

Digital Transformation in Jordan and Poland: Implications on the Legal Protection of Cultural Heritage and Sustainable Development

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This paper aims to clarify the principles of Jordanian and Polish copyright laws applicable to the preservation of cultural heritage, and to recommend the adoption of certain policies to facilitate this task. It is meant to serve as a guide for stakeholders who deal with digital cultural heritage, directed particularly at museums, but also institutions such as libraries, archives, and art galleries. The research aims to discuss the role of copyright law in protecting cultural heritage in the face of the rapid development of ICT technologies. This includes identifying the risks and challenges associated with digital heritage, framing the relationship between authors of digital cultural content, rights holders, and institutions responsible for documenting and preserving it, and the need to establish a fair mechanism that guarantees their rights. The study aims to provide a presentation of the importance of compliance with copyright principles related to the digitization of cultural heritage and other relevant regulations in the Jordan region and the Polish legislation. The article was created as a result of international scientific cooperation in combination with an innovative view at the law-making and application processes in the era of dynamic development of science and technology. The analysis will include identification of legal acts, which aim to ensure the effective, future-oriented, and long-term protection of cultural heritage in Jordan and Poland.

Keywords

UNESCO, Digitization, Intangible heritage, intellectual property law.

SDH Reference

Alaeldin Alkhasawneh and Samanta Kowalska. 2023. Digital transformation in Jordan and Poland: Implications on the legal protection of cultural heritage and sustainable development. *SDH*, 7, 2, 142-160.

<https://doi.org/10.14434/sdh.v7i2.36939>

1. INTRODUCTION

Cultural heritage as a human right [Kadłuczka 2020] encompasses countless manifestations of human expression and creativity and represents a link between the individual and his identity [Bodziński-Guzik and Stożek 2020]. Through a personality aspect between the creator and the recipient, heritage can have a social impact. The protection of cultural heritage has a crucial role in sustainable development as an economic asset or nonrenewable resource [Boryczka 2019]. There is a

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close and far-reaching interdependence between intangible cultural heritage (ICH) and material monuments. Conserving cultural heritage can improve cultural tourism, enhance local communities and even affect the use of alternative medicine [Boryczka 2019]. These aspects were highlighted during the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage. The resulting document was signed on 17 October 2003 and was subsequently ratified in Jordan on 24 March 2006 and in Poland on 16 August 2011.

Delicate and subtle matter often escapes human perception; it cannot be enclosed in the visual structure. Intangible heritage requires a multifaceted view beyond the material substrate in which human artistic thought or tradition is externalized. Hence, it should be noted that even if the passage of time tarnishes the material heritage, the intangible monument may still interact through the transmission of values that lay at the basis of physical creation [Kadłuczka 2020]. Scientific and technological development means that, in addition to traditional forms of conservation of monuments and works of art, digital methods of recording scientific, literary, and artistic works are increasingly used, thereby changing society's concept of cultural heritage and increasing concern about their roots [Gołąb 2020].

A problem and a legal question arise regarding the protection of social identity in the face of technological progress. Does digitization not lead to the separation of intangible monuments from the axiological layer, thanks to which they can fulfill their essential role as a transmitter of values and an intergenerational link? Does the Polish and Jordanian copyright law use criteria for the selection of works that can be introduced and made available in the digital space? Digitization of literary heritage and monuments requires not only a change of format, but also a shift in the current understanding of the protection of cultural heritage [Gołąb 2020]. Therefore, questions arise regarding the quality of the equipment on which digitized cultural goods are kept, their technical safeguards (e.g., against cyber-attacks), and other forms of unlawful activities that could violate intellectual property rights.

Comparing the legal situations in Jordan and Poland helps to realize useful aspects that can help in developing good and effective solutions. The analysis shows potential areas of cooperation and activities that could help protect and nurture heritage. International cooperation deepens relations between countries. The Vienna Convention on the Law of Treaties indicates that international agreements play an important role in developing peaceful cooperation between states, regardless of their respective constitutional and social systems. The example of Jordan and Poland shows that cultural heritage is a universal bond that shapes human identity regardless of language, region, or religion. To date, a large-scale comparative study discussing Jordanian and Polish law regulations on the protection of cultural heritage in the era of expansion of modern technologies and digitalization has not been conducted. The authors' own innovative research may fill this gap, while at the same time providing fertile ground for further research.

On October 26, 2021, the cooperation program between the Government of the Republic of Poland and the Government of the Hashemite Kingdom of Jordan in the field of culture, science, and education for the period 2021-2024 (Code of Laws 2022, item 181) was concluded. Considering the main topic here, it should be noted that the document contains regulations on developing cooperation in the field of translation and publication of literature, including children's books, organizing theatrical events,

music and folklore festivals, and cooperation with national libraries, archives, and museums. Article 3 stipulates the exchange of specialized archival publications and copies of documents (microfilm and scanning) in accordance with the regulations in force in both countries. Supporting activities in the field of restoration and preservation of antiquities and archaeological objects also constitutes an important part of bilateral cooperation between Jordan and Poland (Article 16). The two parties pledged to exchange experiences in the field of protecting and managing sites included on the UNESCO World Heritage List, which are located in both countries (Article 8). The document in question also includes regulations regarding the distribution and broadcast of cultural, historical, and educational programs in accordance with the conditions stipulated in relevant licensing agreements (Article 30, Clause 2), which makes it clear that the heritage of audiovisual culture is also taken into account. Hence, the digitization of cultural goods can complement efforts to protect antiquities and cultural heritage in their traditional form. It can also be noted that it is the sphere of culture that creates the axiomatic basis for the development of cooperation in other areas of activity between countries.

