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HIJACKING SHARED HERITAGE: CULTURAL ARTIFACTS AND INTELLECTUAL PROPERTY RIGHTS

*Amy Hackney Blackwell & Christopher William Blackwell**

INTRODUCTION

In recent years, the world has seen an increase in claims of intellectual property rights to various objects that were formerly considered the common property of all. Institutions, individuals, and nations that possess works of art, historic documents, or naturally-occurring biological materials have claimed ownership of intellectual property related to those objects, e.g., images of those objects.¹ These claims are ostensibly necessary to protect the owners' rights to profit from the use of these objects. These claims of rights in fact prevent others from using the objects to their fullest potential. In the case of images or objects that have very little economic value but ample scientific and scholarly value, this obstruction is actually detrimental to the progress of art and science, and therefore antithetical to the purpose of copyright and other forms of intellectual property.

In our scholarly work, our rights to acquire and share images have often been in question. Other scholars have encountered similar problems with rights to images.² This problem mirrors the loss of access to biological materials that scientists currently encounter as a result of recent national laws claiming property rights to naturally-occurring organisms.³ This is all part of a culture of "hyper-ownership," in which seemingly everything is subject to being owned by

* Copyright © 2014 Amy Hackney Blackwell, Christopher Blackwell. We write from personal experience. We are both scholars. Amy Hackney Blackwell is a former attorney and current research scientist working on biodiversity, international treaties on information sharing, living collections of plants, and historical botanical specimens. Christopher W. Blackwell is a classicist and computer scientist with vast experience digitizing and analyzing ancient papyri and medieval manuscripts of Greek and Latin texts. In our work, we make extensive use of digital images of historical artifacts that are held in museums and libraries. Our current research projects would be impossible without these images, but our rights to acquire, analyze, and share these images have often been in question.

¹ See *infra* Part I.

² See, e.g., Mary Campbell Wojcik, *The Antithesis of Originality: Bridgeman, Image Licensors, and the Public Domain*, 30 HASTINGS COMM. & ENT. L.J. 257 (2008).

³ See, e.g., Sabrina Safrin, *Hyperownership in a Time of Biotechnological Promise: The International Conflict to Control the Building Blocks of Life*, 98 AM J. INT'L L. 641 (2004).

someone, including things of little to no economic value but offers a real or potential benefit to human knowledge.

The purpose of copyright, at least under United States law, is to promote innovation and creativity.⁴ Locking up rights to images of works that by any standard are in the public domain prevents the progress of science. We admire the skill and dedication of curatorial professionals who have preserved human cultural heritage for centuries; without their foresight, many objects may have been lost or decayed by now. We have no objection to owners profiting from their objects when they can, or at least sharing expenses by charging access fees to photographs; we realize that it is costly to maintain a museum. We also realize that each nation has its own approach to handling the protection of these objects. We do, however, regret some of the policies we have encountered and question their legal validity because they undermine the potential of these collections for advancing human knowledge.

Part I of this Article describes the problems currently faced by scholars working with cultural heritage objects and similar items such as genetic resources; we believe that there are too many claims of rights to these items, most of which do nothing to further scholarship or protect the objects themselves. Part II describes the current black letter law governing these objects. Next, Part III explores the problems involved with copyrighting uncopyrightable objects. Further, in Part IV we identify several factors we believe are at least partly responsible for the current situation, such as the fact that when some institutions claim rights they create an incentive for others to do the same, as well as the mistaken belief that images of certain objects have financial value. In Part V we propose some solutions that would both protect the objects in question while allowing open access to them or to their images, at least for non-commercial uses. Finally, we conclude by calling for as much open access to data as possible because we are convinced that this is the best way to increase human knowledge and maximize the potential contained in all types of objects that can be considered intellectual property.

I. THE PROBLEM: TOO MANY CLAIMS OF RIGHTS

In the past few years, we have collaborated on several projects that involved capturing digital photographs of cultural heritage objects, studying them in collaboration with others, and publishing the results. These projects required us to identify significant objects, contact the institutions holding them, plan and execute the work, and publish them in digital form. We have subsequently published scholarly articles that use these images as primary source materials in our respective fields. This has given us extensive personal experience in negotiating intellectual property rights with institutions.

⁴ U.S. CONST. art. I, § 8, cl. 8.

In 2007, we went to Venice with a team that photographed the oldest complete text of the Homeric *Iliad*, a manuscript known variously as “Marciana 821” or simply “the Venetus A.”⁵ This manuscript is the source of all modern printed texts of the *Iliad*. Until this project, the manuscript was effectively unpublished and nearly inaccessible. Now, the work of the Homer Multitext project has made the Venetus A and several other medieval copies of the *Iliad* freely and openly available.⁶

In 2011, we collaborated with the British Library to create new digital images of a papyrus, BL 131, which contains the only surviving text of Aristotle’s *Constitution of the Athenians*. The only previous publication of this text was a lithographic facsimile edition made in the nineteenth century.

Also in 2011, we worked with the Natural History Museum in London to photograph plant specimens collected in the Carolinas during the eighteenth century. This primary source material for historical botany originated in what is now the United States and has been held in London at the Sloane Herbarium for two and a half centuries. These digitized collections form the basis of the evolving *Botanica Caroliniana* project.⁷

In each case, there were negotiations and payments. With the Venetus A, the team spent years negotiating with the public library of St. Mark, the Biblioteca Marciana. The final contract required that our team assign copyright of its photographs to the Marciana in exchange for permission to take the photographs and to use them under a Creative Commons, Non-Commercial, Attribution, Share-alike license.⁸ Our team gave a donation to the Library, part of which defrayed the inevitable expenses of hosting our team, and part of which paid for the grant of this license.

With the *Constitution of the Athenians*, our project paid the British Library to photograph the manuscript using the library’s staff and equipment. The project also paid a licensing fee that granted us permission through an idiosyncratic license to use the resulting images, including posting them for public viewing, but only for a period of five years, at which point the agreement must be renegotiated.

With the botanical specimens, we conducted the photography ourselves, with our own equipment. In exchange for a substantial licensing fee paid to the museum, and for assigning copyright to these images, we secured access to these

⁵ CASEY DUÉ, *RECAPTURING A HOMERIC LEGACY: IMAGES AND INSIGHTS FROM THE VENETUS, A MANUSCRIPT OF THE ILIAD 1* (2009).

⁶ THE HOMER MULTITEXT, <http://www.homermultitext.org/> (last visited Dec. 9, 2013).

⁷ BOTANICA CAROLINIA: COLLABORATIVE RESEARCH IN THE LIBERAL ARTS, <http://folio.furman.edu/botcar/> (last visited Dec. 9, 2013).

⁸ *Noncommercial Attribution License Agreement*, CREATIVE COMMONS, <http://creativecommons.org/licenses/by-nc/3.0/legalcode>.

materials and a Creative Commons License to use them, publish them, and allow others to do so for non-commercial terms.⁹

The work we have done with these objects is new, innovative, and of sufficient value to convince granting agencies to spend substantial sums on it. The images we have created are the first widely visible publications of any of these objects. We have published analyses of these materials that contain insights that could not have been made without digital imagery, and anyone who wishes to use them or to consult the primary sources himself or herself may do so.

In each case, the objects of study are centuries old. The content of the Greek manuscripts is certainly in the public domain. The botanical specimens—dried plants—were never subject to copyright, and copyright to any handwritten notes on the specimens has long since passed into the public domain.

It is reasonable for institutions to charge fees for the expenses they incur in granting access to our projects including skilled and unskilled labor, electricity, and security. But what about the fees and assignment of copyright demanded as a condition of access to the physical objects or the stipulations such as those of the British Library that photographs of a 2,000-year-old document can be studied for only five years? What is the legal foundation for such demands, and what interests do they serve?

Our efforts to integrate the study of historical botanical specimens have required that we reproduce a certain amount of botanical taxonomic data. While some excellent compilations of such data exist—namely, The Plant List, compiled by the Missouri Botanical Garden and the Royal Botanical Garden, Kew—that data is encumbered by a license that effectively prevents it from serving as the foundation for any subsequent research, a matter we discuss further below.¹⁰ What is the motivation for an institution to use restrictive licensing to limit access to a list of botanical data?

