



LEGAL PROTECTION OF INTELLECTUAL PROPERTY

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PROBLEMS OF DIGITIZATION AND USE OF DIGITIZED WORKS BY MUSEUMS FROM THE POSITION OF GERMAN AND UKRAINIAN COPYRIGHT LAW

Introduction. *The developing trends in the digitization of museum collections encourage the creation of virtual exhibitions.*

Problem Statement. *The laws of Ukraine and Germany have different approaches to understanding a photographic work and non-original photographs reproduced in digital form, and there is a need to systematize and streamline the criteria for the originality of photographic works.*

Purpose. *The purpose of this research is to study the legal nature of the category of "originality", to analyze the criteria that determine the originality of photographic works, to substantiate the potential for legal protection of photographic works of art in digital form, to determine the possibilities of reproduction (digitization) of museum collections and provision of access to them by museums.*

Material and Methods. *A set of general scientific and special methods has been used. The materials for the study are publications of domestic and foreign researchers and scholars, norms of the applicable legislation of Ukraine and Germany.*

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Results. *The comparative analysis of the doctrine and practice of Ukraine and Germany has led to the conclusion that “originality” is a condition for the protection of works under copyright, according to which it differs from other works and is endowed with such features as uniqueness, obscurity, and inimitability. The authors have studied the factors that determine the originality of photographic work: one’s creative contribution; it does neither repeats any already known photographic work nor is a copy of other photographic work; contains a unique composition, angle, method of fixation, etc.*

Conclusions. *The critical analysis of museum activities has made it possible to identify opportunities for reproducing (digitizing) works of art, providing digital services (free and paid) for access to digitized works, and restrictions (copyright compliance) that arise in museum activities in communication with authors of works of art.*

Keywords: originality, digitization of works of art, non-original photographs, copyright, museums, virtual museum, and museum policy.

The COVID-19 pandemic posed a significant challenge to the global museum community, compelling museums to grapple with the absence of physical visitors. This unprecedented situation presented multiple daunting tasks, including safeguarding collections, ensuring staff safety and well-being, managing financial aspects, and sustaining public engagement. In response to these challenges and recognizing the pivotal role of museums in modern communication, museums have been employing digital technologies as a means of attracting visitors and maintaining operational functionality.

Amidst the COVID-19-induced isolation, museums endeavored to virtually engage their audiences by establishing virtual museums on their websites, offering virtual tours, and presenting virtual exhibitions.

In their review of museum innovation, Arayaphan W., Intawong K., and Puritat K. (2022) have highlighted the Wieng Yong House Museum’s response to pandemic-induced closure by pioneering the FabricVR project. This initiative has resulted in a web-based digital collection providing structured access to the museum’s ancient fabric repository utilizing the standard VRA meta-kernel. The associated 360 virtual reality web application enables visitors to effortlessly explore the virtual museum through a web browser [1].

In scholarly discourse, the term “virtual museum” lacks a universally accepted definition, with phrases like “digital museum,” “web museums,” “online museum,” “smart museum,” and “e-museum” used interchangeably.

Virtual museum encompasses a connected collection of digital artifacts that are linked and accessed through diverse means [2]. Now, the virtual museum contends to the conventional museum experiences. Not long ago, the superiority of conventional museums was evident, given the rarity and simplistic visual nature of virtual museums, rendering them less appealing to regular visitors. However, rapid technological advancements, including software enhancements and improved visual interface connectivity, have rendered virtual museum sites more accessible and user-friendly for information assimilation [3].

Individuals with disabilities, as a vulnerable segment of society, are an essential audience for museums. As O. V. Rozghon put it, amidst the COVID-19 pandemic, addressing the needs of individuals with disabilities, who endured profound social and informational isolation was crucially important. The author has emphasized the necessity of “digital technologies” for museum visitors, as digitalization inherently holds social relevance for both ordinary citizens and those with disabilities, facilitating web accessibility [4]. An example of IT inclusion implementation in Ukraine is *The Khanenko Museum Inclusive Site* project. It represents the first Ukrainian museum website developed in accordance with the international Universal (inclusive) IT design standards, aiming to ensure maximum access to web content for users with disabilities (visual, auditory, mobility, cognitive, complex impairments). This initiative was realized under support of the Ukrainian Cultural Fund.

The imperative to integrate digital technologies into Ukrainian museum practices has been further accentuated by the full-scale invasion of the Russian Federation. This invasion has revealed the vulnerability of museum collections to destruction, highlighting the crucial need for preservation and fostering continued competitiveness among museums.

Today, the State portion of Ukraine's Museum Fund has been housing over 12 million artifacts. The onset of a full-scale conflict has emphasized the urgent need for digitizing Ukraine's museum resources. In addition to shelling, looting, and ruining of museums, there is destruction of critical accounting documentation containing vital information about museum treasures. In collaboration with the Ministry of Culture and National Heritage of Poland and Solidarity Fund PL, the Ministry of Culture and Information Policy of Ukraine initiated *the Implementation of the Electronic System for the Museum Fund of Ukraine* project, in 2022 [5].

To bolster Ukrainian museums, the National Cultural Heritage Platform has been established. This platform aims to gradually digitize interactions among heritage-related services and implement an E-Museum. A key part of this initiative involves creating the Unified Portal of Cultural Values within the Museum Fund of Ukraine. This endeavor requires legislative changes, software development, and multiple digital tools to organize and manage Ukraine's cultural heritage [6]. Additionally, the ambitious e-Heritage digital project is set for completion by the end of 2023. This project will facilitate the digitalization of museum infrastructure, serving as a foundation for process modernization and transparency.

Ukraine's participation in *the Digital Europe Program* extends until 2027. This program offers funding opportunities for digitalization across various domains in European countries. Among the four main directions available for Ukraine to secure funding, one encompasses the use of digital technologies in the economy and society, allowing for submissions of projects that introduce digitization within the cultural sphere.

Therefore, museums, as custodians of cultural heritage, can secure funding for digitizing their collections, ensuring preservation and broad accessibility.

However, the facilitation of museum operations by the state, especially in the digital age, raises legal challenges concerning the digitization of artworks. The presentation of artworks in museum collections on their websites poses a pressing issue. Artworks, as material objects (e.g., paintings, sculptures), when digitized, transform into digital photographs, creating a distinct dimension in which there are interpretations differing from one state to other, as digital works or non-original photographic renditions of art.

Amidst Ukraine's modern European integration and the evolution of the information society, defining the essence of conditions for legal protection, particularly the concept of originality, gains prominence. New legal approaches and technologies have highlighted the need to understand these conditions [7].

This study concentrates on integrating digitization technology to preserve museum cultural assets and to ensure effective museum operation. It also aims to clarify the legal essence of "originality," to analyze criteria used to assess the originality of photographic works, and to explore approaches to legally protecting digital photographic art.

The pertinence of regulating intellectual property matters arises from the integration of digital technologies in museum activities, aiming to avoid infringement of copyrights on protected artworks.

Furthermore, the digitization of museum collections necessitates attention to copyright concerns and the potential legal protection of digital reproductions of works that have entered the public domain.

At the same time, there is a trend toward limiting access to reproductions of works within the public domain, asserting rights, and exerting control over such works. This can lead to potential copyright infringement lawsuits.

Museums' concerns about relinquishing control over collections in the public domain may result

in restricted access to reproductions for visitors.

Given the distinct characteristics of copyright laws governing artworks and the nuanced aspects pertaining to digital content across legislations and judicial practices of different states, our analysis focuses on the continental law, specifically examining Germany and Ukraine (representing the Romano-Germanic legal family). We scrutinize the museum activities related to collection digitization and other practices within the legal frameworks of both countries.

Our research yields conclusions and recommendations for museums. It emphasizes the urgency of understanding the nature of digital photographic artworks and the copyright protection they warrant in the context of the widespread digitization of museum collections.

Scholars like Arayaphan W., Intawong K., and Puritat K. (2022) [1], Benassi M., Grinza E., and Rentocchini F. (2020) [8], as well as Nambisan S. et al. (2017) [9], have delved into digital innovations. Notably, Klinowski M. and Szafarowicz K. (2023) [10], Rymar H., and Rybicka K. (2020) [11] have dealt with digital innovations in museums.

Furthermore, research on copyright matters and the harmonization of European copyright legislation has been undertaken by scholars like Benhamou Y. (2016) [12] and Margoni T. alongside Perry M. (2011) [13].

Foreign scholars such as Torremans P. (2022) [14], Verdiani G. (2021) [15], Wallace A. and Euler E. (2020) [16], Crews K. D. (2014) [17], and Prof. Dr. Manfred Reh binder (2010) [18] have extensively examined the theoretical and practical facets of museum policy and intellectual property management.

Their collective research, along with that of both foreign and Ukrainian scholars, has delved into the analysis of copyright objects in digital form and the significance of originality in obtaining legal protection for works. Studies by Rahmatian A. (2013) [19], Rosati E. (2013) [20], Mamchur L. IN. and V.V. Sitsevoi (2021) [21], M.V. Dubnyak. (2019) [22], Rozghon, O. V. (2019) [23], Maidanyk L. R. (2018) [7], and Pastukhov O. M. (2002)

[24] represent insightful contributions in this domain.

Ukrainian scholars like Tarasenko (2022) [25], Volynets V. O. (2020) [3], Rozghon, O. V. (2019) [4], and Trotska V. M. (2018) [2] have scrutinized the digitization of artworks within museum collections.

Given the insufficient exploration of digital technologies in museum activities as an innovative preservation tool for cultural values, there is a pressing need to expand research on the legal regulation of art-related copyright in Ukraine and Germany. This entails a comprehensive understanding of photographic works and non-original photographs reproduced in digital form. Such an endeavor necessitates the systematic organization of criteria defining the originality of photographic works.

A combination of general scientific and specialized research methods has been employed in this study. Through the analysis of various publications concerning the digitization of museum cultural values, regulations governing the museum activities, and prospects for digital development, several shortcomings and future possibilities have been revealed. The method of alternatives facilitates the critical assessment of regulatory acts governing the status of museums that have embraced the digitization of cultural values. Additionally, it helps substantiate originality as a copyright-protected work in the context of employing digital technologies in museum activities.

Utilizing the comparative approach has allowed for the identification of key indicators necessitating continued transformations in museum regulations, aligning them with global standards. It has pinpointed the factors defining the originality of photographic works and markers determining legal protection for digitalized artistic works. The functional method has allowed the authors to delineate the role of digitization technology in preserving museum cultural values, to underscore its impact on successful museum operation. Moreover, this approach correlates directly with the economic development levels of the studied states,

providing insights into the creation of a contemporary digital space for museum cultural assets.

The primary objective of this research is to explore the legal concept of “originality,” to analyze the criteria used to ascertain originality in photographic works, to justify the potential legal protection of digitalized photographic artworks, and to assess possibilities for reproducing (digitizing) museum collections and their accessibility.