2. RESEARCH METHODS

This study employed a methodological framework of legal science to analyze regulations concerning the protection of cultural heritage in the digital age as a means of leading cooperation, dialogue, and developing legislation in the study region, and with countries from different cultures. The researchers used the formal-dogmatic method that played a fundamental role in the analysis of acts of Polish and Jordanian law and in the formulation of postulates *de lege ferenda*. The authors also used the analytical and comparative methodology to analyze links between elements of digital cultural heritage, Jordanian and Polish intellectual property laws, and UNESCO. The methodology is applied by compiling, organizing, and systematizing legal regulations and propositions through legal reasoning or deduction. Common points between Jordanian and Polish law, considering an international context, are discussed in the analysis.

3. ANALYSIS AND DISCUSSION

3.1 The Concept of Digital Heritage

Cultural heritage may be tangible or intangible. Tangible heritage may be immovable, such as landmarked buildings, fortifications, and archaeological sites, or movable, such as manuscripts, paintings, sculptures, historical clothes, old coins, and historical weapons [Boryczka 2019; Kozień 2020; Bodziński-Guzik and Stożek 2020]. Tangible heritage can be digitized using electronic programs or applications and 3D technology, then disseminated via YouTube, Virtual Reality [Gołąb 2020], or virtual tours of museums [Liu 2022]. Some researchers point to the trend of culture and the role of experimentation in preserving heritage through narrating heritage events and stories [Gołąb 2020]. In addition, other experiential practices such as hunting, horse riding, and bicycles in archaeological sites are being employed [Gołąb 2020]. Tangible cultural heritage cannot be imagined to be inherently digital, but it can be converted into digital alternatives.

Modern technologies offer promising prospects for the protection of cultural heritage while respecting its nature and its distinctive characteristics, such as its collective character, renewability, and its ability to be transmitted from generation to generation [Kartopu and Bölükoğlu 2016; Nilson and Thorell 2018]. New digital tools seem to offer innovative solutions to facilitate the involvement of indigenous communities in defining their own cultural heritage. One scholar defines digital cultural heritage as “the cultural heritage of peoples and nations that is preserved electronically and placed on the World Wide Web for public viewing” [Hemisi 2017]. Another indicates that digital heritage projects are often “built in a ‘descriptive’ manner rather than ‘interpretive’” [Rahaman and Tan 2010].

Digital heritage was defined in Article 1 of the Charter for the Preservation of Digital Heritage UNESCO as consisting of “unique resources of human knowledge and expression. It embraces cultural, educational, scientific and administrative resources, as well as technical, legal, medical and other kinds of information created digitally, or converted into digital form from existing analogue resources”. Thus, the concept of digital cultural heritage includes both digitally generated cultural heritage and traditional cultural heritage that has been digitally transformed using software and modern technology. At the same time, digital heritage may be considered born-digital, or generated electronically from the ground up [Farrand 2022], meaning that it has no other form than the digital asset [Kořenek and Myška 2019].

The 2012 Vancouver Declaration, titled “The Memory of the World in the Digital Age: Digitization and Preservation,” underscores the importance of safeguarding digital heritage at risk of being lost due to the rapid obsolescence of the hardware and software used in its creation. This charter recognizes the value of documents that exist only in digital form, and of the efforts that have been made to preserve them. This charter drew attention to the two primary aspects of digital heritage: namely, the digitization of heritage in its traditional sense, represented by thousands of heritage books and manuscripts, monuments, paintings, cultural expressions, practices, and traditional knowledge, and the digitization of heritage in its modern sense (e.g. born-digital) as embodied in a large number of websites, blogs, magazines, electronic newspapers, and cultural and intellectual gatherings that broadcast huge amounts of digital information including text, sound, image, film, and other data produced through digital and electronic devices which represent heritage for future generations. This charter also formally expands the concept of heritage to include cultural works and media products.

The increased interest in digital heritage that grew out of the 2012 World Conference in Vancouver, Canada, and the Vancouver UNESCO/UBC University of British Columbia/UNESCO Declaration on Memory of the World in the Digital Era: Digitization and Preservation resulted in the PERSIST/UNESCO project. The PERSIST Initiative is a platform to enhance the sustainability of the information society across the world to set guidelines for the selection of digital heritage for its long-term preservation [Choy et al. 2016].

3.2 The Current Situation of Digitization in Jordan

Although there is no provision in the Jordanian Constitution enshrining the protection of cultural heritage, Jordan has paid attention to the protection of cultural heritage in general, whether tangible or intangible, as a component Jordanian national identity. The country has been keen to join international conventions and treaties related to the protection of cultural heritage, such as the Berne

Convention, and has ratified both the Convention of the World Intellectual Property Organization (WIPO) and the Rome Convention for the Protection of Artists. It should be noted that Jordanian legislation provides limited protection via the Antiquities Law No. 21 of 1988 to immovable and movable tangible heritage. The Antiquities Law did not use the term “cultural heritage”, but rather “general antiquities” to express those movable and immovable objects.

