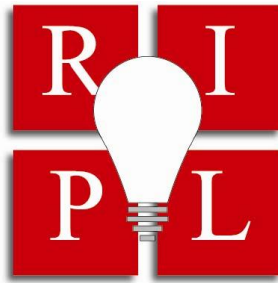


THE JOHN MARSHALL REVIEW OF INTELLECTUAL PROPERTY LAW



CULTURAL HERITAGE & NEW MEDIA: A FUTURE FOR THE PAST

ANN MARIE SULLIVAN

ABSTRACT

The application of new media to cultural heritage is consistent with the policy objectives that the copyright law of the United States stands to promote. However, the practical application of the law currently hinders these objectives, often stifling the creation and dissemination of new media works of cultural heritage. In this context, copyright law presents a problem and not a solution, a barrier and not a protection, dissuasion of creation and not encouragement and incentive. Defining the legal scope and reach of digital property and new media within the realm of art and cultural heritage law is critical for the benefit of creators, consumers, cultures, and society as a whole. Unless a modification is made, or a solution adopted, the problems presented by legal uncertainties and inadequacies will continue to operate in a manner contrary to the main purpose of copyright, “To promote the Progress of Science and useful Arts.”

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ANN MARIE SULLIVAN*

I. INTRODUCTION

The twenty-first century has ushered in several fundamental shifts in the modes of production, the nature of art and cultural heritage,¹ and the way in which creative works of authorship are experienced and preserved. “New media”² art-works, internet-based and multimedia pieces, and the application of technology in the digitization of cultural heritage in museum, library, and archival practices³ give rise to multifaceted legal questions involving authorship, ownership, authenticity,

* © Ann Marie Sullivan 2016. Candidate for Juris Doctor, The John Marshall Law School, January 2017; Bachelor of Fine Arts in Art History, Savannah College of Art & Design, 2011. I would like to express my most sincere appreciation and gratitude to my spouse, friend, and editor, Mariana Gutiérrez, who has been my partner in life and throughout this writing process, and to whom this article is affectionately dedicated. I would also like to thank my parents, Mr. Robert Dunn and Mr. Todd Mauldin, and Ms. Melissa Andress, for their unconditional support and encouragement. Finally, I would like to thank the Board of The John Marshall Review of Intellectual Property Law for all of their patience and guidance.

¹ The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines “cultural heritage” as “the legacy of physical artifacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations.” This definition is further broken down into “intangible” and “tangible” cultural heritage (tangible heritage includes the physical objects and artifacts belonging to a culture; for example: buildings, historic places, monuments, and artifacts; intangible heritage is comprised of nonphysical intellectual property, such as folklore, customs, beliefs, traditions, knowledge, and language). *Protecting Our Heritage and Fostering Creativity*, UNITED NATIONS EDUCATIONAL, SCIENTIFIC, AND CULTURAL ORGANIZATION, available at <http://www.unesco.org/new/en/culture/>. See also John Henry Merryman, *Two Ways of Thinking About Cultural Property*, 80 AM. J. INT’L L. 831 (1986) (Cultures throughout time have attempted to preserve and protect both the tangible and the intangible heritage of their community in order to protect and preserve the culture to which they belong); Andrew L. Adler & Stephen K. Urice, *Resolving the Disjunction Between Cultural Property Policy and Law: A Call for Reform*, 64 RUTGERS L. REV. 117 (2001).

² Beverly Schreiber Jacoby, *Here Comes the Future: “New Media” is transforming, reshaping and disrupting established art world customs and categories*, 237 N.Y.L.J. S2-3, 10 (Apr. 30, 2007) (“The ‘New Media’ rubric refers mainly to technology-based delivery systems for the significant artistic content critically acclaimed today. This involves concept, process and context delivered by means of non-traditional products executed in various formats, often with moving parts and sound, with hardware and software, often film/video based, electronic, digital, networked, Internet, interactive, installation, computer-based and multi-media.”).

³ Ljiljana Manic, Marija Aleksic, & Mirjana Tankosic, *Possibilities of New Technologies in Promotion of the Cultural Heritage: Danube Virtual Museum*, in ADVANCES IN ENVIRONMENT, ECOSYSTEMS & SUSTAINABLE TOURISM 322, 322-323 (Vladimir Marascu-Klein et al. eds., 2013) (“Museums and cultural institutions are tasked with the common responsibility to safeguard culture heritage for future generations. With innovative technologies and newly harnessed powers such as 3-D scanning and the digitization of culture, museums can overcome endless challenges and limitations, such as geographic boundaries, collections mobility, insurances, preventing damage, increased preservation, and the ability to actively answer the needs and wants of contemporary visitors.”).

copyright protection, unauthorized copying and distribution,⁴ reproduction, availability, and access. The evolution from analog to digital profoundly challenges long-since-established conventions in the world of art⁵ and cultural heritage, as well as the role copyright plays in relation to these fields, requiring a parallel evolution in current legal regimes and jurisprudence.⁶

The transformations in how cultural collections are preserved,⁷ communicated, viewed, experienced, and consumed have expanded with the development of new media.⁸ Museums and cultural institutions are no longer static depositories for objects, as they have traditionally been.⁹ Custodians of culture are no longer bound to and limited by the walls of their institutions, the physicality of objects, nor the confines of time and place.¹⁰ Cultural heritage objects, some of which no longer exist

⁴ JOHN MERRYMAN, THINKING ABOUT THE ELGIN MARBLES, 1919-21 (2009) (distribution allows the greater knowledge and appreciation of heritage by larger parts of the world population, as opposed to only the community of origin); see also LUCAS LIXINSKI, INTANGIBLE CULTURAL HERITAGE IN INTERNATIONAL LAW 13 (Oxford 2013) (in the long run, wide spread distribution and access is “beneficial to the custodial community, which is bound to feel more pride over its own heritage upon the realization of its appreciation by others.”).

⁵ Jacoby, *supra* note 2 (“New Media’ works and projects embody powerful creative forces transforming, reshaping and disrupting established art world customs and categories for collectors, galleries and museums alike.”).

⁶ The World Intellectual Property Organization (WIPO) has stated that there is a need for certain amendments to the existing intellectual property rights regimes and a search for new forms of protection are required, notably out of the necessity for: the preservation and safeguarding of intangible cultural heritage; the promotion of cultural diversity; and the promotion of creativity and innovation, including a tradition-based one. WIPO, *Consolidated Analysis of the Legal Protection of Traditional Cultural Expressions*, WIPO/GRTKF/IC/5/3, 2 (May 2003), annex, at ¶ 8. See also the *Declaration on the Future of WIPO*, (Oct. 12, 2004), <http://www.futureofwipo.org>; Laurence R. Helfer, *Towards a Human Rights Framework for Intellectual Property*, 40 U.C. DAVIS L. REV. 971, 1010-1012 (2007); James Boyle, *A Manifesto on WIPO and the Future of Intellectual Property*, 9 DUKE L. & TECH. REV. 14 (2004).

⁷ MINGQUAN ZHOU ET AL., DIGITAL PRESERVATION TECHNOLOGY FOR CULTURAL HERITAGE (2012) (discusses the technology and processes in digital preservation of cultural heritage, covering topics in five major areas: Digitization of cultural heritage; Digital management in the cultural heritage preservation; Restoration techniques for rigid solid relics; Restoration techniques for paintings; and digital museums. It also includes examples of various applications of the digital preservation of cultural heritage); see also Alonzo C. Addison, *The Vanishing Virtual: Safeguarding Heritage’s Endangers Digital Record*, in NEW HERITAGE: NEW MEDIA AND CULTURAL HERITAGE 28 (Yehuda E. Kalay et al. eds., 2008) (discussing how information technology has grown with a parallel growth in three-dimensional documentation and recordation of cultural heritage using various tools such as electronic surveying instruments, laser scanners, photogrammatic cameras, and CAD (computer-aided design) modelers, all of which has brought more and more “heritage data” into the digital domain).

⁸ Gregory Wegner, *Changing Roles of Academic and Research Libraries*, Roundtable on Technology and Change in Academic Libraries, convened by the ASSOCIATION OF COLLEGE AND RESEARCH LIBRARIES (ACRL) (Nov. 2006, Chicago), available at <http://www.ala.org/acrl/issues/value/changingroles>; see also Addison, *supra* note 7, at 29 (“as the field has grown and tools have become more accessible in both cost and ease of use, there has been a flood of interest. Today ‘Virtual Heritage,’ ‘Digital Cultural Heritage,’ or ‘New Heritage’ is a common theme in research grants, academic programs, and at numerous conferences and workshops”).

⁹ RESEARCH LIBRARY GROUP, *Trusted Digital Repositories: Attributes and Responsibilities* (2002).

¹⁰ Bharat Dave, *Virtual Heritage: Mediating Space, Time And Perspectives*, in NEW HERITAGE: NEW MEDIA AND CULTURAL HERITAGE 40 (Yehuda E. Kalay et al. eds., 2008) (virtual heritage projects incorporate digital interactivity and media-rich representations to offer passages through

in the physical form, can be recreated using digital technologies.¹¹ Audiences, once regarded solely as passive participants and silent onlookers, now interact, participate, and view cultural collections in novel and experiential ways.¹² Unconventional usage of space and arrangement employed in the practice of utilizing new media deliberately erases or blurs conventional boundaries, resulting in increased interest and heightened understanding.¹³

With the application of new media and preservation through digitization, the conservation and re-creation of cultural heritage has seen a new level of promise for the future. It is the job of lawmakers¹⁴ and courts to keep pace with the rapidly changing dimensions of the art world; yet there is much uncertainty when it comes to various contemporary issues of art, digital media, and cultural heritage. Further, the courts have traditionally been apprehensive and hesitant to create a concrete precedent in approaching issues of art specifically in the legal context, often pointing back to the role of the legislature.

Those charged with the fate of these priceless items of cultural heritage, the museums of the world, are often confronted with legal issues when it comes to the dissemination and digitization efforts for preservation that fundamentally stifle their mission and objectives as an institution. The traditional viewpoint of museums is that intellectual property laws, specifically copyright law, have not enabled their task as a disseminator of knowledge and culture, but rather inhibited the museums' ability to carry out their mission and mandate.¹⁵

At the same time, scholars, researchers, and those advocating for the free flow of information and access argue that museums and cultural institutions impose too strict of a control over the cultural artifacts housed in their collections. From this perspective, museums arguably hinder the advancement of knowledge and hinder publications and discourse by making some projects—specifically in the art historical world—economically impractical due to high image permissions costs and excessively narrow guidelines for the use of an image. When cultural heritage is not readily accessible, affected groups include, but are not limited to: archivists, librarians, artists, scholars, historians, researchers, academics, universities, publishers,

time and space that are qualitatively different from what may be possible using traditional media and narratives; significant shifts in virtual heritage studies have been made by identifying key characteristics of successive generations of interactive digital media).

¹¹ *Cyber Archaeologists Rebuild Destroyed Artifacts*, NPR.ORG, (June 1, 2015), <http://www.npr.org/sections/alltechconsidered/2015/06/01/411138497/cyber-archaeologists-rebuild-destroyed-artifacts> (“cyber archeologists” are working to put the pieces back together—digitally, at least—by using a process called photogrammetry, or 3-D reconstruction from images).

¹² For example, TATE BRITAIN, IK PRIZE 2015: TATE SENSORIUM (last visited Aug. 25, 2015), <http://www.tate.org.uk/whats-on/tate-britain/display/ik-prize-2015-tate-sensorium> (A new exhibition at Tate Britain transforms visual art into a multi-sensory experience, surrounding paintings with sounds, scents, tactile sensations and tastes inspired by the artwork. “The experience encourages a new approach to interpreting artworks, using technology to stimulate the senses, triggering both memory and imagination.”).

¹³ GLEN CREEBER & ROYSTON MARTIN, *DIGITAL CULTURE: UNDERSTANDING NEW MEDIA: UNDERSTANDING NEW MEDIA* (2008).

¹⁴ *Eldred v. Ashcroft*, 537 U.S. 186, 192 (2003) (“It is Congress that has been assigned the task of defining the scope of the limited monopoly that should be granted to authors in order to give the public appropriate access to their work product.”).

¹⁵ RINA ELSTER PANTLONY, *MANAGING INTELLECTUAL PROPERTY FOR MUSEUMS* 5 (World Intellectual Property Organization, 2013).

professors, social scientists, restoration and historic preservationists, library users, students, museums, historical societies, arts and humanities fields, natural scientists, cultural repositories, and, most importantly, the overall culture and the general public.

The wide range of possibilities and affordances of digital technologies make them the media of choice for the collection, management, representation, and dissemination of cultural heritage.¹⁶ Digital media technologies are used to: create cultural content through scanning, modeling, and archiving; manage digitized content through powerful search engines and database organizational tools; and, disseminate content and information through the world wide web to audiences on an unprecedented global scale.¹⁷ The benefits which flow from the utilization, incorporation, and application of new media to cultural heritage include: wider access to information; enhanced preservation; heightened understanding; cross-cultural collaboration; promotion and relevance to broader audiences; provocation of new media forms in the additional expression, understanding, and collaboration with and among cultural heritage stakeholders.¹⁸ Technology provides a platform for online and interactive access on a global scale, subsequently creating new opportunities for museums and cultural institutions to reach out and discover new and broader audiences, fostering the advancement of access as promotion of cultural achievements.¹⁹ Furthermore, “[t]echnological innovations have provided museums with the means to contextualize their exhibitions in ways not previously imagined.”²⁰ Within this context, intellectual property has been identified as “an essential building block now being used to create visitor experiences, where the virtual environment is integrated in the physical exhibition as additional educational material.”²¹

Although contemporary culture has altered its perception of the way in which “art,” as a general whole, is thought of and experienced, intellectual property law has

¹⁶ Yehuda E. Kalay, *Preserving Cultural Heritage through Digital Media*, in NEW HERITAGE: NEW MEDIA AND CULTURAL HERITAGE 1 (Yehuda E. Kalay et al. eds., 2008). Various applications of “new media” to cultural heritage preservation include research, conservation and interpretation; 3D offers a new set of tools and methodologies that will change the cultural heritage domain significantly: new visualization technologies, both online and in the museum, and new interaction technologies open a wide range of opportunities for museum curators and cultural heritage experts to share the results of their work and the value and beauty of their collection). Digital Meets Heritage, *Beyond 3D Digitisation: Applications of 3D Technology in Cultural Heritage* (Mar. 2015), <http://www.digitalmeetsculture.net/article/beyond-3d-digitisation-application-of-3d-technology-in-cultural-heritage/>.

¹⁷ Yehuda E. Kalay, *Virtual Heritage: Mediating Space, Time And Perspectives*, in NEW HERITAGE: NEW MEDIA AND CULTURAL HERITAGE 1 (Yehuda E. Kalay et al. eds., 2008).

¹⁸ *Id.* at 78.

¹⁹ *European Institutions Use Technology To Foster Culture And Heritage*, MICROSOFT NEWS CENTRE EUROPE, (Mar. 6, 2014), <http://news.microsoft.com/europe/2014/06/03/european-institutions-use-technology-to-foster-culture-and-heritage/> (technology breaks down barriers of distance encouraging cultural cooperation, boosting tourism, and stimulating local economies).

²⁰Rina Elster Pantalony, *The WIPO Guide on Managing Intellectual Property for Museums*, WORLD INTELLECTUAL PROPERTY ORGANIZATION 26 (Geneva, 2013), http://www.wipo.int/copyright/en/museums_ip/ (examining why museums should develop and adopt an intellectual property policy).

²¹ *Id.*

failed to adapt alongside of these transformations.²² Lawmakers and courts appear to be shirking their responsibility to keep pace with the rapidly changing dimensions of intellectual property and the art world and the resulting uncertainty is thrown into sharp relief when regarding digital media and cultural heritage.²³ While the benefits are boundless, the digitization of collections and the incorporation of new media applications and technology to cultural heritage present great challenges for museums in the twenty-first century.²⁴ In order to survive and thrive in the digital environment, the laws and practices governing cultural heritage must evolve to address the progress and developments made in new media and technology.²⁵

This comment endeavors to explore the application of new media technology to cultural heritage within the broader context of the intellectual property laws of the United States, specifically placing emphasis on copyright's role in fostering and promoting creativity while advancing the public policy goal of expanding knowledge, science, and "the useful arts." In a debate that is influenced by and pulled in many directions, each with their own individual set of consequences, all equally important, this topic is ripe for exploration and consideration, not only at a level of scholarly discourse, but at a legislative level, requiring action and attention. "The sole interest of the United States and the primary object in conferring the monopoly lie in the general benefits derived by the public from the labors of authors."²⁶ In a discussion of copyright's main policy directives, this comment examines whether those goals are currently being served by the protections and limitations either encouraging or constraining the creative arts community and efforts to protect, promote, disseminate, preserve, restore, re-create, and re-contextualize cultural heritage sites and artifacts on a global scale.