To meet these objectives, the research delves into several key aspects: the copyright pertaining to photographic works and images, the evolution of digitization technology in museum operations as an innovative tool for preserving cultural assets, and the effective operation of museums in Ukraine and Germany. It also scrutinizes the primary areas of legal regulation concerning art-related copyright in these countries, identifies noteworthy digital technology trends in museum activities worthy of implementing within the legal frameworks of Ukraine and Germany, and examines the regulation of museum collection reproduction (digitization) and accessibility.

ROLE OF DIGITAL INNOVATIONS IN THE MUSEUM OPERATION

Pursuant to Article 2 and Clause 13 of Directive (EU) 2019/790 (2019), museum is a cultural heritage institution. However, this definition does not specify the legal form or structure of institution that is considered a cultural heritage institution [10].

Therefore, this issue is regulated at the state level according to national legislation. According to Art. 1 of the Law of Ukraine on Museums and Museum Matters dated 06/29/1995 No. 249/95-VR, museum is a scholarly research, cultural, and educational institution created for the study, preservation, use, and popularization of museum objects and museum collections with the aim of attracting citizens to the national and world cultural heritage.

In Germany, the term “museum” is not officially defined (by law or other legal sources).

Digital technologies are one of the most sought-after technologies in museum operations, and their introduction accelerates digital development. Therefore, it is quite obvious that the European digital agenda for 2020 – 2030 focuses on the profound changes caused by digital technologies, the important role of digital services and markets, as well as the new technological and geopolitical ambitions of the EU.

Digitization is defined as the process of introducing digital technologies.

For museum to be advanced and interesting for visitors, it should use digital technologies and multimedia products. The conversion of object that exists in any material form (for example, from a conventional, analog form) into a digital form (digital format) is called digitization. It should be noted that the object conversion is a process.

The digital transformation of the museum is accelerating, generating demand for new digital products, processes and technologies. Digital innovation is defined as the creation (and corresponding modification) of market offers, business processes or models, which are the result of digital technologies [9, 225].

They include the development of new technologies [8, 562], as well as their implementation in new products and services and in general learning processes through which organizations transform themselves in a digital way [26].

Innovations in the field of museum affairs cover a rather wide range and different areas of museum operation: the use of digital technologies and audiovisual means in museum exposition; the creation of virtual museums and exhibitions in the worldwide network of museum websites; the digitization and software standards for accounting of museum funds; the application of non-standard and creative approaches in research and educational activities of the museum, museum marketing, etc.

The intensive development of digital technologies and the appearance of advanced visualization tools contribute to the spread of virtual tours in the practice of museums [4, 21], the subject of which can be digitized works of art.

Demonstrating digitized museum collections on the museum website provides an opportunity to preserve museum collections and to view digitized museum collections. We have noted that the audience of museums have significantly expanded due to the conversion of works of art contained in museum collections from analog to digital form. However, this has caused many problems related to the observance of copyright in works of art.

COPYRIGHT ON ARTWORKS AND IMAGES OF ARTWORKS

The Law of Ukraine on Copyright and Related Rights (No. 2811-IX, dated 01.12.2022) governs *sui generis* rights within the realm of copyright and/or related rights, explicitly defining the photographic works. This law draws a distinction between the creative photographic work and the photograph devoid of authorial creativity and originality, thereby excluding the latter from copyright protection [25].

To establish the nature of object resulting from work of a photographer capturing an image eligible for copyright protection, it becomes imperative to consider the nuances involved in the process of photography and digitization, particularly concerning features specific to digital-format photography.

As the discussion pertains to the concept of “photographic work,” it is advisable to define the category of “work,” which enjoys copyright protection under Ukrainian and German legislations.

While analyzing the copyrightable objects, we have noted that the Ukrainian legislation establishes that objects of copyright encompass works in the fields of literature, art, and science (Article 433 of the Civil Code of Ukraine (2003), Article 6 of the Law of Ukraine on Copyright and Related Rights).

The object of copyright is “work.” According to Article 1, paragraph 56 of the Law of Ukraine on Copyright and Related Rights, “work” is an original intellectual creation by the author or co-

authors within the realms of science, literature, art, and other domains, in an objective form.

O. O. Shtefan has stated that the legislator defines “work” as a comprehensive notion encompassing creations in science, literature, and art, thereby establishing a broader framework than the term “object of copyright.” Thus, “work” can be understood as the outcome of intellectual and creative effort, materialized in a tangible, objectively expressed form. The essence of work is considered intangible, while its embodiment takes the form of a material carrier. The object of copyright, therefore, is a material manifestation, a specific material form representing the result of intellectual and creative endeavors, i.e. an objectification of the work. Additionally, in accordance with the Berne Convention on the Protection of Literary and Artistic Works, the term “literary and artistic works” encompasses all creations within the realms of literature, science, and art [27].

Contrary to the Ukrainian law, German legislation under the Act on Copyright and Related Rights (Urheberrechtsgesetz, UrhG) (1965) does not explicitly define the term “work.” Instead, there is an open definition of the concept of “work” with a prescribed list of protected objects. It is stipulated that work, in the context of this law, exclusively refers to individual outcomes of intellectual activity (Section II Works, Article 2 Protected Works, UrhG), thereby delineating the definition of objects eligible for copyright protection.

The Law of Ukraine on Copyright and Related Rights defines the originality of work as a sign (criterion) that characterizes the work as the result of the author’s own intellectual creative activity and reflects the creative decisions made by the author during the creation of the work (Clause 35, Article 1 of the Law of Ukraine on Copyright and Related Rights).

The Berne Convention for the Protection of Literary and Artistic Works (1886) does not mention “originality” as a requirement.

The Directive that continues the vertical harmonization of the standard of originality is Directive 2006/116/EC (2006, Copyright Term Direc-

tive) stating that photographic work is to be considered original if it is the author's own intellectual creation reflecting his personality, with no other criteria such as merit or purpose being taken into account. That is, according to this Directive, copyright protection of individual objects is established, but each work as an object shall be original.

It should be noted that the Directives are, as a rule, the main instrument for harmonizing the legislation of member states. To acquire legal force, the directives need to be implemented into the national legislation of EU member states, although in some cases, directives may have direct effect. Therefore, even within the EU, the issue of the direct effect of EU directives is debatable. At the same time, judicial practice has many examples of the application of EU directives [28].

Certainly, the concept of originality has been explored in cases such as *Eva Maria Painer v Standard VerlagsGmbH & Others* ECLI:EU:C:2011:798 (Austria) [29]. The Court, addressing whether realistic photographs, notably portrait photographs, qualify for copyright protection under Article 6 of Directive 93/98/EEC [], established in *Case C-5/08 Infopaq International* [2009] ECR I-6569 (Denmark) [30], para 35, that copyright can only extend to an object like a photograph if it bears originality in the sense that it embodies the author's unique intellectual creative idea.

Section 5(3) of the German Constitution (*Grundgesetz*, GG, 23.05.1949) guarantees the freedom of art and science. Oppositely to this constitutionally enshrined right, there are the interests of copyright holders of original works, protected by § 14 GG, often aligned with moral interests outlined in Sec. 2 (1) and Sec. 1 (1) GG. Hence, there is a certain conflict between private and public interests, necessitating the maintenance of a societal balance between these competing aspects.

Part 1 of Article 7 of the Law of Ukraine on Copyright and Related Rights addresses the criterion of originality as fundamental for protecting the object of copyright.

The abovementioned analysis has shown that originality stands as a prerequisite for the copy-

right protection of work. This implies that the work shall possess distinctive features such as uniqueness (exceptional author's contribution), novelty (unknown to society), and distinctiveness (exceptional and unlike preceding works).

Original work is deemed to encompass a distinct personal intellectual or creative contribution/input by the author—a natural person—in amount adequate to create an independent intellectual property safeguarded by law, without the presumption of its legality being contested in a court proceeding according to due legal processes. The degree of creative contribution cannot be uniformly predefined across all work types, given the subjective and individualistic nature of creativity. It requires a case-by-case determination by the judiciary, evaluating the sufficiency of the creative contribution in each case. Moreover, this understanding of the sufficiency of creative input finds application within the framework of the presumption of creative contribution (effectively originality) formed through judicial precedents. The creative contribution, a pivotal facet of originality, exclusively involves the participation of a natural person, thereby precluding the protection of objects generated by artificial intelligence under conventional copyright. However, it does not prevent the extension of *sui generis* law over them in the future [7].

The standards for originality requisites for specific work categories are harmonized according to the continental model. It does not mandate a specific level of novelty but necessitates the visible manifestation of the author's personality within the creative outcome [31, 67].

It should be noted that only creative activity may result in creative work/outcome. It is essential to recognize that copyright protection does not extend to mere ideas, processes, methods, or mathematical concepts as such (Article 433 of the Civil Code of Ukraine). Consequently, while the original concept or intention of a photographer marks the inception of a photographic creation, only the culmination of various factors of originality and its embodiment in the tangible

form of a photographic work (the medium of a photographic image) makes it (photographic work) eligible for copyright protection.

It should be pointed out that because of the presumption of a creative nature, in the event of a dispute (the subject of which is, for example, the termination of the infringement of rights to a photograph that does not have signs of originality), it is the defendant (to whom this lawsuit is filed for the termination of copyright infringement) who shall prove the lack of creative nature (originality) in the disputed photograph [25]. If the work requires little effort, skill and input, and the result is ordinary, or, in other words, the work lacks the quality of individuality that would distinguish it from the ordinary [32], it is not considered original.

It should be noted that the literature has emphasized the expediency of providing legal protection only to original photographic works as objects of copyright, it is this approach that ensures the avoidance of misunderstandings in this regard in practice [33].

Terry S. Kogan has pointed out that the object or scene that the viewer sees in a photograph rarely affects the originality of the image. Accordingly, there is the opinion that most photographs are non-creative facts, as those who think so seek the originality of the photograph in the object or scene that the viewer sees in the photograph. However, the originality of the photograph depends primarily on the creative choice of the photographer in placing the marks on the surface [34].

The originality of photographic work can be related to the photographer's choice of composition, perspective, pose/arrangement of the object (subject), light, and method of fixation. The national legislation on copyright does not specify the requirements for the originality of photographic works, everything is decided by forensic examination in the event of a dispute and is determined in each individual case, given the specific circumstances of the case. In particular, the technical (photo lens, lighting, etc.) and the artistic means (image composition, perspective, pose, etc.) define the creative contribution of the photogra-

pher, his/her independent contribution to the creation of the photographic work.

In disputes about the recognition of the originality with respect to photographic works, the elements of proving the “sweat of the brow” concept can be such criteria that testify to the work of the photographer who selects the technical characteristics for the photograph and uses certain photography techniques. For example, such criteria can be: an unusual composition, a non-standard perspective, the transfer of a person's individuality in a manner characteristic only for him/her, the peculiarities of the combination of light and shadow, the type of light chosen by the author (day, artificial, side, spot, diffuse), angle, aperture, focal length to the object, etc. [35, 15–16].