Aspects of cultural heritage are also dealt with in other Jordanian laws and legislation, such as the Environment Law No. 12 of 1995 (Art. 5 and 21), Tourism Law No. 20 of 1988, Town Planning, Villages and Buildings Law No. 79 of 1966, and its amendments in the Urban Heritage Protection Law of 2005. The Urban Heritage Law of 2005 protects only immutable tangible heritage, and there is no legislation to protect intangible cultural heritage (ICH) or digital heritage. The Jordanian Antiquities Law No. 21 defines cultural heritage as “any movable or immovable object created, made, written, engraved, built, discovered or modified by a person before 1750 AD, including caves, sculptures, coins, and pottery...and also manuscripts and other types of artifacts that indicate the emergence and development of science, arts, crafts, religions, and traditions of previous civilizations, or any part that was added to or reconstructed after that date, and human, animal, and plant remains dating back to before the year six hundred AD.” The provisions of these laws prohibit any natural or legal person from excavating antiquities anywhere in the Kingdom, even if they are owned by him, in accordance with what was stated in Article (16) of the Antiquities Law. The legislation has also established criminal penalties for anyone who excavates, trades, destroys, or counterfeits antiquities.

The Jordanian government is committed to the charters of international institutions and follows up on decisions on an ongoing basis. Jordan signed the World Heritage Convention in 1975. The Department of Antiquities and the Ministry of Environment are concerned with implementing the requirements of the agreement and identifying cultural sites that must be included in the World Heritage List. Jordan has ratified the following cultural conventions, which have been adopted by UNESCO: The Convention to Facilitate the International Distribution of Visual and Audio Materials of an Educational, Scientific and Cultural Nature and its Protocol (ratified by Jordan on 7/7/1972); Agreement for the import of educational, scientific and cultural materials with Annexes A and B and its protocol (ratified by Jordan on December 31, 1985); The Convention for the Protection of Cultural Property in the Event of Armed Conflict with instructions for its implementation (ratified by Jordan on October 2, 1957); The First Protocol for the Protection of Cultural Property in the Event of Armed Conflict (ratified by Jordan on October 2, 1957); The Second Protocol for the Protection of Cultural Property in the Event of Armed Conflict (approved by Jordan on 5/5/2009); Convention on Ways and Means of Preventing and Prohibiting the Illicit Import, Export and Transfer of Ownership of Cultural Property (ratified by Jordan on March 15, 1974); Convention for the Protection of the World Cultural and Natural Heritage (ratified by Jordan on May 5, 1975); Convention for the Protection of the Intangible Cultural Heritage (ratified by Jordan on March 24, 2006); Convention on the Protection and Promotion of Cultural Expressions (ratified by Jordan on February 16, 2007); and The 2003 Digital Heritage Preservation Charter and the 2002 Convention on Biological Diversity, Convention for the Protection of the Underwater Cultural Heritage (ratified on December 2, 2009).

Along with several British universities, including Oxford, Leicester, and Durham, Jordan has also been involved in The Endangered Archeology in the Middle East and North Africa (EAMENA) project [Trillo et al. 2021]. EAMENA applies modern technologies such as digital documentation and remote

sensing techniques to the field of antiquities preservation. In light of such projects, it is critical to search for civil protection for digital heritage, including laws for the protection of intellectual property rights. Recently, Jordan joined the MaDiH (مديح): Mapping Digital Cultural Heritage project [Smithies et al. 2022], funded by the Cultural Heritage and Sustainable Development in Jordan AHRC Newton/Khalidi. MaDiH is a collaborative project between King's University Digital Labs in London, Hashemite University in Jordan, the British Research Council in the Levant, the Jordanian Department of Antiquities, the Jordanian Open-Source Society, and the EAMENA project. The MaDiH project is scheduled to last for two years, from February 2019 until February 2021.

MaDiH aimed to identify essential systems, datasets, and standards in order to contribute to the long-term sustainable development of Jordan's digital cultural heritage [Mubaideen et al. 2022]. The project launched an online catalog and prototype repository using the Comprehensive Knowledge Archive Network (CKAN) platform to present the collected data that was produced by the local and international research community on Jordan's cultural heritage [Mubaideen et al. 2022]. This platform includes database information collected and inventoried during the project period, which will be the basis and nucleus for a future comprehensive national catalog of Jordanian cultural heritage. It is currently in recorded English. There are several institutions responsible for protecting cultural heritage in Jordan, such as the General Department of Antiquities and the Directorate for the Protection of Intangible Cultural Heritage of the Ministry of Culture, in addition to some non-governmental and private organizations.

3.3 Means of Legal Protection for Digital Heritage

In the absence of Jordanian legislation for the protection of digital heritage, we find only the application of the provisions of the Jordanian Copyright Law and Related Rights, considering that heritage represents a literary, artistic, or scientific creative work. To protect digital heritage under intellectual property rights (IPR), it must be included in the category of works, and it must meet the conditions of the protected work [Węgrzak 2020; Liu 2006]. The classification according to the rules of the Jordanian Copyright and Related Rights Law is, "every innovative composition in the field of literature, arts or sciences, regardless of its type, method of expression, importance or purpose" (Art. 3, point "a", Jordanian Copyright Law). Jordanian legislation has adopted a broad concept of the protected work, to include any new works, even if the means of expressing it is other than writing. These might include expression by drawing with colors, sculpting with materials that can be formed, expression by voice in lectures, performance by voice, and movement in acting or kinetic performance only, as in dance. Various works appeared in which the means of expression varied and were no longer confined to literary composition in the traditional sense. The concept of work also includes innovative intellectual work, regardless of its field, whether in literature, arts, or sciences, as long as it transfers the intellectual work from the author's mind to the public's senses, whatever its purpose, whether for education, entertainment, education, or media, regardless of its importance. The requirement of physical presence limits protection to works that appear in a material, tangible form, and thus excludes works that are intangible, such as those that are performed, like folk singing. It recognizes the work, such as representation, performance, fixation, or others, which allows protection for the various items of ICH [Liu, 2006]. It is also reinforced if the ICH is disseminated

through audio-visual means of communication. The Jordanian legislation does not require registration or deposit to protect the work according to Article 45 of the Jordanian Copyright Law.