A. Per Uso Personale

In other cases not described here, institutions have told us that while we may photograph objects, we may not publish the photographs and that they are for “personal use” only. What does that even mean and what is the purpose of that restriction?

For our projects to have any scholarship value, our results must be *reproducible*, and so we must be able to publish our raw data and to let others use it. These expensive and laborious projects in digitization did not aim merely to allow casual browsers or even interested readers access to images on a computer screen. The digital photographs have been the objects of computational analysis, dissections, transformation, and alignment in whole and

⁹ *Id.*

¹⁰ THE PLANT LIST, <http://www.theplantlist.org> (last visited Dec. 9, 2013).

in part. The full potential of this data for research requires much more than a presentation of images in a web browser; we must be able to give users direct access to the raw data, the ability to transform that data, and the opportunity to share the results freely. The terms of our grants require this and so does the nature of scholarship.

B. A Widespread Problem

We are not the only scholars facing difficulties with access or permission to use materials. Museums and libraries everywhere have been asserting copyright over objects that are properly in the public domain.¹¹

Scholars and universities sometimes cave in rather than protest. Wojcik recounts an incident in which a scholar and the University of Chicago Press used a public domain image in a book only to receive an outraged letter from a museum owning one of the several existing versions of that print demanding compensatory payment.¹² Rather than risk the consequences of not paying, which included a threat by the museum to refuse to do further business with the entire university, the scholar paid for rights to an uncopyrightable object.¹³

In the case of the Dead Sea Scrolls, scholars with access to the Scrolls effectively prevented other scholars from doing any work on these 2,000-year-old texts for most of the second half of the twentieth century. When the scrolls were finally made available, scholars who attempted to publish reconstructions of fragmentary texts ran afoul of Elisha Qimron, who had already published his own reconstructions and, therefore, claimed copyright to the full texts. Qimron

¹¹ For example, the library of The Linnean Society of London begins its statement of rights and permissions by asserting that “Copyright laws apply to all forms of reproduction.” *Obtaining and Using Reproductions of Material from the Library and Online Collections*, THE LINNEAN SOCIETY OF LONDON, <http://www.linnean.org/Library-and-Archives/main-library-and-archives/Reprographics.htm> (last visited Jan. 6, 2014). After discussing in-copyright works (not at issue here), the page continues, “Please note that all material which is out-of-copyright but held at the Linnean Society is ‘By Permission of the Linnean Society of London’ only.” *Id.* The Houghton Library at Harvard University hosts a collection of ancient papyrus documents and makes images of them available online. When retrieving, for example, an image of Papyrus MS Gr SM2221—a “Notice of a Sale of Land” dating from c. AD 85—a reader receives the following Copyright Statement:

This material is owned, held, or licensed by the President and Fellows of Harvard College. It is being provided solely for the purpose of teaching or individual research. Any other use, including commercial reuse, mounting on other systems, or other forms of redistribution requires permission of the appropriate office of Harvard University.

HARVARD UNIVERSITY LIBRARY, <http://pds.lib.harvard.edu/pds/view/11897518> (Follow the “Copyright” hyperlink.) (last visited Dec. 9, 2013).

¹² Wojcik, *supra* note 2, at 273.

¹³ *Id.*

sued in Israel for copyright infringement and won; although he did not win any pecuniary damages, the court did award him \$55,000 for mental anguish.¹⁴ An award of this size could have a definite chilling effect on other scholars; even if the possessor's claim to copyright is illegitimate, few would want to risk these consequences.

Scientists who work with genetic resources (e.g., plants, animals, tissue cultures, and anything else with genetic code) are encountering similar difficulties due to national responses to the 1993 Convention on Biological Diversity (CBD). The CBD gives ownership of genetic resources to the states in which they originate. Developing nations were worried about bioprospecting, pharmaceutical bonanzas, and exploitation, and wanted a share in profits arising from biologically-based products.¹⁵ In the two decades subsequent to the CBD, nations have created a variety of individual laws governing access and profit-sharing of their genetic resources. Some are quite strict, preventing nearly all access to resources. Biological research, as a rule, does not produce massive commercial profits, so the restrictive laws are not actually helping nations profit from their genetic resources. Instead, these laws are keeping out scientists who could do research beneficial to the donor nations and the world in general—research on biodiversity, ecology, taxonomy, conservation, and all the other subjects of interest to a world facing a biodiversity crisis.¹⁶

The National Plant Germplasm System (NPGS), part of the United States Department of Agriculture (USDA), saves and distributes plant materials freely, with no restrictions, for use in research or breeding, including commercial uses. While other nations have restricted access, the NPGS has insisted that its material remain freely available. Karen Williams reported, however, that some nations have restricted access, while others have imposed restrictions on use of their germplasm, such as prohibiting the NPGS from distributing materials to third parties or requiring renegotiation for commercial uses. These restrictions are unacceptable to the NPGS, thereby resulting in the loss of international partners and a loss to science.¹⁷ At the same time, some botanical gardens in the United States and Europe are responding to national claims of rights to genetic

¹⁴ Cindy Alberts Carson, *The Dead Sea Scrolls Copyright Cases*, 22 WHITTIER L. REV. 47, 49 (2000).

¹⁵ Fikremarkos Merso Birhanu, *Challenges and Prospects of Implementing the Access and Benefit Sharing Regime of the Convention on Biological Diversity in Africa: The Case of Ethiopia*, 10 INT'L ENVTL. AGREEMENTS: POLITICS LAW & ECON. 249, 250–51 (2010).

¹⁶ See Sylvia I. Martinez & Susette Biber-Klemm, *Scientists - Take Action for Access to Biodiversity*, 2 CURRENT OP. ENVTL. SUSTAINABILITY (2010); Amy Hackney Blackwell, *Botanical Gardens: Driving Plant Conservation Law*, 5 KY. J. EQUINE AGRIC. & NAT. RES. L. 1, 24–27 (2012).

¹⁷ Karen A. Williams, *The US NPGS Plant Exploration/Exchange Program: Access and Benefit Sharing*, Address at the 2012 Face2Face Summit: CBD Access and Benefit Sharing Guidelines and NAPPRA Quarantine Regulations (Oct. 25 2012).

materials by drastically limiting the uses to which third parties can put plant materials, or at least by attaching restrictive agreements to any transfers of plant material. This is a loss to science with no obvious benefit.¹⁸

While the legal details of these situations vary, the philosophical principles are the same: entities are claiming intellectual property rights in materials that were previously unowned, some of which were considered the “common heritage of mankind.”¹⁹ The entities claiming ownership of the intellectual property are those that happen to have the physical objects or a body of data in their possession. Although ownership of physical objects may entitle an institution to charge access fees, it should not necessarily allow that institution to claim rights to images of or derivative works based on those objects.²⁰

II. THE BLACK LETTER LAW AND ITS APPLICATION

Copyright law in the United States is governed by Title 17 of the United States Code.²¹ U.S. copyright law is applicable only within the United States; other nations have their own, albeit similar, copyright laws. Efforts have been made to standardize copyright laws among the nations through agreements such as the Berne Convention²² and the Nagoya Protocol,²³ but global harmonization has yet to be reached.

Further, because the facts and circumstances of every copyright case differ, people tend to disagree as to how these laws should be applied in each situation. The following sections give a brief explanation of the copyright laws, followed by an analysis of the seminal case, *Bridgeman Art Library v. Corel Corp.*,²⁴ and some of the criticism surrounding the *Bridgeman* decision.

¹⁸ Blackwell, *supra* note 16.

¹⁹ Birhanu, *supra* note 15, at 250.

²⁰ A derivative work is one that is based on a preexisting copyrighted work, such as a translation, an edited edition, or a photographic reproduction. 17 U.S.C. § 101 (2012). Derivative works are themselves copyrightable as long as they display some originality. *See id.* § 103.

²¹ 17 U.S.C. §§ 101–1332 (2012).

²² Berne Convention for the Protection of Artistic and Literary Works, Sept. 9, 1886, as revised at Paris on July 24, 1971, and amended in 1979, S. Treaty Doc. No. 99-27 (1986), available at www.wipo.int/treaties/en/ip/berne/pdf/trtdocs_wo001.pdf.

