

## Editorial

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# Going Beyond Digital Preservation

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*Preservation, Digital Technology and Culture* (PDT&C) continues to deliver high quality peer-reviewed articles to global readership interested in topics that deal with preservation of “digital content from a wide variety of perspectives, including technological, social, economic, political, and user”, as is stated on the journal’s website. This broad scope is justified by the dynamic nature of digitalization and digital preservation of cultural heritage, in the wider contexts of influences on professional practices in cultural and academic sectors, but also considering the present interconnectedness of digital technologies and everyday life. I argue that defining PDT&C as a journal bounded by theory and practice of digital preservation of culture and heritage, which this author frequently communicates to listeners or prospective authors of articles, is not enough. Crucial information should be on the “technological, social, economic, political, and user” perspectives of digital content preservation, which includes long-term provision of functional access across platforms and domains, trusted storage, file and content authenticity, etc. But there is more. What emerging technologies, such as Artificial Intelligence (AI), Machine Learning (ML), Augmented/Virtual Reality (AR/VR), blockchain and others, are bringing into the realm of digital preservation is the question that will open new areas of research and practice, which must be addressed by theorists and practitioners in an effort to understand how the world is changing and, maybe, where it is heading. This claim could be partially backed up by the retrospective look on published articles in the last couple of PDT&C volumes, as there is no space within this editorial to deal with broader analysis. Nevertheless, it is important to observe the accepted articles in this issue and to analyse them from the position of dynamic changes that go beyond current practices incorporated in the cultural heritage institutional perspective. These dynamic changes in the field of culture and cultural heritage relate both to technological advancements and to shifting cultural discourses brought with new critical observations of influences that technology is bringing into

our common practice. I hope this volume of PDT&C provides a valuable contribution to stimulate further discussion.

Similarly to the first two volumes in 2024, the third volume of PDT&C presents six articles that tackle the aforementioned in a multi and interdisciplinary manner. The volume opens with the article “Historical Depictions, Archaeological Practices, and the Construct of Cultural Heritage in Commercial Video Games: The Role of These Games in Raising Awareness” by Boaventura DaCosta (Solars Research Group, Orlando, USA). For many years researchers were interested in, sometimes even concerned with, the historical accuracy and representation of cultural heritage in commercial video games. This interest stemmed from the wide usage and popularity of video games and their educational value, particularly in the context of engaging and interactive narratives about cultural heritage. The immersive and interactive characteristics of video games introduce to their players discursive rebuilding of ancient places and renewal of lost cultures, making these games mediums of narratives based on certain historical themes, settings, figures, and events. The popularity of video games is seen as one of the largest sectors impacting technology, entertainment, education, psychology, culture and cultural heritage (CH), explaining their interest among researchers in the recent years. This work thus deals with the complex relationship between history, archaeology and cultural heritage within commercial games, taking one popular game, *Shadow of the Tomb Raider*, as a role model in the process of examining this relationship and the portrayal of archaeologists and the discipline. The author explores the portrayal of cultural heritage in video games as a construction that is dependent on collaboration between game developers, heritage professionals and other stakeholders of the community involved in creation and development of video games. It is argued that commercial video games can foster cultural heritage awareness, which is analysed in the case of *Shadow of the Tomb Raider*, as the game is found to be representative in showcasing the effects of archaeology on local populations and descendants of ancient people. It is shown that video games can foster proper awareness about cultural identities, but also that cultural heritage is respectfully represented in these games, avoiding portrayals that marginalize some identities. This emphasizes the vital importance of collaboration between the game industry,

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cultural heritage field and members of the communities represented in these games. Such collaboration not only enriches the gaming content but also fosters a deeper understanding and appreciation for the diversity and complexity of cultures from around the world.

Our second contribution in this volume is “Digital is Not the Alternative: Dilemma and Preserving Films in India” by Ankit Vaishnav, Mahesh Meena, Neha Nandani and Annapurna Sharma (all Central University of Punjab, Bathinda, India). This article deals with the question of film deterioration over time and archival methods to solve this problem. Film preservation serves both to record modern life and to preserve cultural and historical heritage. The authors argue that digital technology enables the conversion of films, but in the context of digital preservation there are various issues with digital approaches that present Indian archivists with the dilemma of choosing the appropriate one to film preservation. This article presents an analysis of a series of interviews with film archivists, curators and restorers in India, with a thematic analysis conducted to understand the perceived insufficiency of digital preservation. The study shows that interviewers perceive digital technology as inferior to film and, thus, archivists in India are struggling to preserve their film heritage for future generations. One of the conclusions is that film archivists in India dislike digital technology, primarily due to issues about originality, obsolescence, cost, resolution and legal aspects, but recognise its other benefits. Archivists suggested that digital archiving is not an alternative to film archiving but rather a complement and the study finds that the problems in digital approaches can be minimised through measures such as diligence, technological advancement, multiple copies and raising awareness which can prolong the film artefact in a digital archive. Despite many challenges there is an optimism that innovation and development can lead to cost-effective digital preservation solutions. Careful management of digital assets, technological advancements, maintenance of multiple copies, increased awareness and funding campaigns provide potential opportunities to protect India’s film heritage.