At the same time, there is the problem measuring the level of originality of specific photographic works. Forensic examination, tasked with assessing the originality of such works, grapples with an array of intricate theoretical and scientific and methodological complexities. The unique nature of the photographic creation process, markedly distinct from other fine arts due to the camera's automated functions as the primary medium of artistic expression and the inherent verisimilitude of the resultant photographic works, poses the primary challenge. Elements of real-life objects and their environments, while depicted in photographs, often lack inherent expressive indicators of artistic originality and uniqueness, presenting a challenge in their characterization of originality a priori [33].

Legal protection extends to works fashioned through the intellectual and creative endeavors of one or more authors. Creativity, being a universal category, is not explicitly defined in legislation, owing to its universal nature. Intellectual and creative endeavors yield qualitatively new, unique, and original creations, including works in science, literature, and art—frequently becoming subjects of legal protection. The creative essence of work is typified by its originality or novelty, which can manifest itself in both the content and form of the work [27].

As stated in paragraph 17 of the preamble of Directive 93/98/EEC (1993), intellectual creation work earns authorship when it reflects the author's personality.

This applies to the cases when the author has the opportunity to express his/her creative abilities when creating the work through a free and creative choice. For example, the case of *Eva Maria Painer v Standard VerlagsGmbH & Others* ECLI:EU:C:2011:798 states that the photographer can make a free and creative choice in several ways and at different stages of its creation. So, at the stage of preparation, the photographer can choose the background, the pose of the subject, and the light. When shooting a portrait, he/she can choose the framing, the angle of view and the atmosphere to be created. Finally, when choosing a shot, the photographer can choose from the many available developing techniques the one he/she wants to use or, if appropriate, use computer software. By making these various choices, the author of portrait photography can put his/her "personal mark" on the created work.

Article 6 of Directive 93/98/EEC (1993) on the unification of the terms of protection of copyright and certain related rights should be interpreted as that the portrait photograph may, in accordance with this provision, be protected by copyright if, as determined by the national court in each particular case, it is an author's intellectual creation that reflects his/her personality and expresses his/her free and creative choice in creating this photograph [29].

Analyzing this Article 6, we assume that in order for the photograph to be protected by copyright, it shall be: author's own intellectual creation reflecting his/her personality, that is, this work shall contain his/her personal intellectual (creative) contribution and express his/her free and creative choice in creating this photograph, in particular, regarding the composition, perspective, placement of the object (subject), light, etc.

Since the creative contribution is a decisive element of originality, we assume that the following factors shall determine the originality of pho-

tographic work: the work shall possess author's own creative contribution (independent creation of the photographic work); it shall not be a repetition of an already known photographic work or copied from other photographic work (author's individuality); it shall contain a unique composition, perspective, method of fixation, etc. as a meaningful content (creative approach).

Therefore, the originality of photographic work is revealed through the novelty, originality, uniqueness of the photographic work created in the process of creative activity, which is not a copy of other already known photographic work.

According to the German copyright law, the definition of the object that can be protected by copyright according to section 2(2) UrhG is that "only the author's own intellectual works are works within the meaning of this act." This norm is an indication of the originality of the work: "one's own intellectual works." Since the protection of the personality of the author extends only to that which originates from the author as a person, the work shall be a personal intellectual creation ("persönliche geistige Schöpfungen").

Originality is not defined in German national law, it is left to the discretion of the courts that follow the concept: "personal" equals "individual," that is, the personal (individual) expression of the author, for example, Case I ZR 55/97. *Werbefotos* (Germany) [36].

In Germany, the understanding of the originality of photographs is reflected in the distinctive distribution of copyright laws. As a broad definition, the difference between "author's rights" ("Urheberrechte") and "related rights" ("Leistungsschutzrechte," "Verwandte Schutzrechte") is that the former protects the newly created work that embodies the individual spirit of the author as its creator, while the latter applies to the efforts that discover, present, and realize an already existing work [18].

In the German law, there is a "dualistic system" in that legal protection is granted to both "original" photographic works and "non-original" photographs. The non-original photographs do not

reach the standard of personal intellectual creative work as provided by Art. 2 UhrG, but they are protected by UhrG.

Hence, the photographs can be protected as photographic works, as a separate category (“Lichtbildwerke”), if they are personal intellectual creative works (thus meet the German requirement for originality) [19]; at the same time, the photographs that do not meet the requirements for originality according to § 2 (1) UrhG can be protected by the related law in accordance with § 72 UrhG. So, the unoriginal photograph is protected in accordance with Art. 72 UrhG in cases where it possesses only a minimal level of “personal intellectual (creative) effort” (ein Mindestmaß an persönlicher geistiger Leistung), that is, it does not require a creative approach from the photographer, but only minor technical skills. Thus, although the level of creative contribution is different, the German law gives protection such an object as well.

Accordingly, in order to qualify as photographic works (Lichtbildwerke), the photographs shall be characterized by individuality and a minimum level of creativity. These requirements are usually met if the photographer has made free and creative choices regarding several artistic factors such as light, framing, background, or exposure [37]. “Individuality” derives from the criterion “personal intellectual effort.”

This criterion of “personal intellectual effort” (“persönliche geistige Schöpfung”) is aimed at the direct connection of the author with the work and the manifestation of the author’s efforts during its creation. It is assumed that all works of art are based on the achievements of previous generations, and the author, in order to claim that a specific work is considered his/her own, shall bring something personal from him/herself into it [38, 78] and express his/her thoughts or feelings while creating the work (UrhG § 2 Rn 12) [39].

The criterion is considered to be met if the work has mental or emotional content from the author, which is able to influence the end user (listener, reader, viewer, etc.) [40, 118]. However,

a minimum level of originality is necessary, although it is lower than that specified in Art. 2 UhrG, and can be expressed in the fact that the photograph is not original, or cannot be original, and can be expressed, for example, in certain conditions of the shooting. Accordingly, ordinary photographs are protected as long as they have a “minimum personal intellectual contribution,” as opposed to the requirement for “personal intellectual creative work” as established by Art. 2 UhrG for the photographic works. In Case I ZR 55/97 (Germany), the court, relying on previous judicial practice, used the expression “minimum level of personal intellectual effort” despite Art. 2 UhrG “personal intellectual creative work”) [36].

In practice, the distinction between these two categories of photographs is often difficult, as “copyrightable” photographs may benefit from the concept of “kleine Münze” for their protection under the copyright law [18]. In the case of the “kleine Münze” author’s photographic works (“Lichtbildwerke”) and “ordinary photographs” (“Lichtbilder”), the protection based on (limited) creative originality, on the one hand, and on the related rights, on the other hand, is combined [19]. There is a difference between the works in terms of the period of protection, as the validity of the exclusive rights to non-original photographs is limited to 50 years after publication or production. The photograph is protected in accordance with Art. 72 UrhG in cases where it possess only a minimal level of “personal intellectual effort.”

Therefore, photographs can also be protected by the so-called copyright-related right under section 72 of the UhrG, which does not require a creative approach from the photographer, but requires a minimum level of “personal intellectual effort.”

An important aspect in the protection of photographs under the EU law can be found in the last sentence of Art. 6 that states, “Member States may provide for the protection of other photographs.” Unlike other special forms of protection, the regulation of protecting non-original photographs (UrhG) is completely left to the discretion of Member States [14, 157].

Directive 2006/116/EC (2006) recognizes not only the photographs (photographic works) as protected objects. The last part of Art. 6 allows Member States to grant protection to “other photographs.” Consequently, the protection that some Member States grant to “other photographs” is defined negatively, i.e. by offering protection to the photographs that do not qualify as photographic works. The European countries that recognize this form (7 EU Member States plus 2 EEA members) generally grant rights similar to copyright (though there are significant exceptions) for a certain period of time. Directive 2006/116/EC (2006) leaves the protection of the photographs that are not the photographic works to the discretion of national law.

The interpretation of other photographic works is discussed in the case of *Eva Maria Painer v Standard VerlagsGmbH & Others* ECLI:EU:C:2011:798 (Austria) [29].

The court that settled this dispute considered that the portrait photograph that was the subject of the dispute, certainly was a work, and its protection had to be the same as for any other work, including other photographic works. The Court assumed that the photographic work fell under Article 5(3)(d) Directive 2001/29/EC (2001).

The court’s ruling in this case underscores that determining whether it is an adaptation or an unrestricted use of the work depends on the level of creative input. A high degree of creative effort applied to a template generally decreases the likelihood of its unrestricted use. In the case of portrait photographs, where, as in the photographs in question, the author has limited creative latitude, the scope of copyright protection for such photographs is consequently narrow. Moreover, the contested photobot created from templates is a distinct and original work eligible for separate copyright protection. The court deems the original photograph used as a template for the disputed work to be eligible for copyright protection. However, the court establishes that the reproduction and dissemination of the disputed photograph do not constitute an adaptation necessitating the consent of Ms. Painer as the author of the

original photographic work. Instead, it is deemed an unrestricted use that does not require her consent (as per paragraphs 41–42 of the decision).

When we engage with a work, usually, we prioritize the form of expression and pay much less attention towards its structure.

The form of expression of works can take various forms: verbal (written), oral, recorded on paper, disc, or other material mediums, and can be publicly performed or proclaimed [41].

Ukraine’s Law on Copyright and Related Rights has repeated mentions of the electronic (digital) form of work, the digital object, etc. It emphasizes the transformation in the form of existence and utilization of copyright objects within the digital realm.

Art. 10 of this law distinguishes between copyright and title to a material, electronic (digital) object in which a work is embodied (fixed). The innovation is that the law distinguishes between the material and the electronic (digital) object in which the work is embodied (fixed). Therefore, the alienation of the electronic (digital) object in which the work is embodied (fixed) does not mean the transfer (alienation) of property rights to the work and vice versa. The electronic form is also a form of existence and reproduction of the work. Making a work in electronic form is considered the creation of such a work [25].

The digital form of an object is intangible. According to the Ukrainian legislation, there are currently no differences between the legal protection of copyrights for the digital photographic works and the ordinary photographic works.

The definition of “digitization of a work,” as proposed by the Court of the European Union in the case C-117/13 (Germany), says that the digitization of work, which essentially involves the conversion of work from the analog format to the digital one, is an act of reproduction of work” [42].

When digitizing the work, the material form of the work does not change. Instead, we use its reproduction, which is a certain process that does not have a creative nature, and save it on a certain medium in digital form (for example, a digital photograph of a painting).

The presumption of authorship establishes the legal relationship between the author and the created work. The author of the work owns personal non-property and property rights (Articles 11–12 of the Law of Ukraine on Copyright and Related Rights, Unterabschnitt 2 Urheberpersönlichkeitsrecht (Non-property) UhrG, Unterabschnitt 3 Verwertungsrechte (Right to Use) UhrG, Unterabschnitt 4 Sonstige Rechte des Urhebers (Other rights) UhrG (Ses. 25–27: Access to details, Right of resale, Rental and loan consideration)).

