Part III: International Developments: the Case for Library Engagement

The framework of global copyright debates and the why and the how of taking part
Sara Klein and Jess Whyte

9 International Copyright Issues in Digital Preservation

Abstract: The goal of this chapter is to review various legal concepts of copyright as they relate to digital preservation. Three topics in digital preservation have been chosen for comparison and analysis: reproductions and their use, technological protection measures (TPMs), and orphan works or abandonware. The chapter focuses on three national and regional legal frameworks in Canada, the US, and the European Union (EU) and examines how each respectively handles the issues for each of the chosen topics. Similarities and differences are identified and areas where legal opinion may be vastly different are highlighted and explored.

Keywords: Technological protection measures; Copying; Library materials – Reproduction; Digital preservation; Orphan works (Copyright); Copyright – Canada; Copyright – European Union; Copyright – United States

Introduction

Preservation of collections is a central function of many libraries and digital content presents unique challenges within that mandate, including copyright complexities. The goal of this chapter is not to discourage digital preservation work, it is to enable it. A copyright concern is just that, a concern, and one that can often be resolved or mitigated.

The percentage of digital content held or managed by libraries is increasing in volume, both through ease of production and reproducibility. In addition, there is a diversity of digital formats and platforms available, with each presenting its own risks of obsolescence. Regarding copyright, there are diverse and high numbers of associated rightsholders, license holders, and creators including some who may be anonymous. Licenses relate to various means of access including online or streaming and might involve purchase or user licenses with conditions which vary considerably and change frequently. Other issues include changing platforms and providers. Content itself is changing with new forms like mashups which combine various digital information resources. Digital preservation, much like traditional preservation, seeks to mitigate some of these risks.

Before continuing, the distinction between digital preservation and digitization in the context of this chapter needs to be clarified. Digitization is the process
of migrating content from a non-digital format to a digital one, for example, scanning a printed photograph and making a JPEG version. Digitization is a form of reproduction that comes with its own copyright and access concerns. Digital preservation, however, is the ongoing management of digital objects in a steward’s care and is the focus of this chapter.

This chapter also makes a distinction between preservation and access functions. This distinction prevents the copyright assessment of one function from affecting the library’s ability to perform the other. Preservation is the maintenance of an object over time. Access is the location and use of an object, digital or otherwise. Preservation and access will always be linked, and the goal of preservation may be enduring access, but the activities undertaken in preserving content may be distinct from the activities undertaken in ensuring access. For example, a conservator may restore a painting so that it can be enjoyed by gallery visitors, but the skills, tools, and actions to do that restoration are separate from those needed to display that same painting in a public gallery. Practitioners may even preserve or restore an object they cannot yet provide access to, in anticipation of being able to do so in the future.

Some actions required to preserve a digital object might be considered copyright infringements unless they are sanctioned by specific exceptions or limitations in the legislative framework governing any particular library’s contractual obligations in relation to purchase or access to information resources. For example, digital preservation practices often include:

– Making and storing multiple copies of an object to reduce the risk of hardware or system failure
– Migrating an object from one file structure to another to reduce the risk of obsolescence as in moving content from a proprietary database to a text-only format for preservation purposes and the maintenance of access
– Emulating or adapting a software environment varying from that used with original hardware in order to access content no longer accessible, including accessing ebooks designed for out-of-date hardware
– Changing software to access information resources in the case of obsolescence, current and potentially in the future, and
– Running or providing access to software or digital content that does not have an identifiable owner, apparent maintenance or support, frequently known as abandonware.

There are aspects of copyright law that seek to restrain these preservation activities; any activity beyond individual or original use of a work is usually restrained.

Librarians, library associations, users, and members of the digital preservation community have flagged copyright concerns related to digital preservation
and lobbied to secure change. Three major topics have emerged at the intersection of digital preservation and copyright law:
- Reproductions or copies for preservation purposes
- **TPMs**, sometimes referred to as, or may include, Digital Rights Management (DRM), and
- Orphan works.

This chapter provides an overview of each topic, followed by an explanation of how different copyright regimes in the US, Canada, and the European Union (EU) approach the issues related to each topic including the impact on digital preservation work.

**Reproductions**

Replication, reproduction, or copying relies on keeping copies of digital objects, ideally with backups stored in different physical locations, possibly in different formats. For example, images may be reproduced in various formats like JPEG or TIFF. While copying or reproducing a work for preservation purposes by a library is typically protected or included as an exception under modern copyright regimes, grey areas emerge in relation to any modification such as changing the file format or copying a work unnecessarily. Some digital resources, due to copyright law, may have requirements to track the number of copies accessed or used. For example, a library cannot create multiple copies for distribution or access under the guise of a preservation exception; a third party or automated software, as part of its preservation or access processes, might be making copies or derivatives without the library’s direct knowledge. In this instance, it might not be possible to determine what arrangements have been made for preservation behind the scenes. Backup mechanisms and procedures are somewhat opaque. It is not clear what legal requirements would be in place in the situation just outlined. While actions taken to preserve digital content are likely to be protected under fair dealing or fair use, given the purpose of the copy, the nature of the materials, and the market impact, they may not be explicitly protected. That said, lack of legal certainty should not prevent libraries from fulfilling their mandates and taking steps to preserve digital information.