Raushan Nurbatyrova, Boris Japarov, Nurlan Apakhayev (all Al-Farabi Kazakh National University, Kazakhstan), Biyakhmet Abdulaziz and Sandugash Khushkeldiyeva (both Almaty Economic-Legal and Pedagogical College, Kazakhstan) are the authors of the next article in the volume entitled “Digital Transformation of Archives in the Context of the Introduction of an Electronic Document Management System in Kazakhstan”. This article examines the key aspects of the digitalization of archives in Kazakhstan, in the context of the current stage of the

country’s economic development and within the framework of two country-adopted programs: Resolution of the Government of the Republic of Kazakhstan No. 827 “About Approval of the State Program “Digital Kazakhstan” (2017) and “Information Kazakhstan-2020” (2021). The study shows that the introduction of an electronic document management system has established numerous advantages, largely determining the significant prospects for the development of this system of interaction between organizations (state, public, legal entities and individuals). The preservation of information contained in archives and its transfer to storage on electronic media is one of the strategically important directions of a sustainable state in various spheres: economic, public and social. In the context of the steadily increasing importance of information in the life of modern Kazakh society, the value of archival documents increases, as does the value of the information contained in them, which raises the overall awareness of this topic in everyday professional practice. For example, the electronic document management system has become widespread in the field of office management in modern Kazakhstan.

“Cultural Preservation through Immersive Technology: The Metaverse as a Pathway to the Past” is our fourth article, written by Bolaji David Oladokun (Federal University of Technology, Ikot Abasi, Nigeria), Yusuf Ayodeji Ajani (Al-Hikmah University, Ilorin & University of Ilorin, Nigeria), Bernadette C.N. Ukaegbu (University of Port Harcourt, Nigeria) and Emmanuel Adeniyi Oloniruha (Federal Polytechnic, Ohodo, Nigeria). This article explores the emergence of immersive digital technologies, which include Virtual Reality, Augmented Reality, and the Metaverse and its relation to cultural preservation. It deals with the potential of metaverse technology for the preservation of cultural heritage, while acknowledging the obstacles that come with its implementation. These challenges encompass technical limitations, ethical considerations regarding cultural representation and ownership, as well as concerns about privacy, data security and digital rights management. Despite these hurdles, the research advocates for the utilization of immersive technology to protect and celebrate cultural heritage, which has reached its limitations in accessibility, scalability and sustainability when traditional methods of preservation are considered. Immersive technology offers unprecedented opportunities for engagement, exploration and collaboration. The metaverse serves as a dynamic platform for connecting individuals with their heritage by recreating virtual environments, preserving intangible cultural practices and facilitating cross-cultural interaction, but also by embracing innovation, fostering collaboration and promoting inclusivity. The article underscores the necessity for

collaboration among stakeholders, such as technology developers, cultural institutions, communities and policy-makers, to tackle these challenges and ensure responsible and ethical preservation practices.

Yunhuan Tan and Welyne Jeffrey Jehom (both University of Malaya, Kuala Lumpur, Malaysia) are authors of the fifth article of this volume, “The Function of Digital Technology in Minority Language Preservation: the Case of the Gyalrong Tibetan Language”. The focus of this article is preservation of the Gyalrong minority language in Tibet and the culture that is inherently connected with it. Gyalrong Tibetan Language is a small language that exemplifies the linguistic diversity endangerment that threatens many lesser-used languages and cultures throughout the world. This article examines the possibility of using digital technology as a supplementary tool in language preservation and conservation, through the combination of qualitative research approach and thematic analysis. The study gathered insights from previous studies, fieldwork and interviews regarding how digital technology could support further research into minority language preservation. In the analysed case, digital technology presents a viable solution for sustaining and revitalizing the Gyalrong Tibetan Language, primarily among younger generations who are using the Internet, digital and mobile technologies in their education. Integrating digital tools thoughtfully into educational strategies can aid in mitigating the language proficiency gap and contribute to language preservation efforts, with keen attention to many challenges in the process which this study investigates, including linguistic authenticity and cultural integrity when using digital technology, trusted accessibility

as well as the intergenerational inclusivity of digital technologies.

Our sixth and last contribution in this issue is “What Needs to be Learned by U.S. Cultural Heritage Professionals? Results from the Digital Preservation Outreach & Education Network” by Kirk Robert Mudle and Anthony Cocciolo (both Pratt Institute, New York City, United States). This article starts from the question what are the most in demand digital preservation instruction topics? The authors conducted a qualitative content analysis of applications by US based professionals seeking training through the Digital Preservation Outreach and Education Network (DPOE-N) between September 2020 and December 2023. This study found that the management of digital records and metadata or cataloguing standards were the most requested training topics from DPOE-N Professional Development Support applicants. These findings confirm past research into the most pressing digital preservation training needs – namely that general and broadly applicable skills tend to be the most sought after. Such results indicate that there is a constant need for education in the digital preservation realm that is focused on core elements, but also that there is an evident stagnation in specialization of involved US professionals. The authors emphasize one implication of their research, that higher education degree programs in library, information and archival science may need to investigate how they teach the digital aspects of records management and metadata. They argue that institutional records are increasingly born-digital, so it is vital that cultural heritage education programs focus on the fundamentals of managing, processing and validating digital records.