Economic (property) rights guarantee the author (rightholder) remuneration for the use of his/her work by other persons. Thus, the author (rightholder) can decide who is entitled to use his/her work and who is not. In contrast, personal non-property rights protect the connection between the author and the work. They consist of the right to be recognized as the author of the work, the right to the integrity of the work, and the right to decide when and how the work becomes available at first [10].

The right of reproduction is one of the exclusive rights granted with respect to work of art.

Article 16 UhrG states that the right to reproduction is the right to make copies of the work in any way and in any quantity.

The Ukrainian law provides a broader concept of reproduction. The reproduction of work means the direct or indirect production of one or more copies of the object of copyright and/or related rights (or part thereof) in any way and in any form, including for temporary or permanent storage in electronic (digital), optical or other computer readable form, as well as the creation of a three-dimensional work from a two-dimensional work and vice versa, and the creation of a computer readable three-dimensional work based on a set of instructions for the production of a three-dimensional work (Clause 14 of Article 1 of the Law of Ukraine on Copyright and Related Rights).

The reproduction also includes placing the work on the Internet to provide access to it. Among the rights related to the right to reproduce is another author's right — the right of access of the author

of a visual art work to the work. The author of such a work has the right to demand from the owner of the material carrier of this work the opportunity for the author to exercise the right to reproduce the specified work. Such access is necessary for the author to reproduce the work in copies or in other manner [43, 52]. As we see, reproduction refers to the method of making and placing the work, but it does not emphasize the creative nature of the work.

Authors of literary and artistic works protected by the Berne Convention for the Protection of Literary and Artistic Works have the exclusive right to permit the reproduction of these works by any means and in any form (Article 9 Berne Convention for the Protection of Literary and Artistic Works).

However, painting as a work of art or a type of cultural value is a material object (material form), i.e., the carrier of this work (the canvas on which the work is made) and the copyright for the painting are preserved. When digitizing a painting, for example, a digital photograph of the painting is preserved in a specific carrier in digital form.

Let us consider digital photographs as “other photographs” or “non-original photographs.” It seems fair to consider this for digitizing objects in all cases where digitization is a mere digital reproduction of the object. However, it should be noted that the level of originality should not mistakenly be set at a too high level: the free and creative choice of the creative photographer, which needs to be assessed in each specific case, can be considered authorial, especially in cases of “artistic” photography of works of art [44].

Digital photography is disseminated very easily. At the same time, all “copies of the work” do not lose their quality as compared with the first version of the digital photograph. Copy of the work, made in any material form, is a replica of the work (para. 27, Art. 1 of the Law of Ukraine on Copyright and Related Rights). As we see, in this article of the Law, copy means an objective form (material or electronic (digital)), while replica of the work relates to the material form of the work.

Works of visual art exist in a material form and can also be reproduced in a digital form as digital photographs. Digital photography in the context of digital representation of works should be perceived as a result of digitizing museum cultural values.

Copyright arises from the fact of creation of a work of science, literature, and art, as a result of the intellectual creative activity of the author or co-authors. The work is considered created from the moment of its initial appearance in any objective form (written, material, electronic (digital), etc.) (Art. 9 of the Law of Ukraine on Copyright and Related Rights). The Ukrainian legislation allows the creation of a work in a digital form. Unless proven otherwise, the result of intellectual activity is considered creative work.

The perfect digitization of text, documents, or images made through processes such as digital scanning or photocopying most likely does not fall under the protection of Art. 72 UhrG, and is deemed a mere reproduction [45]. For instance, in Case I ZR 14/88 (Germany), the court excluded mere copies produced without any minimal personal intellectual input from the protection as ordinary photographs.

If the digitized element is neither text nor an image, but a three-dimensional object, in this case, most likely there is a human operator who, in a process comparable to photography, places the object in the best position from the point view of light, angle, height and/or perspective to display the object as much detailed as possible. In such a case, while the photographer's intention is certainly to reproduce a real object as accurately as possible, which excludes any personal brand, ordinary photographs may be protected because the result reflects minimal intellectual input from the author. However, this remains a highly disputable issue, and the fact that the result of the digitization process is a perfect reproduction of a three-dimensional object [44] shall be weighed against the possibility that the image is protected by Art. 2 or Art. 72 UhrG.

The transfer of works from material form to digital indicates the possibility of reproduction of

such a work through storage (as a method) in electronic (including digital) form.

The embodiment of museum cultural values in other form of expression (digital) contributes to a different perception of the museum visitor. For example, the reproduction may take the form of digital photographs of paintings.

Before digitizing any work of art, which belongs to museum, it is necessary to determine the existence of copyright, whether they qualify as objects of copyright through the standpoint of copyright, and to obtain permission from the owner of the copyright on the work for the reproduction and subsequent access of the Internet users of the museum website to the reproduction.

Thus, not every museum object—whether a movable or immovable thing — that is registered in a museum inventory book and potentially a national treasure is considered a subject of copyright from the standpoint of copyright law. Using the museum objects that are not copyrighted is much easier, as the museum does not have to consider copyright aspects.

However, if artifact is protected, it is also necessary to distinguish the work itself from its physical medium. The ownership of object that is a work by museum does not result in the transfer of property rights to the work because, from a legal point of view, work is an intangible asset. As a result, there shall exist a separate legal basis for the use of work physically embodied in the object owned by museum. Such a basis can be a license or an agreement on the transfer of copyright, each being a separate agreement between the author (or his/her successor) and the museum. Copyright transfer agreement has a permanent nature and transfers economic rights to other person who receives all economic rights to the work. License agreement allows only certain use of the work (within a certain period of time and in a certain territory), while the rights remain with the author or other authorized person [10].

According to Art. 12 of the Law of Ukraine on Copyright and Related Rights, the subject of copyright has the right to grant permission to use

the work or to dispose of the property rights to the work in other way that does not contradict the law. Art. 1107 of the Civil Code of Ukraine established forms of disposal of property rights, in particular, granting a license (permit) for the use of an object; transfer (alienation) of exclusive intellectual property rights.

According to Section 31 UrhG, the author can give another person the right to use his/her work in a certain way or in any way either as non-exclusive right or as exclusive right.

The creator of the work has the exclusive right to use the work in tangible and intangible form (Usage Rights, Section 15ff UrhG). If the work is created by several coauthors, the rights of use can only be exercised jointly.

Right to use is not fully transferable in Germany. However, the author may grant third parties right to use, which is called license. The right to use may be granted as non-exclusive right or as exclusive right and may be limited in terms of place, time or content.

In addition, there are copyright restrictions that legally allow certain uses of works for the benefit of the general public (such as the right to make private copies). This means that, as a rule, in these cases, it is not necessary to obtain an individual permission for use. However, in many cases, such use may be subject to a fee paid either by users themselves or in the form of fixed amounts included in retail prices.

Granted rights are determined by license agreements between authors and users. License agreements should always be worded as precisely as possible. If individual rights are not explicitly stated, the main purpose of the agreement determines the types of use covered by the agreement (Section 31 (5) UrhG, transfer of rights for a specific purpose). This also applies to exclusivity or non-exclusivity of the right of use, as well as to the time and place restrictions to which the use is subject [46].

There is nothing to prevent museums from making appropriate copyright transfer agreements with authors when receiving the ownership of ar-

tefact, to determine the scope in which they (the museums) can use the work.

However, it is also possible to foresee the situations in which this is impossible (for example, the acquisition of an artifact from a person who is not the copyright owner); in such cases, the agreement, most likely, have to be made later, when there is a need to use the work, and with someone other than the previous owner of the tangible medium. Conversely, it is sometimes possible to use a work in unrestricted manner, for example, under the copyright exceptions and limitations or beyond the copyright law, after the property rights to the work have expired. The further complication of this sophisticated legal landscape is that national jurisdictions may have different copyright exceptions and limitations. For this reason, certain rules have been proposed at the EU level to allow museums and other cultural institutions to use works from their collections without obtaining the consent of the right holder (e.g. Directive 2012/28/EU (2012) Directive (EU) 2019/790 (2019)) [10].

Paragraph “j” of Art. 5 (3) Directive 2001/29/EC (2001) allows unrestricted use for the purpose of advertising a public exhibition or sale of works of art to the extent necessary for the promotion of the event, excluding any other commercial use. Their reproduction is deemed unrestricted only for the purpose of covering museum events, except for the use of catalogs for commercial purposes. Section 58 UrhG allows the reproduction, distribution, and making known to the public of works shown to the public or intended for public display or sale in accordance with Section 2(1)(4) – (6) by the organizer for the purpose of advertising, to the extent in which it is necessary to promote the event.

Art. 22 of the Law of Ukraine on Copyright and Related Rights allows using without the permission of the subjects of copyright and free of charge, but with an indication of the author’s name and the source of borrowing, to bring to the public knowledge the works seen or heard during the course of current events for the purpose of

highlighting such events, to the extent that corresponds to the informational purpose, reproduction in catalogs of works exhibited at publicly accessible exhibitions, auctions, fairs or in collections to cover the specified events, except for the use of such catalogs for commercial purposes.

The reproductions of visual works that are in the public domain are not protected by related rights according to parts 2 and 3 (Sec. 68. UrhG). This applies, for example, to ordinary photographs of works of visual art, which are in the public domain, and leads to a partial cancellation of the applicable case law of the Federal Court (I ZR 104/17 Museumsfotos) [47]. The purpose of this is to provide access to reproductions of Germany's cultural heritage.

Therefore, Sec. 68 UrhG prevents the implementation of Sec. 14 Directive (EU) 2019/790 (2019), the previously granted re-monopolization of visual works in the public domain through related rights, such as, in particular, the legal protection under the German Photograph Act pursuant to Sec. 72 UrhG. The visual works in the public domain can now be reproduced in unrestricted manner, even if the basis of the reproduction is the photograph itself. However, the protection for reproduction photographs of works of fine art, which are not in the public domain, is still fairly granted under general rules [48].

Photograph as an object of copyright within the meaning of Sec. 2 UrhG can still be protected if it exceeds the threshold of copyright protection. The already existing right of withdrawal because of non-use (Sec. 41 UrhG) is adapted to Sec. 20 Directive (EU) 2019/790 (2019), which also provides for the right of withdrawal because of non-use. Directive (EU) 2019/790 (2019) also allows partial withdrawal. Accordingly, the author can withdraw either only the exclusivity or the right to use in general (Sec. 41 (1) sentence 1 UrhG-E). After the revocation, the licensee's right to use is accordingly modified into a non-exclusive right to use or is terminated altogether [49].

Therefore, these reproductions of visual works, for which the copyright term has expired and

which are in the public domain, shall not be protected by copyright.

As a general rule, it is possible to digitize work of art without the permission of the copyright owner, for example, after the copyright has expired and it has become the public domain. The expiration of the period of validity of property rights to work means the transfer of the work into the public domain (Article 32 of the Law of Ukraine on Copyright and Related Rights).