Article 8 of the Jordanian Copyright Law specified the author's moral rights, while Article 30 of this law specified the author's financial rights. Jordanian Copyright Law lists a set of exceptions to copyright that allow obtaining a copy of this work without the permission of its author or the owner of the IPR. Article 17 of the Jordanian Copyright Law permits copying of the work for personal use, except for computer software, audio, and audio-visual works. It is permitted to create one backup copy of computer software for persons who own an original work to protect the original. By Article 17, it is permissible to use the work for educational purposes as a clarification within the limits of the desired goal, or to make one or two copies for public libraries or non-commercial documentation centers as stipulated in Article 20, provided that it is not done commercially or for profit, or that the copies are limited to the needs of activities. This copy shall not prejudice the material benefit of the work, and that if the work has been out of print, its versions are lost, or destroyed, and that these works are reproduced through photocopying or photocopying, that the number of copies is limited to the needs of that institution and that such use does not cause harm to the author or is followed by a ban for the author to exploit his work. Short excerpts from previously published works, drawings, pictures, designs, or maps may be transferred to textbooks prepared for educational curricula, or to books on history, literature, and the arts, provided that the transfer is limited to the extent necessary and that the name of the work and the name of the author are mentioned. Parts of scientific articles and works may also be transferred by research institutions for their internal purposes, or to fulfill the requirements of those preparing studies and research, with mention of the source [Sean et al. 2022]. Jordanian copyright law allows any person to make a single copy of a work for personal use without the author's permission, as long as the said person does not aim to transmit, publish, or display to the public and provided that such copying does not prejudice the normal exploitation of the work or cause unjustified damage to the legitimate interests of the author or copyright holders. Exceptions to copyright approved by national legislation that allows copying for preservation and documentation must be carefully specified.

Another question also arises about the character of work resulting from the digitization of cultural heritage. Does digitization generate new work or work that deserves protection? What are the rights contained in the digital version of the traditional heritage? Is it possible to claim the existence of rights to the images of monuments? We answer that simply scanning cultural heritage does not in itself involve innovation. Most of the legislation does not give legal protection to photography that does not change the reality of the thing and does not include a creative touch. But the process that includes collecting and selecting the cultural heritage, scanning it, displaying the large number of associated documents in digital format, and classifying them, may constitute a new work that deserves protection under intellectual property rules [Węgrzak 2020]. Moreover, intellectual property legislation gives protection to databases that are classified in a manner that involves a kind of originality. Intellectual property rights can be claimed over unique monuments, such as the pyramids and Petra.

3.4 Originality in Works Resulting from The Digitization

The rules of Jordanian copyright law protect the work if it meets two conditions: that it takes a tangible form and that it is original. The legislation did not define what is meant by intellectual work but does include an indicative list of works that deserve protection, which were mentioned as an example, but not a limitation. This list includes literary, musical, audiovisual, photographic, and software works. It can be expanded to include other works within the development of art and technology. The Jordanian legislation does not define the concept of authenticity, and this is desirable in order not to be bound by rigid standards that may be outgrown over time. The matter of determining whether or not originality is present in a particular work is left to the judges, and they have their full discretion after consulting with experts and according to the circumstances of the reality that surrounded the creation of a work of art [Bonnaud-Le Roux 2020].

Authenticity is often determined through the presence of the author's personality imprint and the presence of appropriate intellectual creativity of the author. This expression comes in light of the development in the field of images, programs, databases, and the impressive digital changes that increase the possibilities of creating businesses. Authenticity must be established on a case-by-case basis, and possible means to address it should be considered. Copyright represents a dividing line between human creativity and technical automation. Sometimes, these limits evolve according to the interpretation established by the courts and according to the different digitization techniques used.

We said that there are many questions about IPRs in the case of using 3D models, which aim to copy and photograph things that have entered the public domain and make them available to the public [Cronin 2022]. It can be said that we must examine each on a case-by-case basis, and see how the models are designed and created, to determine whether they are original works and therefore whether they deserve the protection. The application of these concepts also has important implications for the cultural sector, concerning how digital files are made available to the public, who has control over their use, the licensing of use, and their pricing.

Undoubtedly, digitization and 3D models of heritage objects and features raise many questions related to IPR legislation [Cronin 2022]. Where the 3D scanning process includes many technical operations, whether it is thousands of images captured by photogrammetry, a model made from design programs, or even animations for a virtual visit [Verykokou and Ioannidis 2023]. Then, digitally restoring a work makes it possible to restore its original aspect to preserve its integrity. The principle is that this does not affect the moral rights of the original owner, which includes his right to attribute the work to him, and his right to respect his work and not to harm or change it. However, in the field of restoration of heritage works, a person may claim the originality of his work if he proves that the restored work is a composite work. This means a new work in which a pre-existing work is merged without the cooperation of its previous author. It can be a work that is in the public domain or an old work that has lost copyright protection.

In the absence of known elements of the original work, if the restorer must imagine the missing parts even if he had to respect the artistic canons of the time, the margin of freedom in them is greater, and original creations can be born. Sincerity in style does not exclude the originality of the work or the creative freedom of the restorer [Mouron 2019]. Therefore, these differences in art restoration should

be compared to digital technologies. Jurisprudence usually distinguishes between the identical restoration of a work of art or heritage object and the reconstruction or formation of a work. If the restorer is not required to present or implement anything of his own in the work and to be satisfied with identical restoration to restore the original appearance of the work, it can be said that this work cannot generate new work. If the restored work does not contain new elements, it is merely a copy of it, and a change of format cannot justify the creation of new work. This is the case for photographs of cultural property, so it cannot be described as a composite work.