²³ Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity, art. 4, Oct. 29, 2010, available at <http://www.cbd.int/abs/text/articles/?sec=abs-04>.

²⁴ *Bridgeman Art Library v. Corel Corp.*, 25 F. Supp. 2d 421 (S.D.N.Y. 1998).

A. Basic Copyright Law

The Constitution establishes the foundation of copyright in the United States: “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.”²⁵ The progress of science and the useful arts is, therefore, a public good prior to copyright. Where the legitimacy of an application of copyright is ambiguous or contentious, the public good it exists to promote becomes a legitimate criterion for consideration.

The Copyright Act of 1976 extends copyright protection to “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, either directly or with the aid of a machine or device.”²⁶ Works of authorship may include literary works, pictorial and graphic works, and recordings.²⁷ A copyright gives its holder the right to reproduce the work and distribute copies, to create derivative works, and to perform or display the work publicly.²⁸

The Berne Convention for the Protection of Literary and Artistic Works is an international agreement that took effect in 1887, under which signatories agreed to recognize the copyrights of authors from other signatory nations. The Berne Convention grants copyrights for most works for at least fifty years after an author’s death; for photographs, the term is at least twenty-five years.²⁹

United States’ copyright law and the Convention provide for a limitation to the exclusive rights granted to copyright holders under the fair use doctrine.³⁰ For example, 17 U.S.C. § 107 allows others to use a work (published or unpublished) for teaching, scholarship, research, reporting, or criticism.³¹ Fair use is determined by the purpose of the use, the nature of the copyrighted work, the amount of the work used, and the effect of that use on the market for the original work.³²

B. Bridgeman Art Library v. Corel Corp.: *Images of Uncopyrightable Objects*

The fundamental issue here is that entities that possess uncopyrightable physical objects are claiming intellectual property rights over those objects,

²⁵ U.S. CONST. art. I, § 8, cl. 8.

²⁶ Copyright Act of 1976, 17 U.S.C. § 102(a) (2012).

²⁷ *Id.* § 101.

²⁸ *Id.* § 106.

²⁹ Berne Convention for the Protection of Literary and Artistic Works art. 7, Sept. 9, 1886, as revised at Paris on July 24, 1971, and amended in 1979, S. Treaty Doc. No. 99-27 (1986), available at www.wipo.int/treaties/en/ip/berne/pdf/trtdocs_wo001.pdf.

³⁰ *Id.* art. 10.

³¹ 17 U.S.C. § 107.

³² *Id.*

including rights to images and other uses. A seminal case in this field is the 1998 United States district court case, *Bridgeman Art Library v. Corel Corp.*³³ Bridgeman was a British company with an office in New York in the business of selling digital reproductions of copies of public domain works of art.³⁴ Corel was a Canadian software company;³⁵ one of its products was a set of CD-ROMs containing digital reproductions of old master paintings.³⁶ Bridgeman accused Corel of copying some of its images to create this set because its transparencies were the “only authorized transparencies of some of these works of art.”³⁷ It claimed infringement in the United States, Canada, and the United Kingdom.³⁸

In order to establish infringement in the United States under the Copyright Act of 1976, Bridgeman had to show that it owned a valid copyright and that Corel had copied its works.³⁹ In this case, most of the works of art were located in the United Kingdom, and the photographs were first published in the United Kingdom, so the court decided to apply U.K. copyright law for the issue of copyrightability, but U.S. law for the question of whether infringement occurred in the United States.⁴⁰

Under U.K. law, copyright is available to original literary or artistic works.⁴¹ To be original, the work must originate with the author and not be copied from any other work.⁴² A work is not original if it is “wholly copied from an existing work, without any significant addition, alteration, transformation, or combination with other material.”⁴³ The court compared Bridgeman’s type of photography to the use of a photocopier and concluded that, because Bridgeman’s images were exact copies of public domain works, they were not copyrightable under U.K. law.⁴⁴

Bridgeman failed to convince the court that Corel had copied its images.⁴⁵ The only similarities it could offer were that both images were exact reproductions of public domain works of art.⁴⁶ One exact reproduction is by

³³ *Bridgeman Art Library v. Corel Corp.*, 25 F. Supp. 2d 421 (S.D.N.Y. 1998).

³⁴ *Id.* at 423.

³⁵ *Id.* at 424.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.* at 425.

⁴⁰ *Id.* at 425–26.

⁴¹ *Id.* at 426.

⁴² *Id.* (quoting 2 MELVILLE B. NIMMER & PAUL E. GELLER, INTERNATIONAL COPYRIGHT LAW & PRACTICE § 2[1][v][ii], at UK-19 (1998)).

⁴³ NIMMER & GELLER, *supra* note 42, § 2[1][b][ii] at UK-19 (citations omitted).

⁴⁴ Bridgeman also argued that its images with added color bars were unique, but that argument did not apply because Corel did not use those images in its product. *Bridgeman*, 25 F. Supp. 2d at 427.

⁴⁵ *See id.* at 428.

⁴⁶ *Id.*

definition indistinguishable from another. Because the original works were not subject to copyright, and because it could not be determined that Corel's images were derived from Bridgeman's, the court granted summary judgment to Corel on the issue of copyright infringement.⁴⁷

Bridgeman appealed in 1999.⁴⁸ On appeal, the court explored further the contention that, under U.S. law, exact photographic copies of public domain works are not copyrightable.⁴⁹ It found that slavish copies of paintings lack originality and are, therefore, not subject to copyright, which would be the case under either U.S. or U.K. law.⁵⁰ Bridgeman's images reproduced the objects as precisely as technology permitted, and were akin to photocopies.⁵¹ Bridgeman argued that taking photographs requires greater skill than making a photocopy, but the court found that point to be immaterial.⁵² Slavish copies, however difficult to make, are still slavish copies, and changing medium is not in itself sufficient grounds to claim originality.⁵³

1. What is Original?

The *Bridgeman* court followed the doctrine of originality as defined by the United States Supreme Court in *Feist Publications, Inc., v. Rural Telephone Service*.⁵⁴ Rural Telephone Services was a local telephone company that had compiled a telephone directory for their customers.⁵⁵ Feist Publications was a publisher that was assembling a compilation directory of telephone numbers from a larger region.⁵⁶ Rural refused to license its data for Feist's use, so Feist simply copied Rural's directory without permission.⁵⁷ Rural, in turn, sued for copyright infringement.⁵⁸

The district and appellate courts sided with Rural, citing the "sweat of the brow" argument, which essentially awards copyright to someone who has worked hard to assemble some document.⁵⁹ The Supreme Court, however, disagreed, finding that the originality is the essential ingredient for

⁴⁷ *Id.*

⁴⁸ *Bridgeman Art Library v. Corel Corp.*, 36 F. Supp. 2d 191 (S.D.N.Y. 1999).

⁴⁹ *See id.* at 196–97.

⁵⁰ *See id.* at 196–99.

⁵¹ *Id.* at 198.

⁵² *Id.*

⁵³ *See id.* at 196, 198–99.

⁵⁴ *Id.* at 197 (citing *Feist Publications, Inc., v. Rural Telephone Service*, 499 U.S. 340 (1991)).

⁵⁵ *Feist*, 499 U.S. at 342.

⁵⁶ *Id.* at 342–43.

⁵⁷ *Id.* at 343.

⁵⁸ *Id.* at 344.

⁵⁹ *See id.*

copyrightability.⁶⁰ Assembling a list of customers and phone numbers, albeit difficult, was not creative or original.⁶¹ Further, the underlying facts expressed in a work are not be copyrighted.⁶² Sorting the list alphabetically is “obvious” and, therefore, not creative or original.⁶³ The lower court’s decision was reversed.⁶⁴

Of particular interest to us, Rural was in a position to collect and monopolize the information it gathered. It was the only telephone company in its area; anyone who wanted a telephone had to supply a name and address to Rural, who compiled that information. Feist had no special access to that same information, but it could provide a valuable service with that information by assembling lists of telephone numbers into regional directories to make the process of looking up numbers much more efficient. Even though Feist offered to pay a licensing fee, Rural refused to license its directory solely to maintain its monopoly on yellow pages-advertising in the area.⁶⁵

Since *Feist*, there has been a debate on what constitutes originality, and what deserves copyright protection. Justice O’Connor, in *Feist*, noted that a work need not be very creative or original to qualify; the merest “spark of creativity” can make a work deserving of protection.