For museums, there may be available unrestricted use of the work with open access for visitors, archives or organizations for the preservation of audio and video recordings. Article 24 of the Law of Ukraine on Copyright and Related Rights establishes the possibility for museums to provide unrestricted interactive access to works in electronic (digital) form without the permission of the copyright holder, using terminals in the museum premises, provided that there are made copies of these works and there is access to one copy of this work only. Therefore, this article confirms that there are copies of the copyrighted work in digital form and that museums may use such an open access work in unrestricted manner.

For works of art, which are protected by copyright and have a known author, the copyright mark appears below the image and as part of the artwork registration.

The European Commission emphasizes that materials in the public domain shall remain in the public domain after digitization through various official documents and initiatives. This is noted in OpenGLAM (galleries, libraries, archives, and museums, 2008). The European Commission, having a pro-open position, has announced the adoption of the two licenses: CC BY 4.0 for all content and CCo. Therefore, the digitization of public domain content does not create new rights to works that are in the public domain in analog form. They continue to remain in the public domain after they have been digitized.

Sometimes the author of a work cannot be established or found, despite a thorough search. Such works are called orphan works.

The concept of “work that has entered the public domain” makes it possible to accurately or conditionally identify and mark the author, to determine the term of protection of exclusive rights, and implies that this term, established by law, has already expired. Unlike, the concept of “orphan work” is used if the attempt to identify the author and/or his/her successors is unsuccessful (lack of information), but the term of legal protection probably continues and the law requires obtaining permission from the holder of exclusive rights for the legal use of such a work, but it is technically impossible [21].

The legislation of Ukraine establishes the conditions under which object is recognized as an orphan work. Orphan work is a work or a fixed performance made public in Ukraine, in respect of which the subject of property rights has not been identified as a result of a thorough search, or even if the subject is identified (including for the objects made public anonymously or under a pseudonym), his/her location has not been established (clause 51) Art. 1 of the Law of Ukraine on Copyright and Related Rights).

Libraries, museums with open access for visitors, archives or organizations for the preservation of audio and video recording funds by means of reproduction for the purpose of digitizing, indexing, cataloging, preserving or restoring the copy may use orphan works, having taken measures to identify and properly trace the authors, other subjects of copyright, provided the relevant subjects of copyright have not been identified or the identified subjects have not found (Article 29 of the Law of Ukraine on Copyright and Related Rights).

Orphan works within the meaning of the UrhG are: the works and other objects of protection contained in books, journals, newspapers, magazines or other works; cinematographic works, as well as image and sound media on which cinematographic works are recorded; sound carriers from the funds (inventory objects) of public libraries, educational institutions, museums, archives, as well as institutions in the field of film or sound heritage, if these inventory objects have

already been made public, and the right holder of which could not be established or discovered even through a thorough search.

The institutions specified in part 2 of Sec. 61 UrhG are not allowed to reproduce and make available to public orphan works, unless they act in the public interest, in particular, preserve and restore the contents of the funds and open access to their collections, provided that this contributes to cultural and educational purposes. The institutions may charge an access fee for the orphan works to cover the costs of digitizing and making them available to the public.

If a museum has such works in its collection, their use (for example, making them available or reproducing in unrestricted manner) may result in copyright infringement. Therefore, due to the fears of museums regarding the possible consequences of copyright infringement, the status of an orphan work can become a significant obstacle to the preservation of cultural heritage [50, 286].

The reason for orphan works is that copyright protection is relatively long, and property (economic) rights can be transferred. As such, it can be difficult to determine who owns the relevant right to a work in museum’s collection. The author may transfer his/her rights to a third party or heirs, or there may occur so-called “fragmentation” of rights.

Such orphan works are marked by museums with “undetermined status.” Directive 2012/28/EU (2012) provides for the principle of orphan works. This Directive allows works to be digitized and made available on the Internet, provided that a thorough search has been made to identify the author. If investigation of copyright has not yet been completed for an artwork, it is marked with “status unknown, investigation required.”

At the same time, this Directive 2012/28/EU (2012) in Art. 1 limits the category of works that can be recognized as orphan works. Namely orphan works are works published in the form of books, journals, newspapers, magazines or other works; cinematographic or audiovisual works; and phonograms. Importantly, these works should be

kept in museum collections, as these institutions have the right to use orphan works in the public interest [10].

However, the practice of implementing Directive 2012/28/EU (2012) on certain permitted use of orphan works has proved that the adoption of the directive could not solve the problems of rapid and massive digitization of orphan works and making them accessible to the public. The seldom use of the mechanism for granting status of orphan work is explained by the huge human and time inputs (that are disproportionate to the number of such works), required to conduct a proper search for the authors of the works or their legal successors. This indicates the expediency of using the special mechanism for some particularly important works, but not for the purpose of mass digitization [51].

Directive 2012/28/EU (2012) is supplemented by the provisions of Directive (EU) 2019/790 (2019) regarding so-called noncommercial works. The noncommercial works should not be confused with the orphan works or the works in the public domain. Noncommercial works are works that are still protected by copyright but are not available for sale, such as literary works, audiovisual works, phonograms, photographs, and unique works of art [52].

A significant part of the collections of various cultural heritage institutions consists of works that have never been available for commercial use, and therefore it is difficult or even impossible for various reasons to obtain rights to copy or share them [53].

Article 30 of Directive (EU) 2019/790 (2019) states that cultural heritage institutions should benefit from a clear framework for the digitization and dissemination, including across borders, of works or other subject matter that are considered to be out of commerce for the purposes of this Directive. However, the particular characteristics of the collections of out-of-commerce works or other subject matter, together with the amount of works and other subject matter involved in mass digitization projects, mean that

obtaining the prior authorization of the individual rightholders can be very difficult. This can be due, for example, to the age of the works or other subject matter, their limited commercial value or the fact that they were never intended for commercial use or that they have never been exploited commercially.

Directive (EU) 2019/790 (2019) introduces a mandatory copyright exception in Articles 8–11, which allows cultural heritage institutions to provide access to such works without the permission of the rightholders. Directive (EU) 2019/790 (2019) does not impose any restrictions on the types of works that can be considered to be out of commerce, and therefore can include works both in analog form and those that are originally created in digital form [54, 694]. However, such works or other objects shall be permanently located and accessible in collection of the cultural heritage institution. The institution should contact the relevant collective management organization that can issue a license allowing the use of the works (Article 8 Directive (EU) 2019/790 (2019)).

There are also fears that even where the collective management organizations may be willing to grant a license, the proposed fees may prevent the heritage institutions from signing an agreement. There is also the risk that once the cultural heritage institutions have invested time and money in digitizing and making works available, the exclusive right holders may refuse from this [55].

The German legislation aligns the Digital Single Market Directive (EU) 2019/790 (2019) and numerous amendments to the UrhG, in particular the provisions on the reproduction of works of fine art in the public domain.

If, because of the nature of a work, there is a probability that this work will be reproduced and such reproduction is permitted under clause 1 or 2 of Sec. 53 or Sec. 60a – 60f UrhG, the author of the work is entitled to fair remuneration from the manufacturer of the equipment and media, if this type of equipment or media is used alone or together with other equipment, media or accessories for such reproduction (Sec. 54 UrhG).

Public museums that neither directly nor indirectly pursue commercial goals or those that pursue commercial goals may reproduce works from their collections or exhibitions or order the reproduction of such works for the purpose of providing access, indexing, cataloguing, preserving and restoring, including doing this repeatedly and with technically necessary modifications (Sec. 60e, 60f UrhG).

In order to determine whether a work is truly out of commerce, a reasonable effort shall be made to determine whether it is available to the public. Therefore, Directive (EU) 2019/790 (2019), on the one hand, protects the public domain by limiting copyright to the exact reproduction of works in the public domain. On the other hand, there are opportunities for copyright protection of digital art and non-fungible tokens. Directive (EU) 2019/790 (2019) also creates preservation and digitization opportunities for cultural heritage institutions. There are opportunities that can be used profitably and productively for the benefit of all stakeholders. Enhanced collective licensing and measures for the out of commerce works can also play a role to ensure that all users can freely enjoy reproductions of works in the public domain and to prevent further misappropriation of the public domain by cultural institutions.

Paragraph (53) of the preamble of Directive (EU) 2019/790 (2019) states that the circulation of faithful reproductions of works in the public domain contributes to the access to and promotion of culture, and the access to cultural heritage. Thus, in the digital environment, the protection of such reproductions through copyright or related rights is inconsistent with the expiry of the copyright protection of works and contradicts the public mission of cultural heritage institutions.

According to Klinowski M., Szafarowicz K. (2023), it seems reasonable to assert that Directive (EU) 2019/790 (2019) provides, at least to a certain extent, a legal basis useful for regulating the activities of cultural heritage institutions in the digital age [10].

The intention of the EU legislator who introduced Art. 14 to Directive (EU) 2019/790 (2019),

was, firstly, to emphasize that after the expiration of the property (economic) rights to work, it can be reproduced and used without the author's consent. Secondly, more important intention was to ensure that non-original reproductions of works of visual art that had already entered the public domain would not be granted exclusive rights [56], and thus cultural heritage institutions would have no legal basis to claim copyright protection for it [14].

Article 14 Directive (EU) 2019/790 (2019) indicates that Member States shall provide that, when the term of protection of a work of visual art has expired, any material resulting from an act of reproduction of that work is not subject to copyright or related rights, unless the material resulting from that act of reproduction is original in the sense that it is the author's own intellectual creation. As one can see, Directive (EU) 2019/790 (2019) in this article limits the scope of application to "works of fine art," which are in the public domain.

Copyright protection of work expires after a certain period (as a general rule, during the lifetime of the author and 70 years after his/her death), as determined by the applicable legislation of Ukraine and Germany.

In particular, according to Art. 31 of the Law of Ukraine on Copyright and Related Rights, the term of validity of intellectual property rights to work expires after 70 years, as calculated from January 1 of the year following the year of the author's death, except for the cases provided for in Parts 3 to 6 of this Article.

Pursuant to UrhG, copyright expires 70 years after author's death (Sec.64 UrhG). However, the regulations of Part 1 Sec. 72 UrhG apply to photographic works, respectively, to photographs and products made in a manner similar to photographs. The term of the right, as per paragraph (1), expires 50 years after the release of the photograph or, if it was made public earlier, 50 years thereafter, although the right expires 50 years after the production, if the photograph was not released or lawfully brought to public knowledge

during this period. This period is calculated in accordance with Sec. 69.

Expiration of the term of validity of the property rights to work means the transition of the work into the public domain. Works that have become public property can be used in unrestricted manner, without payment of remuneration, by any person, subject to compliance with the personal non-property rights of the author, provided for in Article 11 of the Law of Ukraine on Copyright and Related Rights. The German legislation has implemented this in section 68 of UrhG, where reproductions of visual works in the public domain are not protected by related rights according to Parts 2 and 3 Section 68 UrhG.