But it is different for “reconstructed” works, whether in whole or in part, because the restorer has enough freedom to maneuver in which he can express his personality. Thus, the items he added or recreated may attest to a certain originality. In this case, the renewed or restored work may be a new copyrighted work. It is also different when it comes to restoration, which can witness additions of the restorer to the work, which is an expression of his personality. The annotations accompanying the text must be considered original additions, and the text can then be protected by a new copyright. This is also the case when it comes to incomplete or fragmented work, which the restorer intends to complete or restore, where the restorer must summon his imagination. This assumes that additions have been made to the original work.

Sometimes the line between identical restoration and restoration is very thin. The former is when the restorer must confine himself to restoring the original aspects of the property, to reveal the work of others and not his own. Therefore, techniques for the identical restoration of cultural property, no matter how complex, cannot be considered evidence of the expression of the author's imprint [Węgrzak 2020]. However, restoration work often requires specific skills, in-depth study, and a comparison of creative techniques. These are all factors that can involve options on the part of the restorer, including actions that allow for a better realization of the original aspect of the work. One can then object that the duty of fidelity precludes any creative intent on the part of the restorer.

Nor can the digitization of any cultural object or work be compared to photographic copying, the choice of which is more limited. One may wonder whether such digital technologies will not lead to copyright. A restorer, out of a desire to give a more complete and accurate view of the original for fine or digital work, can add original elements to it. An objective conception of originality will surely lead to this result, once the personal imprint of the author is visible; because the restorer has made choices that go beyond technical training or a consulting job. Thus, it can be related to the aesthetic dimension of the digital asset.

Copyright is a bridge that provides many benefits to cultural heritage holders, including the right to publish and paternity. This helps communities maintain the authenticity of their intangible cultural heritage. However, the authors of intangible heritage are usually unknown or inaccessible, and even when they are known; there is a fundamental difference when it comes to protection between heritage assets and the copyrights of the creative process. At the same time, terms of copyright protection, such as originality and creativity, do not fit well with the nature of ICH; the copyright system focuses on the author and individual property, in direct contrast to ICH elements. The creator of the ICH is often a community, and it represents public goods [Ewa 2019], with creative contributions coming from successive generations. Copyright is traditionally concerned with the creations of individuals, rather than the cumulative creations of an ethnic group or region.

Copyrighting ICH/digital heritage therefore requires great effort in preparing legal frameworks and clarifying the role of government and private institutions. For this, it is necessary to review and amend the rules of IPRs to respond to the developments of cultural heritage in the digital age, considering the Internet as a platform through which cultural heritage is created and used in the era of digitization [Mazur 2020; Gołąb 2020], storage, and preservation, and the need to develop relations between institutions and users of cultural heritage [Chapman 2009]. The increase of cultural democracy through access to computers and the Internet provides more opportunities for individuals and societies to access cultural heritage. The argument for cultural heritage and IPRs in the context of a human rights approach may form the basis for challenges to cultural hegemony.

3.5 The Systemic Basis of Cultural Heritage Protection in Poland

The systemic basis for the protection of cultural heritage in Poland is set out in the Constitution of the Republic of Poland of 2 April 1997. Article 5 of the Constitution stipulates that the Republic of Poland shall guard cultural heritage [Dworzecki et al. 2020; Mazur 2020]. The Constitution expresses respect for the heritage of ancestors rooted in centuries-old history, culture, and legal tradition. However, attachment to and cultivation of national cultural heritage does not mean that the legislation disregards persons of other nationalities and ethnicities. The Constitution states that the multiplicity of forms of expression of human thought can guarantee the survival and development of society in a spirit of dialogue and pluralism. This is evidenced by the Preamble about “the need to cooperate with all countries for the good of the Human Family” and the reference to “universal values” common to believers and non-believers. The Constitution expresses appreciation and respect for the selfhood, achievements, and activities of persons of other nationalities who have contributed or are currently participating in the development of Polish statehood, science, and art [Pruszyński 2001]. Article 6(1) provides that the Republic of Poland shall create the conditions for the people's equal access to cultural goods. Currently, the protection of literary heritage includes taking coordinated actions for the preservation, sharing, and management of documents in digital format. The systemic foundations for the protection of cultural heritage affect acts of a lower order, which should be compatible with the Constitution. To ensure effective protection, activities are coordinated, and legal and administrative procedures and educational programs are implemented.

The scope and form of the protection of monuments in Poland are specified in the Act of 23 July 2003, on the Protection and the Care of Monuments. The Act does not use the term “heritage” but defines the term “monument” [Rymaszewski 2005]. The legal definition in this respect is included in Article 3 item 1. In the aforementioned provision, the phrase about monuments whose “preservation is in the public interest due to their historical, artistic or scientific value” can now also refer to the preservation of monuments using digital technologies. The Act covers archaeological, movable, and immovable monuments. Although intangible cultural goods were not mentioned *expressis verbis*, the cited normative act contains provisions that certify the legislation does not disregard this issue. For example, under Article 6(1), item 1, letters “a,” “b,” and “h,” cultural landscapes, rural and urban layouts, as well as works of architecture and construction are mentioned. Furthermore, based on Article 6(2), the letters “a,” “f,” and “g,” works of art, artistic craftsmanship; musical instruments, products of folk art and crafts, and ethnographic objects, are protected. Article 6(3), letter “d” indicates that relics of artistic, religious, and economic activities are protected by the law. Each of the mentioned

manifestations of human activity and creativity contains an intangible component. Monuments of architecture, urban planning, and works of art can delight and encourage reflection. However, it should be remembered that monuments are not only the sum of the materials from which they were made, but also an expression of the social memory that constitutes them. Therefore, intangible heritage should be considered as a core tenet of material heritage.