2. Museums against *Bridgeman*: The “Gift Shop” Defense and the “Photography is Hard” Defense

The *Bridgeman* case caused a flurry of publication. Museums and libraries were reportedly horrified by *Bridgeman* and its implications.⁶⁶ Robin Allan suggests that that the *Bridgeman* court confused originality and creativity, and required an unreasonable degree of the latter to achieve the former.⁶⁷ He cites *Alva Studios v. Winninger* as a better case, in which originality refers to the degree of “skill, labor, and judgment” that the creator of the copy put into the work.⁶⁸ Photographing a sculpture requires the same degree of skill as photographing a painting, but the result wouldn’t be identical; *Bridgeman* doesn’t address the distinction between photos of two- and three-dimensional works. Allan argues the decision was muddled, that the court should have found *Bridgeman*’s photos to be copyrightable and then gone on to address the question of infringement.⁶⁹

⁶⁰ *Id.* at 347.

⁶¹ *Id.* at 363.

⁶² *Id.* at 364.

⁶³ *Id.*

⁶⁴ *Id.* at 364.

⁶⁵ *Id.* at 343–44.

⁶⁶ See Wojcik, *supra* note 2, at 270–71.

⁶⁷ Robin Allan, *After Bridgeman: Copyright, Museums, and Public Domain Works of Art*, 155 U. PA. L. REV. 961, 973 (2007).

⁶⁸ *Id.*

⁶⁹ *Id.*

Allan is one of the advocates of what we call the “Gift Shop Defense.”⁷⁰ He argues that museums depend on sales of reproductions of artwork for their operating budgets.⁷¹ They are the correct institutions to create and sell these reproductions because of their missions of preservation and dissemination to the public. Further, they have an incentive to make high-quality reproductions, whereas others have no incentive to create reproductions of works in the public domain.⁷² Although advocates of public domain ownership predict that museums would hoard and restrict access if they could claim copyright, Allan thinks this is more likely if they are not afforded copyright and are forced to protect themselves from liability through contracts and licensing agreements.⁷³ He also suggests that this might lead museums to engage in bad practices such as flash photography or low-quality reproductions that do a disservice to the works of art,⁷⁴ even though these so-called bad practices have been placed in doubt.⁷⁵

Lara Ortega suggests that there should be some method under copyright law to allow museums to profit from public domain images that they have invested time and money in creating; museums should be able to exploit images of the artwork they own without having to use licenses.⁷⁶ She writes:

It is essential that museums remain able to retain control over the digital reproductions of works they possess in their physical locations in order to further these goals [i.e., “to disseminate knowledge and art appreciation throughout society”]. If an online collection is to mimic and serve some of the same purposes as the physical collection, then the museum should be able to protect its interest in the digital reproductions so as to prevent degradation of the images through overuse by third parties.⁷⁷

The final sentence quoted above invites this question: Why would museums have an interest in preventing “degradation of images [of cultural heritage objects] through overuse,” an interest that supersedes the public’s

⁷⁰ See *id.* at 962.

⁷¹ *Id.*

⁷² *Id.* at 982–83.

⁷³ *Id.* at 984.

⁷⁴ *Id.*

⁷⁵ Though this Article is not about best practices in museum and library conservation, we do feel compelled to point out that flash photography is not nearly as dangerous to works of art as many mistakenly believe. We have worked closely with conservators at the British Library and the Natural History Museum, London, who note that a photographic flash conveys the equivalent of one-fifteenth of a second of reading-room-level light [cold light, with little ultraviolet radiation]. Solar radiation from open windows is much more damaging. Documentary photographers eschew flash mainly because it is easier to ensure even illumination with steady lighting.

⁷⁶ Lara Ortega, *How to Get the Mona Lisa in Your Home Without Breaking the Law: Painting a Picture of Copyright Issues with Digitally Accessible Museum Collections*, 18 J. INTELL. PROP. L. 567, 585 (2011).

⁷⁷ *Id.*

interest in using such images for study and analysis? For that matter, when applied to digital images, what does “degradation through overuse” mean?

Terry Kogan looks at the issue from the perspective of art and visual theory, finding that photography is itself a creative art, and that photographic reproductions of other works of art embody enough creativity to themselves qualify for copyright.⁷⁸ This is what we call the “Photography is Hard” defense, a variation on the “sweat of the brow” argument unsuccessfully put forward by the defendant in *Feist*. Kogan suggests that a photograph of a work of art is like a “a map that conveys a great deal of truthful and accurate information about the artwork, but does not imitate or duplicate it in any meaningful sense.”⁷⁹

Kogan’s analogy to maps is flawed. Maps are not aerial photographs. Rather, a good map is the result of careful selection: what features will the map document, what symbols and icons will represent features, and other creative decisions. Evidence from actual practice invalidates Kogan’s argument. Museums and scholars create documentary photographs of works of art to serve as proxies for them to the greatest extent possible. When a photographic image diverges from the object it depicts to the extent that it no longer “imitate[s] or duplicate[s] it in any meaningful sense,” that image becomes a new creation subject to copyright, but also ceases to be useful scholarly evidence of the original; thus, it is no longer the subject of this argument.

Of course, this is all about museums using images to create revenue, which raises the question of what to do with images that have no economic value. It also presumes that the purpose of online images is to create a digital substitute for the physical collection, so museums would want to protect the images from unlimited dissemination.

3. The Other Side: Against Limited Access

On the other side of this debate are advocates of freeing knowledge in the public domain. Mary Campbell Wojcik notes that museums and libraries have largely chosen to ignore *Bridgeman*, and are continuing to assert copyright to uncopyrightable objects simply because they can.⁸⁰ *Bridgeman* claimed that it was charging merely for physical access to and use of its high-quality reproductions.⁸¹ It also claimed that breaching its licensing agreement was an infringement of copyright, copyright that it could not in fact own.⁸²

Colin Cameron notes that museums have been asserting copyright to uncopyrightable works largely due to their desire to maintain as many sources of

⁷⁸ Terry Kogan, *Photographic Reproductions, Copyright and the Slavish Copy*, 35 COLUM. J.L. & ARTS 445, 489–90 (2012).

⁷⁹ *Id.* at 501.

⁸⁰ Wojcik, *supra* note 2, at 268–72.

⁸¹ *Id.* at 269.

⁸² *Id.* at 268–69.

revenue as possible.⁸³ Cameron believes that preventing others from taking and using photographs of public domain works stifles new creation and contradicts the intention of copyright.⁸⁴ By claiming copyright, museums and libraries can make themselves the sole sources of access to public domain works.⁸⁵ The Museum Copyright Group in the United Kingdom, for example, has vigorously opposed any loosening of restrictions on access to images of public-domain materials, even while acknowledging that copyright probably does not apply.⁸⁶ Some institutions offer hope that researchers might secure permission for non-commercial use, but without stating the criteria on which they will base decisions.⁸⁷

All of these parties writing about, reacting to, and acting upon issues of intellectual property rights over cultural heritage objects have in common a recognition of the importance of those objects. All of these parties want the public to see, study, and value them. The disagreement is on the conditions of that access and the status of curatorial institutions, and the proper balance between needs (practical and economic) and values (intellectual and cultural).

III. WHAT'S UP WITH IP?

Why are so many institutions grabbing intellectual property rights? This development is motivated in several ways: (1) by a culture of hyperownership that encourages institutions to grab rights defensively; (2) as a result of

⁸³ See Colin Cameron, *In Defiance of Bridgeman: Claiming Copyright in Photographic Reproductions of Public Domain Works*, 15 TEX. INTELL. PROP. L.J. 31, 61 (2006).

⁸⁴ *Id.* at 58, 61.

⁸⁵ *Id.* at 58.

⁸⁶ FAQ, MUSEUMS COPYRIGHT GROUP, <http://museumscopyright.org.uk/resources/faq/> (last visited Dec. 9, 2013) (“Q: How can rights be enforced in the taking of photographs of archival material? A: This is difficult to do under copyright law; However, rights can be enforced under contract law.”).