This comment begins by examining the intersection of cultural heritage and new media technologies, highlighting various threats facing cultural heritage today, as

²² Vivek Wadhwa, *Lawmakers Can't Keep Up with Technology*, MIT TECH. REV. (Sept. 19, 2014), <http://www.technologyreview.com/view/526401/laws-and-ethics-cant-keep-pace-with-technology/>.

²³ Mary L. Mills, *New Technology and the Limitations of Copyright Law: An Argument for Finding Alternatives to Copyright Legislation in an Era of Rapid Technological Change*, 65 CHI. KENT. L. REV. 307 (1989).

²⁴ Christopher Johnson & Daniel J. Walworth, *Protecting U.S. Intellectual Property Rights And The Challenges Of Digital Piracy*, U.S. INTERNATIONAL TRADE COMMISSION. According to U.S. industry and government officials, the infringement of intellectual property rights has reached critical levels in the United States as well as abroad:

The speed and ease with which the duplication of products protected by IPR can occur has created an urgent need for industries and governments alike to address the protection of IPR in order to keep markets open to trade in the affected goods. Copyrighted products such as software, movies, music and video recordings, and other media products have been particularly affected by inadequate IPR protection. New tools, such as writable compact discs (CDs) and, of course, the Internet have made duplication not only effortless and low-cost, but anonymous as well.

Id. at 1. The report continues, addressing the relationship to copyright law, "at the same time, an increasingly digital world has spawned vigorous debate about how to maintain the appropriate incentives afforded to creators of copyright content, given the ease of digital copying, while continuing to provide for certain non-infringing uses of works for socially beneficial purposes." *Id.*

²⁵ Wadhwa, *supra* note 22 (regulatory gaps exist because laws have not kept up with advances in technology; and the gaps are getting wider as technology advances ever more rapidly).

²⁶ Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932).

well as discussing how these concerns may be addressed or combatted through the use of new media technologies. Examples are set forth ranging from simple digital photography to three-dimensional comprehensive laser scanning systems, and possible legal ramifications stemming therefrom. After laying this groundwork, this comment reviews the ways in which the current state of the law and of intellectual property regimes present various challenges when applied to cultural heritage, as well as the inadequate protections and incentives provided. Considering the policy justifications driving copyright and intellectual property law, as well as the ethical imperatives that bound custodians of culture, the inherent conflict created by the collision of these two fields is necessary. Following these examples and the analysis framing the legal issues, a discussion is presented of the various rights, consequences, obligations, and interests of the affected stakeholders. Keeping with the overarching and controlling theme of copyright policy, the potential benefits and applications as well as the possible pitfalls of addressing digital cultural heritage within a framework of intellectual property law is explored from the perspectives of: individual content-creators and rights-holders; cultural heritage institutions and custodians; the cultural objects and artifacts themselves; society and the general public; and the interests which copyright law primarily seek to serve.

Finally, this comment explores several different approaches to the intellectual property protection of cultural heritage and new media. These approaches serve as the basis for proposals and modifications set forth to address the issues arising from the intersection of intellectual property law and the protection of cultural heritage. This comment concludes with the observation that the only absolute remains that intellectual property law must adapt to survive in and serve the digital generation. Copyright law cannot control or prevent change; however, it certainly must not sit idly by as these transformations take place. Rather, what can be controlled is how copyright as a whole adapts, reacts, and addresses these changes.

II. BACKGROUND

A. Copyright Law & its Origins

1. Authority & History

Copyright protection stems from both Constitutional and statutory authority. Under the United States Constitution, Congress is empowered "to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."²⁷

²⁷ U.S. CONST. art. 1, § 8, cl. 8 ("Copyright Clause"). The "Progress of Science," under the Copyright Clause, refers broadly to the creation and spread of knowledge and learning. *See Golan v. Holder*, 132 S. Ct. 873, 181 (2012); *See also Goldstein v. California*, 412 U.S. 546, 555 (1973) (explaining that the Clause describes both the objective which Congress may seek as well as the means to achieve it, "[t]he objective is to promote the progress of science and the arts. As employed, the terms 'to promote' are synonymous with the words 'to stimulate,' 'to encourage,' or 'to induce.'").

Furthermore, Title 17 of the U.S. Code provides: “Copyright protection subsists, in accordance with this title, in original works of authorship fixed in any tangible medium of expression.”²⁸

When copyright laws were first enacted, nationally and internationally, the focus was primarily on the interests of the users, according authors and publishers a level of protection “just strong enough to encourage and reward them, but weak enough not to prevent free flow of culture and information.”²⁹ Historically, copyright law has been transformed by culture, industry, and technology. Successive acts, legislative history, and the practice of the Copyright Office establish that “works of art” and “reproductions of works of art” are terms intended by Congress to include the authority to copyright works in new mediums.³⁰ However, just as the invention of the camera gave rise to both a new form of artistic expression and a new reproduction method bringing the concepts of authenticity, originality, and authorship into question, so too does the advent and application of new media technologies bring about similar questions, especially in relation to the ongoing debate regarding the status of the original and the copy.³¹

The constitutional purpose of copyright law informs all aspects of the debate.³² The role which is to be played by Congress has been addressed by the Supreme Court: “[T]he Copyright Clause empowers Congress to determine the intellectual property regimes that, overall, in that body’s judgment, will serve the ends of the Clause.”³³ Furthermore, “it is generally for Congress, not the courts, to decide how to best pursue the Copyright Clause’s objectives.”³⁴ As such, it is the responsibility of Congress to adapt the copyright laws to respond adequately and address contemporary changes in technology and culture.³⁵

2. Policy

Copyright law is intended to grant valuable and enforceable rights to authors, publishers, and content creators without burdensome requirements, as well as to

²⁸ 17 U.S.C. § 101 *et seq.* (2012).

²⁹ NICOLA LUCCHI, *DIGITAL MEDIA & INTELLECTUAL PROPERTY: MANAGEMENT OF RIGHTS AND CONSUMER PROTECTION IN A COMPARATIVE ANALYSIS* 23 (1st ed. 2006).

³⁰ *Mazer v. Stein*, 347 U.S. 201, 202 (1954) (The Court held that the legislative history of the copyright act and the practice of the copyright agency showed that works of art and reproductions of works of art were intended by Congress to be copyrighted).

³¹ *See* *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 248 (1903) (The Court, in considering whether chromolithographs were entitled to the protection of copyright law held in favor of protection, noting that the pictures were protected as original pictorial illustrations, and that a copyright is not affected by the fact that pictures represent actual visible things: “Even if drawn from life, that fact would not deprive them of protection. Others are free to copy the original. They are not free to copy the copy.”).

³² U.S. CONST. art. I, § 8, cl. 8 (“The Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”).

³³ *Eldred v. Ashcroft*, 537 U.S. 186, 222 (2003).

³⁴ *Id.* at 212.

³⁵ *Author’s Guild v. Google Inc.*, 770 F. Supp. 2d 666, at 677 (S.D.N.Y. 2011) (quoting *Eldred v. Ashcroft*, 537 U.S. 186, 212 (2003) and *Sony Corp. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984)).

encourage the production of literary or artistic works of lasting benefit.³⁶ The primary purpose, however, of copyright law is not to reward the individual author, but rather to secure “the general benefits derived by the public from the works of the authors.”³⁷ As the Supreme Court has explained, “The economic philosophy behind the clause empowering Congress to grant . . . copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors.”³⁸

Copyright and intellectual property protections must carefully balance a variety of different interests: the reward to the owner or author and the benefit to the overall public. However, as noted, the rights of an individual, in the overall balance and consideration, come secondary to that of the public welfare.³⁹ Creativity and innovation do not exist in a vacuum—as such, the public welfare’s overall interest and benefit from gaining access to these cultural heritage works is best advanced and served by a copyright law and intellectual property scheme that reflects the interests of a digital generation, and takes into consideration the rights of the public first, and the rights of the individual content creator second.⁴⁰

B. Copyright Law Generally

1. Originality & Creativity

“Originality,” for copyright purposes, is constitutionally and statutorily mandated for all works seeking the protections of a copyright.⁴¹ This requirement is embodied in the U.S. Federal Copyright Act, which affords that copyright protection subsists in “original works of authorship.”⁴² Originality is the “one pervading element” which is essential for copyright protection, regardless of the form of the

³⁶ U.S. CONST. art. 1, § 8, cl. 8. *See also* Golan v. Holder, 132 S. Ct. 873, 181 (2012) (The provision of incentives for the creation of new works is an essential means to advance the spread of knowledge and learning under the Copyright Clause; it is not, however, the sole means Congress may use to promote the Progress of Science).

³⁷ Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932). *See also* Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417, 477 (1984) (“The monopoly created by copyright thus rewards the individual author in order to benefit the public.”); Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975) (“The Copyright Act exists ‘to stimulate artistic creativity for the general public good.’”).

³⁸ Mazer v. Stein, 347 U.S. 201, 219 (1954).

³⁹ Eldred v. Ashcroft, 537 U.S. 186, 222 (2003).

⁴⁰ *See generally*, 1-3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 3.07 (addressing the rights of the copyright owner in a pre-existing work as against the author of a derivative or collective work that incorporates such pre-existing work where the consent of the owner of the pre-existing work is obtained in connection with the creation of the derivative or collective work, but such consent is limited either in time or as to particular media, and the derivative work is used in a manner that exceeds such limits).

⁴¹ U.S. CONST. art. I, § 8, cl. 8; 17 U.S.C. § 102(a) (2012); Feist Publications, Inc. v. Rural Telephone Service Co., 499 U.S. 340, 347 (1991).

⁴² 17 U.S.C. § 102(a) (2012).

work.⁴³ Originality is distinct from novelty; thus, in order for a work to be sufficiently “original,” it must be the product of independent creation.⁴⁴

While originality is required, the level necessary to meet this burden is extremely low. The test for originality has a “low threshold,” requiring that the author or authors contribute “at least some minimal degree of creativity,” or “more than a trivial variation of a previous work.”⁴⁵ This requirement was addressed in the 1991 landmark Supreme Court case *Feist Publications, Inc. v. Rural Telephone Service. Co.*⁴⁶ The Court, in holding that the compilation of a telephone directory was copyrightable, addresses the mandate for originality, adding that some non-obvious element must be present.⁴⁷ *Feist* also illustrates the general notion in copyright law that facts and data are not eligible for copyright protection; however, originality in the method of selection, arrangement, and presentation of the data or facts in a compilation can qualify the work as copyrightable.⁴⁸

2. Fixation

An additional requirement for U.S. copyright protection is fixation.⁴⁹ The U.S. Copyright Act establishes that a work must be “fixed in a tangible medium of

⁴³ *Id.*; see also *Magic Mktg., Inc. v. Mailing Servs. of Pittsburgh, Inc.*, 634 F. Supp. 769 (W.D. Pa. 1986) (“originality is the one pervading element essential for copyright protection regardless of form of work.”); 1 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 2.01[B] (1985).

⁴⁴ *Magic Mktg., Inc. v. Mailing Servs. of Pittsburgh, Inc.*, 634 F. Supp. 769 (W.D. Pa. 1986).

⁴⁵ *Id.*; *Feist Publications, Inc. v. Rural Telephone Service. Co.*, 499 U.S. 340 (1991); see also *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239 (1903) (The U.S. Supreme Court upheld the validity of a copyright in the reproduction of posters advertising a traveling circus. The Court, in so holding, stated: “Others are free to copy the original [subject matter depicted]. They are not free to copy the copy . . . The copy is the personal reaction of an individual upon nature,” and thus can be inherently original.”).

⁴⁶ *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991).

⁴⁷ *Id.* at 345.

⁴⁸ *Id.* at 349. The Court held that an alphabetical listing of telephone subscriber information was “obvious” and lacked “at least some minimal degree of creativity” sufficient to warrant copyright protection. *Id.* In addressing the issue of the defendant’s efforts which required extensive labor and investment, the Court held that “sweat of the brow” alone is not the “creative spark” that copyright requires, the *sine qua non* of originality, which is part of the constitutionally mandated requirement for copyright. *Id.* at 359-60. In contrast to the United States’ refusal to apply the “sweat of the brow” doctrine, some European countries, such as the United Kingdom, Ireland, and the Netherlands, have traditionally applied the “sweat of the brow” doctrine, finding that skill and labor alone will generally confer originality. For example, in *BBC v. Magill*, the Court held that the weekly programming schedules of the BBC could not be reproduced because the work, skill, and judgment required to produce the schedules was sufficient to qualify them for copyright protection. *BBC v. Magill*, I.L.R.M. 534 (1990). However, this was before adoption of the European database directive, which standardized E.U. copyright and authors’ rights law on an intellectual creation standard. See Mark Powell, *The European Union’s Database Directive: An International Antidote to The Side Effects of Feist?*, 20 *FORDHAM INT’L L.J.* 1215 (1997); European Parliament and Council Directive 96/9/EC of 11 March 1996 on the Legal Protection of Databases, 1996 O.J. (L 77) 2.

⁴⁹ 17 U.S.C. § 101 (2012) (“A work is ‘fixed’ in a tangible medium of expression when its embodiment in a copy or phonorecord, by or under the authority of the author, is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration. A work consisting of sounds, images, or both, that are

expression” for a period of “more than a transitory duration” in order to be copyrightable.⁵⁰ In other words, a work is sufficiently “fixed” when its embodiment “is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration.”⁵¹

The issue in this context regarding “fixation” surrounds the changing digital climate. Questions are raised as to whether a digital work is “fixed” as it transitions from one medium to another or from one platform to another. Additionally, is the work considered “fixed” when it is created in a digital form, or is it “fixed” when it is recreated, for example, by using 3D printing? Works that exist on contributory platforms and in crowd-sourced multimedia can change on a daily basis: information and data is added or subtracted, alterations take place to update the piece as discoveries are made, and software platforms are different when the media is viewed on the internet versus when it is downloaded. One of the reasons why new media is so valuable is also one of the reasons that may also limit its copyrightability.

3. Authorship & Expression

Even if a work is original and is fixed in a tangible medium of expression, not every aspect of every creative work is protected by copyright. The law regulates only the copying of an “*original expression*.” Each of those words is significant. First, copyright protects only that which is original.⁵² As addressed earlier, originality entails independent creation by the author, and “at least some minimal degree of creativity.”⁵³ However, it is “universally true” that even creative works contain material that is not original, because “all creative works draw on the common wellspring that is the public domain.”⁵⁴ This principle excludes from copyright protection the “raw materials” of art, such as colors, letters, descriptive facts, standard geometric forms, as well as previous creative works that have fallen into the public domain.⁵⁵

An argument can be made that the addition and incorporation of substantial content in a digital facsimile may be “transformative” enough so as to elevate the digital replica into a newly copyrightable work. However, this argument is easily stifled when one considers that this additional content—generally information such as location, size, culture of origin, and other foundational specifics—while it is valuable, is not eligible for copyright protection insofar as the baseline material is simply factual, and facts are not copyrightable.

In the context of a recreation or digital reproduction of cultural heritage works, an issue arises as to whether “creativity” or “original expression” exists in an exact replication of a pre-existing work by simply transforming the original into a different

being transmitted, is “fixed” for purposes of this title if a fixation of the work is being made simultaneously with its transmission.”).

⁵⁰ 17 U.S.C. § 101 (2012).

⁵¹ *Id.*

⁵² *Feist*, 499 U.S. at 345.

⁵³ *Id.*

⁵⁴ *Tufenkian Imp./Exp. Ventures, Inc. v. Einstein Moomjy, Inc.*, 338 F.3d 127, 132 (2d Cir. 2003).