Directive (EU) 2019/790 (2019), the Law of Ukraine on Copyright and Related Rights, and UrhG establish that no new intellectual property rights should arise on digital copies of works in the public domain.

In Germany, the Public Domain Mark (PDM) is used to denote materials that are not subject to copyright restrictions. This makes it clear that such materials are in the public domain. PDM is intended for older works that have been no longer protected anywhere in the world over time, or that were previously explicitly released into the global public domain by their copyright holder. It is not used if the corresponding work is in the public domain only in some jurisdictions, but is still protected in others [57, 61]. Accordingly, from the moment when the work acquires the status of public domain by law, this work ceases to be protected and can be used, including by museums. Museums, having a large number of works that have entered into the public domain, actively use digitization of works of art in their activities.

The question arises: in which case of digitizing works of art and placing them on the site, the digital photograph as a work is an original and independent object of copyright.

This is a debatable issue, as it depends on interpreting the term ‘photograph’ or ‘digital photograph’ as ‘non-original photograph’ in the law of a particular state and case law or precedents.

Marketing strategies and business models of museums with a direction of ‘creativity’ are now becoming quite relevant due to the introduction of digitization of works of art as business products. A typical business model for the public museums is co-financing with the state, while for private ones, it is self-financing. What helps the museum earn money? Souvenir products, cafeteria, family cafe, rental of premises, revitalization of abandoned buildings, temporary exhibitions, and a creative approach with the use of digital technologies. The introduction of a smart museum makes it possible to implement alternative ways of doing business, influencing the ticket price for visitors.

However, ‘creativity’ is neither ‘originality’ nor ‘high artistic creativity’ in the literal sense.

However, it should be noted that originality, novelty, and author’s individuality as something unique, new, and unrepeatable have the meaning that is close to the category ‘creativity.’

Work as a result of creative activity depends entirely on the inspiration of its author. If we think about creativity, then we see a practical point that is to surprise the viewer with an unconventional, atypical view of creativity. That is, creativity is not a mandatory feature for a work as a result of creative activity. Traditionally, making a new painting or writing a new work of literature is enough if such a work is eligible for legal protection of copyright objects. Therefore, the creative nature is displayed through the category ‘creativity’ as a feature that is demonstrated through new creative solutions and new concepts in works, which differ from conventional approaches in works of science, literature, and art. If the artist uses original methods of representation, unusual manner, original technique to embody the idea, this is a creative strategy of creative activity. The creativity of the work is a sign that indicates an innovation approach of the author, it is demonstrated through new creative solutions and new concepts during the creation of the work [23].

It is assumed that the digitization of museum cultural assets as a process has no originality, ar-

tistic creativity, novelty, etc. Therefore, digital photograph as a copy of work is a mere reproduction of the original and is not subject to copyright protection, since likely, it has no originality and author's contribution. Thus, the digitization of museum cultural values as a process does not involve such creative decisions as the creation of a work of art, for example, a painting, because the photographer has much less opportunities for creativity as compared with the painter.

MUSEUM POLICY ON REPRODUCING (DIGITIZING) MUSEUM COLLECTIONS AND GIVING ACCESS TO THEM

In this part of the research, we consider the activities of museums, emphasize the museum policy regarding the digitization of museum collections, and pay attention to the connection between copyright and reproduction (digitization) of museum collections. We will analyze the provisions of the applicable legislation of Ukraine and Germany and some provisions of the Directives of the European Parliament, European judicial practice, which affect the activities of museums, the digitization of their museum collections, the placement of images of museum objects on museum websites, and the related copyright issues.

In Germany, almost all cultural heritage issues are regulated by the federal legislation of states rather than the national legislation. This means that there is no national legislation on the withdrawal and disposal of cultural values [58]. The German Bundestag (parliament) adopted a revised Act to Protect Cultural Property (June 23, 2016). It protects certain national cultural properties from export, restricts illegal trade in cultural property, and facilitates the tracing of cultural property that has been illegally exported. The museum policy is not mentioned in this law.

In Ukraine, the main legal act that underlies the government policy in the field of museum affairs of Ukraine, is the Law of Ukraine on Museums and Museum Affairs dated June 29, 1995 No. 249/95-VR. According to it, the National muse-

um policy (Article 3) is a set of main directions and principles of the state and society in the field of museum affairs. One of the main directions of the National Museum Policy is: the preservation and support at the government level of the Museum Fund of Ukraine (individual museum objects, museum collections).

As mentioned in the previous section, before reproducing (digitizing) work of art, the museum shall establish whether there is a copyright to such a work or it belongs to the public domain, has the status of orphan work, and shall obtain, if necessary, permission from the copyright holder for reproducing the work with subsequent placing it on the Internet for giving museum website visitors access to it.

The virtual museum is an area where public interests, such as the need to preserve cultural heritage and the desire to make it available to the widest possible audience, and the interests of private stakeholders protected by copyright clearly come into conflict [10].

The museum as a cultural heritage institution works to preserve and popularize cultural heritage, introducing the digitization of works of art for providing wide access to museum cultural values in the form of virtual museums. The applicable legislation of Ukraine does not mention the reproduction (digitization) for the purpose of reconstruction or replacement of a lost or damaged work of art. The Law of Ukraine on Museums and Museum Matters dated June 29, 1995 No. 249/95-VR provides for a set of organizational, scientifically based measures to ensure the protection, enhancement of the physical condition, and the improvement of the appearance of museum objects and objects of museum importance, such as conservation or restoration, but these measures apply to non-digitized works of art, such as paintings. That is, this norm applies to works of art in material form.

There are certain exclusions in this regard under the German law. If works and other protected objects are made publicly available by contractual agreement under Sec. 19a UrhG, the repro-

duction for preservation purposes is allowed for legally permitted uses in accordance with the provisions of Sec. 60f UrhG (archives, museums and educational institutions).

Directive 2001/29/EC (2001), Article 5(2)(c), establishes the possibility of exceptions and limitations in respect of specific acts of reproduction made by publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage; Member States may provide for exceptions or limitations to the rights in the case of the use by communication or making available, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of establishments referred to in paragraph 2(c) of works and other subject-matter not subject to purchase or licensing terms which are contained in their collections; (Article 5 (3)n Directive 2001/29/EC (2001)).

It follows from Article 5(2)(c), Article 5 (3) Directive 2001/29/EC (2001) that the unrestricted use of works is allowed under the following conditions: reproduction made by publicly accessible libraries, educational establishments or museums, or by archives, which are not for direct or indirect economic or commercial advantage; use for the sole purpose of illustration for teaching or scientific research; use by communication or making available, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of establishments. However, interpretation of “direct or indirect economic or commercial advantage” is quite broad. So the question arises whether a state or private museum belongs to this category. We assume, no. Museums can be founded and operate in any organizational and legal forms provided for by law. Also, access to works is allowed for research purposes (for example, research units can submit written requests to museums for access to works housed in museum collections for the purposes of scholarly research) or for private study (independent acquisition of knowledge by an individual). Unrestricted access to

works can be granted to a person on the premises of the museum with the use of a special terminal (equipment). Such requirements are aimed at making it impossible to reproduce and distribute the work for purposes other than those specified [2].

Directive (EU) 2019/790 (2019) allows cultural heritage institutions to make copies of any works or other subject matter that are permanently in their collections, in any format or medium, for purposes of preservation of such works or other subject matter and to the extent necessary for such preservation (Article 6). In paras. 28–29, it is clarified that for the purposes of this Directive, works and other subject matter should be considered to be permanently in the collection of a cultural heritage institution when copies of such works or other subject matter are owned or permanently held by that institution, for example as a result of a transfer of ownership or a license agreement, legal deposit obligations or permanent custody arrangements. Under the exception for preservation purposes provided for by this Directive, cultural heritage institutions should be allowed to rely on third parties acting on their behalf and under their responsibility, including those that are based in other Member States, for the making of copies. However, to ensure the rights of copyright holders in such situations, copies made by third parties shall be directly returned to the licensing authority, and any temporary or accidental copies shall be destroyed immediately [59].

As described above, this Directive provides for the possibility to make copies of works collected by museums in a limited quantity, for a different purpose and with certain exceptions that limit the rights of cultural heritage institutions, in particular, museums.

At the same time, Directive (EU) 2019/790 (2019) makes no distinction between digital and analog reproductions. Although it is the digital market that has become the main focus of the new EU legislation in the field of copyright and related rights, and it can be stated that Article 14 applies only to digital reproductions, the lack of a

clear distinction between these two categories may lead to the fact that this regulation applies to both digital and analog reproductions [10].

Article 6 Directive (EU) 2019/790 (2019) ensures that all cultural heritage institutions in the EU can make copies of works from their collections for the purpose of preservation [55]. Thus, the rights of cultural institutions have expanded as compared with the previously existing rules that allowed making copies of works only to protect them from destruction and often did not provide for digitization or did not apply to works that existed in digital form from the moment of their creation [60].

Even for the purpose of preserving museum collections, no image of work of art may be available because the work of art has not yet been photographed or is too fragile to be moved to a location that is adapted for photography capabilities.

Unrestricted reproduction (digitization) of works of art is allowed for the purposes of preservation, replacement of a damaged and unusable copy, transfer of the work to another museum (when it is necessary to restore a lost, destroyed or unusable copy by a similar museum, if such a museum cannot obtain such a copy in another lawful way) [2]. Therefore, the method designed to ensure preservation due to the risk of disappearance or destruction of a work of art in museum collections can be their digitization. However, the purpose of reproduction (digitization) of museum collections goes beyond this.

According to Art. 16 Law of Ukraine on Culture dated 14.12.2010 No. 2778-VI, cultural heritage, cultural values and cultural assets may be preserved, among others, through the preservation of cultural values in the territory of Ukraine, the protection of cultural heritage and the historical environment; the preservation of the Museum Fund of Ukraine; the operation and development of the network of museums. Therefore, the operation and development of the network of museums can also be related to giving access to digitized works in order to significantly expand the audience of museums, to reach international

visitors of the museum website, to raise the competitiveness of museums in the conditions of developing digital technologies, etc.

Museums in their activities set certain restrictions regarding access to works of art and their use. Museum that provides access to images of works of art is the party to the relationship that solely determines the terms of use and can do so based on its ability to control access to the works [17] in a way provided by the law.

Museums and other cultural institutions often require third parties to obtain their permission to make or distribute reproductions of objects from their collections, including those that are not protected by copyright. This practice can be explained by the fact that the digitization of museum collections is an expensive phenomenon, so preserving the rights to digital reproduction should be compensation for the costs incurred [16].

Let us consider the case regarding the restriction of access to reproductions of works that are in the public domain and availability on the Wikipedia website (decision of the Federal Court of Germany dated December 20, 2018, in the case of *Museumsfotos*) [47].