⁸⁷ See, e.g., *Ordering and Reproducing Images from the J. Paul Getty Museum's Collection*, THE GETTY, http://www.getty.edu/legal/image_request/index.html (last visited Dec. 9, 2013).

The J. Paul Getty Museum grants permission to download collection images from our web site for your own personal and non-commercial use, or for fair use as defined in the United States copyright laws

. . . .

. . . [R]equests for all other uses must be made in writing, and the Museum will only consider requests to use or reproduce images of objects in its collection for scholarly, educational, or non-commercial purposes. *Each request is separately considered, and permission is granted on a case-by-case basis at the sole discretion of the Museum.* Fees apply depending on the type and nature of the intended use.

Id. (emphasis added).

confusion between copyright and plagiarism; (3) as a result of the mindset that everyone else is doing it so I should too and; (4) by the mistaken perception surrounding the economic potential of held objects.⁸⁸

A. A Culture of Hyperownership

Sabrina Safrin has written extensively on the development of private ownership of objects previously considered to be in the public domain, such as biological and genetic material. Before about 1980, genetic resources were considered to be available to everyone, and no one had the right to exclusive ownership of naturally occurring organisms.⁸⁹ Since that time, individuals, corporations, and national governments have all laid claim to genetic materials.⁹⁰ She describes a culture of “hyperownership,” in which the expansion of intellectual and other property rights causes a chain reaction in which the creation of those property rights leads to the demand for additional rights.⁹¹ This self-generating cycle of demand has little or nothing to do with the actual or potential value of the resources in question; instead, the simple existence of property rights creates demand for more.⁹²

Granting property rights to naturally-occurring genetic material does not encourage innovation; Safrin instead sees a tit-for-tat dynamic occurring as nations claim property rights in response to other claims for property rights, i.e., the claims of corporations to rights in genetic materials used to create valuable products.⁹³ The CBD does not recognize genetic materials as the common heritage of mankind, but instead the property of individual nations.⁹⁴ Nations claiming property rights to their biological resources are not performing cost-benefit analyses; they are simply reacting to the existence of earlier claims by making their own.⁹⁵ Likewise, nations are claiming as their own the traditional knowledge that has historically been free.⁹⁶ Safrin views this as a response to the internationalization of intellectual property after the United States began to impose trade sanctions on countries that failed to protect American intellectual property and the adoption of TRIPS in 1994.⁹⁷ Nations found themselves required to provide IP protection for artistic works, and they responded by insisting that those same rights be applied to their own traditional knowledge

⁸⁸ See *infra* Parts IV.B–D.

⁸⁹ Sabrina Safrin, *Chain Reaction: How Property Begets Property*, 82 NOTRE DAME L. REV 1917, 1926 (2006).

⁹⁰ *Id.* at 1917–18.

⁹¹ *Id.* at 1922.

⁹² See *id.* at 1935–46.

⁹³ *Id.* at 1928.

⁹⁴ *Id.* at 1929–30.

⁹⁵ *Id.* at 1931.

⁹⁶ *Id.* at 1939–40.

⁹⁷ *Id.* at 1937–38.

and folklore. Similarly, there has also been a rise in “defensive patenting,” in which an increase in patents being sought causes a chain reaction resulting in even more patent applications, just because others are applying for patents.⁹⁸

Safrin explains this phenomenon by invoking group behavior theory, which suggests that people will do something if other people do it.⁹⁹ This behavior can happen at all levels, from children on a playground to nation-states creating laws.¹⁰⁰ She also suggests that there has been a decline in the culture of sharing, and an increase in the desire to prevent others from exploiting resources, especially if those resources might have value.¹⁰¹ A third possibility is fear of exclusion: if one person suddenly comes to own a resource, others fear that they will no longer be able to use it so they rush to secure property rights of their own.¹⁰² In all cases, the acquisition of property rights spurs a drive to acquire other, similar rights, without much regard for values or consequences.¹⁰³

There are consequences, though. Early creators of rights generally do not foresee the wave of requests for similar rights that often follow this creation.¹⁰⁴ Those early creators do, however, exert a disproportionate influence over the demand for rights that follow.¹⁰⁵ Because later demands for rights are responsive, they are not finely tailored to protect innovation; they are simply reactions to existing rights, sought out of a sense of justice.¹⁰⁶

B. Everyone Else is Doing It . . .

The websites and archives of public institutions contain many assertions of copyright and limitations on users’ rights that are artifacts of earlier times. Many date from the 1990s or about 2000, when digital texts and images were relatively new and scholarly practices had not embraced a world of networked data to the extent they have now. This was also before the societal conversation on rights and access that has occupied the past decade. Unfortunately, these outdated first drafts have become accepted practice.

For example, the University of North Carolina at Chapel Hill hosts an electronic edition of the text of William Bartram’s *Travels*, a work published in

⁹⁸ *Id.* at 1944.

⁹⁹ *Id.* at 1948.

¹⁰⁰ *See id.* at 1948–49.

¹⁰¹ *See id.* at 1949–50.

¹⁰² *Id.* at 1951–53.

¹⁰³ *See id.* at 1923–24.

¹⁰⁴ *Id.* at 1925.

¹⁰⁵ *See generally id.* at 1925–45.

¹⁰⁶ *Id.* at 1957.

1791.¹⁰⁷ The text of this work was transcribed into an electronic file by a commercial data service, with funding from the Institute for Museum and Library Services, a federal agency that dispenses public funds for research. The University of North Carolina claims copyright to this work: “© This work is the property of the University of North Carolina at Chapel Hill.”¹⁰⁸ This copyright claim is followed by this statement of rights: “It may be used freely by individuals for research, teaching and personal use as long as this statement of availability is included in the text.”¹⁰⁹ A responsible scholar intending to take advantage of this publically-funded resource might well wonder what her rights are. “Individual” and “teaching” seem mutually exclusive. And what is “personal use” of a book, especially if it can include “research,” which presumably includes publication of that research and, thus, scholarly citation, quotation, and reproduction of Bartram’s words?

In 2001, scholarly publications were largely a matter of printed articles and books, and the computational analysis of texts (with an attendant requirement to publish electronically the source-text along with the results of textual analysis) remained nascent. A generous reading of this statement of permissions indicates that the creators approved of scholarly use but not commercial use, and hoped to receive credit for having made the resource available. It is not clear, however, that in the case of a 200-year-old text any limitation on use is tenable, or that a claim of copyright is appropriate.

The Creative Commons changed attitudes during the 2000s. It was founded in 2001 as an organization dedicated to helping creators share their work with the world by providing well-articulated and specific licenses to describe conditions of use.¹¹⁰ It has several levels of licenses, all of which are designed to help creators get credit for their work and possible commercial benefit while preventing that work from being locked up.¹¹¹ Unfortunately, many agreements were formed before the Creative Commons helped codify this new attitude toward licensing; therefore, that older language is still present in many documents.

¹⁰⁷ WILLIAM BARTRAM, *TRAVELS THROUGH NORTH & SOUTH CAROLINA, GEORGIA, EAST & WEST FLORIDA, THE CHEROKEE COUNTRY, THE EXTENSIVE TERRITORIES OF THE MUSCOGULGES, OR CREEK CONFEDERACY, AND THE COUNTRY OF THE CHACTAWS; CONTAINING AN ACCOUNT OF THE SOIL AND NATURAL PRODUCTIONS OF THOSE REGIONS, TOGETHER WITH OBSERVATIONS ON THE MANNERS OF THE INDIANS* (Electronic ed. 2001), available at <http://docsouth.unc.edu/nc/bartram/bartram.html>.

¹⁰⁸ DOCUMENTING THE AMERICAN SOUTH, <http://docsouth.unc.edu/nc/bartram/bartram.html> (last visited Dec. 20, 2013).

¹⁰⁹ *Id.*

¹¹⁰ *About*, CREATIVE COMMONS, <http://creativecommons.org/about> (last visited Dec. 20, 2013).

¹¹¹ *History*, CREATIVE COMMONS, <http://creativecommons.org/about/history> (last visited Dec. 9, 2013).