⁵⁵ *Id.*

medium. While fairly broad for an original work of authorship, federal copyright protection does not extend to “any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”⁵⁶ Copyright is limited to those aspects of work, deemed an “expression,” which display the stamp of author’s originality.⁵⁷

The Court in *Burrow-Giles Lithographic Company v. Sarony* considered the issue of whether a photograph of Oscar Wilde contained enough creativity and intellectual invention to constitute copyrightable subject matter.⁵⁸ In *Burrow-Giles*, the Court found creative elements in the photographer’s “own original mental conception . . . posing the said Oscar Wilde in front of the camera, selecting and arranging the costume, draperies, and other various accessories . . . arranging the subject so as to present graceful outlines, arranging and disposing the light and shade, [and] suggesting and evoking the desired expression.”⁵⁹ While a photograph is an exact replica of a physical embodiment, *Burrow-Giles* extended copyright protection insofar as a photograph embodies the original elements of artistic creation.

4. Ownership

When a work of art is created and sufficiently fixed in a tangible medium of expression, the copyright vests in the author and grants to the copyright owner a bundle of exclusive rights.⁶⁰ The copyright owner may be either the artist, or if the work is a work made for hire, the employer, person, or entity that commissioned the work.⁶¹ The different “owners” of these projects could be: the artist, author, or creator; a humanities scholar, providing the information, curation, content, and directing the creation; the museums in physical possession of the object or artifact; the culture to which the original object or artifact belonged; stakeholders providing funding contributions; the country of origin; the public; a private or public commissioner; a university; or any combination of these and others.

The benefits incentivizing authors to produce new works of lasting benefit are the means; the end, “to promote the Progress of Science⁶² and useful Arts.”⁶³ It naturally follows that copyright protection is not unlimited and does not protect everything or every use. The Copyright Act protects “original works of authorship” that are “fixed in any tangible medium of expression.”⁶⁴ The copyright vests

⁵⁶ 17 U.S.C. § 102(b) (2012).

⁵⁷ *Harper & Row Publishers, Inc. v. Nation Enterprises*, 471 U.S. 539, 544 (1985).

⁵⁸ *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 61 (1884).

⁵⁹ *Id.*

⁶⁰ 17 U.S.C. § 106 (2012) (granting copyright holder the exclusive rights of reproduction, preparation of derivative works, distribution, performance and display).

⁶¹ 17 U.S.C. § 201(a) (2012) (“Copyright in a work protected under this title vests initially in the author or authors of the work”). 17 U.S.C. § 201(b) (2012) (“In the case of a work made for hire, the employer or other person for whom the work was prepared is considered the author for purposes of this title”).

⁶² *Golan v. Holder*, 132 S. Ct. 873, 888 (2012) (“The ‘Progress of Science,’ refers broadly to ‘the creation and spread of knowledge and learning.’”).

⁶³ U.S. CONST. art. I, § 8, cl. 8.

⁶⁴ 17 U.S.C. § 102(a) (2012).

immediately with the author⁶⁵ upon the creation⁶⁶ of the work. Copyright protection does not extend to facts or ideas, only to the expression of these ideas. Furthermore, there are exceptions allowing the use of a copyrighted work either once it has fallen into the public domain or if the use falls under the “fair use” doctrine. Works within the public domain belong to the public⁶⁷ and the public has a federal right to utilize works within the public domain.⁶⁸ Uses that are considered “fair” may be permissible under certain circumstances.⁶⁹ Due to the idea/expression distinction under copyright law, every idea, theory, and fact in a copyrighted work becomes instantly available for public exploitation at the moment of publication; the author's expression alone gains copyright protection.⁷⁰ The fair use limitation on copyright exclusivity allows the public to use not only facts and ideas contained in a copyrighted work, but also the author's expression itself in certain circumstances.⁷¹

5. *Rights Granted*

The protections of copyright grant to the owner not merely one exclusive right, but rather several different and independent rights. Section 106 of the Copyright Act provides copyright owners⁷² with a number of exclusive⁷³ rights; and the Act also provides certain exceptions and limitations to these exclusive rights.⁷⁴ In the United States, these rights include: (1) the right to reproduce the work in copies;⁷⁵ (2) the right to create derivative⁷⁶ works; (3) the right to distribute copies of the copyrighted

⁶⁵ Where an author creates a work “for hire,” it is the employer and not the hired author who is deemed the rightful owner of the work. *TufAmerica, Inc. v. Codice Music LLC*, 2016 WL 626557, at *14 (S.D.N.Y. Feb. 16, 2016); *see also* 17 U.S.C. § 101 (2012) (A “work made for hire” is- (1) a work prepared by an employee within the scope of his or her employment; or (2) a work specially ordered or commissioned”).

⁶⁶ A work is “created” when it is fixed in a copy or phonorecord for the first time; where a work is prepared over a period of time, the portion of it that has been fixed at any particular time constitutes the work as of that time, and where the work has been prepared in different versions, each version constitutes a separate work. 17 U.S.C. § 101 (2012).

⁶⁷ *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 231-32 (1964).

⁶⁸ *Dastar Corp. v. Twentieth Cent. Fox Film Corp.*, 539 U.S. 23, 33-34 (2003).

⁶⁹ 17 U.S.C. § 107 (2012).

⁷⁰ *Golan v. Holder*, 132 S. Ct. 873 (2012).

⁷¹ *Id.*

⁷² The “copyright owner” with respect to any of the exclusive rights comprised in a copyright, refers to the owner of that particular right, not necessarily the creator. 17 U.S.C. § 101 (2012).

⁷³ 17 U.S.C. § 106 (2012).

⁷⁴ *See* 17 U.S.C. §§ 107-122 (2012).

⁷⁵ “Copies” are “material objects, other than phonorecords, in which a work is fixed by any method now known or later developed, and from which the work can be perceived, reproduced, or otherwise communicated, either directly or with the aid of a machine or device.” 17 U.S.C. § 101 (2012). The term “copies” also includes “the material object, other than a phonorecord, in which the work is first fixed.” *Id.*

⁷⁶ A “derivative work” is a “work based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which a work may be recast, transformed, or adapted.” 17 U.S.C. § 101 (2012). Furthermore, a work “consisting of editorial revisions, annotations, elaborations, or other modifications which, as a whole, represent an original work of authorship,” is also a “derivative work.” *Id.*

work to the public; (4) the right to perform⁷⁷ the work publicly; (5) the right to display⁷⁸ the copyrighted work publicly; and (6) the right to perform the copyrighted work publicly by means of a digital audio transmission.⁷⁹ Each of these rights, and the control over each of these rights, depend upon the determination of authorship and ownership. These rights instill upon the copyright owner not only the right to exercise but the right to authorize others as well.

C. Current State of Cultural Heritage

“Heritage is part of our expressive life that tells us where we came from by preserving and presenting voices from the past, grounding us in the linkages of family, community, ethnicity, and nationality, giving us our creative vocabulary.”⁸⁰ Unfortunately, on a global scale, cultural heritage objects and sites face a multitude of threats due to: age and natural deterioration, theft⁸¹ and looting, conflicts of war, tourism, aggressive urbanization, speculative development, natural disasters and environmental forces⁸² both within cultural heritage institutions, as well as in the field or on-location,⁸³ individual researchers, professional societies, museums,

⁷⁷ To “perform” a work means to “recite, render, play, dance, or act it, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.” 17 U.S.C. § 101 (2012).

⁷⁸ 17 U.S.C. § 101 (2012) (“To ‘display’ a work means to show a copy of it, either directly or by means of a film, slide, television image, or any other device or process or, in the case of a motion picture or other audiovisual work, to show individual images nonsequentially.”).

⁷⁹ 17 U.S.C. § 106 (2012). The sixth exclusive right, the right to perform the copyrighted work publicly by means of a digital audio transmission, pertains only to sound recordings. See 17 U.S.C. § 106(6) (2012).

⁸⁰ BILL IVEY, ARTS, INC.: HOW GREED AND NEGLECT HAVE DESTROYED OUR CULTURAL RIGHTS 55-56 (2008).

⁸¹ Each year, between 12,000 and 14,000 cultural objects are reported stolen, accounting for an annual value of more than € 5 billion (\$ 5.5 million). See John M. Milo & Vincent Sagaert, *Private Property Rights in Cultural Objects: Balancing Preservation of Cultural Objects and Certainty of Trade in Belgian and Dutch Law*, in ART & LAW 468 (Bert Demarsin et al. eds., 2008). Other estimates place the illicit trafficking of antiquities to be over \$ 6 billion per year. UNESCO, Information Kit, *The Fight Against the Illicit Trafficking of Cultural Objects, The 1970 Convention: Past, Present and Future* (2011) CLT/2011/CONF.207/6.

⁸² United Nations Educational, Scientific and Cultural Organization (UNESCO) has adopted international conventions on the protection of cultural heritage. UNESCO provides a “standard list of threats/factors affecting the Outstanding Universal Value of World Heritage properties” consisting of a series of 14 primary factors, each encompassing a number of secondary factors. Among those factors: Buildings and development; transportation infrastructure; utilities or service infrastructure; pollution, biological resource use/modification; physical resource extraction; local conditions affecting physical fabric; social/cultural uses of heritage; other human activities, including illegal activities and the deliberate destruction of heritage; climate change and severe weather events; sudden ecological or geological events, such as natural disasters; invasive/alien species or “hyper-abundant” species; and, management and institutional factors. UNESCO WORLD HERITAGE CONVENTION, *List of Factors Affecting the Properties*, <http://whc.unesco.org/en/factors/>.

⁸³ Leah A Lievrouw, *What's changed about new media?* 6 NEW MEDIA & SOCIETY 1, 9-15 (2004).

universities, and governments have embraced new media technologies to augment traditional methods of cultural management.⁸⁴

For hundreds of years, cultural institutions have safeguarded the world's art, culture, history, and heritage. The use of new technologies can strengthen this mission, while preserving these artifacts and collections for a worldwide audience of today and tomorrow. When access to the art and heritage of peoples' past is restricted, something of a person's understanding of human nature is lost. Just as the "great libraries of the past—from the fabled collection at Alexandria to the early public libraries of nineteenth-century America—stood as arguments for increasing access,"⁸⁵ this principle ought to be advocated for and encouraged throughout all cultural institutions. Digital technologies and web-based communication platforms remove obstacles in achieving the goal of wide dissemination of knowledge and cultural heritage. "The ability to display and link collections from around the world breaks down physical barriers to access, and the potential of reaching audiences across social and economic boundaries blurs the distinction between the privileged few and the general public."⁸⁶

1. Cultural Heritage Institutions

While there are institutional distinctions between museums and other cultural heritage institutions—such as archives, libraries, and other institutions that are custodians of cultural heritage—many of the intellectual property issues facing each of them are similar. Therefore, despite their distinct purposes, missions, and mandates, this comment refers generally to "museums" and "cultural heritage institutions" as all-encompassing and interchangeable terms, in the effort to address all institutions comprising the cultural heritage community.⁸⁷

⁸⁴ Kalay, *supra* note 17, at 15 ("Individual researchers, professional societies, museums, universities, and governments have embraced computer modeling and visualization to create virtual reconstructions and databases of living, threatened or lost cultural heritage sites.").

⁸⁵ JOHN WILLINSKY, *THE ACCESS PRINCIPLE: THE CASE FOR OPEN ACCESS TO RESEARCH AND SCHOLARSHIP* (MIT Press, 1st ed. 2009).

⁸⁶ HOWARD BESSER & JENNIFER TRANT, *INTRODUCTION TO IMAGING 7* (1995).

⁸⁷ While there are institutional distinctions between museums and other cultural heritage institutions—such as archives, libraries, and other institutions that are custodians of cultural heritage—many of the intellectual property issues and legal concerns facing each of them are similar. Therefore, despite their distinct purposes, missions, and mandates, this comment refers to "museums" and "cultural heritage institutions" as all-encompassing and interchangeable terms, in the effort to address all institutions comprising the cultural heritage community. See Christian Dupont, *Libraries, Archives and Museums in the Twenty-First Century: Intersecting Missions, Converging Futures?*, 8 *RBM: A JOURNAL OF RARE BOOKS, MANUSCRIPTS AND CULTURAL HERITAGE* 13-19 (Spring, 2007), <http://rbm.highwire.org/content/8/1/13.full.pdf> ("cultural heritage institutions, libraries, archives, and museums share common goals to acquire, preserve, and make accessible artifacts and evidences of the world's social, intellectual, artistic, even spiritual achievements."). See also Pantalony, *supra* note 20, at 5.

a. Digitization of Collections

While there is no singular and comprehensive solution to eliminate the risks facing cultural heritage, steps can be taken in order to mitigate the damage,⁸⁸ as the use of new media can assist in preservation efforts.⁸⁹ When a museum digitizes an object or a collection and grants online and virtual access to users across the world, the underlying mission of the institute is achieved (to promote and share knowledge and culture), while simultaneously providing incentives for visitors, thus driving attendance and revenues. Furthermore, “digital heritage” serves as a valuable tool to promote and foster understanding and appreciation for the heritage of any culture. However, the digitization of cultural collections and artifacts is not always as clear cut as it may sound. Before any institution embarks upon a digitization project or initiative, a careful consideration of intellectual property rights necessarily must include the laws governing: copyright, design rights, moral rights, cultural heritage rights, trademarks, and patents.⁹⁰

b. Digitization and the Question of Access

In February of 2016, in a project meant to question museum policies and notions of cultural ownership, two German artists, Nora Al-Badri and Jan Nikolai Nelles, captured headlines across the globe, announcing that the two snuck a Kinect Sensor into the Neues Museum in Berlin and captured an unauthorized guerrilla 3D scan of the bust of Queen Nefertiti, the precious artwork from ancient Egypt.⁹¹ The motivation driving this project, entitled “The Other Nefertiti,” was an attempt to liberate the sculpture, which was removed from Egypt in the early 20th century by a German team of archaeologists, according to a report from *Ars Technica*.⁹² Given that the bust is an incredibly important cultural artifact, Al-Badri and Nelles felt that the people of Egypt had a right, at the very least, to a high-quality reproduction

⁸⁸ Joe Parkinson, Ayla Albayrak & Duncan Mavin, *Culture Brigade: Syrian ‘Monuments Men’ Race to Protect Antiquities as Looting Bankrolls Terror*, WSJ (Feb. 10, 2015), available at <http://www.wsj.com/articles/syrian-monuments-men-race-to-protect-antiquities-as-looting-bankrolls-terror-1423615241> (a group of academics acting to save and preserve ancient artifacts and imperiled archaeological sites from profiteers, desperate civilians and fundamentalists who have plundered Syria’s rich artistic heritage to fund their war effort).

⁸⁹ Tom Coghlan & Oliver Moody, *High-Tech Plan To Save Ancient Sites From Isis*, THE TIMES: MIDDLE EAST (Aug. 28, 2015), available at <http://www.thetimes.co.uk/tto/news/world/middleeast/article4540560.ece> (“Palmyra is rapidly becoming the symbol of Isis’s cultural iconoclasm,” Roger Michel, the director for the Institute for Digital Archaeology (IDA) in Oxford, told *The Times*, “If ISIS is permitted to wipe the slate clean and rewrite the history of a region that defined global aesthetic and political sensibilities, we will collectively suffer a costly and irreversible defeat. But there is hope. By placing the record of our past in the digital realm, it will lie forever beyond the reach of vandals and terrorists.”).

⁹⁰ David Arnold, *Digital Artefacts: Possibilities and Purpose*, in THE VIRTUAL REPRESENTATION OF THE PAST 59 (Mark Greengrass & Lorna Hughes eds., 2008).

⁹¹ Charly Wilder, *Swiping a Priceless Antiquity . . . With a Scanner and a 3-D Printer*, NY TIMES, (Mar. 1, 2016), <http://www.nytimes.com/2016/03/02/arts/design/other-nefertiti-3d-printer.html>.

⁹² *Id.*

of the work.⁹³ They exhibited a 3D print of the bust publicly in Cairo, and released the associated data file to the Internet on an open-access platform.⁹⁴ However, the digital scan itself gave rise to another scandal—researchers and scholars, after examining the 3D digital version, suggested that the 3D scan was actually taken from the Museum’s database by “hackers.”⁹⁵ The common theory is that the scan came from hackers who breached the museum’s private servers and heisted a copy of its professional-grade scan. Whether or not it was the artists’ intention, this project has raised an important contemporary issue and has done a great deal to publicize the fact that museums and cultural custodians are often in possession of high quality scans of the works in their collection. The question thus becomes whether those files should be more accessible to other museums, researchers, scholars, and the public.