Another complexity is the use of shared networks or resources. Many libraries operate as part of consortia for agreed upon or shared purchasing of library collections. Others collaborate with regional or like groupings of libraries with shared storage arrangements or distributed digital preservation plans. Libraries
benefit from these consortia because of the distribution of the work and lowered costs. Collaborative library operations bring additional layers of intricacy and detail. There are shared contractual obligations and unilaterally owned items on shared servers. Examples of shared digital preservation include:

- **Chronopolis** digital preservation network, a program for the preservation of digital collections in three locations across the US
- **CLOCKSS** network (Controlled Lots of Copies Keep Stuff Safe), a dark archive run by its community members that preserves content at twelve international nodes with over 34,000 serials titles and 360,000 book titles at the time of writing which are to be used only in the case of a trigger event such as a natural disaster
- Belgium-based **SAFE PLN network**, an international distributed preservation network based on the LOCKSS technology which creates multiple preservation copies of born-digital, open-access collections and is currently hosted by seven different institutions, and
- **WestVault**, which is part of the Council of Prairie and Pacific University Libraries (COPPUL) in Canada and uses OwnCloud and the LOCKSS software to ingest digital content into a distributed digital preservation storage network.

Libraries participating in these digital preservation arrangements will hold either a full copy of the digital collection or a partial copy. If anything happens to one copy, it can be repaired or replaced by a version held at another member institution. Some distributed storage networks require each depositing and holding member to own its own copy of the works ingested, but most do not. The networks serve as dark archive services, which are inaccessible to the public and where content can be retrieved by the depositor only. They do not operate as open access or distribution points. Much of their value is in the ability to access geographically distributed, affordable, and secure digital storage that relies on partner memory institutions and not on a costly and privately-owned service like **Amazon Web Services** (Trehub et al. 2019).

Differences in how copyright regimes handle reproductions for preservation purposes can confuse and hamper the creation of collaborative preservation networks, particularly cross-border ones because conflicting laws might govern behaviour differently for the various organizations involved, leading to confusion or inoperability. Because of different copyright laws in different jurisdictions, it may be overly complicated, or in some cases impossible, to complete projects across borders in a way that adheres to both sets of laws. Many networks deal with these issues by keeping the networks dark and/or controlled, separating preservation and access with access available as a failsafe mechanism to be used
only in the case of a disaster, or deferring copyright responsibility to the institutions depositing content.

**Technological Protection Measures (TPMs)**

Technological protection measures (TPMs), sometimes referred to as digital locks, are a means of controlling access to and use of digital content by technological means through hardware or software or a combination of both. They are used to prevent or restrict copying. For example, TPMs affecting libraries might be encrypting an ebook or DVD; applying a geographical restriction to use; blocking the download of streaming content; setting time limits for use; including watermarks or labels on a PDF document; determining the number of simultaneous users of information resources; or embedding passwords or keys on software.

TPMs are a challenge because they can render materials impossible to access, let alone preserve. TPMs themselves have a limited life and change frequently. They are notoriously susceptible to changing standards, business practices, and trends. Because of changing TPMs, a movie or ebook accessible ten years ago may no longer be available if the company that owns the format no longer makes or supports the software or keys needed to read it. With digital works encumbered by TPMs, and a general context of constantly changing technology resulting in obsolescence, file formats may not be able to be easily changed; passwords can be lost; printing or copying can be blocked; and purchased digital content can be withheld from owners seeking to access, download, copy, or preserve purchased content. While TPMs are intended to protect digital works from copyright infringement, they can also impede use and prevent legitimate copying under fair use or fair dealing, or some other legitimate copyright exception, and affect materials which might be in the public domain.

TPMs cannot always differentiate between legitimate and infringing uses of content. A library might rightfully, for example, migrate a work to another format for preservation. The act of preservation might be legal within the relevant copyright regime, but a legal act could still be technically impeded by overzealous TPMs which conflict with the exceptions afforded within the legislation to libraries, heritage institutions, or individual consumers. Depending on the copyright regime, circumvention of the TPMs might be specifically prohibited.
Orphan Works

As described in greater detail elsewhere in this book, orphan works are works “for which copyright owners cannot be identified or contacted to obtain permission for use” (Borgman 2007, 108). Abandonware refers to software that is no longer maintained and is ignored by its creators. The copyright complexities created by orphan works are not unique to digital preservation and there are existing strategies for mitigating risks, which focus on when a work is published or access to it is provided. These strategies include the use of takedown notices, applications for exemptions, or documenting failed attempts to locate copyright holders. In a library preservation context, copyright infringements of orphan works are unlikely to become a significant issue due to a lack of profit motivation. Preservation-specific actions on orphan works are unlikely to trigger a copyright case for libraries.