C. Copyright vs. Plagiarism

Ownership of the expression of ideas is very important in scholarship. Any scholar's career depends on laying claim to some aspect of learning that can be associated with his or her name. This is one reason why universities make such an issue of plagiarism. Plagiarism is not a legal concept. Institutions create their own definitions of plagiarism, but, generally, plagiarism consists of the use of another person's original work without acknowledgment. In effect, plagiarism is the removal of the originating scholar's name from the expression of the idea.

Plagiarism and copyright infringement are similar concepts and can happen simultaneously, but they are not identical. Plagiarism is a moral or ethical offense that occurs when a plagiarist enhances his own reputation with the ideas of another. Copyright infringement is a legal offense. Infringement is a violation of the copyright holder's legal right to be the only one to exploit his work for economic or other gain.¹¹² Copyright infringement can occur even if the original author is acknowledged.

In regard to scholarly work, plagiarism is typically the greater concern. In general, works of scholarship do not possess great economic value. Scholars want their work acknowledged; this is the path to publication, tenure, and other forms of academic advancement. Far from profiting economically from their writing, authors of scholarly publications very often pay to have their own work published. The publication and accompanying enhancement of reputation are what present the greatest value, albeit not an explicitly economic value.

D. Economic Value? Not so much . . .

The images of the objects that we work with—1000-year-old handwritten manuscripts and 300-year-old dried plants glued onto old paper—are not economically valuable, at least not in normal markets.¹¹³ Our photographic copies are not particularly beautiful, and it is unlikely that many people would think them worth purchasing, but as primary sources for scholarship, these images hold tremendous value.

The digital images of the Venetus A manuscript available on the Homer Multitext project's website make it possible for anyone anywhere to read the oldest complete copy of Homer's *Iliad* in existence today.¹¹⁴ Before the Homer Multitext project, anyone who wanted to do this work either had to make an

¹¹² See 17 U.S.C. § 501 (2012).

¹¹³ The objects themselves probably are valuable. No doubt, there are collectors prepared to pay large sums for these objects due to their age or because they were assembled by famous historical figures. However, these objects are considered cultural heritage objects and are preserved by institutions dedicated to keeping such things safe.

¹¹⁴ *Archival Binary Data*, THE HOMER MULTITEXT, <http://www.homermultitext.org/hmt-image-archive/> (last visited Dec. 9, 2013).

expensive trip to Venice, having first negotiated access to the document with the Biblioteca Marciana (unlikely), or to find one of the extremely rare facsimile editions produced in 1903.

Digital images of plants collected in the Carolinas between 1700 and 1725 constitute the basis of an ecological field survey of the region done before extensive European settlement of the area. Before we began *Botanica Caroliniana*, anyone wishing to examine these collections had to go to London and negotiate access to the actual specimens in the Sloane Herbarium, which had to occur during museum opening hours and at the convenience of the curator. The collections remained largely unpublished and unexamined for 300 years. Now, we have published determinations (identifications of the taxonomic classifications of individual specimens) of several large collections¹¹⁵ and can continue our work in the comfort and convenience of our own homes and offices in South Carolina. Our images have very real value now—scholarly value, not economic value—and should maintain that value in the future as we and other scholars make use of them.

IV. SOLUTIONS

In the following sections, we propose several possible solutions to the problems described above.

A. Backtracking from Hyperownership: Fair Use

Not everyone agrees that all things should be the subject of ownership. Juei-Jung Ni notes that prior to the adoption of the CBD, some scholars wanted to put genetic resources under international control to prevent resources from being dominated by sovereign nations.¹¹⁶ The reasoning was that genetic resources are the common heritage of mankind and should, therefore, be available to all, not locked up in national legal regimes.¹¹⁷ Of course, the CBD took the opposite approach.¹¹⁸

The farmers' rights movement has risen out of interest groups who dislike large companies having monopolies over crop plants.¹¹⁹ Scholars have begun to

¹¹⁵ See, e.g., Patrick McMillan et al., *The Vascular Plants in the Mark Catesby Collection at the Sloane Herbarium, with Notes on Their Taxonomic and Ecological Significance* (Jan. 28, 2013), PHYTONEURON 1–37, available at <http://www.phytoneuron.net/2013Phytoneuron/07PhytoN-CatesbySloane.pdf>.

¹¹⁶ Kuei-Jung Ni, *Legal Aspects of Prior Informed Consent on Access to Genetic Resources: An Analysis of Global Lawmaking and Local Implementation Toward an Optimal Normative Construction*, 42 VAND. J. TRANSNAT'L. L. 227, 229 (2009).

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 231.

¹¹⁹ See Ryann Beck, *Farmers' Rights and Open Source Licensing*, 1 ARIZ. J. ENVTL. L. & POL'Y 167, 174 (2011).

argue that traditional knowledge does not qualify for IP protection under existing law because it is not new or original.¹²⁰ The Nagoya Protocol¹²¹ was added to the CBD in 2010 to clarify rules regarding access to and benefit-sharing of genetic materials in an attempt to make it easier for scientists to do work with genetic resources.¹²²

There are plenty of advocates for fair use of objects. Carson argues that copying for scholarship, especially where there is no economic harm, should be permitted as fair use.¹²³ Museums do not universally believe in holding tight the images of their collections, and many museum and library professionals embrace projects that would allow their holdings greater exposure.

For example, the Rijksmuseum in Amsterdam has quite recently begun to offer high-resolution images of its collection online at no cost and with no restrictions.¹²⁴ It intends to make its entire collection available. The director of collections points out that the Rijksmuseum is publicly funded and so the objects in its collection are effectively public objects.¹²⁵ He also notes that with the Internet it is nearly impossible to control the use of images and claims that the museum would prefer people to use its own high-quality images rather than poorer-quality images available from other sources.¹²⁶ The museum also sells higher-resolution images to commercial customers who wish to use the images

¹²⁰ See, e.g., A. F. Myburgh, *Legal Developments in the Protection of Plant-Related Traditional Knowledge: An Intellectual Property Lawyer's Perspective of the International and South African Legal Framework*, 77 S. AFR. J. BOT. 844 (2011).

¹²¹ See Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity, Oct. 29, 2010, available at <http://www.cbd.int/abs/text/articles/?sec=abs-04>.

¹²² See *id.* at 2–4. See generally Angelica Bonfanti & Seline Trevisanut, *TRIPs on the High Seas: Intellectual Property Rights on Marine Genetic Resources*, 37 BROOK. J. INT'L L. 187 (2011). It is hard to know what impact the Nagoya Protocol will have if and when it goes into effect; the document calls for more predictable laws governing access to genetic materials, presumably so that outside researchers do not face the complex and onerous procedures currently in place, but source nations will still have all the property rights granted by the CBD.

¹²³ Carson, *supra* note 14, at 66–69.

¹²⁴ Nina Siegal, *Masterworks for One and All*, N.Y. TIMES (May 28, 2013), available at <http://www.nytimes.com/2013/05/29/arts/design/museums-mull-public-use-of-online-art-images.html>; see *Works of Art*, RIJKS MUSEUM, available at <https://www.rijksmuseum.nl/en/explore-the-collection/works-of-art> (last visited Dec. 20, 2013).

¹²⁵ Siegal, *supra* note 124.

¹²⁶ *Id.*

for profit.¹²⁷ The Riksmuseum's model has (happily) received recognition and approval from within the world of professional librarians.¹²⁸

Other curatorial institutions have embraced policies that respect copyrighted works while aggressively sharing public domain data to promote science. The Hathi Trust digital library clearly categorizes its digital holdings into these general groups: protected by copyright law, protected by copyright law but available on a limited basis according to statute, copyrighted but with an open access license, eligible for copyright but released into the public domain, public domain (with some fine gradations among these to account for international differences in laws and licenses).¹²⁹ The Schoenberg Center for Digital Text and Image (SCETI) at the University of Pennsylvania begins its public statement of permissions with this assertion: "In almost all cases, the content of the Schoenberg Center's digital resources are drawn from the University of Pennsylvania Libraries collections.¹³⁰ For the most part, works which appear on the SCETI web site were published prior to 1923 and are in the public domain. SCETI goes on to assign permissions to other documents under the terms of a Creative Commons License.¹³¹

B. Creative Commons

Creative Commons (CC) provides a valuable mechanism for copyright holders to share their intellectual property broadly, with fine-grained gradations of rights to large segments of the public, while retaining specific rights for themselves. But a CC License is not a panacea for the problems that misuse of copyright poses for publicly-beneficial access to objects of study, especially if the particular license chosen undermines the ostensible goal of sharing scientific information.