The artists, by taking it upon themselves to make the object widely available, confront cultural theft and the ever-persisting colonialist notions of national ownership.⁹⁶ As the practice of guarding 3D digitized data and reproductions is customary among many museums,⁹⁷ the project also brings to the forefront the way in which 3D scanning technologies, which are becoming more affordable and accessible, present cultural institutions with new opportunities, as well as new challenges.

Among others, Nelles and Al-Badari, in their efforts to digitally repatriate important cultural artifacts, ultimately seek to have the original Nefertiti bust, one of the centerpieces of the Neues Museum, returned to Egypt, while a 3D-printed replica would take its place in Berlin.⁹⁸ This is one way in which other cultural patrimony disputes—of which the most well-known is probably that between the British Museum and Greece over the Elgin marbles—could be similarly resolved.⁹⁹

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ Wilder, *supra* note 91.

⁹⁷ However, this is by no means the policy of all museums; some cultural institutions take a relatively open approach to scanning technology, while other museums actually go so far as to encourage scanning. For example: Both the Art Institute of Chicago and the Metropolitan Museum of Art encourage visitors to scan objects in their collections; while the British Museum even hosted a “scanathon” for which museumgoers were asked to use scanning devices and smartphones, in an effort to create a crowd-sourced digital archive, and the Musée du Louvre held a similar series of digital workshops. *See id.*

⁹⁸ *Id.*

⁹⁹ The institution in which the Elgin Marbles are held, the British Museum, even suggests using new media to digitally repatriate or remedy—at least in part—the cultural heritage dispute:

The aim of representing all known sculptures of the Parthenon in one place can be achieved without their physical reunion. The British Museum has furnished Greek colleagues with a full set of casts of all the Parthenon sculptures in the British Museum, while 3D scanning offers opportunities to reunify the sculptures virtually.

The Parthenon Sculptures, BRITISH MUSEUM 9.10.2 (Mar. 2016), http://www.britishmuseum.org/about_us/news_and_press/statements/parthenon_sculptures/facts_and_figures.aspx; *see generally* Derek Fincham, *The Parthenon Sculptures and Cultural Justice*, 23 IPLJ 943 (2013).

2. *Work That No Longer Exists*

New media technologies can be used to re-create cultural artifacts and architecture that no longer exist in the physical form. To illustrate, new media technologies were recently utilized in a form of “recreation” following the devastating destruction of the two Buddhas of Bamiyan.¹⁰⁰ This past June, fourteen years after the Taliban bombed Afghanistan’s Bamiyan Buddha statues, a Chinese couple created life-sized holograms of the ancient artifacts and projected them back into their cliff-side home.¹⁰¹ What was once thought of as lost forever, has made a return in the form of 3D light projections that now fill the empty cliff where the original statues once stood.¹⁰²

3. *Cultural Heritage as the Victim of War*

Various efforts utilizing a new media approach to the preservation and recordation of cultural heritage have arisen in the wake of the deliberate destruction and theft carried out by the “Islamic State of Iraq and Syria” (“ISIS”), in the Middle East and North Africa—notably in Iraq, Syria, Yemen, and Libya.¹⁰³ Some argue that the damage and destruction that has been inflicted on antiquities in these countries pales beside the hundreds of thousands of lives lost and millions uprooted in countries whose structures—human, political, and cultural—may never return to what they once were.¹⁰⁴ Those charged with protecting cultural heritage argue that

¹⁰⁰ KENNETH W. MORGAN, *THE PATH OF THE BUDDHA: BUDDHISM INTERPRETED BY BUDDHISTS*, at 43 (Ronald Press Co., 1956) (famous for their beauty, craftsmanship and size, and as a representation of the classic blended style of Gandhara art and prior to their destruction in 2001, these iconic statues were the largest examples of standing Buddha carvings in the world); W.L. Rathje, *Why the Taliban are destroying Buddhas*, USATODAY.COM, (Mar. 22, 2001) (“In March 2001, Taliban leader Mullah Mohammed Omar ordered the Buddhas destroyed, bringing these monumental statues to the ground, leaving only the rubble and memory behind.”); Hartwig Schmidt, *Reconstruction of Ancient Buildings*, in *THE CONSERVATION OF ARCHAEOLOGICAL SITES IN THE MEDITERRANEAN REGION: AN INTERNATIONAL CONFERENCE ORGANIZED BY THE GETTY CONSERVATION INSTITUTE AND THE J. PAUL GETTY MUSEUM*, 41-50 (May 1995), <http://d2aohiyo3d3idm.cloudfront.net/publications/virtuallibrary/0892364866.pdf>; Documents, *10th Expert Working Group Meeting for the Safeguarding of the Cultural Landscape and Archaeological Remains of the Bamiyan Valley World Heritage Property, Afghanistan*, UNESCO, available at <http://whc.unesco.org/en/list/208> (“While the Valley was determined by UNESCO to have ‘Outstanding Universal Value’ and the Buddhas were designated a World Heritage site following a review in 2002, UNESCO ultimately determined that rebuilding the statues will be difficult, if not impossible.”).

¹⁰¹ Mary-Ann Russon, *Afghanistan: Buddhas Of Bamiyan Resurrected As Laser Projections*, TECH. INT’L, BUSINESS TIMES UK (Jun. 12, 2015), <http://www.ibtimes.co.uk/buddha-statues-destroyed-by-taliban-resurrected-laser-projections-1505794>.

¹⁰² *Id.*

¹⁰³ *Threats to Cultural Heritage in Iraq and Syria*, U.S. DEPT. OF STATE, (Sept. 23, 2014), available at <http://www.state.gov/r/pa/prs/ps/2014/09/232028.htm>.

¹⁰⁴ According to a Report by the United Nations High Commissioner for Human Rights, “From January 2014 through 29 September 2015, a total of 3,206,736 persons became internally displaced in Iraq, including over 1 million school age girls and boys.” Furthermore, the report provides, “Civilians continue to suffer the most from the non-international armed conflict in Iraq. From January 1, 2014 through October 31, 2015, UNAMI/OHCHR recorded at least 55,047 civilian

attacks on people and their culture are inextricably linked.¹⁰⁵ Irina Bokova, the director general of UNESCO, in speaking about cultural cleansing as a war crime and tactic, eloquently addressed the relationship between these two threats, “[t]his is not a choice between protecting people or protecting culture. It is part of the same responsibility because culture is about belonging, identity, values, common history and the kind of world that we want to live in.”¹⁰⁶

As a result of the apparent inability of either governments or international agencies to stop or prevent the fanatic levelers of ISIS, other cultural organizations have sprung up in their wake and are attempting to create 3D records and digital replicas of various cultural heritage sites, artifacts, and monuments in an effort to preserve their existence, at least in digital form, for future generations.¹⁰⁷

These cultural organizations are working with Iraqi and Syrian experts, drawing on local knowledge and providing equipment and training, in an effort to create digital records of endangered ancient sites.¹⁰⁸ Among the pioneers is CyArk, a nonprofit organization based in California, which is dedicated to the 3D digital preservation of cultural heritage.¹⁰⁹ CyArk has sent teams to scan high-risk—but still accessible—sites in Syria and Iraq, and plans to extend the project further to 200 other locations in neighboring countries.¹¹⁰ Additionally, the World Monuments Fund, a New York-based nonprofit charity, commissioned a 3D laser-scan of the Ishtar Gate in Iraq in conjunction with the Iraq State Board of Antiquities and Heritage.¹¹¹

Project Mosul and the Million Image Database Project further demonstrate the application of photography and high-tech 3D imaging and printing in the preservation of history. Project Mosul is trying to preserve artifacts and monuments destroyed by ISIS in Iraq using 3D modeling, based on crowd-sourced photographs,

casualties as a result of the conflict, with 18,802 people killed and 36,245 wounded.” This *Report on the Protection of Civilians in the Armed Conflict in Iraq* is published jointly by the United Nations Assistance Mission for Iraq (UNAMI) and the Office of the United Nations High Commissioner for Human Rights (OHCHR), and it covers the period of May 1 to October 31, 2015. See *Report on the Protection of Civilians in the Armed Conflict in Iraq: 1 May-31 October 2015*, at 9 (Jan. 2016), available at <http://www.ohchr.org/Documents/Countries/IQ/UNAMIRreport1May31October2015.pdf>.

¹⁰⁵ Stephen Farrell, *Using Lasers to Preserve Antiquities Threatened by ISIS*, NY TIMES.COM, (Dec. 27, 2015), <http://www.nytimes.com/2015/12/28/arts/design/using-laser-scanners-to-preserve-antiquities-in-isis-cross-hairs.html?action=click&contentCollection=Art%20%26%20Design&module=RelatedCoverage®ion=EndOfArticle&pgtype=article>.

¹⁰⁶ Address by Irina Bokova, Director-General of UNESCO, International Conference on Cultural Heritage at Risk, the Role of Museums in War and Conflict Museum of Mediterranean and Near Eastern Antiquities (Stockholm, Nov. 26, 2015), available at <http://unesdoc.unesco.org/images/0023/002357/235720e.pdf>.

¹⁰⁷ Farrell, *supra* note 105.

¹⁰⁸ *Id.*

¹⁰⁹ CyArk is “[a] prototype project to test the concept of a digital archive of 3D survey information of endangered world heritage sites.” CYARK, <http://www.cyark.org> (last visited Mar. 4, 2016).

¹¹⁰ Farrell, *supra* note 105; CyArk’s mission is located prominently on its website and aligns perfectly with this initiative: “CyArk was founded in 2003 to ensure heritage sites are available to future generations, while making them uniquely accessible today. CyArk operates internationally as a 501(c)3 non-profit organization with the mission of using new technologies to create a free, 3D online library of the world’s cultural heritage sites before they are lost to natural disasters, destroyed by human aggression or ravaged by the passage of time.” <http://www.cyark.org/about/>.

¹¹¹ Farrell, *supra* note 105.

with the ultimate goal of reproducing destroyed or damaged artifacts.¹¹² The Institute for Digital Archaeology (IDA) created the Million Image Database Project in an effort to compile the open-source platform using photographs taken before the destruction of various sites—such as Palmyra—to record, and even rebuild monuments.¹¹³ Through partnership with other organizations, the IDA aims to create accessible digital archives that encourage interdisciplinary collaboration and the crowd-sourcing of research.¹¹⁴ Francesco Bandarin, the Assistant Director-General for Culture of UNESCO, has praised IDA's efforts in saying, “[t]he documentation of cultural heritage in areas affected by conflict or natural disasters, including through the use of new digital technologies, is a critical step to preserve the memory of our past and mitigate the risk of possible damage or loss of precious cultural assets.”¹¹⁵ The IDA's campaign also plans to “flood” war-torn regions with thousands of 3D cameras so people can scan and (digitally) preserve their region's historical architecture and artifacts.¹¹⁶

D. Copyright, Cultural Heritage, & New Media

The main issues concerning the intellectual property ownership rights of new media and cultural heritage works are primarily governed and regulated under rules based in copyright. The role played by copyright is clear:

Copyright protection is above all one of the means of promoting, enriching and disseminating the national cultural heritage. A country's development depends to a very great extent on the

¹¹² PROJECT MOSUL, <http://projectmosul.org/>. Project Mosul is an initiative started by Matthew Vincent (ITN-DCH Researcher), Chance Coughenour (ITN-DCH Researcher), and Marinos Ioannides (ITN-DCH Coordinator) of the Initial Training Network for Digital Cultural Heritage. The project is a response to the destruction of cultural heritage by the Islamic States, and proposes to use crowd-sourced imagery to digitally reconstruct the heritage that has been destroyed. However, while these submitted pictures have been done so voluntarily as a form of “crowd-sourcing” what will become of the eventual copyright of the final work is unknown, what copyright will attach, if any, to whom would the ownership of the copyright belong.

¹¹³ The Institute for Digital Archaeology (IDA) is a joint venture between Harvard University, the University of Oxford, and Dubai's Museum of the Future that promotes the development and use of digital imaging and 3D printing techniques in archaeology, epigraphy, art history and museum conservation. Additionally, Roger Michel, the Executive Director of IDA has restated the Institute's purpose as follows: “The Institute for Digital Archaeology seeks to provide an optimistic and constructive response to the ongoing threats to history and heritage . . . aim[ing] to highlight the potential for the triumph of human ingenuity over violence by offering innovative, technology-driven options for the stewardship of objects and architecture from our shared past.” See IDA, <http://digitalarchaeology.org.uk> (last accessed Mar. 1, 2016).

¹¹⁴ *Id.*

¹¹⁵ Francesco Bandarin, Assistant Director-General for Culture, UNESCO; See Karissa Rosenfield, *Harvard and Oxford Take On ISIS with Digital Preservation Campaign*, ARCHDAILY, (Sept. 1, 2015), <http://www.archdaily.com/772902/harvard-and-oxford-take-on-isis-with-digital-preservation-campaign/>.

¹¹⁶ *Id.*

creativity of its people, and encouragement of individual creativity
and its dissemination as a *sine qua non* for progress.¹¹⁷

Copyright supplies the economic incentive to create and disseminate expressive works of art.¹¹⁸

Cultural institutes benefit economically and commercially from the digitization of collections. Image permissions generate revenue for the museum, and the ability to reproduce and control access to works in their collection increase the profitability and notoriety of any particular museum. Under the guise of copyright law, museums limit access to collections and create a financial burden for the public seeking to use a work. However, for those works that have fallen squarely in the public domain, the museum's ability to enforce these subsequent copyrights over the digital file of the work physically in their collection is something of a legal fallacy. Museums argue that the digitized work is a derivative work or a new creation over which they seek the protection of copyright; however, while not specifically adopted by the legislature or by the Supreme Court, District Courts have firmly held that no such copyright exists over digital reproductions. Despite the courts' finding to the contrary, museums continue to operate under guarded and limiting copyright policies, the ultimate result of which has been the degradation in production of scholarly works and the shrinking framework of the public domain.

One major development enabling widespread access to art, culture, and heritage is the Google Cultural Institute's "Google Art Project," which provides museums with the ability to display and archive their collections online, while simultaneously making them accessible to viewers around the world.¹¹⁹ However, many museum collections feature works that cannot be seen through the service due to "copyright

¹¹⁷ WORLD INTELLECTUAL PROPERTY ORGANIZATION, *WIPO Intellectual Property Handbook: Law, Policy and Use*, WIPO Publication No. 489(E), available at www.wipo.int (accessed: July 2015).

¹¹⁸ *Golan v. Holder*, 132 S.Ct. 873, 874 (2012). *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 526 (1994). The Court in *Fogerty v. Fantasy, Inc.*, addressed the Copyright Act's primary objective, which is to encourage the production of original literary, artistic, and musical expression for the public good. *Id.* Furthermore, *Fogerty* establishes that copyright law ultimately serves the purpose of enriching the general public through access to creative works, and points out that "it is peculiarly important that the law's boundaries be demarcated as clearly as possible." *Id.* at 518; see also *Mazer v. Stein*, 347 U.S. 201 (1954). Copyright law is intended to grant valuable and enforceable rights to authors to afford greater encouragement to the production of literary and artistic works of lasting benefit to the world. The copyright protects originality rather than novelty or invention, as originality is the *sine qua non* of copyright as well as being a constitutional requirement. *Id.* at 202. To qualify for copyright protection, a work must be original to the author. Original, as the term is used in copyright, means only that the work was independently created by the author and that it possesses at least some minimal degree of creativity. Originality does not signify novelty; a work may be original even though it closely resembles other works so long as the similarity is fortuitous, not the result of copying. *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 342 (1991) (interpreting the Copyright Clause of the United States Constitution). See also 17 U.S.C. § 102 (2012). On its most basic terms, copyright is comprised of a bundle of rights awarded to the author of an "original work of authorship" that is "fixed in any tangible medium of expression." This bundle of rights includes the exclusive right to reproduce, the right to distribute copies, the right to publicly perform, the right to publicly display, and, the right to create derivative works for a limited time. 17 U.S.C. § 106 (2012); 17 U.S.C. §§ 302-305.