In its ruling, the Federal Court had to resolve a dispute between the Reiss-Engelhorn-Museen in Mannheim and Andreas Praefcke, a user and editor of the Wikipedia website, regarding scanning and uploading to the Wikipedia website 37 photographs of paintings from the museum's collection. Seventeen of these photographs were taken in 1992 by a museum employee and placed in the museum catalogue, while the other 20 were taken by the defendant during his visit to the museum in 2007. All the photos were scanned by the defendant, placed on public Wikipedia and marked as those in the public domain. The federal court ruled that while the photographed images were already in the public domain, the photos taken by a museum employee were protected because the person taking them had the ability to decide, among other things, issues of perspective or light. Regarding the photographs captured by the defendant, the court stressed the breach of the mu-

seum's photography prohibition within its premises. This action constituted a violation of the agreement between the museum and its visitors, as per the institution's general visiting conditions. Consequently, the museum retains the right to seek damages and halt the unauthorized publication of these photos on the Internet [61].

The federal court ruled that the photographs of paintings in the public domain and other two-dimensional works of art are not considered works but are protected by related rights. Sec. 72 (Lichtbilder) UrhG establishes the protection of photographic works and non-original photographs that do not bear the properties of works and are protected by related right that expires 50 years after publication.

This ruling has shown that the very existence of provisions allowing the protection of non-original photographs can lead to legal uncertainty and problems in cross-border and online use, as the same reproduction may be protected in one Member State while in other, it may be considered to be public property [62]. Article 9 Directive (EU) 2019/790 (2019) establishes a rule for cross-border use, namely, "Member States shall ensure that licenses granted in accordance with Article 8 may allow the use of out-of-commerce works or other subject matter by cultural heritage institutions in any Member State".

If museums provide access to digitized works of art and offer a service for the use of images of works of art, there arises the problem of charging for such a service, in particular for access to the digitized works of art through the museum's website.

The digitization of museum collections provides new opportunities for their preservation and use, ensuring wide user access. Yu. M. Kapitzya has proposed to provide unrestricted circulation of works and other objects in digital networks. However, each object shall have a digital identifier (passport) with information about the legal status of such an object, date of creation, legal entities, etc. At the same time, all works are conditionally divided into two groups. The first group is the works that acquire the status of un-

restricted use when the work is created or after a certain period of time after its creation, as determined by the author or another person who has the exclusive property right to the work. For such works, there is no problem of their digitization or use. The second group is the works for which the author or subject of law believes that they should be used for a fee or free of charge for non-commercial purposes while their commercial use should be charged [51].

Section § 61d UrhG states that cultural heritage institutions (Sec. 60d) may reproduce works (Sec. 52b Act on the Management of Copyright and Related Rights by Collective Management Organizations (Verwertungsgesellschaftengesetz – VGG)) that are not in their inventory, or reproduce them and make them available to the public. Public access is allowed on non-commercial websites only.

According to Art. 24 of the Law of Ukraine on Copyright and Related Rights, it is established that the activity of museums with open access for visitors, archives or organizations for the preservation of audio and video recording funds is considered non-commercial, including if this organization charges a fee that does not exceed the amount necessary for covering the expenses related to the provision of services for reproduction, borrowing, and interactive access to the works specified in this article, or the mentioned services are provided free of charge. However, this applies to the original artworks or their copies for the purpose of preserving audio and video recording funds, not to the digitized works.

Museums offer a variety of virtual exhibitions, tours with free and paid access. For instance, the State Museum in Berlin (Staatliche Museen zu Berlin) documents and digitizes its collections and thus makes them accessible to the general public. It has a scientific and research infrastructure of national and international importance.

The rights and conditions of the State Museum in Berlin strive to define objects as public domain. This means that information about objects may: be shared (e.g. forwarded, copied, and stored),

be processed (modified, combined, used to create something new) and used for any purpose (e.g. for research, education, publications, as well as for commercial use). All object illustrations marked with CC-BY-SA may be used with the name of the copyright holder. No permissions are required, and these images may be forwarded, copied, and stored under the same conditions, be adapted (i.e. modified, combined, used to create something new), and be used for any purpose (e.g. research, education, commercial). If the user wishes to obtain permission to use copyrighted images of artworks owned by the museum, new digital copies and permission for their use may be charged.

In addition to museums, images of artworks may be accessed through the Image Bank. For instance, BPK Bildagentur für Kunst, Kultur und Geschichte (Berlin (Mitte)) is one of the largest photo agencies in the field of culture, the Image Bank of Cultural Institutions, which offers high-quality reproductions of works of art and treasures from the collections of the Stiftung Preussischer Kulturbesitz (Prussian Cultural Heritage Foundation) and many other cultural institutions. The images are available for download under terms of paid editorial and commercial use for images of high-quality reproductions of objects from important museums in Germany and the world. New photos and detailed photos of the Stiftung Preussischer Kulturbesitz collection, which have not yet been photographed (photos that are made to order) are available for a fee.

Any museum through the digital museum Digimuseo.fi (Helsinki, Finland) may use its services to make its museum collections available to users. The Digimuseo.fi platform (service) enables museums to publish digital exhibitions, to organize tours, and to publish introductory articles about them. Digital Museum does not hold exhibitions independently, but cooperates with external partners. This platform is created as part of the development of platform ecosystem and museum e-commerce 2021–2023 (EU funding), with the aim of enabling museums to add their exhibitions and to allow visitors to visit museums virtu-

ally, either free or for a fee, or under the guidance of a guide, making paid virtual tours.

There arises the problem of the legal nature of digital services in the context of images of artworks as digital content, which museum (remote provider) may provide on its website (or through other digital platform).

Sources of funding for cultural institutions, including museums, may include funds received from paid services. Resolution No. 1183 of the CMU dated December 2, 2020 establishes a list of paid services that can be provided by state-owned and communal cultural institutions, which are not leased. In particular, producing and selling (in non-specialized stores (kiosks, booths), through electronic sales systems) publications about the funds and activities of libraries, museums (in electronic form, on CDs), reproductions, leaflets, posters, postcards (including those bearing images of artworks, monuments of literature, sheet music editions), etc.; photocopying, reproduction, copying, scanning, photographing, microfilming, microcopying, creating digital and three-dimensional copies of books, brochures, newspapers, magazines, museum objects, objects of museum importance, documents from the funds/archives of libraries, museums, restoration and other cultural institutions.

In Ukraine, the Draft Law on Digital Content and Digital Services No. 6576 dated 12.01.2023 has been adopted as a basis that provides for the regulation of civil law relations between the contractor and the consumer/user regarding the provision of digital content and digital services on the basis of an agreement. According to this draft law, digital content is data that is created and provided in digital form. Digital content includes, in particular, computer programs, applications, video files, audio files, music files, digital games and e-books. Digital service is service that enables a consumer to create, process, store, and distribute data in digital form or receive access to such data, as well as to perform any other actions with data in digital form, which have been created or uploaded by the consumer or other users of such service. Digital services include, but are not limited to, those

that enable the creation, processing, access or storage of data in digital form, including file hosting, word processing or games offered in cloud computing environments and social networks.

Ukraine has acquired the status of a candidate country for joining the EU and it is very important to strive to comply with EU legislation (for example, Digital Services Act (DSA, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022) and to update the applicable legislation for ensuring a safe and reliable online environment, to improve the conditions for the launch and spread of digital services, to ensure the rights of consumers of digital services, and to prescribe in draft law No. 6576, the rights, obligations, and responsibilities of providers (in the case of our research, museums) in terms of the quality and content of the digital information available from the providers and the digital services they provide.

Currently, the Civil Code of Ukraine has been supplemented by Art. 179-1, according to which digital thing digital thing is good that is created and exists exclusively in a digital environment and has a property value. Digital thing is virtual assets, digital content, and other goods to which the provisions of part one of this article apply. However, the legal analysis of digital things as objects of civil rights is beyond the scope of this research.

This study does not cover all aspects of the regulation of digital services provided by museums. Further study requires a separate research and the formation of legislative proposals for amendments to the draft law on digital content and digital services, which has been being prepared for the second reading.

However, the applicable Law of Ukraine on Copyright and Related Rights (para 65 Art. 1) defines digital content (electronic (digital) information) as any information or data in electronic (digital) form, which contain objects of copyright and/or related rights and can be stored and/or distributed in the form of one or more files (parts of files), records in the database on storage devices of computers, servers, etc., on the Internet.

The doctrine of common law refers to digital content expressed in electronic form: books, movies, music, photos, drawings, as well as databases, excluding software [63, 27]. In the opinion of H. M. Stakhyra, the separation of the concept of digital content from the concept of digital service that serves such content and is meaningless without the digital content, is reasonable. When establishing the definition of digital content in Ukrainian legislation, it is necessary to take into account the clear demarcation of the concepts of digital content, digital service as the subject of digital content supply contract, and service as the subject of a separate contract. At the same time, digital service should be defined as a service that enables the creation, processing, and storage of digital content; or sharing or otherwise interacting with data in digital form created or uploaded by users [64].

Directive 2011/83/EU on consumer rights refers to digital content as digital data supplied in any form, as well as software of technical devices. Directive (EU) 2019/770 (2019) on contracts for the supply of digital content and digital services narrows the concept of digital content, defining it as data generated and supplied in digital form.

The Digital Services Act (DSA, Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022) and the Digital Markets Act (DMA, Brussels, 15.12.2020) form a single set of rules that apply throughout the EU. They have two main goals: to create a safer digital space in which the basic rights of all users of digital services are protected; to create a level playing field to promote innovation, growth, and competitiveness both in the single European market and globally. In Germany, the Digitalization Act (GWB-Digitalisierungsgesetz) is in force. The advisory board has been set up to monitor the implementation and enforcement of EU provisions for harmonizing the German legislation with the Digital Services Act (DSA).

The Digital Services Act officially entered into force on August 25, 2023. DSA's primary goal is to promote a safer online environment. Under

the new rules, online platforms shall implement ways to prevent and remove posts containing illegal goods, services or content, while providing users with a means to report this type of content. The Digital Services Act is a comprehensive set of new rules governing the duties of digital service providers that act as intermediaries in the EU to connect consumers with goods, services, and content.

We assume that museums should review their business model and present digital content, provide digital services for reproduction (digitization), access to images of artworks on a digital platform to meet the needs of museum visitors, while complying with copyright law. Therefore, on such a digital platform (which, for example, can be created on museum's website), the following services can be provided under the following conditions: free of charge (for example, works that have entered the public domain); paid, for editorial and commercial use of high-quality reproductions of artworks; a service fee, for additional downloads of images of artworks, if the object of copyright can be used only with the author's permission; a separate fee shall be charged for access to artwork images, if the photographic works are made upon order.

So, for example, the website of the National Museum of the History of Ukraine (virtual project) lists the paid services that the museum may provide regarding the right to use of museum object images, with the establishment of specific fees, depending on the purpose of use and the category of the museum object.