For example, "The Plant List" is a database containing a working list of all known plants, compiled under the auspices of the Royal Botanical Gardens, Kew, and the Missouri Botanical Garden.¹³² The editors, working scientists at large Botanical Gardens, seem to encourage the use of this scientific data, and note that having asserted their copyright, they chose to make the data available under a Creative Commons License: "Use of the content (such as the classification, synonymised species checklist, and scientific names) for

¹²⁷ *Id.*

¹²⁸ Kevin Smith, *Museums Can Get Copyright Right*, DUKE UNIVERSITY LIBRARIES (June 14, 2013), <http://blogs.library.duke.edu/scholcomm/2013/06/14/museums-can-get-copyright-right/>.

¹²⁹ *Access and Use Policies*, HATHI TRUST DIGITAL LIBRARY (2013), http://www.hathitrust.org/access_use (last accessed Dec. 9, 2013).

¹³⁰ *Permission and Fair Use of Images*, SCHOENBERG CENTER FOR ELECTRONIC TEXT & IMAGE, <http://sceti.library.upenn.edu/permissions.cfm> (last accessed Dec. 9, 2013).

¹³¹ *Id.*

¹³² THE PLANT LIST, <http://www.theplantlist.org/> (last visited Dec. 20, 2013).

publications and databases by individuals and organizations for not-for-profit usage is encouraged, on condition that full and precise credit is given to The Plant List and the conditions of the Creative Commons License are observed.”¹³³

The particular version of the Creative Commons license chosen by The Plant List, however, is the “Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License,” which states that, “You may not alter, transform, or *build upon this work*.”¹³⁴ Further, the creators of the Plant List preclude using their data on a “public portal or webpage,” although the Creative Commons License they grant to their data makes no such prohibition. A project in, for example, the biodiversity of the Southeastern United States might want to integrate modern, accepted plant names into a database of historical botany, tracking all the different names that early explorers applied to the plants they discovered; this would require transforming and building upon data from The Plant List, and publication in the twenty-first century would require placing the results on a “public portal or web-page.” Since none of this is permitted, The Plant List offers almost no value for professional scholars of botany working in public.

As a list of names, this data is arguably akin to the telephone directory that was at issue in *Feist*. The Plant List is a work of great scholarship, but as it purports to document scientific facts (“what plants exist in the world”), a claim of copyright must largely depend on the “sweat of the brow” argument, an argument rejected by the court in *Feist*.¹³⁵ Absent any written argument from the editors of The Plant List, its creators seem to confuse issues appropriate to “copyright” with issues of academic integrity, trying to avoid plagiarism through a claim to hold copyright on an enumeration of scientific facts (albeit a vast and admirable one).¹³⁶

¹³³ *Terms and Conditions*, THE PLANT LIST, <http://www.theplantlist.org/terms/> (last visited Dec. 9, 2013).

¹³⁴ *Noncommercial Attribution License Agreement*, *supra* note 8 (emphasis added).

¹³⁵ Annotations on items in the list are, of course, the intellectual creations of their authors and entirely appropriate for the protections of copyright.

¹³⁶ We would contrast The Plant List’s choice of a “No Derivative Works” license with the policies surrounding the Hubble Space Telescope (HST). Researchers who, through a process of highly competitive review, secure observation time on the HST *may* enjoy a period of exclusive access to the imagery (up to one year), so they can be sure to be the first to capitalize professionally from the data they commissioned. *5.1 Data Rights, Hubble Space Telescope Call for Proposals for Cycle 21*, SPACE TELESCOPE SCIENCE INSTITUTE (Dec. 2012), http://www.stsci.edu/hst/proposing/documents/cp/5_Data_Rights2.html#1819527. After that year, but “[a]t the end of the proprietary period, the data become available for analysis by any interested scientist through the HST Archive.” *Id.* Far from discouraging derivative works, NASA hosts a website dedicated to encouraging amateur researchers and enthusiasts to download *and reprocess* Hubble imagery, even providing specialized image-processing tools, under open-content licenses,

C. Fees for Services

It can be costly to an institution to support certain kinds of research. Our digitization work at the British Library required two days of labor from several members of the Library's staff, the use of the Library's photographic equipment, and exclusive use of several rooms. All of this incurred real, and specific expenses, which the British Library was able to itemize. Our project paid fees to offset these costs, and conducted photography of several ancient papyrus fragments.

In this case, where digital images of specific objects did not yet exist, this was a workable, practical, and fair arrangement, cost-neutral to the institution. The institution had the objects in its charge, according to its institution mission. We had a specific interest in digital images of them, and we paid fees to offset the cost of digitization, in exchange for which we got precisely the data we wanted and first access to that data. The British Library got high-quality digital images of its own materials at no cost. By virtue of the licensing agreement we struck with the institution, we can expose our images freely and publicly, extending to others non-commercial rights, and, thus, providing a service to scholarship—allowing our research to be reproducible and potentially falsifiable—and the institution is free to make its own arrangements with anyone who is interested in commercial rights.

Charging fees for services is entirely appropriate in cases where the services and their costs can be itemized. Such an itemization could even include forward-looking fees to defray the ongoing cost of digital storage. A research budget that included “data management fee to partner institutions” as a line-item would raise no eyebrows. This is very different, though, from a policy of charging fees for access to extant digital representations about historical objects or scientific data (which someone else has already paid to create), when those fees exist because “the museum should be able to protect its interest in the digital reproductions so as to prevent degradation of the images through overuse by third parties.”¹³⁷

D. Controlling Use Through Professional Restraints

In 2009, scientists confirmed the existence of four extra-solar planets orbiting the star, HR8799, by applying novel techniques of image-processing to decade-old archival images captured by the Hubble Space Telescope. This re-processing of old data identified the orbits of these planets, their size (some of

to help. *Hubble Image Processors*, HUBBLESITE, http://hubblesite.org/get_involved/hubble_image_processors/ (last accessed Dec. 9, 2013).

¹³⁷ Kogan, *supra* note 78, at 585. See also Richard Shone, *Copyright: Fair or Foul?*, 148 BURLINGTON MAGAZINE 659 (Oct. 2006), who decries the ill-will engendered by museums through “the often scandalously high costs for permission to reproduce rather than the charge for supplying the image itself.”

them thirteen times larger than Jupiter), and the composition of their atmospheres.¹³⁸ These images came to exist because of breakthrough technology and the expenditure of billions of dollars, and yet these scholars were able to download them, share them, reprocess them, and publish them freely. As a result, the universe is an incrementally larger and more interesting place, one which people understand a little bit better thanks to the work of these scientists.

This story is unexceptional in the field of astronomy. It is much rarer in fields dedicated to human culture, in which data resides under the curation of libraries and museums. Unfortunately, it is also rare in scientific fields where primary source data is controlled by curatorial institutions. The solution to the problem depends on the consideration of the nature of copyright, competing claims of public interest, distinction between law and academic practices (i.e., between copyright infringement and plagiarism), appropriate use of contracts and licenses, and evolving assumptions about the use of scholarly information.

A frequent objection to fair use is based on the argument of universality: “But the Library/Museum/Botanical Garden cannot give *everyone* that kind of access.” The perceived threat of “overuse by third parties” is a variant of this.¹³⁹ This argument is flawed in that the institution does not have to give everyone the same access; if a resource is limited, scholars can apply to use it, and the institution can select the best users.

The Hubble Space Telescope situation is an extreme example of a highly finite and highly expensive resource that clearly cannot be shared universally. Scientists must apply for observing time on this resource, and a committee selects projects based on merit. In certain cases, the Principal Investigators (PIs) of successful applications receive exclusive access to their data for up to one year, after which the data is freely available to everyone.¹⁴⁰ In other cases the collected data is immediately available from the project’s archives.¹⁴¹ Thus, NASA ensures that the device is used in pursuit of the most worthy objectives; the winning PIs get data from observations tailored to their project; and the larger public gets unencumbered access to that data as well. The possibility of unscrupulous researchers “scooping” other PIs’ data is mitigated, as it has ever been, by the ethical standards of the professional disciplines and institutions of higher learning.