¹¹⁹ Phillip Kennicott, *National Treasures: Google Art Project Unlocks Riches Of World's Galleries*, WASHINGTON POST, (Feb. 1, 2011).

restrictions on the pieces,” whether or not a valid copyright exists.¹²⁰ When the project was launched, it was touted as a huge boom for freedom of information and cultural connectivity; yet, if one were to explore any of the museums on Google Art currently, there are many blurred rectangles where paintings should be as the result of a copyright system that prevents the public from viewing artworks.¹²¹

The right of reproduction is particularly of interest to cultural institutions in the stages of acquisition, preservation, and dissemination of their collections. Additionally, the rights to perform or display the copyrighted work publicly may also have an impact on the policy of these institutions.¹²² Museums argue that digital reproductions of cultural heritage, for legal purposes, should be considered either “derivative works” or “original works.” as the true “original works,” the cultural heritage artifacts, are often in the public domain, those who desire access to these works argue that any creation or use of these subsequent digital reproductions constitute a “fair use.”¹²³

E. International Law & Treaties

While this comment focuses on the legal ramifications of these issues through the lens of the copyright laws of the United States, it should not be ignored that other international standards also influence this discussion.¹²⁴ Although international treaties¹²⁵ and conventions as well as enabling domestic laws have been adopted and

¹²⁰ Cait Munro, *A Tumblr Chronicles Google Art Project Copyright Fails*, ARTNET NEWS, (June 23, 2014), <https://news.artnet.com/art-world/a-tumblr-chronicles-google-art-project-copyright-fails-46507>.

¹²¹ Caitlin DeWey, *Google’s Quest to Make Art Available to Everyone was Foiled by Copyright Concerns*, WASHINGTON POST, (Mar. 4, 2015).

¹²² 17 U.S.C. § 101 (2012). To perform or display a work ‘publicly’ means: (1) to perform or display it at a place open to the public or at any place where a substantial number of persons outside of a normal circle of a family and its social acquaintances is gathered; or (2) to transmit or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times. Furthermore, to “transmit” a performance or display is “to communicate it by any device or process whereby images or sounds are received beyond the place from which they are sent.” *Id.*

¹²³ 17 U.S.C. § 107 (2012) provides, in relevant part, that fair use is to be evaluated using four factors: (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work. 17 U.S.C. § 107 (2012). However, this area of the law is historically known for its relatively low levels of regulation and the Court’s natural inclination to avoid coming to any determinative conclusion on the matter is neither informing nor clear.

¹²⁴ See Marilyn Phelan, *A Synopsis of the Laws Protecting Our Cultural Heritage*, 28 NEW ENG. L. REV. 63 (1993).

¹²⁵ 17 U.S.C. § 101 (2012) (An ‘international agreement’ is: (1) the Universal Copyright Convention; (2) the Geneva Phonograms Convention; (3) the Berne Convention; (4) the WTO Agreement; (5) the WIPO Copy Treaty; (6) the WIPO Performances and Phonograms Treaty; and (7) any other copyright treaty to which the United States is a party); The WIPO Copyright and Performances and Phonograms Treaties Implementation Act of 1998 requires that paragraph (5) of

enacted, the issue of preserving cultural heritage through technology remains germane.¹²⁶ Similarly, although efforts have been made to prevent the theft and destruction of cultural heritage, for example by criminal sanctions, the issue has not yet been resolved.¹²⁷ While questions arise when international law and protection are not always consistent with U.S. practices and regulations, that discussion is outside of the scope of this comment.¹²⁸

the definition of “international agreement” take effect upon entry into force of the WIPO Copyright Treaty with respect to the United States, which occurred March 6, 2002. Pub. L. No. 105-304, 112 Stat. 2860, 2877; The WIPO Copyright and Performances and Phonograms Treaties Implementation Act of 1998 amended section 101 by adding the definition of “international agreement.” Pub. L. No. 105-304, 112 Stat. 2860, 2861.

¹²⁶ “International law” is the universal body of law that applies to all states regardless of their specific cultures, belief systems, and political organizations. The sources of international law are treaty and custom. Where there is no treaty and no contending executive or legislative act or judicial decision, resort must be had to customs and usages of “civilized nations.” See BARBARA T. HOFFMAN, *ART AND CULTURAL HERITAGE: LAW, POLICY AND PRACTICE* (Barbara T. Hoffman ed., 2009). A prevailing custom of international law is one that arises from “a general and consistent practice of states followed by them from a sense of legal obligation (opinion juris).” See RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES SECTION 102(2) (1987). International Treaties including: CONVENTION FOR THE SAFEGUARDING OF INTANGIBLE CULTURAL HERITAGE, Oct. 17, 2003, 2368 U.N.T.S. 3; The 1970 UNESCO Convention; Reforming the Cultural Property Export and Import Act; The 1954 Hague Convention. See also, *United States v. Schultz*, 178 F.Supp. 2d 445 (S.D.N.Y. 2002), *aff’d*, 333 F.3d (2d Cir. 2003), *cert. denied*, 540 U.S. 1106 (2004) (at issue in this case was the validity of enforcing foreign patrimony laws in the United States courts under the National Stolen Property Act); National Stolen Property Act, 18 U.S.C. § 2314 (“NSPA”), an Act of Congress which prohibits certain offenses relating to stolen property and forgery. In general, the Act prohibits the interstate or international transportation of the proceeds of theft and certain types of forged securities, as well as the receipt or fencing of stolen property, forged securities, or tools for forging securities. The definitions related to the Act are codified at 18 U.S.C. § 2311 and the offense are codified at 18 U.S.C. §§ 2314-2315.

¹²⁷ Criminal Sanctions in the United States include: The National Stolen Property Act (NSPA); The Archeological Resources Protection Act (ARPA); The Federal Anti-Smuggling Statute; State Laws for Recovery of Stolen Property; The Native American Grave Protection Act (NAGPRA); Cultural Property Implementation Act (CPIA); Immigration and Customs Enforcement (ICE); The Importation of Pre-Columbian Monumental or Architectural Sculpture or Murals Act; The Racketeer Influenced Corrupt Organization Act (RICO Dragnet); Criminal Sanctions Under NSPA. 18 U.S.C. § 2311.

¹²⁸ Many international treaties express an outright commitment to the preservation of cultural heritage. By way of example, the Convention for the Protection of Cultural Property in the Event of Armed Conflict states in its preamble, “Being convinced that damage to cultural property belonging to any people whatsoever means damage to the cultural heritage of all mankind, since each people makes its contribution to the culture of the world[.]” Convention for the Protection of Cultural Property in the Event of Armed Conflict, May 14, 1954, 249 U.N.T.S. 240. Similarly, the Convention concerning Protection of World Cultural Heritage provides:

Considering that deterioration or disappearance of any item of the cultural or natural heritage constitutes a harmful impoverishment of the heritage of all the nations of the world, Considering that the existing international conventions, recommendations and resolutions concerning cultural and natural property demonstrate the importance, for all the peoples of the world, of safeguarding this unique and irreplaceable property, to whatever people it may belong, Considering that parts of the cultural or natural heritage are of outstanding interest and therefore need to be preserved as part of the world heritage of mankind as a whole

Convention Concerning the Protection of the World Cultural and Natural Heritage, preamble, Nov. 16, 1972, 1037 U.N.T.S. 151.

III. ANALYSIS

The policy goals of copyright are consistent with the notion behind the efforts of digitization of cultural heritage and the application of new media in the furtherance thereof. The ultimate beneficiary of access to digital heritage is the public, “from individuals who are captivated by a book or film to libraries that collect and provide access to our cultural heritage for communities around the country.”¹²⁹ New media technologies can: provide unprecedented levels of access and distribution; enhance understanding and interest through contextualization and participation; illustrate relationships between culture, artists, patrons, and between the object and the viewer; provide insight into the social, economic, political, and geographical environment; and preserve the heritage and its meaning.¹³⁰ Cultural institutions also stand to benefit from the digitization and new media applications of works of cultural heritage,¹³¹ as digital heritage serves as a valuable tool to promote and foster understanding by engaging visitors and adding to the experience and appreciation for the heritage of any culture.¹³²

Copyright in this context presents a problem and not a solution, a barrier and not a protection, dissuasion of creation and not encouragement and incentive. Defining the legal scope and reach of digital property and new media within the realm of art and cultural heritage law is critical for the benefit of creators, users, consumers, cultures, and society as a whole. Unless a modification is made, or a solution adopted, the problems presented by legal uncertainties and inadequacies will only continue to hinder copyright’s main purpose and underlying policy.

First, the economic incentive for cultural institutions to digitize and take on new media projects may be undermined and frustrated by the imposition of additional and substantial financial burdens upon potential subsequent creators in the licensing and use of material derived from existing works. Second, creators—primarily

¹²⁹ *Copyright Policy, Creativity, and Innovation In The Digital Economy*, The Department Of Commerce Internet Policy Task Force, led by the UNITED STATES PATENT AND TRADEMARK OFFICE (USPTO) and NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA) at 3 (July 2013), available at www.uspto.gov/news/publications/copyrightgreenpaper.pdf (The Green Paper on Copyright Policy, Creativity, and Innovation in the Digital Economy is an assessment of current copyright & internet related policies).

¹³⁰ CREEBER & MARTIN, *supra* note 13; Dave, *supra* note 10, at 40 (virtual heritage projects incorporate digital interactivity and media-rich representations to offer passages through time and space that are qualitatively different from what may be possible using traditional media and narratives).

¹³¹ R.J. Loomis, S.M. Elias & M. Wells, *Website Availability And Visitor Motivation: An Evaluation Study For The Colorado Digitization Project*, 2003, Unpublished Report, Fort Collins, CO: Colorado State University, available at <http://www.cdpheritage.org/resource/reports/loomisreport.pdf> (Research has revealed that 70% of people visiting a museum website would subsequently be more likely to go to the “real” museum to visit).

¹³² DAVID LOWENTHAL, *THE PAST IS A FOREIGN COUNTRY* (Cambridge University Press, 1985) (Objects are a part of the study of human history because they provide a concrete basis for ideas, and can validate them. Their preservation demonstrates a recognition of the necessity of the past and of the things that tell its story. Preserved objects also validate memories; while digital acquisition techniques can provide a technological solution that is able to acquire the shape and the appearance of artifacts with an unprecedented precision in human history, the actuality of the object, as opposed to a reproduction, draws people in and gives them a literal way of touching the past.).

scholars and artists—may be deterred from producing new works under the exception carved out in the Copyright Act for “fair use,”¹³³ opting instead to abandon new projects that would otherwise incorporate existing works, due to the risk of potential copyright infringement liability or threat of litigation. Third, the public interest is harmed from the diminution of the public domain due to jealously guarded and access-prohibitive policies as a result of uncertainty over copyright ownership and status.

The ambiguous and unknown state of law in this respect has led to the discouragement of creation and collaboration as well as resulted in scholarly works to go unfinished, unpublished, and abandoned as a result of legal uncertainties and fear of litigation.¹³⁴ Research and scholarship is stifled and hindered, when museums do not adhere to open access practices, and instead enforce high licensing fees and restrictive permissions. The inability to use works physically owned by museums and seemingly subject to copyright law protection, is prohibitory in practice due to an inability to obtain permissions for use or excessive and overly burdensome fees.¹³⁵ Those seeking to use or reproduce cultural heritage have indicated that the possible “risk of liability for copyright infringement, however remote, is enough to prompt

¹³³ 17 U.S.C. § 107 (2012).

¹³⁴ COLLEGE ART ASSOCIATION REPORT, *Copyright, Permissions, and Fair Use Among Visual Artists and the Academic and Museum Visual Arts Communities* (Feb. 2014), available at <http://www.collegeart.org/pdf/FairUseIssuesReport.pdf>. This report discusses the concerns shared by visual arts professionals, namely art historians, and the negative impact on their ability, or inability, to complete and carryout scholarship. While the fundamentally visual nature of the discipline raises particular concerns among various scholars and historians of art, artists, editors, publishers, professors, and museum curators, experts say these fears are shared across academe. The report further states: “The visual arts communities of practice share a common problem in their confusion about and misunderstanding of the nature of copyright law and the availability of fair use.” *Id.* The report continues, discussing the concept of a form of “self-censorship” in the work of these industry professionals which “is constrained and censored, most powerfully by themselves, because of the confusion and the resulting fear and anxiety.” *Id.* Part of the report includes a survey of College Art Association (“CAA”) members, finding that one-third had avoided or abandoned a project due to an “actual or perceived inability to obtain permission to use third-party works.” Within that group, 39% of academics said they had done so; however, editors and publishers were the most affected group, with 57% reported dropping a project. Moreover, in addition to abandoned projects, the Report asserts copyright confusion and failure to employ fair use laws in the visual arts also result in: unnecessary delay and expense; subordination of creative decision-making to the availability of creative materials and cooperativeness of providers; and failure to innovate in the digital environment. *Id.*

¹³⁵ *Harper & Row, Publishers, Inc. v. Nation Enterprises*, 471 U.S. 539, 546 (1985). As the Court in *Harper & Row* explained, copyright “is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired.” Thus, promoting public access to information is as important to intellectual property policy as creative incentives. Furthermore, a healthy public domain is essential to a healthy intellectual property regime. As the Court stated in *Harper & Row*, “copyright is intended to increase and not to impede the harvest of knowledge.” 471 U.S. at 545. Therefore, in order to reap these benefits, the public must not only be permitted to make certain uses of works during the copyright term, but must also have access in order to make use of these works through public consumption, study, and re-exposition after the works enter the public domain.

them simply to not make use of the work.”¹³⁶ The U.S. Copyright Office has even expressly observed that “[s]uch an outcome is *not in the public interest*.”¹³⁷

The mandate of modern museums and cultural institutions alike is to collect, preserve, and present objects and cultural heritage for the public to appreciate,¹³⁸ the constantly changing needs and interests of the surrounding culture and environments—economic, political, and scholarly—continually shape the museums’ direction and its contents. Those charged with the fate of cultural heritage are often confronted with legal obstacles that fundamentally stifle the mission and objectives of an institution.¹³⁹ The traditional viewpoint of museums is that intellectual property laws, specifically copyright laws, have not enabled their task as a disseminator of knowledge and culture, but rather have inhibited the museum’s ability to carry out their mission and mandate.¹⁴⁰

Retroactively, new media can foster a better understanding of cultures that exist now only in the history books. Recreating and providing a virtual environment can capture a multi-dimensional, multi-faceted, experiential, and interactive understanding of: tangible elements, such as buildings, monuments, and objects; intangible elements, such as custom and ritual; spatial and geographical elements; as well as temporal layers of history and information. The benefits of virtual exhibitions and augmented reality as a means to capture cultural heritage provide an incredible departure from the sequentially and a linearly ordered solitary objects on shelves behind glass inherent in the traditional museum. With the use of new media, the temporal, spatial, and subjective nature limited by the physical and aesthetic experience of the traditional museum can be transformed into a dynamic, interactive, informed, multidimensional, participatory, and educational experience for the public.

The creation of a new media project is costly in terms of both time and data. Labor-intensive resources required from artists and scholars in order to provide the density of information and design that go into each aspect and detail of a given project. The processes and resources required to create these new media renderings include: image and object licensing and permissions fees; and costs associated with software purchase, maintenance, and updates, as well as data storage and publication.

¹³⁶ U.S. Copyright Office, Report On Orphan Works 1, 15 (Jan. 2006), *available at* <http://www.copyright.gov/orphan/orphan-report-full.pdf>.

¹³⁷ *Id.*

¹³⁸ Susan A. Crane, *The Conundrum of Ephemerality: Time, Memory, and Museums*, 39 A COMPANION TO MUSEUM STUDIES: BLACKWELL COMPANIONS IN CULTURAL STUDIES 98 (Sharon Macdonald ed., 2011).

¹³⁹ Pantalony, *supra* note 20, at 9 (World Intellectual Property Organization 2013) (“the ability to operate in the digital environment may provide a way forward. So long as IP rights are understood and well managed, it may not take a great deal of funding to create meaningful online educational programming available to the public, while at the same time meeting the objective of preserving regional cultural heritage collections.”).

¹⁴⁰ *Id.* at 5.