One digital preservation strategy that may lead to issues with orphan works is emulation. Emulation is a common tactic when dealing with orphan works or abandonware because these works or software are often older and no longer maintained. Emulation is when you use one computer system to imitate or pretend to be another computer system. Emulation is sometimes used to preserve older or obsolete content. For example, emulation may be used to provide access to an older file format when a modern method is not available. Emulation as a preservation strategy is most prevalent in interactive works, such as video games, software, or interactive art, when the goal is to preserve the experience alongside the content (Corrado and Sandy 2017, 222–224), or to enable performance of a work so that it may be recorded for posterity. Emulation might be used with donations of personal papers to view content for appraisal where author’s manuscripts or archives are in obsolete formats, or research data management where scientific software might be needed to reproduce results. Libraries and stewards responsible for the ongoing management of content try to preserve the look and feel of the context in which the work was created, its functioning, or any digital marginalia included. As a strategy, emulation can be labor-intensive, sometimes requiring a bespoke solution that can be difficult to maintain over the long term.

The issues emulation raises within digital preservation are layered. One must find and use not only the object itself, but the software needed to perform or view it on-screen. Software may be a single application, or it may include other software needed to run the application, like an operating system. Software codes can be copyrighted and may have been distributed with licenses, and the content within the software may also be licensed, for example music, videos, or fonts. Each of these discrete areas can be taken up under copyright. Curation-ready soft-
ware, according to the Software Preservation Network, has known terms under which the software can and should be made available (Rios et al. 2017).

**Digital Preservation and Copyright Legislation**

The following sections provide an overview of the relevant copyright law relating to digital preservation in Canada, the United States, and the European Union, and an analysis of its impact on library activities and digital preservation work in each of the regimes examined. There are similarities across the regimes and some key differences. The area is in a constant state of flux. Laws are changed and interpreted all the time, and legal review and treaty negotiations with respect to copyright regimes are ongoing. There is frequently a gap between stated policy goals and the implementation of legal changes. Within each jurisdiction, the three topics of reproductions, technological protection measures, and orphan works are examined.

**Canadian Legislation**

The Canadian *Copyright Act*, as in most countries, grants copyright owners the sole and exclusive right to reproduce, perform, or publish a work, and to control the ability to benefit from that work, monetarily and otherwise. The rights are subject to limitations and exceptions, and particularly of interest are the exceptions granted to libraries, archives, museums, and educational institutions (Harris 2014). Canada, in a prescient move, overhauled all copyright legislation in 2012, in the middle of the digital explosion. As of this writing, the last statutory review of the *Copyright Act* was in June 2019, but its recommendations have yet to be enacted (Canada. Parliament. House of Commons 2019). The approach of the Canadian act in relation to the three areas identified is outlined below.

**Reproductions**

The Canadian *Copyright Act* (Canada. Justice Laws Website. 2020), identifies exceptions to infringement for libraries, archives, educational institutions, and museums in *Section 30*. Libraries may copy published and unpublished works protected by copyright so that they may maintain and preserve their collections:
Management and maintenance of collection

30.1 (1) It is not an infringement of copyright for a library, archive or museum or a person acting under the authority of a library, archive or museum to make, for the maintenance or management of its permanent collection or the permanent collection of another library, archive or museum, a copy of a work or other subject-matter, whether published or unpublished, in its permanent collection

(a) if the original is rare or unpublished and is
   (i) deteriorating, damaged or lost, or
   (ii) at risk of deterioration or becoming damaged or lost;
(b) for the purposes of on-site consultation if the original cannot be viewed, handled or listened to because of its condition or because of the atmospheric conditions in which it must be kept;
(c) in an alternative format if the library, archive or museum or a person acting under the authority of the library, archive or museum considers that the original is currently in a format that is obsolete or is becoming obsolete, or that the technology required to use the original is unavailable or is becoming unavailable;
(d) for the purposes of internal record-keeping and cataloguing;
(e) for insurance purposes or police investigations; or
(f) if necessary for restoration.

There is a caveat. The exceptions do not apply if an appropriate copy is commercially available:

Limitation

(2) Paragraphs (1)(a) to (c) do not apply where an appropriate copy is commercially available in a medium and of a quality that is appropriate for the purposes of subsection (1).

Issues arise with computer storage where backup copies and automated redundancies are part of the preservation process early on. A robust digital preservation strategy for libraries relies on multiple copies, even when a commercial copy is readily available. The best protection is to separate preservation functions from access. The preservation of digital content and the creation of backup copies in a dark storage inaccessible to most is unlikely to trigger a copyright case, whereas proliferating and/or distributing those copies online might. The separation of preservation and access permits libraries to address the copyright complexities of each separately without jeopardizing either mandate.
Technological Protection Measures

Section 41 of the Canadian Copyright Act specifically addresses TPMs and Rights Management Information and prohibits circumvention by various means:

41.1 (1) No person shall
(a) circumvent a technological protection measure within the meaning of paragraph (a) of the definition technological protection measure in section 41;
(b) offer services to the public or provide services if
   (i) the services are offered or provided primarily for the purposes of circumventing a technological protection measure,
   (ii) the uses or purposes of those services are not commercially significant other than when they are offered or provided for the purposes of circumventing a technological protection measure, or
   (iii) the person markets those services as being for the purposes of circumventing a technological protection measure or acts in concert with another person in order to market those services as being for those purposes; or
(c) manufacture, import, distribute, offer for sale or rental or provide — including by selling or renting — any technology, device or component if
   (i) the technology, device or component is designed or produced primarily for the purposes of circumventing a technological protection measure,
   (ii) the uses or purposes of the technology, device or component are not commercially significant other than when it is used for the purposes of circumventing a technological protection measure, or
   (iii) the person markets the technology, device or component as being for the purposes of circumventing a technological protection measure or acts in concert with another person in order to market the technology, device or component as being for those purposes.

For example, an individual may copy a non-infringing reproduction of a song from a laptop to a smartphone for personal use but cannot do so if the action involves circumventing technological measures preventing such an occurrence. Despite the 2012 overhauls in the Copyright Act generally, no explicit exceptions exist for the circumvention of TPMs by libraries, archives, or museums. Canadian digital preservationists cannot circumvent TPMs to preserve digital works for the future. The lack of legal specificity affects the preservation of ebooks and software.

In 2018, the Canadian Federation of Library Associations /Fédération canadienne des associations de bibliothèques (CFLA-FCAB) submitted a brief to the statutory copyright review process including five recommendations for changes to the Copyright Act. On the issue of TPMs, the CFLA-FCAB recommended “that Parliament amend the Copyright Act to make it clear that the Act is technologically neutral and that circumvention of TPMs is permitted for non-infringing,
digital and analog uses, in sections 29; 30.1–30.5; and 80 (1)” (CFLA-FCAB 2018). Similar calls were submitted in briefs from the Canadian Association of Research Libraries/Association des bibliothèques de recherche du Canada, Canadian Council of Archives/Conseil canadien des archives, the Canadian Museums Association/Association des musées canadiens, Creative Commons, Education International, MacEwan University, the Ontario Council of University Libraries’ Digital Curation Community, the Organization for Transformative Works, the Union des écrivaines et des écrivains québécois, and the University of Guelph. According to Pascale Chapdelaine at the University of Windsor, the introduction of TPMs to digital objects has significantly curtailed the application of exceptions in the Copyright Act (Chapdelaine 2018, 9).

The Canadian Parliamentary Standing Committee on Industry, Science, and Technology’s (INDU) review of the Copyright Act, taking the representations received from various groups into consideration, made 36 recommendations for change. Recommendation 19 speaks directly to TPMs:

that the Government of Canada examine measures to modernize copyright policy with digital technologies affecting Canadians and Canadian institutions, including the relevance of technological protection measures within copyright law, notably to facilitate the maintenance, repair or adaptation of a lawfully-acquired device for non-infringing purposes (Canada. Parliament. House of Commons 2019).

The outcomes of the report are yet to be taken up. Currently, no specific exception for the circumvention of TPMs for the purposes of preservation exists in Canadian law. In addition to the fact that there is no stated digital preservation exception, the definition of TPMs itself has been interpreted broadly in Canada with the consequences that acts regarded as legitimate within the law currently could be interpreted differently by the courts. Although the federal case Nintendo of America Inc. v. King & Go Cyber Shopping (2005) Ltd, 2017 FC 246 does not deal with preservation, its outcome has a wide-ranging effect on future conduct. Taking up the issue of TPMs for the first time, the Court found in this case that the Act’s definition of TPMs is broad, and wrongdoing could be found even if no actual infringement occurred (Crowne 2017). The potential for infringement of the Copyright Act and the absence of appropriate exceptions for educational institutions, libraries, archives, and museums present strong disincentives and barriers to digital preservation and contribute to a lack of sustainability for works ensconced in TPMs. As a minimum, bit-level preservation may be possible but long-term accessibility and availability might be unlikely.

---

1 Nintendo of America Inc. v. King, 2017 FC 246 (CanLII), [2018] 1 FCR 509.
Orphan Works

When dealing with orphan works or abandonware, Section 77 of the Canadian Copyright Act assigns the Copyright Board of Canada/Commission du droit d'auteur du Canada the power to issue non-exclusive licenses for the use of works or other copyright subject-matters when the owner of the copyright cannot be located. Applications are reviewed on a case-by-case basis. In order to approve a request, the Board must be shown evidence that the applicant has made a reasonable effort to locate the rightsholder and that the rightsholder could not be located through that effort. The Copyright Board may then approve a request and issue a conditional nonexclusive license. The Board can also limit the types of uses permitted by the licenses, such as limits on reproduction, publication, performance, and distribution. The Copyright Board may issue licenses permitting certain uses including reproduction, publication, performance, and distribution (US Copyright Office 2015, 30–31). There are some situations which comply with exceptions under the Act and do not require an application, for example educational use. Preservation, even within an educational context, though, is not explicitly dealt with as a reason for exemption. As of this writing, an average of between 5–20 licenses have been awarded every year since 1990 (Canada. Copyright Board of Canada n.d). For digital preservation work in Canada related to orphan works, a Board-issued license is unlikely to be required unless access is being provided to the work, as in publishing it online or providing access to abandonware software in an online emulator outside of educational use.

