q2. Given the focus of “Digital Library Perspectives,” how do you see the role of digitization not only as an access tool, but also as a protective shield for cultural heritage at risk? And how digitization complements physical preservation of artifacts?

When archives or libraries are targeted or looted, a digital surrogate can preserve content that would otherwise be lost forever. In that sense, digitization becomes both an archival and a resistance act. It is not just about saving data; it is about safeguarding the intellectual and cultural memory of communities, especially marginalized or threatened ones. However, this needs to be approached with great sensitivity, particularly when it comes to ownership, metadata integrity and significance for local communities.

At the same time, we must be aware of the limits of digitization. While it preserves textual and visual information, it does not – and cannot – replicate the original physical object. The materiality of manuscripts and documents hold historical and cultural meaning in themselves. Furthermore, digitization often involves intensive handling of originals, which can pose additional risks to fragile or ancient items. I am convinced that any digitization plan should always be integrated into a broader strategy for collection curation and access: while the digital surrogate extends access and ensures a form of preservation, we must remain committed to protecting and preserving also the original items itself.

Q3. What are the logistical and security challenges you face when digitizing in crisis areas, and how do you adapt tools, software and protocols to these conditions?

There is no “one-size-fits-all” model when working in vulnerable areas. Security issues are often the most pressing challenges in heritage preservation projects carried out in conflict-affected regions. In addition to security, factors such as procurement, logistics and the establishment of reliable technical infrastructure significantly add to the complexity of implementation: electricity might be intermittent; internet connectivity can be unreliable or nonexistent. You have to be constantly ready to adapt original plans to the context of reality and volatility.

Security concerns for staff, collections and equipment were particularly acute in Mali and in Jerusalem. In Timbuktu, the establishment of a collaborative framework among CSMC, UNESCO and the MINUSMA (United Nations Multidimensional Integrated Stabilization Mission in Mali) Peacekeeping Mission [4] ensured the care of artifacts and the delivery of a significant training program, while also providing the logistical and security infrastructure necessary for their successful implementation.

As for equipment, highly specialized items – such as digital cameras with the required performance standards – typically need to be sourced from the international market; other components, such as computers and hard drives, can often be purchased locally; yet other ones can be crafted on-site, thanks to the involvement of local craftsmen. Their contribution has been particularly valuable on more than one occasion, for instance, in building basic photo stands and book supports in both Jerusalem and Timbuktu projects. Equally important is the training of local staff. We place strong emphasis on adapting workflows and protocols to prioritize both the safety of the individuals involved in the digitization process and the physical preservation of collections.

Q4. In what ways do your projects impact local communities and historical memory, and how important are international collaborations in achieving sustainable cultural preservation?

The preservation of cultural heritage significantly aids in healing societal wounds. Locally trained staff, often community members themselves, find that safeguarding their heritage allows them to reconnect with aspects of their identity that may have been jeopardized by natural disasters or conflict. Engaging in laboratories focused on cataloging, preservation and digitization helps individuals reestablish a sense of peaceful daily routine, often disrupted by traumatic events. This work also provides income and creates valuable training and practical experience opportunities, especially for younger generations.

International partnerships are vital in these efforts. Heritage institutions, humanitarian and peacekeeping organizations, and donors each bring unique strengths. Over the years, I have worked on projects supported by the German Foreign Office, the UN system, the ALIPH Foundation [5], the Hill Museum and Manuscript Library [6], and other public and private bodies. In each project – whether in the Middle East or West Africa – the local libraries and/or archives were key partners. The project configurations varied, sometimes involving universities or the AMALIA association [7], but the collaborative spirit and shared commitment remained constant.

Q5. Looking ahead, what are the most promising technologies or strategies for safeguarding cultural heritage, and what ethical considerations should guide this work?

There is exciting progress in fields, such as multispectral imaging, which enables complex, in-depth analysis of artifacts and AI-driven text recognition for non-Latin scripts. Such technologies are opening new frontiers in heritage research; however, these advancements must be accompanied by careful ethical reflection – both regarding the physical materials and the data derived from their digitization and study. Drawing on my field experience, I contribute to ongoing discussions on these topics as a member of both Blue Shield and of the Ethics Working Group at the CSMC.

For example, the illicit trafficking of cultural property remains a significant concern, especially in conflict zones. Our safeguarding efforts must therefore remain vigilant regarding objects whose provenance is unknown. In addition, research data should not only meet the FAIR principles [8] – Findable, Accessible, Interoperable and Reusable – but also respect the rights of Indigenous and local communities. Data should be governed in a way that ensures those communities can access and benefit from the knowledge produced. These concerns are reflected in the CARE Principles for Indigenous Data Governance [9]. At CSMC, we have adopted and published guidelines for “Ethical and responsible research,” accessible online [10] and helpful not only for academic researchers, but for anyone working in various capacities on cultural property.

Q6. What message would you like to leave to digital library professionals, curators and students who might be inspired by your work and wish to contribute to safeguarding heritage in difficult contexts?

This work requires deep passion for cultural heritage, significant flexibility, and a respectful, empathetic approach to communities and individuals. The heritage we strive to preserve holds profound social value, particularly in societies deeply scarred by conflict or disaster. The human dimension is essential: actively listening and tailoring strategies ensures local populations become true partners in preserving their own heritage. This calls for adaptability, active listening and the ability to engage people, making them participants in a process that extends far beyond technical aspects. Our laboratories and training programs are

more than just preservation centers – they are spaces where daily life seeks to regain normalcy, places of healing, continuity and hope.

Digital Library
Perspectives

Maria Luisa Russo

*Centre for the Study of Manuscript Culture, University of Hamburg,
Hamburg, Germany, and*

Anna Maria Tammaro

Department of Information Engineering, University of Parma, Parma, Italy

711

Notes

- [1.] www.csmc.uni-hamburg.de/
- [2.] <https://theblueshield.org/>
- [3.] www.csmc.uni-hamburg.de/cultural-heritage/timbuktu-training.html
- [4.] <https://peacekeeping.un.org/en/mission/minusma>
- [5.] www.aliph-foundation.org/
- [6.] <https://hmml.org/>
- [7.] www.amaliaweb.org/associazione-amalia/
- [8.] www.go-fair.org/fair-principles/
- [9.] www.gida-global.org/care
- [10.] www.fdr.uni-hamburg.de/record/14757