This aspect is particularly important in relation to book collections and library materials. In Poland, the above issues are regulated by the Act of 27 June 1997, on Libraries. National and global cultural achievements are collected in libraries. Books are sources of knowledge about systemic, socio-cultural, and economic transformations. According to the definition contained in Article 5 of the aforementioned Act, "library material" includes a recorded expression of human thought, regardless of the physical medium and the manner of recording the content, which can also be related to works introduced into digital repositories.

Poland actively participates in the UNESCO "Memory of the World" program, which includes the most valuable monuments of literary heritage in traditional form (e.g. parchment manuscripts, inscriptions, codes, book collections, architectural archives, iconographic and cartographic documentation, and maps), as well as works recorded on more modern information carriers (e.g. photographs, films, audiovisual documents, music recordings, and radio recordings). Currently, 17 monuments of literary and documentary heritage from Poland are included on the list. Among the objects entered from Poland are cultural goods that are intertwined with the history and heritage of other nations. The diversity of forms of communication and content makes the "Memory of the World" List a testament to overcoming stereotypes by establishing and conducting dialogue between countries who often have different cultures and traditions.

The transformation of literary communications point to changes in the organization of social life. The UNESCO Recommendation adopted in 2015 indicated that the term "document" also refers to 'an object containing information in analog or digital form as well as the carrier of this information'. Currently, we observe the shaping of a dualistic form of heritage: traditional records and digital resources. There is a true surge of information in digital format. In this respect, more and more legal and technical dilemmas related to the protection of intellectual property of cultural goods introduced into the virtual sphere are emerging.

3.6 Copyright Protection of Cultural Goods in The Digital Space

In Polish law, the right to free use of published works without permission of the author is granted by an institution of permissible use. Detailed provisions in this matter are contained in Chapter 3 of the Act of 4 February 1994 on Copyright and Related Rights. Considering the objectives and the circle of people who can use the works under Polish law, there is a distinction between permissible private and public use [Preussner-Zamorska 2007]. Permitted use aims to maintain a balance between the rights of the creator and public interest by guaranteeing public access to scientific resources, artworks, and cultural goods. These issues are extremely broad and require separate studies for detailed discussion. For this reason, only select basic legal regulations will be indicated here. According to Article 23(2), persons who are in a personal relationship with the creator, in particular, any consanguinity, affinity, or social relationship may, without the authorization of the creator, use

single copies of disseminated works free of charge (permissible personal use). However, this must not interfere with the legitimate interests of the creator or lead to mass reproduction (Art. 35). On the other hand, public permissible use is directed at a wider group of people and concerns scientific, didactic, information, and documentary purposes. Libraries, archives and museums, schools, universities, and research institutes may, in order to supplement, preserve, or protect book collections, reproduce works and make digital copies of them (e.g. in the absence of or damage to the original to such an extent that it is not usable), make available using internal IT terminals modern academic textbooks, provided that this is for the statutory purposes of the institution and does not entail any financial gain (Art. 28(1)). In accordance with Art. 32(1), the owner of a copy of the artistic work shall have the right to display it publicly, if he or she does not derive any financial benefit from it. As part of the fair use, depending on the existing possibilities, the creator's personal data must be provided. However, the permissible use must not entail disrespect for the person, the rights, and the intellectual effort of the creator (Art. 34).

Digitization enables cultural goods, library materials, and documents to be transferred into a digital format in a short time. Through electronic transposition, countless people have access to digitized cultural goods from virtually every corner of the Earth. Transferring to the digital format requires the work to be processed and reproduced. Therefore, each such procedure should be preceded by a review of the author's legal status, which is not always easy, especially in the case of "orphan" works [Jarmuszkiewicz 2017; Sieńczyło-Chłabczyk 2020]. Works that are not protected by copyrights or whose copyrights have already expired may be placed in the public domain. However, it should be noted that the digital copy of a book collection, archival material, or a work of art will never replace direct contact with a work of culture. For many people, for health reasons, it may be the only opportunity to get acquainted with works of art from remote regions of the world or archives, access to which could be restricted in stationary form for legal or technical reasons (e.g. due to the state of preservation of the monument). Digitization makes matters easier for scientists and researchers who do not have to travel hundreds or thousands of kilometers to conduct scientific queries. However, there are situations in which the physical form of a work of culture is very fragile, so digitization may be the only form of preservation of the monument. Many cultural institutions allow making scanned documents and archiving materials at the request of users, which are later transmitted on tangible data carriers.

However, electronic transposition is not exempt from the protection and care for the physical form of the monument. Although the digitization of cultural heritage opens up many opportunities, more and more technical issues are emerging. Wear and tear of *corpus mechanicum* prompts engineers to look for more durable and efficient data carriers. Electronic data carriers are susceptible to mechanical damage and external influences. Technological progress is so rapid that the data carrier reading equipment may not be usable in a relatively short period of time. In the case of analog media, the quality of the content recording format deteriorates over time, which may lead to loss of data. Due to obsolete carriers and the fragility of the materials from which they were made, each year more and more of the oldest artifacts from the European audiovisual archives are lost (Commission of European Parliament 2005). A similar problem arises in connection with digitized cultural goods stored in virtual cultural institutions. Indexing and maintenance of original materials and source codes require the provision of appropriate technical, organizational, and infrastructure conditions.