United States Legislation

US copyright law protects copyright owners’ rights, but also the public’s rights. The purpose of most copyright laws is to encourage the creation of new works, but there are limits on the protections provided within the law so that people may refer to or invoke or, in the case of libraries, archives, and museums, collect or preserve works and contribute to the growth of knowledge. A major legislative event after the passing of the US Copyright Act of 1976 was the passage of the Digital Millennium Copyright Act of 1998 (DMCA) which implemented two World Intellectual Property Organization (WIPO) treaties. The passage of the DMCA enacted revisions to the 1976 Act by introducing rules to deal with the foreseen potential explosion of reproduction and distribution that was arriving with growing use of the internet and online services (US Copyright Office 1998).
Reproductions

Under Title 17 of the US Code, which contains the copyright laws, §108 addresses reproductions by libraries and archives specifically:

108. Limitations on exclusive rights: Reproduction by libraries and archives
(a) Except as otherwise provided in this title and notwithstanding the provisions of §106, it is not an infringement of copyright for a library or archives, or any of its employees acting within the scope of their employment, to reproduce no more than one copy or phonorecord of a work, except as provided in subsections (b) and (c), or to distribute such copy or phonorecord, under the conditions specified by this section...(US Copyright.gov n.d.)

Libraries and archives have a limited exception to the protected reproduction and distribution rights when necessary to maintain or preserve their collections (LaFrance 2017, 241). Exceptions must fall within the allowances of fair use and within a scope so as not to infringe. As noted, §108 (a) for published works in particular allows libraries and archives or any of their employees to reproduce and distribute works under the following conditions:

1) the reproduction or distribution is made without any purpose of direct or indirect commercial advantage;
2) the collections of the library or archives are (i) open to the public, or (ii) available not only to researchers affiliated with the library or archives or with the institution of which it is a part, but also to other persons doing research in a specialized field; and
3) the reproduction or distribution of the work includes a notice of copyright that appears on the copy or phonorecord that is reproduced under the provisions of this section, or includes a legend stating that the work may be protected by copyright if no such notice can be found on the copy or phonorecord that is reproduced under the provisions of this section.

If a work is being reproduced “solely for the purposes of preservation and security or for deposit for research use in another library” (Subsection (b)), the law allows for “three copies or phonorecords of an unpublished work duplicated solely for purposes of preservation and security or for deposit for research use in another library or archives...” Similar conditions apply: first, the work to be reproduced is currently in the institution’s collection; and second, any reproduction that is copied in a digital format cannot be distributed or made available in that format outside the premises of the library or archive. A point of contention is how one defines “the premises.” Must a server be located on the premises of an archive for example, or can it be located remotely for use?

Subsection (c) addresses reproduction for the purposes of replacing damaged, deteriorating, lost, or stolen items, or reproduction in the case of a work where the
existing format in which it is stored has become obsolete. Reproductions in these cases are also subject to restrictions. First, the library or archive must determine, with reasonable effort, that an “unused replacement cannot be obtained at a fair price”; and second, any digital reproduction made cannot be made available to the public in its digital format outside the premises of the library or archive in which it is stored leading to similar questions about what constitutes the library’s premises.

The subsection also discusses obsolete formats, defining obsolete as: “the machine or device necessary to render perceptible a work stored in that format is no longer manufactured or is no longer reasonably available in the commercial marketplace.” Similar issues with the limited reproduction model in the digital realm discussed in relation to Canada arise in the US. If robust digital preservation systems rely on multiple, geographically distributed copies of files and automated digital asset management systems (DAMS), copy-tracking becomes onerous and impractical. The requirement that any digital reproduction remains on the premises of the library or archive should also be interpreted as within the control of the library or archive. With many libraries and archives moving to third-party digital storage providers or distributed digital storage, a traditional geographic concept of premises is difficult to define. Libraries may also rely upon their fair use rights (as described in §107) to preserve the content they steward.

107. Limitations on exclusive rights: Fair use
...the fair use of a copyrighted work, including such use by reproduction in copies or phonorecords or by any other means specified by that section, for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research, is not an infringement of copyright.

There are no precise boundaries for reproduction activities (for the purposes of preservation) permitted by fair use, but this also means the law is flexible and context sensitive. The social and cultural benefits of preservation work can likely be argued to outweigh the cost imposed on the copyright owner.

**Technological Protection Measures**

**Title 17, Chapter 12 of the US Code** containing the Copyright Law of the US addresses copyright protection and management systems. Specific to TPMs, 17 U.S.C. §1201 prohibits circumvention: “(1)(A) No person shall circumvent a technological measure that effectively controls access to a work protected under this title.” There are statutory exemptions relevant to libraries:
§1201 (a) (C) provides various conditions for non-infringement, including:
(i) the availability for use of copyrighted works;
(ii) the availability for use of works for nonprofit archival, preservation, and educational purposes;
(iii) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research;
(iv) the effect of circumvention of technological measures on the market for or value of copyrighted works...