The activities of such a digital platform with regard to museum digital content are carried out given the national legislation where the institution is located, with the terms of use of images, the necessary legal information regarding the copyright for images of artworks, the conditions for using these images, the agreement on the provision of additional services, the collection of visitor data, etc. indicated.

With regard to the processing of visitor personal data on the museum website in Germany, visitors are jointly responsible for the protection of

personal data (Art. 26 General Data Protection Regulation (GDPR Datenschutz-Grundverordnung (DSGVO))). Personal data is processed to protect legitimate interests based on Art. 6 para. 1 letter e GDPR in conjunction with Sec. 3 Federal Data Protection Act (German Bundesdatenschutzgesetz (BDSG)). Based on the terms of use, which each visitor (user) agrees to, while creating his/her profile on the museum platform, visitors to the museum site are identified. Visitors agree to the Shared Responsibility Agreement, while data processing is based on an agreement between joint controllers in accordance with Art. 26 GDPR.

When museums display digitized museum collections on their websites, they expect official consent from visitors (users) for their use of the relevant artwork images, and the museum can state that visitors (users) are considered to have agreed to the terms by virtue of using the website. That is, they (visitors) are given the *quid pro quo* for permission to use or join official license agreements (contracts).

Museums may encourage open data (free reuse of data published by museums through free licenses guaranteeing free access and reuse). Currently, open data is important in the fields of cultural policy, as it allows for a wider exchange and dissemination of information [12]. Museums may claim control over images by citing copyright and/or licensing terms. The museum itself determines the restrictions in the terms of use of works of art or digital images, which apply to users, including the ability to transfer digital images of works of art to other visitors (users).

In this case, the museum may place certain disclaimers on its website, such as: "texts, images, data, audio, video and other content on the website... are protected by copyright", or "the text and images posted on the museum website shall be used with the museum permission and are protected by law (of the country where the museum is located) and by international copyright law and are not materials in the public domain".

The issue of the right to access to museum public collections on its website is still debatable. The

implementation of digital technologies in museum activities gives rise to legal problems, because when digitizing works of art, it is necessary to comply with the law, first of all, to obtain permission to digitize works and to place works on the Internet.

To summarize the above, we note that this article has touched on the problem of the lack of a unified understanding of photographic works and non-original photographs reproduced in digital form, the definition of “originality”, the identification of factors that determine the originality of photographic work, the presence/absence of the potential for legal protection of photographic works of art in the digital form and the inconsistency of museum policies regarding the digitization of works of art in the legislation of the countries under review.

It should be noted that the legal protection provided by UhrG (Art. 2) extends to the photographic works and the “non-original” photographs because the photographs are protected in accordance with Art. 72 UhrG in cases where they have at least a minimal level of “personal intellectual effort.” The Law of Ukraine on Copyright and Related Rights distinguishes between the photographic works and the photographs that are created without any creative input of the author and is not endowed with originality. Copyright under this law extends only to the photographic works, including those in digital form (form of expression of works).

It has been proven that “originality” is a condition for the protection of the work under copyright, according to which it differs from other works and is endowed with such features as uniqueness, novelty, and inimitable style. The digitization of museum cultural values as a process neither involves such a set of creative decisions as creating a work of art nor have originality, artistic creativity, novelty, etc., and a digital photograph as a copy of work is a mere reproduction of the original, which does not reach the standard of personal intellectual creation.

Legal protection (copyright) of photographic works in digital form is provided for by the law of

Ukraine. Protection extends to the form of expression of the object, but covers original works only. That is, the photos that do not have signs of originality are not protected by copyright. However, digital photograph is a copy of the original, a copy of a work, which does not contain signs of originality and creative input. Both the photographic works and the non-original photographs are protected by the German law. Since the law distinguishes between the two types: the photographic works (protected by copyright) and the non-original photographs (by related rights, pursuant to para. 72 UhrG), the latter include photographs in digital form, which are not protected by copyright.

The authors have considered the process of development of trends towards the digitization of museum collections, which leads to certain opportunities in the activities of museums to create virtual museums, virtual exhibitions or virtual tours, but also have pointed to the related legal problems in the field of copyright. The virtual museum differs from the conventional in terms of services related to reproducing (digitizing) works of art, in particular, visiting a virtual tour, viewing a virtual exhibition, accessing images of works of art, etc.

The analysis of the museum policies of the analyzed countries has made it possible to see that new challenges such as the COVID-19 pandemic, the full-scale invasion of the Russian Federation on the territory of Ukraine have caused an economic crisis in the activities of museums and pushed them to active digitalization. At the same time, the strengthening of the European integration processes of Ukraine within the framework of the Association Agreement between Ukraine dated June 27, 2014 No. 984_011 has actualized the need for digitizing museum collections, implementing virtual museums, and harmonizing the Ukrainian legislation with the EU law in the context of copyright and digital development. Ukraine’s accession to the “Digital Europe” program by 2027 will contribute to the implementation of digital projects in Ukraine, in the museum sphere.

Reproduction (digitization) of museum collections is one of the main factors in the development of museums, which expands access to museum collections for the purpose of their virtual visit, preservation of museum collections, and communication with museum visitors through virtual interaction. At the same time, the problems related to unrestricted access to works of art, public domain works, and orphan works remain relevant. The critical analysis of the reproduction (digitization) of works of art has made it possible to clarify the opportunities and limitations, which arise in the activities of museums in communication with the authors of works of art. We have noted the dual nature of museum activities, since it is necessary, on the one hand, to implement museum policy in terms of the preservation and accessibility of digitized works of art, to maintain competitiveness in order to operate properly in the conditions of the development of digital technologies, and, on the other hand, to observe the copyright of digitized works of art and to prevent infringement of authors' rights to works of art.

After the expiry of the property rights, the work enters the public domain. In Ukraine, it is possible for museums to provide free interactive access to works in electronic (digital) form without the permission of the copyright holder, with the use of terminals in the museum premises, provided there are made copies of this work and there is access to only one copy. Similarly, under the German law, the photographic works of art, for which the copyright has expired, are not protected by copyright and are considered those in the public domain. The reproduction, distribution, and making known to the public of the works exhibited to the public or intended for public display or sale, for the purpose of advertising, shall be permitted to the extent necessary for the promotion of the event.

The authors have determined that museums use their policies for approving the list of those rights that go beyond the copyright law. There may be restrictions of access to reproductions of works in the public domain and control over the

use of such works, which may lead to lawsuits (for example, in the case of Museumsfotos). Accordingly, any restriction by the museum outside of copyright is a violation of the law. Studying the legislation and court practice regarding the violation of copyright when reproducing (digitizing) collections from German museums or providing access to them allows Ukraine to implement foreign experience in matters of harmonization and implementation of the legislation in the field of intellectual property.

On the basis of the proposed comparative analysis, it has been established that access to museum collections may be provided without or with the author's permission.

In Germany, access to works without the author's permission is given for research purposes (for works housed in museum collections for the purpose of scientific research, Sec. 60c UhrG) or for private education (Sec. 60a UhrG). In Ukraine, the access without the permission of the copyright holders, free of charge, but with an indication of the author's name and the source of borrowing is allowed under Art. 22 of the Law of Ukraine on Copyright and Related Rights. The use of orphan works by museums with open access for visitors is allowed, ... with the preservation of audio and video recording funds by means of reproduction, in particular, for the purpose of digitization (Article 29 of the Law of Ukraine on Copyright and Related Rights). Sec. 61 UhrG allows the reproduction and public access to orphan works.

Museum may own a work of art as a physical object, but it does not always have the right to digitize it or place it on a digital platform for a virtual exhibition. Since the digitization of works protected by copyright and their placement on the museum's website affects the rights of reproduction and transfer, it requires the author's permission.

The authors have reviewed the legislation on digital services that museums can render on their websites in the analyzed countries. On digital platform, museums may provide the following digital services for access to images of artworks: free of charge (for example, those already in the

public domain or orphan works; for research purposes or for private education); paid for editorial and commercial use of images of high-quality reproductions of works of art; a service fee for additional image downloads, if the copyright object can be used only with the author's permission; a separate fee for access to images of works of art if the photographic work is made on order.

Thus, the modern role of museums is not only to preserve and display museum collections (material objects), but also to provide digital services (free and paid) by giving access to digitized works, in compliance with copyright and given the restrictions on the use of works, as established by law.

The research has not covered all the problems that may be related to the purpose of this research. The prospects for the further research may be studying the German experience in the doctrine and judicial practice in identifying the originality of photographic works, when providing access to the works, which ensures the observance of copyright. Studying Ukrainian judicial practice holds significance as it addresses the concept of "originality," a pivotal criterion for determining the eligibility of works for legal protection. Factors determining the originality of photographic works are deliberated and scrutinized within court cases. Consequently, this area necessitates further exploration, elaboration, and comprehensive analysis.

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ПРОБЛЕМИ ОЦИФРУВАННЯ ТА ВИКОРИСТАННЯ ОЦИФРОВАНИХ ТВОРІВ МУЗЕЯМИ З ПОЗИЦІЇ АВТОРСЬКОГО ПРАВА НІМЕЧЧИНИ ТА УКРАЇНИ

Вступ. Процес розвитку тенденцій оцифрування музейних колекцій спонукає до створення віртуальних виставок.

Проблематика. Законодавства України та Німеччини містять різні підходи до розуміння фотографічного твору та неоригінальних фотографій, відтворених у цифровій формі, потребує систематизації та впорядкування критеріїв оригінальності фотографічних творів.

Мета. Дослідити правову природу категорії «оригінальність», проаналізувати критерії, якими визначається оригінальність фотографічного твору, обґрунтувати потенціал до правової охорони фотографічного твору мистецтва у

цифровій формі, визначити можливості відтворення (оцифрування) музейних колекцій та надання доступу до них музеями.

Матеріали й методи. Використано комплекс загально-наукових та спеціальних методів. Матеріалами для дослідження слугували публікації вітчизняних та зарубіжних учених, норми чинного законодавства України та Німеччини.

Результати. Компаративістський аналіз доктрини та практики України й Німеччини дозволив зробити висновок про те, що «оригінальність» — це умова охоронюваності твору за авторським правом, за якою він відрізняється від інших творів та наділений такими ознаками як унікальність, невідомість, неповторність. Досліджено чинники, які зумовлюють оригінальність фотографічного твору: власного творчого внеску; неповторюваність вже відомого фотографічного твору або його не скопійовано з іншого фотографічного твору; містить унікальну композицію, ракурс, спосіб фіксації тощо

Висновки. Критичний аналіз діяльності музеїв дав змогу з'ясувати можливості щодо відтворення (оцифрування) творів мистецтва, надання цифрових послуг (безкоштовні і платні) щодо доступу до оцифрованих творів й обмеження (дотримання авторського права), які виникають у діяльності музеїв у комунікації з авторами творів мистецтва.

Ключові слова: оригінальність, оцифрування творів мистецтва, неоригінальні фотографії, авторське право, музеї, віртуальний музей, музейна політика.