A. Digitization of Cultural Collections

Strict adherence to the principles of copyright law would make the routine digital archiving of cultural heritage legally prohibitive, monetarily¹⁴¹ inequitable, or overly time-consuming.¹⁴² When works of cultural heritage that may, in and of themselves, not qualify for copyright protection, are translated and documented, through the use of technology, creating an exact replica or digital facsimile of the work—on whatever scale—it is unclear whether a new, now copyrightable work has been created. The underlying work is generally non-copyrightable, the primary reason being that these works reside in the public domain. The information that is attached to these multi-layered digital works is also non-copyrightable because it is factual. While there has clearly been a significant investment in the creation of a digital heritage work, “originality,” not “sweat of the brow,” is the touchstone for copyright protection in fact-based works under the Copyright Act of 1909 and 1976 revisions; copyright rewards originality, not effort.¹⁴³

Under U.S. copyright law, the owner is granted the exclusive right to prepare derivative works.¹⁴⁴ However, this right is not a subdivision of the right to reproduce; rather, under the Copyright Act, a derivative work is:

based upon one or more preexisting works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, *or any other form in which a work may be recast, transformed, or adapted*. A work consisting of editorial revisions, annotations, elaborations, or other modifications which, *as a whole*, represent an original work of authorship, is a “derivative work.”¹⁴⁵

Furthermore, as clarified by the Copyright Act:

The copyright in a compilation or derivative work extends only to the material contributed by the author of such work, as distinguished from the preexisting material employed in the work, and does not imply any exclusive right in the preexisting material. The copyright in such work is independent of, and does not affect or enlarge the scope, duration, ownership, or subsistence of, any copyright protection in the preexisting material.¹⁴⁶

If the text of the Copyright Act does not shed enough light on the issue, which it arguably does not, case law has further established that the migration from one format to another does not result in or create a “new work.” In other words, the

¹⁴¹ This assumes that any copyright holder offered a license in the first instance.

¹⁴² The time consideration referenced is that of the labor intensive task of locating and contacting each copyright holder from which an institution may seek permission or license.

¹⁴³ 17 U.S.C. § 101 et seq.; Act March 4, 1909, § 1 et seq., 35 Stat. 1075; U.S. CONST. art. 1, § 8, cl. 8, *Feist Publications, Inc. v. Rural Tel. Serv. Co., Inc.*, 499 U.S. 340 (1991).

¹⁴⁴ 17 U.S.C. § 106 (2012).

¹⁴⁵ 17 U.S.C. § 101 (2012) (emphasis added).

¹⁴⁶ 17 U.S.C. § 103(b) (2012).

retransmission of a work in another medium is not a sufficient basis for any claim of transformation.¹⁴⁷ Furthermore, in *New York Times Co. v. Tasini*, the Supreme Court explained that the long-embraced doctrine of “media neutrality,” mandates that the “transfer of a work between media does not alter the character of that work for copyright purposes.”¹⁴⁸

B. The “Right” to Access

Society has a right to the diverse artistic heritage of the world, “even if access must be achieved by setting new public policy goals that push back against the ownership rights of market-driven cultural industries.”¹⁴⁹ With digital media, the curation and exhibition of complex knowledge is simplified by the ability to present multi-layered and multi-dimensional information in ways that have otherwise been impossible. Not only can new media provide a platform for users around the world to experience and examine two-dimensional works, technology now ventures into the third-dimension, presenting the user with the ability to examine all aspects of the object, and even in some cases, through the utilization of three-dimensional printing, the ability to physically hold an object of cultural heritage in a museum that is across the globe.¹⁵⁰ Furthermore, new media can offer the ability to explore in the

¹⁴⁷ *UMG Recordings, Inc. v. MP3.Com, Inc.*, 92 F. Supp. 2d 349, 351 (S.D.N.Y. 2000) (finding that a “space shift” of sound recordings on CDS to and MP3 format was not a fair use in that the unauthorized copies were being retransmitted in another medium, which is an insufficient basis for any legitimate claim of transformation); *see also* *Infinity Broadcast Corp. v. Kirkwood*, 150 F.3d 104, 108 (2d Cir. 1998) (rejecting fair use defense by operator of a service that retransmitted copyrighted radio broadcasts over telephone lines); Pierre N. Leval, *Toward A Fair Use Standard*, 103 HARV. L. REV. 1105, 1111 (1990) (repetition of copyrighted material that “merely repackages or republishes the original” is unlikely to be deemed a fair use).

¹⁴⁸ *New York Times Co. v. Tasini*, 533 U.S. 483, 502 (2001); *see also* *Faulkner v. Nat'l Geographic Enterprises, Inc.*, 409 F.3d 26, 40 (2d Cir. 2005) (noting that the transfer of a work from one medium to another generally does not alter its character for copyright purposes); *Greenberg v. Nat'l Geographic Soc.*, 533 F.3d 1244, 1258 (11th Cir. 2008) (holding that electronic collection was privileged “revision” of the original works when magazine published searchable electronic collection of its prior issues, which included photographer’s copyrighted pictures). *See* 17 U.S.C. § 102(a) (2012) (noting that “[c]opyright protection subsists . . . in original works of authorship fixed in any tangible medium of expression, *now known or later developed*, from which they can be perceived, reproduced, or otherwise communicated.”) (emphasis added). *See also* *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 55 (1884). *See also* Walter Benjamin’s 1936 essay, “The Work of Art in the Age of Mechanical Reproduction,” which constitutes one of the earliest reflections of the way in which the cultural experience and interpretation is transformed by the advent of what were then the “new” media technologies (photography and film). Benjamin directs attention to the way in which these technologies release cultural objects from their unique presence in a place and make them uniformly available irrespective of spatial location. The way in which old media technologies apparently obliterate the place of cultural objects is also a feature of new media. However, the apparent obliteration of place that occurs in this way is in itself problematic, giving rise to a loss of the sense of spatial and temporal distance, and so of the relative “locatedness” of both experiencing subject and interpreted object. The loss of sense of the place of the object threatens a loss of the sense of place of the subject, and with it, a loss of a proper sense of heritage as such.

¹⁴⁹ IVEY, *supra* note 80.

¹⁵⁰ Addison, *supra* note 7, at 28 (As information technology has grown, 3D documentation tools, from electronic surveying instruments to laser scanners, photogrammatic cameras, and even CAD modellers, have brought more and more heritage data into the digital domain). From vivid

fourth-dimension: time. An additional layer of information can be presented in the form of interactive timelines and the ability to view one or more objects at various times throughout history.¹⁵¹ “Virtual exhibitions” and comprehensive recreations allow the user to navigate entire cities and sites from anywhere in the world. Cultural heritage institutions, as well as the public, stand to benefit immensely from the digitization of cultural heritage housed within institutions globally. The restrictive practices of museums and private collectors impede the purposes of the public domain by controlling access to the original work of art and claiming copyright protection over digital reproductions of collections.

C. Museums and Cultural Institutions

1. Restrictive Museum Policies – Copyright Misuse?

Returning for a moment to the two German artists and the “illegal” scan of the bust of Nefertiti—while Neues Museum’s policy in essentially “hoarding” cultural heritage is only one example, this unfortunately is not an isolated practice. Museums are in a position to profit immensely from their collections. Monetarily, profits may be realized in the form of licensing fees for those wishing to use an image for one purpose or another, royalties derived from replicas and memorabilia, and

pixel-based *visuals* to accurate scanner-produced *dimensions*, GPS *locations* and various *environmental* parameters, digital capture devices have enabled us to document and record at new levels of detail and precision. *Id.* at 29. Furthermore, interactive multimedia presentations featuring animated (e.g. Flash), 3D (e.g. VRML), or panoramic (e.g. QTVR) elements have become the norm, and museum/site kiosks and VR theatres are becoming more common. *Id.*

¹⁵¹ For example, new media and technology can be used to show the Pantheon, emblematic in its own right as it stands today, however, a complete appreciation of the structure can only be ascertained when one knows and understands the history behind its existence. New media and technology can offer this understanding in an easy-to-digest way. The Pantheon can be viewed at and during its construction, with the original decoration and adornment, after the Catholic Reformation changed all of the sculptures and added new meanings to the various aspects of the physical structure, and as the Pantheon appears today, in addition to the various changes that have been made to the physical construction and appearance, as the structure has weathered with age as well as how the structure has stood the test of time. Furthermore, the Pantheon, like all objects, artifacts, and cultural heritage sites, does not exist in a vacuum, and in order to gain a full understanding, must be viewed within the physical and spatial context of its surroundings: within the people and culture of the different times, as the structure stands in relation to other buildings and monuments, the environment and coordination and relative placement and function within the city as a whole. Furthermore, the respective roles played by the structure throughout time must also be appreciated: how the structure functioned at its inception, how different people of different times and cultures interacted and interact with the building, the structure’s role as an active participant in ceremonial and social contexts, and its importance as an iconic symbol, accomplishment, and achievement of a people. All of these aspects are then supplemented with user-generated content in the form of images, stories, experiences, ideas, notes, thoughts, understandings, and so forth. New media, technology, and the Internet make this type of unprecedented access and understanding available to the masses in a way that has never been imagined.

through museum membership and admission costs.¹⁵² From another perspective, institutions also have an interest in guarding and controlling how their collections are viewed and used. The appeal, notoriety, and prestige of an institution can be influenced by the decision to follow or adopt an open policy or to jealously guard and limit access to the particular work or collection.

While the doctrine of copyright misuse has yet to be formally recognized by the U.S. Supreme Court, it is recognized and well-defined in several circuits as an affirmative defense to infringement. The copyright misuse doctrine “forbids the use of the copyright to secure an exclusive right or limited monopoly not granted by the Copyright Office.”¹⁵³ The defense is often applied when a defendant can prove either: “(1) a violation of the antitrust laws; (2) that the copyright owner otherwise illegally extended its monopoly; or (3) that the copyright owner violated the public policies underlying the copyright laws.”¹⁵⁴ While the courts have discussed copyright misuse in only a handful of published opinions, and have “applied the doctrine sparingly,”¹⁵⁵ copyright misuse is a valid defense, “the contours of which are still being defined.”¹⁵⁶

To motivate the creative activity of authors and inventors for the sake of the public's benefit, copyrights are limited in time and scope.¹⁵⁷ “Implicit in this rationale is the assumption that in the absence of such public benefit, the grant of a copyright monopoly to individuals would be unjustified.”¹⁵⁸ The defense of copyright misuse involves the question of whether a copyright is being used in a manner “violative of the public policy embodied in the grant of a copyright.”¹⁵⁹ The Ninth Circuit expressly adopted copyright misuse as an equitable defense to a claim of infringement,¹⁶⁰ noting “copyright misuse does not invalidate a copyright, but precludes its enforcement during the period of misuse.”¹⁶¹

The doctrine of copyright misuse is limited in this regard, as the application first requires the existence of a valid copyright. Thus, the determination of whether a valid copyright over a museum's digital recreation of works in its collection is essential in assessing the applicability of this equitable defense.

¹⁵² For example, in 2014, the Prussian Cultural Heritage Foundation produced a limited edition of 100 painted 3-D-printed copies of the Nefertiti bust at the Replica Workshop of the National Museums of Berlin and sold the replicas for 8,900 euros (about \$9,650) each. Wilder, *supra* note 91.

¹⁵³ Lasercomb Am., Inc. v. Reynolds, 911 F.2d 970, 977 (4th Cir.1990).

¹⁵⁴ Soc'y of Holy Transfiguration Monastery, Inc. v. Gregory, 689 F.3d 29, 65 (1st Cir. 2012), *cert. denied*, 133 S.Ct. 1315 (2013).

¹⁵⁵ Apple Inc. v. Psystar Corp., 658 F.3d 1150, 1157 (9th Cir.2011) (the purpose of copyright misuse is to prevent “holders of copyrights from leveraging their limited monopoly to allow them control of areas outside the monopoly”).

¹⁵⁶ MDY Indus., LLC v. Blizzard Entm't, Inc., 629 F.3d 928, 941 (9th Cir. 2010).

¹⁵⁷ Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984).

¹⁵⁸ 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 1.03[A] (2014).

¹⁵⁹ Lasercomb Am., Inc. v. Reynolds, 911 F.2d 970, 978 (4th Cir.1990).

¹⁶⁰ Practice Management Information Corp. v. American Medical Ass'n, 121 F.3d 516 (9th Cir. 1997).

¹⁶¹ *Id.*; see also Altera Corp. v. Clear Logic, Inc., 424 F.3d 1079, 1090 (9th Cir. 2005) (recognizing the Fifth Circuit's discussion of copyright misuse “as an unclean hands defense which forbids the use of the copyright to secure an exclusive right or limited monopoly not granted by the Copyright Office and which is contrary to public policy to grant”).

2. *Physical Ownership Versus Copyright Ownership*

Many of the artworks held by cultural institutions are in the public domain—either because they were created before the late 17th and early 18th centuries, when copyright law came into existence, or any original copyrights have expired. Additionally, for works that are still protected by copyright, the museum that owns the physical artwork typically does not also hold the copyright to that work. Ownership of a copyright, or of any of the exclusive rights under a copyright, is entirely distinct from the ownership of any physical or material object in which the work is embodied.¹⁶² A copyright is independent of both its physical manifestation and the very thing that is copyrighted.¹⁶³ Furthermore, a copyright is not identical to a copyrighted work, but exists separately as the intangible right to exclude all others from printing, publishing, copying, or vending the work.¹⁶⁴

Institutions that have engaged in digitization practices often argue that the exact digital replica or scans are eligible for copyright protection. However, despite the fact that these works technically belong to the public domain, restrictive museum practices prevent this from happening in reality. By limiting access to cultural heritage, the final goal of copyright is hindered. Inside of museums, once access has been granted to patrons and museumgoers, there are additional boundaries in place which further limit individuals' access. Some museums—on the far end of the “anti-access” spectrum—have adopted policies that prohibit not only photography, but sketching, as well.¹⁶⁵ Recently, however, an increasing number of museums are opening up and allowing the public to access their collections remotely, as many have taken steps to digitize collections and make these digital archives available for download.

As explored earlier, the copyright laws of the United States do not reward “sweat of the brow” efforts.¹⁶⁶ This is not, however, to say that these institutions should not receive any benefit or protection for their efforts; rather, it simply suggests that perhaps copyright law is not where these protections should originate.

3. *The “Originality” Requirement, as told by *Bridgeman v. Corel**¹⁶⁷

In *Bridgeman Art Library v. Corel Corporation*,¹⁶⁸ the district court for the Southern District of New York upheld the public's right to access and use of public

¹⁶² See 17 U.S.C. § 202 (2012).

¹⁶³ *United States v. Smith*, 686 F.2d 234, 240 (5th Cir. 1982).

¹⁶⁴ 17 U.S.C. § 27 (2012); see *Lantern Press, Inc. v. Am. Publishers Co.*, 419 F. Supp. 1267, 1271 (E.D.N.Y. 1976) (“Section 27 was directed to making clear the idea that the copyright was not identical with the copyrighted work but existed separately from it as the intangible right to exclude all others from printing, publishing, copying or vending the work.”).

¹⁶⁵ Flash photography is prohibited almost universally; however, this prohibition is more for the preservation interests of the artwork than for reasons of copyright.

¹⁶⁶ *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 342 (1991).

¹⁶⁷ The federal district court in *Bridgeman Art Library, Ltd. v. Corel Corp.*, 25 F. Supp. 2d 421 (S.D.N.Y. 1998) (hereinafter “*Bridgeman I*”), *on recons.*, 36 F. Supp. 2d 191 (S.D.N.Y. 1999) (hereinafter “*Bridgeman II*”).

¹⁶⁸ *Bridgeman Art Library, Ltd. v. Corel Corp.*, 25 F. Supp. 2d 421 (S.D.N.Y. 1998), *on recons.*, 36 F. Supp. 2d 191 (S.D.N.Y. 1999).

domain works of art, in finding that exact photographic reproductions of public domain works of art are not copyrightable.¹⁶⁹ Bridgeman Art Library, Ltd. (hereinafter “Bridgeman”) was a company in the business of acquiring the rights to market digital reproductions of public domain artworks owned by museums and other collections; Bridgeman maintained a library of those reproductions in the form of digital files, and profited off of those files through licensing.¹⁷⁰ Bridgeman transformed photographic transparencies of numerous artworks into digital image files and claimed that they held the exclusive rights to those reproductions.¹⁷¹ The defendant, Corel Corporation (“Corel”), a Canadian computer software company, was marketing a CD-ROM set containing hundreds of digital reproductions of famous paintings by European masters.¹⁷² Bridgeman, claiming that it held copyrights in these reproductions, brought suit against Corel, contending that over one hundred of Corel’s digital images were of paintings for which Bridgeman claimed the exclusive rights.¹⁷³

The key element upon which this case hinged was “originality.”¹⁷⁴ Bridgeman, as the plaintiff, needed to prove—under either British or U.S. law—that its reproductions were sufficiently “original” that they qualified for copyright protection.¹⁷⁵ While Bridgeman never contested the fact that the original artworks were in the public domain, it maintained that the digital copies of these works possessed sufficient originality, in and of themselves, to qualify for copyright protection.¹⁷⁶

Bridgeman advanced several arguments in support of its claim that these digital copies were sufficiently original, two of which are particularly relevant to the topic of this comment. First, Bridgeman argued that the change in medium—from painting to photograph—that occurred as it copied the paintings, rendered the digital reproductions sufficiently original to qualify for copyright protection.¹⁷⁷ The court, in rejecting Bridgeman’s argument stated, “the mere reproduction of a work of art in a different medium should not constitute the required originality.”¹⁷⁸ Second, Bridgeman asserted that the photography itself constituted an inherently original practice, arguing “photography requires artistic talent and originality and therefore would have the court conclude that its transparencies—photographs of underlying works of art—are original.”¹⁷⁹ Unsurprisingly, the court rejected this argument as well, “one need not deny the creativity inherent in the art of photography to recognize

¹⁶⁹ *Id.*

¹⁷⁰ *Bridgeman Art Library, Ltd. v. Corel Corp.*, 25 F. Supp. 2d 421, 423 (S.D.N.Y. 1998).