There are generalized exemptions for nonprofit libraries, archives, and educational institutions which are applicable throughout (LaFrance 2017, 430) although they are explicitly addressed in various subsections. For example, 17 U.S.C. § 1201(d) provides a specific exemption creation process for nonprofit libraries, archives, and educational institutions. The pathway by which these exemptions are generated is through a process of regulation promulgation involving the Librarian of Congress who plays a particular role in the US Copyright Law implementation. Section 1201(a)(1)(C) of the United States Code requires the regulation process to occur every three years to identify classes of copyrighted works whose non-infringing uses should be allowed to circumvent TPMs. For example, a regulation relevant to digital preservation was promulgated by the Librarian of Congress in 2015 with 37 CFR §201.40: an explicit exemption was created for non-infringing circumvention of TPMs in lawfully acquired online video games to eliminate the need for a remote authentication server after the original server is shut down. Typically, this happens where the game is no longer supported by its developer but is allowed only for personal gameplay and, in the case of museums, libraries, and archives, to restore access to the game on a personal computer or game consoles to allow preservation of the game in a playable form, in which case circumvention of software used to operate the console is also permitted.

Similar to the case law interpretations of the Canadian statutes, TPMs law in the US has been interpreted to mean no actual infringement has to occur to be in violation if a situation is non-exempt (Chapdelaine 2018, 137; Universal City Studios, Inc. v. Eric Corley 273 F.3d 429 (2d Cir. 2001)). “No actual infringement” means that no copyright has to be violated, but that the creation of circumventions in and of itself, whether they are used or not, is a violation. The “no actual infringement” avenue was subsequently reinterpreted in Chamberlain Group, Inc. v. Skylink Technologies, Inc.,381 F.3d 1178 (Fed. Cir. 2004) which concerned the anti-trafficking provision of the DMCA, 17 U.S.C. §1201 (a) (2), in the context of two

2 Universal City Studios, Inc. v. Eric Corley 273 F.3d 429 (2d Cir. 2001).
competing universal garage door opener companies. The case led to a require-
ment for a reasonable relationship between “[t]he circumvention and copyright
infringement, and enablement of copyright infringement or prohibited circum-
vention for attracting liability under the trafficking prohibitions but has not been
consistently applied in subsequent judgments” despite the denouncement of the
literal interpretation of the non-infringement angle (Chapdelaine 2018, 139).

A blanket exemption for memory institutions to preserve content for future
use and study would be much simpler and in keeping with the spirit of US law.
It may also be worth considering whether TPMs laws are constitutionally sound.
Pascale Chapdelaine (2018) has identified four central questions which deserve
exploration:

– Laws regarding TPMs may be considered unconstitutional if they are unre-
related to the purpose for which copyright was created and exceed legislative
power
– They might effectively fall outside the jurisdiction that gave them statutory
authority in the first place and be deemed unconstitutional because they spill
over powers regarding property rights, contracts, or consumer protections
which fall under various state or federal powers
– They might violate free speech or freedom of expression, and
– Associated legislative and regulatory regimes might violate due process by
being too broad.

So far, courts in the US have generally left the constitutionality of TPMs law unex-
amined, for example, in the case of 321 Studios v. Metro Goldwyn Mayer Studios,
Inc., 307 F. Supp. 2d 1085 (N.D. Cal. 2004) involving circumvention software
where its use was not found to be unconstitutional (Chapdelaine 2018, 144).

Orphan Works

A major review of the state of orphan works under US copyright law was con-
ducted by the US Copyright Office in 2015. The uncertainty about the fate of
orphan works was deemed to be “a frustration, a liability risk, and a major cause
of gridlock in the digital marketplace” (US Copyright Office 2015, 35). The review
produced an extensive and wide-ranging report: Orphan Works and Mass Digitiza-

The reason behind the initial uncertainties is that, despite all best efforts to
locate a copyright owner, an archive or library may not be able to seek permission

---

or negotiate licensing terms: “anyone using an orphan work does so under a legal cloud, as there is always the possibility that the copyright owner could emerge after the use has commenced and seek substantial infringement damages, an injunction, and/or attorneys’ fees” (US Copyright Office 2015, 2). The report recommended legislation requiring that good faith and a diligent search for the copyright owner would be sufficient to limit liability. The report did not recommend that the US adopt fair use for orphan works, suggesting that this approach “does little to encourage users to search diligently for copyright owners” (US Copyright Office 2015, 3). The recommendations also rejected other models such as orphan works exceptions or creating a government-run licensing program, deciding that the limited liability model, on the whole, “provides the most comprehensive and well-calibrated approach for the United States” (US Copyright Office 2015, 3). The report recommended that a diligent search be defined as, “at a minimum, searching Copyright Office records; searching sources of copyright authorship, ownership, and licensing; using technology tools; and using databases, all as reasonable and appropriate under the circumstances” (US Copyright Office 2015, 3). Libraries would also be responsible for proving such diligent searches were undertaken before using any orphan works in ways that would normally violate copyright.