Similar professional restraints would ensure proper use and attribution of other kinds of data, such as The Plant List (TPL), were it to modify their “no derivatives” license.¹⁴² Responsible scholars using data from TPL would be

¹³⁸ B. R. Oppenheimer et al., *Reconnaissance of the HR 8799 Exosolar System. I. Near-infrared Spectroscopy*, 768 *ASTROPHYSICAL J.* 24 (2013).

¹³⁹ Kogan, *supra* note 78, at 585.

¹⁴⁰ 5.1 *Data Rights*, *supra* note 136.

¹⁴¹ *See, e.g., id.*

¹⁴² *Terms and Conditions*, *supra* note 133; *Noncommercial Attribution License Agreement*, *supra* note 8.

expected to cite it, as they would cite any other source of data they did not generate on their own, both as a matter of professional ethics and to bolster the credibility of their derivative work. TPL is widely known, well-vetted, and rich with virtues that invite proper attribution even in the absence of legal obligations.

E. Allowing a Revenue Stream

Some curatorial institutions have come to depend on revenues from licensing images and data to which they claim copyright. It has been proposed that museums, for example, could charge license fees for commercial users, while granting free licenses for non-commercial use.¹⁴³ But such a scheme still requires a claim to rights that might be unjustified, might lead to confusion, and might cause a stifling effect on knowledge down the road.

There are other solutions that do not require dubious assertions of rights. An institution that creates documentary images or collaborates with individual researchers in the creation of images could generate and sell digital masters processed at a highly professional level and aimed at the needs of print publications—using a CMYK color model, for example, instead of RGB. The fee would be for the electronic file (and the expertise that created it). Customers would be paying for the convenience of receiving a professional digital negative, along with professionally edited metadata. This follows the well-established “services” model that serves well companies specializing in open-source software such as Linux, who provides software for free download (as required by its license) but sells skilled professional support. It is always reasonable for an institution to include a fee for services, overhead, and access as a condition for allowing researchers to use space, equipment, and the staff’s time. Such charges are an expected and appropriate item in any grant proposal’s budget.

Recognizing that images of historical artifacts belong in the public domain would not necessarily limit institutions’ abilities to sell reproductions, coffee mugs, *vel sim.*, from their catalogues and gift shops. Visitors purchase souvenirs at museum gift shops impulsively as mementos of visits, to bring home a reminder of an experience. The existence of freely available digital images in an archive online is unlikely to deter these sales.

CONCLUSION

International property law is a new field that encompasses such topics as ownership of cultural objects, rights of indigenous peoples to ancestral lands, title to deep seabed minerals, rights to transmit greenhouse gases, etc. These types of property rights have traditionally been considered as belonging to the nation within whose borders the property lies, but these situations spill over

¹⁴³ Smith, *supra* note 128.

national jurisdictions and complicate the question of national sovereignty. The international legal system now regulates actors other than nations, such as businesses or individuals. States have become the agents of international bodies, creating national legal regimes to enforce international standards. Some scholars suggest that the concept of territoriality will need to be reconfigured.¹⁴⁴ For our purposes, international law affects the private property rights of individuals, businesses, and other non-state entities.¹⁴⁵ This is a complex situation, but one that inevitably must be made *more* complex by distinguishing purely commercial issues from issues of science, scholarship, and the public good.

Scientific progress and cultural understanding depend on access to data, whether in the form of words and illustrations on a page, lists of known facts, or mechanically captured documentation of the natural world. “Access,” for the purposes of scholarship in the twenty-first century means more than a view through the portal of a web-browser’s window. Useful access means the ability to copy, manipulate, excerpt, and analyze data, *and to share publicly both the results and the data on which they depend.*¹⁴⁶

Scientific progress and cultural understanding also depend on an environment in which scholars and researchers receive credit for their contributions, and one in which readers know who is responsible (for praise or blame) for a piece of scholarship. The curatorial institutions—libraries, museums, botanical gardens, zoos—require funds to operate, and must be free to exercise judgment and care regarding the handling of the objects in their charge. Further, the public deserves access to knowledge at many levels and for many purposes, from the art-lover sitting before a painting, to school children being introduced to the archaeology of the past, to the amateur historian, essayist, and

¹⁴⁴ See generally Graeme B. Dinwoodie, *Developing A Private International Intellectual Property Law: The Demise Of Territoriality?*, 51 WM. & MARY L. REV. 711 (2009).

¹⁴⁵ John G. Sprankling, *The Emergence of International Property Law*, 90 N.C. L. REV. 461, 469 (2012).

¹⁴⁶ This is the kind of analysis specifically forbidden by many institutional policies. For example, the British Library’s policies governing their online content in general, states that users may not “systematically extract and/or re-utilise the content of the Site, including but not limited to the utilisation of any data mining, robots, or similar data gathering and extraction tools to extract (whether once or many times) for re-utilisation of any substantial parts of this the Site.” *Copyright and Your Use of the British Library Website*, BRITISH LIBRARY, <http://www.bl.uk/aboutus/terms/copyright/index.html> (last accessed Dec. 9, 2013). On the other hand, the British Library’s *Illuminated Manuscripts* site is to be commended for clearly marking certain of its contents as in the public domain or governed by Creative Commons License, and for reducing technological barriers to downloading high-resolution images. *Access Reuse Guidance Notes for the Catalogue of Illuminated Manuscripts*, BRITISH LIBRARY, <http://www.bl.uk/catalogues/illuminatedmanuscripts/reuse.asp> (last accessed Dec. 9, 2013).

citizen-scientist with no institutional affiliation or formal credentials, but who is poised to decipher an ancient script, elucidate obscure symbolism, or discover a comet.

These goals are not incompatible, nor does a harmony of these goals require overturning long-established practices. A century of professional research on the works of Charles Dickens or Jane Austen, for example, has proceeded happily with scholars receiving credit for their intellectual creations and libraries conducting their curatorial business, without anyone claiming copyright over these nineteenth century works (or demanding that “no derivatives” be made based on access to the novels). But these goals may require overturning practices put in place within the past two decades, as the risks and rewards of a highly networked world begin to come into view.

In the matter of digital reproductions of objects not themselves protected by copyright, public curatorial institutions should assume that their mission is not to ensure that data appears on their own websites, but to ensure that it can appear on as many websites as possible.¹⁴⁷ For uses clearly aligned with the public-service missions of museums and libraries—the non-commercial activities of teaching, individual contemplation, and scholarship—institutions should assume that their data is free to use and reuse. These assumptions would preclude a business model that depends on fees for access. This would not preclude the owners from commercially exploiting the objects through attractive and innovative products including apps, posters, prints, models, souvenirs, and bound facsimiles of manuscripts. For digital data where copyright clearly does apply, institutions can assert their rights as copyright holders to grant free non-commercial licenses broadly, while negotiating specific commercial licenses.

There will be some cases in which institutions find themselves in possession of digital data that is in the public domain. In these cases, the institutions cannot control the terms under which others use the data, and may find themselves competing with commercial entities in the free market. Even in these cases, museums and libraries can still hope to generate revenue based on digital data in the public domain. The curatorial institution will have the significant advantage of the domain expertise in-house, direct access to the original objects and (thanks to magazines, websites, catalogues, and gift-shops) a path-to-market with immediate access to the most interested potential consumers.

Finally, institutions can abandon the notion that they are empowered, or even obliged, to police every reference, description, reproduction, and

¹⁴⁷ This formulation of a museum’s obligations was coined in conversation by William Noel, Director of the Penn Libraries’ Special Collections Center and Schoenberg Institute for Manuscript Studies. William Noel (@willnoel), Twitter (Dec. 4, 2013, 5:58 AM), <https://twitter.com/WillNoel/status/408188665140346880> (“Owners of cultural heritage. Your task is not to get your stuff up on your website. It is to get it up on other peoples, freely and fully.”).

attribution to the objects in their collections. The professional standards in scholarly disciplines are at least as well-equipped to police plagiarism and sloppy research, as has been done for centuries for works based on printed books circulating freely from traditional libraries.