Cultural institutions are increasingly offering hybrid services, combining stationary activities with interoperability in the digital sphere. Virtual cultural institutions are created, which allow access to cultural goods from many European libraries, archives, and museums (e.g. "Europeana"). The Polish National Library has been participating in the "The European Library" project since 2007. However, the digitization and dissemination of cultural goods in the European library requires the harmonization of copyright law, an accessible interface, the preservation of digital content, and the assurance of long-term sustainability of the resources obtained from the digitization.

Many virtual cultural institutions operate at the national level. "Polona" is the largest modern digital library in Poland. Each year the collection is expanded by over 17 million scans of documents and digitized cultural goods (e.g. manuscripts, old prints, books, pieces of engraving art and maps, photographs, and sheet music). Archival materials constitute a source of knowledge about cultural heritage and various manifestations of human activity in the individual and social dimensions. "Polona" includes digitized versions of the most valuable monuments of Polish literary and cultural heritage [Mazur 2020]. Most collections are made available in the public domain, which means that access is not subject to additional legal requirements. "Polona" cooperates with other cultural institutions, opening the door to further cultural, scientific, and artistic resources.

In Poland, collections that are part of the state archival resources are developed, collected, and made available by the National Digital Archives, or NDA (Narodowe Archiwum Cyfrowe). Currently, the collection of NDA contains over 15 million digitized photographs dating from the 1940s, over 40,000 sound recordings since 1889, including recordings of the Polish Section of Radio Free Europe (Radio Wolna Europa), and about 2,400 films from the period of 1928-1993 (The Polish National Digital Archives. Status as at: 2023-06-02).

The "Search the Archives" ("Szukaj w Archiwach") service constitutes support for scientists, students, and people who desire to discover unknown pages of history. At the moment of writing this article, 58 million document scans from 108 institutions, along with 15 million descriptions of archival materials, are collected on the website (Information provided by "Search the Archives". Status as of: 2023-06-02).

It should be noted that, in Poland, activities related to the protection of tangible and intangible cultural heritage are supervised and coordinated by the Ministry of Culture and National Heritage (Ministerstwo Kultury i Dziedzictwa Narodowego). Other institutions that support the process of digitization of cultural goods and ensure compliance with the national and international standards developed in this field include: the National Heritage Institute (Narodowy Instytut Dziedzictwa); the National Institute of Museum and Collection Protection (Narodowy Instytut Muzealnictwa i Ochrony Zbiorów); the National Library (Biblioteka Narodowa); the General Directorate of State Archives (Naczelna Dyrekcja Archiwów Państwowych); the Book Institute (Instytut Książki); and the National Film Archive - Audiovisual Institute (Filmoteka Narodowa – Instytut Audiowizualny). Before a given archival document or library material is transferred to digital format, it is subject to conservation and expert assessment to ascertain whether it can be digitally processed. If a given document or library material is not protected by copyright, and the digitization procedure does not adversely affect the state of preservation of the original, digitization and transfer to the digital form may be considered.

3.7 Integrity of A Work and Copyright

Based on Polish copyright, works benefiting from the protection of the law also include works expressed with graphic signs, mathematical symbols, architectural works, architectural and urban planning works, audiovisual works, films, and computer programs (Art. 1(2), Copyright and Related Rights, 199). The authors of the aforementioned works are entitled to rights on the same terms as the authors of works of art, literary works, scientific dissertations, or stage works. Works that meet the conditions set out in Article 1(1) shall be entitled to copyright protection. Under Polish law, authors are entitled to moral rights and property rights. Article 16, which is pertinent to the protection of the work's integrity, states that moral rights protect the creator's bond with the work, which is unlimited in time and independent of any waiver or disposal [Węgrzak 2020]. This means that the authorship of the work does not expire after the author's death. Copyright consists of the right to authorship of the work, the right to mark the work with one's name or publish it under a pseudonym or anonymously, as well as the right to the inviolability of the content (Art. 16, points 1-3). This means that without the consent of the creator, it is not possible to make changes in the form of a piece (e.g. a work of literature or a painting), or to make modifications that could distort its content or message and make it incompatible with the author's intention. Pursuant to Article 79(1) of the Act on Copyright and Related Rights, the creator may demand from a person who has committed violations the cessation of their actions, the removal of the effects of violations, the repair of the damage caused, or the handover of unlawfully obtained benefits. For this consideration, it is important to determine the duration of copyright. As mentioned earlier, the author's moral rights are not limited in time. On the other hand, author's economic rights (right to use the work and to manage its use throughout all the fields of exploitation, the right to remuneration for the use of the work), subject to the exceptions provided for in the Act, expire 70 years after the death of the creator [Digitalizacji 2022], and in case of co-authored works after the death of the last of the co-authors (Article 17 in connection with Article 36, item 1, Copyright and Related Rights, 1994). The conducted analysis should be supplemented with the information that, in the light of Polish law, the execution of a traditional reconstruction or a copy of an artifact is not considered a "work" due to the lack of a key premise required by copyright law - the author's creative invention. On the other hand, a copyist or reconstructor may assert rights based on general provisions on the protection of personal rights set out in civil law.

4. CONCLUSION

Modern technology has had a positive impact on introducing cultural heritage on a wide level and ensuring its continuity. The digitization of heritage may consist of salvaging these works from their dilapidated condition while making them available to the public at the same time. Protection of digital cultural heritage requires the existence of specialized databases and the use of cloud computing and blockchain technologies in a manner that guarantees the security and safety requirements for stored data.