While the concern in this chapter is with digital preservation and not access issues, when it comes to preserving orphan works, the cases dealing with the issues have blurred the demarcation slightly. For example, the Google Books case is one that deals almost entirely with access. However, the 2nd Circuit ruling, Authors Guild v. Google, Inc. 804 F.3d 202 (2d Cir. 2015) determined that simply scanning the books fell under fair use, touching on a digital preservation issue, even though access was the focus of the analysis. Do those who have the ability and resources to digitize and produce access to orphan works need to be concerned about seeking de facto ownership? Google Books, in describing its library project, notes their observance of copyright laws but risks remain in making preservation copies for works where owners cannot be located.

As in Canada, copyright issues with orphan works are unlikely to impede preservation-specific work in the US. The US has seen considerable advocacy on the part of its library community for the application of fair use within preservation. Fair use and fair dealing tend to be applied to performance, access, distribution, or use, not preservation, but there are some relevant applications in the sector. The Center for Media and Social Impact’s Statement of Best Practices in Fair Use of Collections Containing Orphan Works for Libraries, Archives, and other Memory Institutions asserts fair use can apply to memory institutions’ use

---

5 Authors Guild v. Google, Inc. 804 F.3d 202 (2d Cir. 2015).
of orphan works, and that “fair use supports the digital preservation of materials in archival and special collections, without regard to their status as orphan works” (Aufderheide et al. 2014, 26). The Code of Best Practices in Fair Use for Software Preservation, coordinated by the Association of Research Libraries, the Center for Media and Social Impact, and the Program on Information Justice and Intellectual Property, and endorsed by other organizations including the American Library Association, takes a similar approach with its position that “fair use applies equally to works where the owner is known and unknown” and that software preservation work should take the same approaches whether or not the copyright owners are findable (Aufderheide et al. 2019, 5).

**European Union (EU)**

Following the trend, the EU has also been engaged in updating its copyright laws and regulations in the last 5 years. The modernization has three goals: “more cross-border access to content online, wider and easier use of copyrighted material in education, research, and by cultural heritage institutions, and improved functioning of the copyright marketplace” (Panezi 2018, 596).

In the intervening years, various directives have been passed by the European Parliament and Council. Legislatively, the EU is still looking for harmonization of Member State copyright laws (Panezi 2018, 602). The EU governing bodies released Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on Copyright and Related Rights in the Digital Single Market and Amending Directives 96/9/EC and 2001/29/EC 2019 [hereinafter DSM Directive] (Directive (EU)2019/790) indicating the copyright initiatives and setting up a timetable for Member States to adopt modernization in their laws by April 2021, which, as of this writing, has yet to occur. European directives provide end-state goals for legislation purposes for Member States for achieving results; they do not implement or suggest the means to perform those results. Directives leave leeway for Member States to achieve the goals, but specifics in laws are not outlined. To date, eight Member States have put in some measures to implement the copyright modernization directive as noted in the EU National Transposition website with separate reportings for each directive, including the DSM Directive.
Reproductions

Article 6 of the DSM Directive applies to both TPMs and reproductions:

Member States shall provide for an exception to the rights provided for in Article 5(a) and Article 7(1) of Directive 96/9/EC, Article 2 of Directive 2001/29/EC, Article 4(1)(a) of Directive 2009/24/EC and Article 15(1) of this Directive, in order to allow cultural heritage institutions to make copies of any works or other subject matter that are permanently in their collections, in any format or medium, for purposes of preservation of such works or other subject matter and to the extent necessary for such preservation (Directive (EU) 2019/790).

The DSM Directive also recognizes the need for cross-border distributed digital storage networks and for cultural heritage institutions to rely on third parties “acting on their behalf and under their responsibility, including those that are based in other Member States, for the making of copies” (Paragraph 28). Again, though, work at the national level is still required. The Directive also notes that:

An act of preservation of a work or other subject matter in the collection of a cultural heritage institution might require a reproduction and consequently require the authorisation of the relevant rightsholders. Digital technologies offer new ways of preserving the heritage contained in those collections, but they also create new challenges. In view of those new challenges, it is necessary to adapt the existing legal framework by providing for a mandatory exception to the right of reproduction in order to allow such acts of preservation by such institutions (Paragraph 25).

The DSM Directive states a preservation goal (Paragraph 27) for Member States:

Member States should, therefore, be required to provide for an exception to permit cultural heritage institutions to reproduce works and other subject matter permanently in their collections for preservation purposes, for example to address technological obsolescence or the degradation of original supports or to insure such works and other subject matter. Such an exception should allow the making of copies by the appropriate preservation tool, means or technology, in any format or medium, in the required number, at any point in the life of a work or other subject matter and to the extent required for preservation purposes. Acts of reproduction undertaken by cultural heritage institutions for purposes other than the preservation of works and other subject matter in their permanent collections should remain subject to the authorisation of rightsholders, unless permitted by other exceptions or limitations provided for in Union law.