¹⁷¹ *Id.*

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ *Bridgeman I*, 25 F. Supp. 2d 421, 427, n.41 (S.D.N.Y. 1998) (“A work is original if it owes its creation to the author and was not merely copied. With respect to derivative works, the originality requirement warrants that there be a distinguishable variation between the work in which copyright is sought and the underlying work. Important to this calculus is that the demonstration of some physical, as opposed to artistic, skill does not constitute a ‘distinguishable variation.’” [internal citations omitted]).

¹⁷⁵ *Id.* at 426.

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 427.

¹⁷⁹ *Bridgeman I*, 25 F. Supp. 2d 421, 427, n.41 (S.D.N.Y. 1998).

that a photograph which is no more than a copy of the work of another as exact as science and technology permit lacks originality. That is not to say such a feat is trivial, simply not original. The more persuasive analogy is that of a photocopier.”¹⁸⁰

The court rejected all of Bridgeman’s arguments, and granted summary judgment in favor of Corel—once pursuant to British law, and then again pursuant to U.S. law. In both opinions, the court explicitly held that a change in medium, alone, does not confer sufficient originality so as to entitle a work to copyright protection; in other words, “the change of medium is immaterial.”¹⁸¹ The court further explained that a copy in a new medium is only copyrightable where “a copier makes some identifiable original contribution.”¹⁸² The court, in its discussion, paid close attention to the fact that, in an effort to create accurate, high-resolution, true to life, and exact digital facsimiles of the works in its collection, Bridgeman not only failed to make such an “original” contribution, but actively took great pains to avoid doing so.¹⁸³

The court expressly addressed the overarching policy of copyright law, “[a]bsent a genuine difference between the underlying work of art and the copy of it for which protection is sought, the public interest in promoting progress in the arts—indeed, the constitutional demand—could hardly be served.”¹⁸⁴ The court dismissed Bridgeman’s copyright infringement claim on the grounds that “the allegedly infringed works—color transparencies of paintings which themselves are in the public domain—were not original and therefore not permissible subjects of valid copyright.”¹⁸⁵

As the District Court found in *Bridgeman* and the Supreme Court indicated in *Feist*, “sweat of the brow” alone is not the “creative spark” which is the *sine qua non* of originality.¹⁸⁶ Case law and copyright policy resoundingly suggest that the digital replications of physical works of art in the collections of museums are not eligible for copyright protection. While the court in *Bridgeman* found that expertly faithful photographic reproductions of two-dimensional works, which themselves belong to the public domain, do not have the requisite amount of originality to be protected by copyright, the court’s reasoning suggests that any accurate reproduction of a two-dimensional work would fail for lack of originality under *Feist*, regardless of whether or not the copied works are in the public domain.

In the context of recreating cultural heritage artifacts by taking photographs and rendering the photographs into three-dimensional computer automated design files, the issue becomes whether these image compilations are sufficiently creative and original, or transformative, to vest copyright ownership in the creator or co-creators of these projects.

¹⁸⁰ *Id.*

¹⁸¹ *Bridgeman II*, 36 F. Supp. 2d at 199; *Bridgeman I*, 25 F. Supp. at 427 (“The mere reproduction of a work of art in a different medium should not constitute the required originality for the reason that no one can claim to have independently evolved any particular medium. As discussed above, the law requires “some element of material alteration or embellishment” to the totality of the work. At bottom, the totality of the work is the image itself, and Bridgeman admittedly seeks to duplicate exactly the images of the underlying works.”).

¹⁸² *Bridgeman II*, 36 F. Supp. 2d at 199.

¹⁸³ *Bridgeman I*, 25 F. Supp. 2d at 426.

¹⁸⁴ *Bridgeman II*, 36 F. Supp. 2d at 196; U.S. Const. art. I, § 8, cl. 8.

¹⁸⁵ *Bridgeman I*, 25 F. Supp. 2d at 421; *Bridgeman II*, 36 F. Supp. 2d at 192.

¹⁸⁶ *Feist*, 499 U.S. at 340.

4. *In Practice: Contract law disguised as Copyright law*

Museum claims over the use and reuse of works from their collections, while often labeled and understood as “copyright claims,” are in reality primarily a matter of contractual agreements, licenses, and the exercise of control over access to the many works that museums hold. Although outside the scope of this article, it is worth noting that in this context, an additional concern is raised as to the legality and enforceability of these restrictive museum practices. As copyright is a federal law, and the laws governing contracts are common law, or state-based law, it is possible that a preemption issue arises when contract law frustrates the constitutional mandate of the “public domain.”

D. Outside of Museums

Three-dimensional scanning technologies as well as other new media applications to cultural heritage have applications far beyond the walls of museums. “Right now there’s this boom of 3-D scanning to reproduce cultural heritage,” said Morehshin Allahyari, an Iranian-born artist who uses new media and scanning technologies to recreate artifacts that have been destroyed by ISIS, “[b]ut few people are talking about who the images belong to.”¹⁸⁷ Although it may be a good thing that few people are talking about to whom these images and projects belong, and are focusing more on what really matters—the fact that these projects are being carried out, working to save antiquity—the few people that are talking about them, are not as “pro-access for all” as the public would hope. In terms of the copyrightability of works in the public domain transformed into a new media format, it is unclear whether any protections will be granted at all.

This issue has been considered by a district court, however that decision was limited to the applicability to two-dimensional works on paper. In *United States v. Elcon Ltd.* (hereinafter “*Elcon*”), the Northern District of California made the determination that copyright law:

does not “prevent access to matters in the public domain” or allow any publisher to remove from the public domain and acquire rights in any public domain work. Nothing within the [Digital Millennium Copyright Act] grants any rights to anyone in any public domain work. A public domain work remains in the public domain and no party has any intellectual property right in the expression of that work.¹⁸⁸

The defendant in *Elcon* raised the scenario involving a situation in which the only available version of a public domain work was an electronic version, protected by technical measures.¹⁸⁹ In responding to this presumption, the court addressed the scenario with a rather definitive answer:

¹⁸⁷ Wilder, *supra* note 91.

¹⁸⁸ *United States v. Elcom Ltd.*, 203 F. Supp. 2d 1111, 1131 (N.D. Cal. 2002).

¹⁸⁹ *Id.*

If a work is in the public domain, any person may make use of that expression, for whatever purposes desired. To the extent that a publisher has taken a public domain work and made it available in electronic form, and in the course of doing so has also imposed use restrictions on the electronic version, the publisher has not gained any lawfully protected intellectual property interest in the work. The publisher has only gained a technological protection against copying that particular electronic version of the work.¹⁹⁰

The court's decision answered this question in holding that publishing a public domain work in a restricted format does not remove the work from the public domain, even if in doing so it allows the publisher to control that particular electronic copy.¹⁹¹ Pointing to Congress' role in copyright, and implying a potential need for legislative measures to be taken, the court went on to say, "[i]f this is an evil in the law, the remedy is for Congress to prohibit use or access restrictions from being imposed upon public domain works."¹⁹² The Court next pointed to the public's role in determining and influencing these issues, "perhaps, if left to the market, the consuming public could decline to purchase public domain works packaged with use restrictions."¹⁹³

Interestingly enough, it is likely that, of all of the various applications of new media to cultural heritage discussed thus far, these works are the most likely to be eligible for copyright protection. On the flip side, these works are also the most important for the public and museums to have a right to access, as they no longer exist in the physical form.

E. Integrity and Authenticity

Apart from questions of ownership and authorship, especially within the context of third-party user contributions and content, the creator of digitized cultural heritage must also be responsible for the data quality and quantity, as well as the authenticity of the media.¹⁹⁴ The reduction of an artifact to a digital replica, some argue, has the potential of discounting the authenticity of the original cultural object.

¹⁹⁰ *Id.*

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ *Id.*

¹⁹⁴ Issues of data quantity, quality, and longevity must also be considered. Addison, *supra* note 7, at 27 (without careful planning, many digital efforts will not outlive the heritage they are meant to record and protect. Following a review of the growth in the field, heritage's universal value is contrasted with its insular digital record. Metadata and solutions for sharing are proposed. Using UNESCO's *Online World Heritage Portal* as an example, a structure for sharing and preserving technical, statutory, and rich media heritage content is presented.). See also LIXINSKI, *supra* note 4, at 17 (the notion of authenticity in heritage in general—and intangible heritage in particular—must also be considered when digitizing cultural heritage. While the very notion of intangible heritage challenges the assumption that there is such a thing as "authentic" heritage, at the same time authenticity is an important bridge between the idea of heritage as experience and its market value. But, because "heritage experiences" focus "on sincerity, rather than facts," it is understandable that this consumer sensibility will exert pressure for some notion of authenticity to come into play.).

In changing the cultural significance from a singular original physical work to a digital copy, with the ability to be created and recreated many times over, as well as transforming it into mere economic potential can degrade the status of the original to a consumer good.

The determination of the ownership of the copyright in the new media works is another question in and of itself. The answer to this question may have sweeping effects and may determine in large part: monetary considerations; funding; and proceeds derived from the work (museum contributions, licensing, any monies awarded as the result of a successful lawsuit pertaining to the copyright). The ownership of the copyright will also determine the relevant rights and responsibilities of the parties, including: duties related to the work; maintenance; up-keep of the project; control over content and access to the work; the right to make or authorize reproductions and derivative works in different mediums such as sculpture, 3D printing, virtual reality, and other multimedia platforms; the duty to protect and patrol the copyright; and, the right and authority to destroy or authorize the destruction of the work.

While the threat of misappropriation is a legitimate concern due to the relative ease at which those with access can manipulate digital heritage, there are also protective measures that can be taken in order to control and protect against this threat. Protection measures such as encryption, authentication, digital fingerprinting, watermarking, and other distribution mechanisms for digital content can provide a secure distribution system for the management of copyrighted content.

IV. PROPOSALS

The current legal structure in the United States does not effectively or efficiently address the conflicting concerns and uncertain legalities as to the potential rights and responsibilities of the custodians of cultural heritage and the creators and documenters of “Digital Heritage.” In the absence of a complete legislative overhaul of the existing intellectual property rights regime, compromises and alternative approaches must be made within the creative arts and cultural heritage fields. The balance between intellectual property, cultural heritage, artists’ rights, and the public domain must be maintained as the ways in which all realms contribute to innovation, cultural vitality, education, free speech, and scientific progress are integral to an enriched collective culture.

The responsibility of creating an open-access structure and the promotion of increased access must necessarily fall upon the shoulders of those who hold the cultural heritage and upon those with access. Possible proposals to address this downfall in the traditional legal process include the introduction of an open-ended “fair use” exception for cultural heritage and the digital age; the adoption of “Codes of Best Practices” and other standards; variations on moral rights; creative commons licensing; open-source software platforms; and the adoption of a modified form of compulsory licensing.¹⁹⁵

¹⁹⁵ Another possible solution may be the introduction of an open-ended fair use exception for the digital age. While the “fair use” exception does have many advantages, the ambiguity surrounding the defense requires clarification in order to adapt the copyright regime to the digital realm.

A. Industry Codes of Best Practices & Adoption of Standards

In response to various uncertainties inherent within copyright law, especially within the realm of digital and new media, many fields have adopted their own version or interpretation of the law, in the form of “Codes of Best Practices.”¹⁹⁶ While these Codes are helpful within their respective fields, they are not legally binding and present their own set of issues.¹⁹⁷ Furthermore, codes of best practices operate in the “shadow” of fair use and within the gaps left in intellectual property law by the failure to address pertinent issues. However, while they are a valuable resource in determining an industry standard, there is no public law approval, and the Codes have no binding legal application.

National and international standards are already in place, to some degree, in an effort to ensure that digital heritage will be “interchangeable between systems and institutions and sustainable in the long term, and that systems and applications will themselves be interoperable.”¹⁹⁸ “The transitory nature of digital technology demands that technical standards be applied to the creation and documentation of digital image files if they are not swiftly to become defunct.”¹⁹⁹ Again, however,

“Balancing technological innovation and content creation depends less on the distinctions between the fair use and fair dealing exemptions and more on ensuring that the law, through both legislation and judicial interpretation, in fact acts to promote the main purpose of copyright law, the benefit of the public.” Susanna Monseau, *Copyright and the Digital Economy: Is It Necessary to Adopt Fair Use?* COLLEGE OF NEW JERSEY, (Mar. 10, 2015), <http://dx.doi.org/10.2139/ssrn.2576436> (accessed July 2015).

¹⁹⁶ *Atlantic Richfield Co. v. Fed. Energy Admin.*, 556 F.2d 542, 552 (T.E.C.A. 1977) (observing that an agency document that lacks formally binding effect “may have extremely important consequences with respect to the issue of good faith reliance for future acts” and therefore constitute “final agency action”).

¹⁹⁷ See *Some Optimism About Fair Use And Copyright Law*, 57 J. COPYRIGHT SOC’Y 351, as a comprehensive article on “Code of Best Practices”:

Codes of best practices make practical the observation that the development of knowledge and access to knowledge are inescapably social processes, in addition to individual ones. Second, codes of best practices highlight the existence of institutional settings for the production and re-production of knowledge. Third, codes of best practices signify the growing significance of blended public/private institutional forms for the development and application of law itself; “law” reform in copyright is not exclusively a matter for public authorities, such as Congress, courts, the Copyright Office, and international conventions. Fourth, and perhaps most important, codes of best practices offer an affirmative vision of the role of fair use as part of a broader project of copyright that extends beyond merely the affirmation of proprietary rights and fair competition in markets for creative and innovative goods, and in doing so they re-affirm that project itself.

Id. at 353.

¹⁹⁸ HOWARD BESSER & JENNIFER TRANT, *INTRODUCTION TO IMAGING: STANDARDS* 7 (1997); Bresser, *Introduction to Imaging* (rev. ed. 2003), http://www.getty.edu/research/publications/electronic_publications/introimages/standards.html.

¹⁹⁹ See Bresser, *supra* note 198 (“Technical standards addressing a broad range of information technology issues, including file formats and technical metadata schemas, are maintained and developed by international organizations. Examples include the International Organization for Standardization (ISO); the International Electrotechnical Commission (IEC); the Institute of Electrical and Electronics Engineers (IEEE); the International Telecommunications Union (ITU); and the World Wide Web Consortium (W3C), which develops vendor-neutral open standards and specifications for Internet and Web-based transactions, with the intent of promoting

while highly valuable in the abstract and beneficial to those who adhere to these standards, not all have any legally binding force.

B. Moral Rights

Although related, “moral rights” are separate and distinct from copyrights. Where copyright protects an author’s economic interest, moral rights are “rights of a spiritual, non-economic and personal nature” that exist “independently of an artist’s copyright in his or her work” and “spring from a belief that an artist in the process of creation injects his spirit into the work and that the artist’s personality, as well as integrity of the work, should therefore be protected and preserved.”²⁰⁰

Moral rights could offer a possible compromise between artists’ rights, museums’ interests, the culture of origin’s integrity, and the public’s right to access.²⁰¹ Perhaps the rights of attribution and integrity should be required and maintained in the demarcation of a work, including the culture of origin and the museum presently caring for the item. However, the moral rights question presents additional issues of its own. For example, there is a dramatic difference in which moral rights—if any at all—are instilled upon artists depending upon the law of each country.