Intellectual property law suitable for the digital economy requires a new vision for copyrighting and exploitation strategies in a virtual environment. The first of these challenges is the lack of a clear national plan and sufficient official policies to implement the digitization process in Jordan. The organizational obstacles are also represented by the shortage of resources and financial allocations

for the digitization of the national cultural heritage. In addition, there are no partnerships in Jordan between public and private sector institutions and bodies in this field.

The use of modern technology in preserving cultural heritage also raises many risks, the most important of which is that many of the information storage technologies and programs employed become obsolete and unreadable with time considering the rapid development of programming and electronics, the increase in the storage capacity of electronic instruments, and the resort to computing technologies in virtual space. It is a common issue with current practices in Jordan and Poland. Until recently, most computers used floppy or compact disks to store and retrieve information, but it seems that this time has largely passed as their storage capacity is no longer commensurate with the huge volume of information and the amount of data that we are witnessing in the age of the Internet.

The digitization of cultural heritage has drawbacks, including that it leads to the commodification of cultural heritage elements due to easy access to these elements. It may also lead to a change in the nature of this heritage, in addition to the ease of piracy and cyberattacks, imitation, copying, and dissemination without permission of creators or the rights holders, and the possibility of trading and marketing on the Internet without a license. The three-dimensional digitization of cultural heritage embodies a topic that raises many legal problems about who is the owner or the rights holder of this reproduction and what impact it has on protected rights.

In Polish law, so far, there is no legal definition of digitization. To determine the meaningful scope, reference should be made, in particular, to the Act on Copyright and Related Rights. Depending on the type of document, sectoral regulations should also be considered (e.g. digitization of library and archival materials), as well as acts of international law. With the transformation of social life, new technologies are entering the area of culture more and more extensively. Therefore, there is a need to strengthen the protection of authors of literary, scientific, and artistic works, while simultaneously not limiting public access to them through the adopted regulations. Access to cultural goods is a key factor in nurturing cultural identity and preserving historical and intergenerational continuity. In times of widespread decline of values and authority figures, the protection of heritage axiology becomes one of the more urgent issues enabling social development and peaceful, harmonious relations with other countries and nations.

The rapid development of science and technology means that new digital, multimedia, and interactive services are being developed. The convergence of data and the digitization of cultural goods entails the need to protect the rights of the creator and the integrity of the original artwork, piece of literature, scientific work, or document. Polish law, while protecting the creator, also contains regulations aimed at guaranteeing public access to cultural goods. Cultural heritage is a carrier of values, it plays a key role in the development of creativity and social cohesion. Hence, the digitization of cultural goods should not lead to the objectification of knowledge or the reduction of cultural goods exclusively to material data carriers. Intangible heritage indicates the essence of human existence and the axiological basis for the protection of the products of the human mind. By preserving and caring for heritage, cultural diversity can be multiplied, while contributing to the development of international cultural relations in a spirit of pluralism and mutual respect.

In conclusion, to enable people to preserve and access their cultural heritage, we need to work together to overcome obstacles, such as the outdated copyright system, ever-changing digital technology, and the huge mass of digital content available. Today, large amounts of newly created world cultural heritage are available only digitally, and not stored in physical form. While digital technologies provide wide access to culture, access to tomorrow is far from guaranteed. The digital legal deposit of e-books and similar materials is still in its infancy, which means that a lot of physical risks will arise in the future. Legislation often fails to keep pace with technological development. Where there is no copyright exception, there is an obligation to seek the rights holder's permission. The proposed solution may be to resort to the idea of collective licensing. It provides a clear solution to the issue of disclaiming rights to use works when it is difficult or impossible to find the rights holder. However, Extended Volume Licensing cannot be a panacea for all those involved in conservation activities. The lack of coordination between countries - on the duration of copyright, the extent of exceptions, or the use of the license - makes it difficult to implement transnational preservation projects.

Several initiatives have been launched in recent years to address the need to combat digital amnesia and preserve digital cultural heritage for the future. However, this is a task that cultural heritage institutions cannot tackle alone. Industry and governments will also need to be actively involved in ensuring that digital cultural memory is available for future generations.

Currently, there is much discussion of cultural rights and the right to culture in international conventions. The debate erupts between two basic ideas: access to culture as a public good and the privatization of culture through copyright. Copyright should be used as a creative tool to formulate an appropriate framework for IPRs to safeguard common cultural heritage in the digital age. Access to heritage or culture is an issue for both institutions trying to safeguard ICH and the bearers of traditions. Standards for IP protection afforded to digital heritage should be constructively reviewed in light of prevailing realities including the private nature of data, and the customary rules of societies. The findings of this paper are that Jordanian and Polish copyright laws for the documenting and preserving of cultural heritage by digital means require legislative changes depending on scientific and technological development and social dynamic. A governance model must accompany the creation, use, and sharing of digital cultural products to maintain integrity concerning their origin, and also to build cultural diversity.

Libraries, archives, and museums, in discussions at the national, regional, and global levels, have sought to demonstrate the existence of a copyright system that supports the digitization of traditional works and the preservation of "born-digital" heritage, and dedicate as much as possible their efforts to preserve the digital works, without prejudice to the rights holders. UN documents stress the importance of ensuring that communities and individuals have access to cultural heritage to build strong knowledge societies.

This study concluded the importance and necessity of complying with the copyright principles related to the digitization of cultural heritage. The implementation of digitization requires partnerships between entrepreneurs and technology companies. A clear and comprehensive plan must be drawn up, with close cooperation between centers of power, the private sector, and

technology companies. The necessity of establishing a national database, and not granting the monopoly of documenting the national cultural heritage to major companies, is crucial.

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Received November 2023; revised February 2024; accepted May 2024.