Member states can specifically address issues such as obsolescence and degradation or provide insurance or backup to existing items to maintain preservation. This broad recommendation contrasts with the more restrictive US regulations, but again, the Directive is not word for word implemented in Member States and
more restrictive laws may be in place in various nations of the EU as long as they are in line with the Directive generally. It remains that the legislation of Member States differs on reproductions.

**Technological Protection Measures**

As already noted, Article 6 of the DSM Directive provides an explicit exception for cultural heritage institutions to make copies of any works in their collections for purposes of preservation. Previous iterations of Directives prevented circumvention of TPMs. Articles 6 and 7 of the DSM Directive provides for more freedom for circumvention of TPMs to be used appropriately. The new provisions can be viewed as more than a mere defense to possible infringement. They can be regarded as rights in the positive sense (White 2020).

**Orphan Works**

The EU has adopted the statutory exception model when it comes to orphan works. In October 2012, the European Council released the [Directive on Certain Permitted Uses of Orphan Works](https://eur-lex.europa.eu/eli/notice/2012/28/20120419) 2012/28/EU [hereinafter Orphan Works Directive], requiring:

1. Member States shall provide for an exception or limitation to the right of reproduction and the right of making available to the public ... to ensure that the organisations ... are permitted to use orphan works contained in their collections in the following ways:
   
a) by making the orphan work available to the public...,
   
b) by acts of reproduction...for the purposes of digitisation, making available, indexing, cataloguing, preservation or restoration.

2. The organisations ... shall use an orphan work ...only in order to achieve aims related to their public-interest missions, in particular the preservation of, the restoration of, and the provision of cultural and educational access to, works and phonograms contained in their collection. The organisations may generate revenues in the course of such uses, for the exclusive purpose of covering their costs of digitising orphan works and making them available to the public (Directive 2012/28/EU).

Uniquely, the European model allows for a public service organization to partner with a private organization to generate revenue in relation to orphan works they are using, as long as that use is “consistent with the public service organization’s mission. The private sector partner, however, is not permitted to use the works directly” (US Copyright Office 2015, 21). The Directive in relation to orphan works has had widespread implementation as reported on the EU [National Transposi-](https://www.copyrightoffice.gov/OPN/2015/11-12/copyrightmemo.html)
tion website. As already noted, national transposition data is maintained for each directive and is available for the Orphan Works Directive.

As in Canada and the US, the Orphan Works Directive requires instituting a diligent search requirement to determine the owner, if any, of copyright material in Member State law. Once a work is judged to be orphan in one Member State, it is considered to be orphan in all Member States. Works can be used and accessed throughout the EU. The Directive calls for a single registry to maintain data on all works deemed orphan. A rightsholder who later resurfaces may reclaim ownership of a work once deemed orphan and claim fair compensation for the use of the work as provided by individual Member States’ laws (US Copyright Office 2015, 21–22). The International Federation of Library Associations and Institutions (IFLA) Committee on Copyright and Other Legal Matters (CLM), in its response to a survey on the directive on orphan works, emphasized the burdensome nature for libraries of the process of conducting a diligent search for owners of works, and the resulting database’s failure to facilitate the consideration of works for cross-border use. Despite libraries encountering a significant number of orphan works, only a limited number have been recognized as orphaned. IFLA also pointed out discrepancies between the Orphan Works Directive and the DSM Directive’s out-of-commerce works provisions which creates complexities as to what exceptions beneficiaries are eligible for and when (IFLA Committee on Copyright and other Legal Matters 2020).

By separating access and preservation functions, libraries can continue preservation-specific work on orphan works. The DSM Directive provides an exception for making available out-of-commerce works, unless collective management organizations offer licenses, in which case, memory institutions may be granted licenses.

Conclusion

Various nations and international bodies have adopted differing regimes when it comes to copyright and preservation. It is clear that quickly changing technologies have resulted in, hopefully temporary, complex legal responses. Due to the differing nature of legislative systems and frameworks in different parts of the world, a unified approach might not emerge in the near future, but the library and other professional and educational communities should continue to lobby for simplified copyright laws and clear, ideally inclusive, exceptions for memory institutions. Examples of advocacy work include the efforts by international organizations like IFLA and its CLM, with representation and advocacy with WIPO, the
Library Copyright Alliance, or national initiatives like the Canadian Federation of Library Associations /Fédération canadienne des associations de bibliothèques (CFLA-FCAB) work to change laws around TPMs in Canada. Despite the complexities, lack of legal certainty should not prevent libraries from fulfilling their mandates and preserving digital information. Most copyright law regimes, even those that differ starkly, have significant protections and exceptions for cultural heritage institutions, libraries, educational institutions, archives, and museums. Acting in good faith and making considered, documented decisions will go a long way to adhering to regimes in place while campaigning for their replacement and more progressive, simplified legal frameworks.

References