Section 106A of the Copyright Act protects the rights of certain authors to attribution and integrity.²⁰² Although United States’ “moral rights” granted to artists are much narrower than those overseas, under Section 106A of the Copyright Act,

the author of a work of visual art—(1) shall have the right—(A) to claim authorship of that work, and (B) to prevent the use of his or her name as the author of any work of visual art which he or she did not create; (2) shall have the right to prevent the use of his or her name as the author of the work of visual art in the event of a distortion,

interoperability. National standards bodies—including the American National Standards Institute (ANSI), the U.S. National Information Standards Organization (NISO), the British Standards Institution (BSI), and the German Deutsches Institut für Normung (DIN)—not only define and endorse their own standards but also support the work of international agencies.”)

²⁰⁰ Carter v. Helmsley-Spear, 71 F.3d 77, 81 (2d Cir. 1995); 17 U.S.C. § 106A (2012); *see also* Robert Platt, *A Comparative Survey of Moral Rights*, 57 J. COPYRIGHT SOC’Y 951, 968-69 (2010).

²⁰¹ In the U.S., moral rights were codified under U.S. law 17 U.S.C. § 106A in 1990 in order for the U.S. to comply with its obligations under the Berne Convention. 17 U.S.C. § 106A (2012). *See also* Platt, *supra* note 200. This legislation is known as the Visual Artists Rights Act (“VARA”). Section 106A endows creators of qualifying works with limited moral rights, specifically the rights of authorship and integrity for the duration of the creator’s life. VARA contains many limitations; works of “visual art” that fall within its protection may only constitute a “painting, drawing, print, or sculpture,” and prints and cast sculptures must exist in numbers less than two hundred. 17 U.S.C. § 101 (2012). Further, while the right of integrity allows the creator of a qualifying work of visual art to prevent the intentional distortion, mutilation, or modification of work that would be prejudicial to the artist’s honor, VARA only allows artists to prevent the destruction of a work if that work is of a “recognized stature.” Still problematic, however, is that VARA specifically states that the rights set forth therein are subject to the fair use provisions of 17 U.S.C. § 107 (2012). It is unclear just how fair use applies to moral rights, and it does not appear that any court has specifically addressed this issue.

²⁰² Visual Artists Rights Act of 1990 (VARA), 17 U.S.C. § 106A (2012).

mutilation, or other modification of the work which would be prejudicial to his or her honor or reputation; and (3) subject to the limitations set forth in section 113 (d), shall have the right—(A) to prevent any intentional distortion, mutilation, or other modification of that work which would be prejudicial to his or her honor or reputation, and any intentional distortion, mutilation, or modification of that work is a violation of that right.²⁰³

Furthermore, the conflicting international laws, specifically the more artist-friendly European Union laws, place additional confusion on the status of artist's rights flowing from the Moral Rights doctrine of the United States; therefore, this proposal must also be accompanied by additional legislative acts in order to thoroughly address these concerns.

When discussing cultural heritage on a global scale, much of which arguably belongs to the "collective heritage to the world," the question becomes which law should govern: the country in which the cultural heritage object or artifact originated, the country in which the digital media transcribing the artifact is created, or the country in which the museum housing the artifact resides? Furthermore, when it comes to third-party resources and user-generated content contribution, when does the "original" artist's work become so changed and altered by additional content that the original "artist" is no longer the main content contributor?

C. Licensing

1. Creative Commons Licensing

Another possible solution to the problems of access to and control of cultural heritage and "digital heritage" may be the usage of creative commons licensing, releasing the work and providing wide access to the public, under certain limitations or requirements.²⁰⁴ This proposal provides the closest balance yet seen between powerful restriction and widespread access with retention of certain controls.²⁰⁵

Public licenses, also commonly referred to as "open source" licenses, may provide a solution, or at least an answer to some of the issues posed by copyright concerns

²⁰³ 17 U.S.C. § 106A (2012).

²⁰⁴ There are currently several types and variations of public licenses that have been designed and are used to provide the creators or owners of copyrighted material a means through which to protect and control their copyrights. Creative Commons licensing provides free copyright licenses which allow the copyright owner to dedicate works to the public, or to license certain uses of their works, while retaining and reserving other rights from the proverbial "copyright bundle of rights" for themselves or their respective affiliated institutions. *Jacobsen v. Katzer*, 535 F.3d 1373, 1378 (Fed. Cir. 2008). Recently, "open source licensing has become a widely used method of creative collaboration that serves to advance the arts and sciences in a manner and at a pace that few could have imagined just a few decades ago." *Id.* at 1378.

²⁰⁵ *Jacobsen v. Katzer*, 535 F.3d 1373 (Fed. Cir. 2008) (attribution and modification transparency requirements in open source license created conditions to protect economic rights in granting of public license, and thus the Court held that the creative commons license and its requirements were enforceable).

and allowing open access to information and digital heritage.²⁰⁶ These common licenses are typically used by artists, authors, educators, software developers, digital humanities scholars, museums, historians, and scientists when creating and carrying out collaborative projects with the intention to dedicate the work to the public.²⁰⁷

2. *Compulsory Licensing*

Compulsory licensing is one exception that has been carved out of certain copyright owners' set of exclusive monopoly rights. These compulsory, or "statutory" licensing mechanisms already exist in copyright law.²⁰⁸ However, they do not exist for works of visual art. Extending this compulsory scheme to works of visual art may be one way to address the issues presented. Similar to those compulsory licenses that operate and apply to musical works, a similar exception could easily be applied and extended to works of visual art, benefitting the creator, while also providing benefit through access to the public.

Naturally, these compulsory licensing mechanisms are not favored by those owners of copyrights to which they currently apply.²⁰⁹ Furthermore, courts have also

²⁰⁶ Open source licensing restrictions are easily distinguished from mere "author attribution" cases. Copyright law does not automatically protect the rights of authors to credit for copyrighted materials. Whether such rights are protected by a specific license grant depends on the language of the license. *Jacobsen v. Katzer*, 535 F.3d 1373, 1375 (Fed. Cir. 2008). Copyright law does not automatically protect the rights of authors to credit for copyrighted materials. *See Gilliam v. American Broadcasting Companies*, 538 F.2d 14, 20-21 (2d Cir. 1976) ("American copyright law, as presently written, does not recognize moral rights or provide a cause of action for their violation, since the law seeks to vindicate the economic, rather than the personal rights of authors."); *Graham v. James*, 144 F.3d 229, 236 (2d Cir. 1998) (Whether such rights are protected by a specific license grant depends on the language of the license. Creative Commons licenses are also beneficial and desirable, as they offer an answer to the question of collaboration and may provide a solution to situations in which multi-disciplinary co-collaborators from all over the world, contributing enormous amounts of information and development, are still able to "track" what author or authors created which portion or portions of the software or information.)

²⁰⁷ Creative Commons licensing provides free copyright licenses which allow the copyright owner to dedicate works to the public, or to license certain uses of their works, while retaining and reserving other rights from the proverbial "copyright bundle of rights" for themselves or their respective affiliated institutions. *Jacobsen v. Katzer*, 535 F.3d 1373, 1378 (Fed. Cir. 2008). For example, the copyright owner may, under a Creative Commons license, grant access to the work, and the right to copy and reproduce the work for educational purposes, while still not allowing the person copying the work to create derivative works or alter the original in any way. Under this license, a copyright owner may also require attribution as to the work's source—a requirement not inherent in the weak protections afforded to artists under the United States copyright law.

²⁰⁸ Compulsory Licensing in Copyright Law. *See* 17 U.S.C. § 111 (limitations on exclusive rights: secondary transmissions); *id.* § 115 (scope of exclusive rights in nondramatic musical works: compulsory license for making and distributing phonorecords); *id.* § 116 (scope of negotiated licenses for public performance by means of coin-operated phonorecord players); *id.* § 119 (limitations on exclusive rights: secondary transmissions of superstations and network stations for private home viewing); *id.* § 122 (limitations on exclusive rights: secondary transmissions by satellite carriers within local markets).

²⁰⁹ *See* Midge M. Hyman, *The Socialization of Copyright: The Increased Use of Compulsory Licenses*, 4 CARDOZO ARTS & ENT. L.J. 105 (1985); *see also* Robert Stephen Lee, *An Economic Analysis of Compulsory Licensing in Copyright Law*, 5 W. NEW ENG. L. REV. 203, 204-05 (1982) (critiquing the application, in commenting, compulsory licenses "not only deny creators the exclusive

taken the position that the compelled license is not a solution to the various issues surrounding “access.”²¹⁰ Copyright law does not exist solely to benefit and protect content creators; rather, copyright law is a carefully-struck balance between the need to create incentives for authorship and the interests of society in the broad accessibility of ideas.²¹¹ However, as a balance, authorial incentive may come at the expense of the equally important public interest. From a policy standpoint, removing the burden from the secondary user and placing the responsibility on the industry and those who own or claim ownership of works of art, pushes the practical application of copyright closer to the policy goals copyright law seeks to serve, in striking a balance between the two competing interests of incentivizing creativity and creation and advancing the interests of society in the broad accessibility of ideas.

3. Variations of Licenses

In the United States, those who deliver and provide access to content often emphasize contractual and voluntary licenses as the preferred vehicle to deliver online or digital copyrighted content to the consumer.²¹² These restrictions often come in the form of “access controls.” Under U.S. law, circumventing an access control the copyright owner places on his or her work is a violation of the law.²¹³ However, explicit in U.S. law, circumvention and trafficking rules apply only to works subject to copyright protection: “a work protected under this title” or “the right of a copyright owner under this title.”²¹⁴ Therefore, the act of circumventing the access control used to protect a reformatted version of a work that is already in the public domain—as is most cultural heritage—should not, in theory, be a violation of Title 17 Section 1201(a)(1)(A). Therefore, if the underlying work is not subject to copyright protection, then circumventing access to it, or using control devices related to it cannot, in the plain language of the statute, violate Title 17, Section 1201.²¹⁵ In this respect, at least, the proposal of using technical measures controlling access to materials that are in the public domain fails insofar as these controls can be legally circumvented, as such material is not subject to protection under the Copyright Act.

right to use their work as they wish, but also require them to do business with persons not of their own choosing and to accept statutorily established rates at statutorily mandated intervals for the use of their works.”)

²¹⁰ *Harper & Row Publishers, Inc. v. Nation Enterprises*, 471 U.S. 539, 569 (1985) (in considering the unpublished copyrighted expression of public figures, the Court commented, “Congress has not designed, and we see no warrant for judicially imposing, a ‘compulsory license’ permitting unfettered access” to these expressions).

²¹¹ See U.S. CONST. art. I, § 8, cl. 8.

²¹² Hannelore Dekeyser & Tomas A. Lipinski, *Digital Preservation of the Cultural Record in Archives: A Comparative Copyright Analysis*, in *ART & LAW* 142, 153 (Bert Demarsin et al. eds., 2008).

²¹³ 17 U.S.C. § 1201(a)(1) (2012).

²¹⁴ *Id.*

²¹⁵ See Dekeyser & Lipinski, *supra* note 212, at 181.

D. Fair Use Exception for Cultural Heritage

One argument put forth in this debate is that the “fair use” exception of copyright should be expanded to include the specific subject matter of cultural heritage. However, in addressing this topic, the focus of the legal arguments should depend less on the distinctions between fair use and fair dealing exemptions and more on ensuring that the law, through both legislation and judicial interpretation, in fact, truly acts to promote the main purpose of copyright law: the overall benefit to the public.²¹⁶

V. CONCLUSION

It is absolutely imperative that the art history and legal communities take action to address the concerns raised in this comment. The failure to act will ultimately stifle the preservation of access to public domain artworks and cultural heritage. The potential and far-reaching benefits of adopting a collaborative culture that contributes to a collective memory and a broad understanding of how the world views heritage as a whole are clear. Technological and digitally-based applications to cultural heritage threats offer solutions to traditional preservation and exhibition of cultural heritage, as well as add to the legacy and beneficial commerce provided by cultural property.²¹⁷ However, the relative failure or short-comings of the basic legal process to effectively address, answer, and define the questions relating thereto discourages the process of creation and incorporation of new media, therefore stifling any possible benefits flowing therefrom. Multi-modal and multimedia platforms, cross-cultural collaboration, and inter-disciplinary approaches to the understanding and sharing of cultural heritage contribute to the global economy in the form of building and preserving collective memory platforms and practices within the new media landscape.²¹⁸

The protections afforded to the broad general notion of intellectual property were designed to encourage creation. From a policy perspective, the incentive to individual content creators is a secondary consideration after promoting the advancement of Science and the Useful Arts. Neither of these interests is being adequately served in the context of new media, cultural heritage, and respective copyright protections. The issues presented stem from outdated and uncertain legalities, limitations, and applications of intellectual property to cultural heritage;

²¹⁶ However, Section 108 of the Copyright Act grants qualifying libraries and archives additional rights beyond a general right of fair use, this argument extends that exception beyond this provision. 17 U.S.C. § 108(a) (2012).

²¹⁷ See ZHOU ET AL., *supra* note 7.

²¹⁸ Protecting intellectual property and cultural heritage in “cyberspace” has been a growing concern for many, and has become a priority for several industries, in that, without safeguards for digital heritage, the Internet and all aspects of new media cannot realize the enormous potential as commercial, educational, and entertainment mediums. The various answers to the legal questions presented by Cultural Heritage and new media have wide-ranging outcomes and impacts. The determination of ownership and authorship establish various rights and responsibilities in relation to the maintenance, upkeep, financial burden, and have an extreme impact on whether these works of new media and cultural heritage survive or are lost.

thus hampering the creation and exhibition of new and meaningful scholarship and creative works centering on and around the preservation, conservation, and dissemination of cultural heritage.²¹⁹

New media and technologies, when applied to cultural heritage and made accessible on a wide scale, further the policy objectives that copyright stands to promote, while simultaneously benefiting the collective culture of society, the general welfare of the public, individual content creators, and museums and cultural institutions.²²⁰ In order to ensure that these not only survive, but also are encouraged, a change must be made and a solution adopted.

²¹⁹ The result is that intellectual property is presenting and acting as a problem, not a solution. Defining the legal scope and reach of digital property and cultural heritage is important for users, creators, consumers, cultures, and society as a whole. Unless a change is made, or a solution adopted, the problem of legal uncertainties will continue to hinder intellectual property's main purpose and underlying policy. First, the economic incentive to create new media works involving cultural heritage may be undermined by the imposition of additional and substantial costs and financial burdens upon subsequent creators wishing to use material from existing works, or to capture existing works of cultural heritage and digitize the objects or artifacts. These creators may be dissuaded from creating new works incorporating and using as a base existing works for which they cannot afford the risk of potential intellectual property liability or even threat of litigation. Second, the public interest may be harmed when works cannot be made available to the public due to uncertainty over its copyright or cultural heritage ownership and status.

²²⁰ In an effort to address the existing counter-arguments that stand against the making public these digital renderings of cultural heritage, research has proven conclusive that any possible deterrence impact the availability of these works may have, has, in practice, the opposite result, in that its availability encourages visitors to come to the museum.

The idea of becoming virtual might not be a pleasant one for some museums, especially not for art museums who cherish the ideal of the 'real thing' and its aura. But this development is inevitable because of the increasing digitization of cultural heritage and the demand to make collections more accessible. The virtual museum is no competitor or danger for the 'brick and mortar' museum because, by its digital nature, it cannot offer real objects to its visitors, as the traditional museum does. But it can extend the ideas and concepts of collections into the digital space and in this way reveal the essential nature of the museum. At the same time the virtual museum will reach out to virtual visitors who might never be able to visit a certain museum in person.

Werner Schweibenz, *The Development of Virtual Museums*, 3 ICOM NEWS 3 (2004). It has been suggested that the application of new media to cultural heritage poses a certain "threat" to museums inasmuch as the availability of 3-D skins and digital replicas may deter "real museum visits." This threat was expressed in STUART ROBSON, SALLY MCDONALD, GRAEME WERE, AND MONA HESS, "3D Recording and Museums," in DIGITAL HUMANITIES IN PRACTICE, ed. Claire Warwick et. al. (London: Facet Publishing, 2012), 98. The goal of the virtual museum cannot be to replace the real museum. Only by cooperation of the ones who work on preserving and presenting the cultural heritage (historians, archeologists, museum curators, etc.) can results that contribute to cultural creation can be achieved. The primary aim of virtual museum is to investigate and propose models for the exploration of the real purpose and conceptual orientation of a museum. However, research has revealed that 70% of people visiting a museum website would subsequently be more likely to go to the "real" museum to visit. Loomis, Elias & Wells, *supra* note 131.