

THE PERMISSION BARRIER: THE IMPACT OF COPYRIGHT LAW ON DIGITAL PRESERVATION IN AUSTRALIA

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with

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This paper is an abridged version of the International Study on the Impact of Copyright Law on Digital Preservation (Queensland University of Technology, 2008), a joint project of the Open Access to Knowledge (OAK) Law project (Australia), the Library of Congress (United States), the Joint Information Systems Committee (United Kingdom), and the SURFfoundation (Netherlands). The full report can be accessed at <http://www.oaklaw.qut.edu.au/reports> under a Creative Commons Attribution 3.0 Unported licence (<http://creativecommons.org/licenses/by/3.0/>).

Focusing on Australia's position in the broader international community and drawing on the outcomes of the World Intellectual Property Organisation's July 2008 workshop on the issue (http://www.wipo.int/meetings/en/2008/cr_wk_ge/), this paper aims to examine how copyright law both enables and hinders the preservation of digital objects.

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I. Introduction

Traditional works of authorship are increasingly created and disseminated to the public in digital form. Today, many radio and television programs, musical compositions, movies, maps, reports, stories, poems, letters, scholarly articles, newspapers and photographs are “born digital.” There is also a growing trend to convert analogue material to digital form (“digitisation”) so that it can be easily and efficiently stored, transmitted and accessed. New forms of authorship, such as web sites, blogs and “user-generated content” of all kinds are flourishing in the dynamic environment of the Internet. These new works reflect the world’s culture as much as their analogue predecessors.

Embodying creative works in digital form has the unfortunate effect of potentially decreasing their usable lifespan. Digital information is ephemeral: it is easily deleted, written over or corrupted. Because information technology such as hardware, software and digital object formats evolves so rapidly, it can be difficult to access and use digital materials created only a few years ago. Countless born digital works are created every day, but countless born digital works are also lost every day as they are removed, replaced, superseded or left, forgotten, in obsolete formats and media. Digitised and born digital materials are an important part of the world’s cultural heritage, but unless active steps are taken to preserve them, they will be lost.

Preservation is critical in the digital context to ensure continued long term access to historically, scientifically and socially valuable materials, so that future generations will be able to benefit from works created in the present day. Libraries, archives and other preservation institutions have been responsible for much of the preservation that has occurred in past centuries. Many books, musical compositions, drawings and other works are still available today for scholars and historians to read, hear and see because of the preservation efforts of these institutions. It is clear, however, that in many cases the digital equivalents of those analogue works preserved in the past are not being preserved in any systematic way, in part because digital preservation triggers copyright concerns in a way that analogue preservation does not.

There are significant technical, financial and legal obstacles to digital preservation. This paper, and the *International Study on the Impact of Copyright Law on Digital Preservation* (ISICLDP) Report¹¹ from which it is derived, focuses on the law – in particular, on copyright and related rights issues. Many of the activities involved in digital preservation, such as making multiple copies of a work, distributing copies among multiple institutions, and migrating works to new

¹¹ *International Study on the Impact of Copyright Law on Digital Preservation* (Queensland University of Technology, 2008), a joint project of the Open Access to Knowledge (OAK) Law project (Australia), the Library of Congress (United States), the Joint Information Systems Committee (United Kingdom), and the SURFfoundation (Netherlands)
<<http://www.oaklaw.qut.edu.au/reports>>

technological formats and media, involve the exercise of exclusive rights, including but not limited to the reproduction right. As the broader Report demonstrates, in many countries copyright exceptions and limitations do not accommodate the actions required for digital preservation. The Australian-specific copyright and related rights issues, and various strategies to address them, are discussed further below.

The Study

The purpose of the ISICLDP Study was to:

- (1) review the current state of copyright and related laws and their impact on digital preservation;
- (2) make recommendations for legislative reform and other solutions to ensure that libraries, archives and other preservation institutions can effectively preserve digital works and information in a manner consistent with international laws and norms of copyright and related rights; and
- (3) make recommendations for further study or activities to advance the recommendations in the Report.

It was prepared jointly as an international collaboration by the following organisations:

- *Australia*: Open Access to Knowledge Law Project (<http://www.oaklaw.qut.edu.au>);
- *The Netherlands*: The SURFfoundation (<http://www.surffoundation.nl>);
- *The United Kingdom*: Joint Information Systems Committee (<http://www.jisc.ac.uk>); and
- *The United States*: Library of Congress, National Digital Information Infrastructure and Preservation Program (<http://www.digitalpreservation.gov/>).

This paper provides an abridged version of the final ISICLDP Report, incorporating material from the international review but focusing particularly on the issues of relevance to Australia and Australian collecting institutions.

II. Digital Preservation Overview

Works in digital form present significant challenges for preservation that most analogue works do not. Many analogue materials remain stable for long periods of time and require only intermittent interventions for purposes of preservation. Moreover, degradation of an analogue work is usually gradual enough to provide advance warning that preservation efforts are required. For example, one can perform a fold test to determine if the paper on which a book was printed has become brittle, or smell the vinegar that signals degradation of films. Digital

materials, in contrast, cannot be unattended for long: their preservation requires regular intervention. They may suffer from “bit rot,” a degradation that usually cannot be discerned by the naked eye and therefore may not be discovered until someone tries to use the work. Bit rot often renders the entire digital copy useless. Technological obsolescence is another problem for digital works. Even if their bits remain intact, the hardware and software required to access them may be difficult or impossible to obtain. Because of these characteristics, preservation of digital materials must begin at or shortly after production or acquisition.

Long term management of a digital work usually requires that multiple copies of the work be made over the course of its lifetime. One reason for making copies is for security and disaster preparedness. Since it is always possible that digital works can be destroyed due to fire, flood, or other calamity, it is necessary to retain one or more redundant copies in different locations. Another purpose is to migrate information content from an old to a new technology, such as copying works from a floppy disk to a server. Access to content – either by users or by institution staff to verify its integrity – also may entail making a copy on a screen and in computer memory.

Major Digital Preservation Activities in Australia

Although Australian copyright law sets out a number of exceptions designed to facilitate preservation of cultural collections, as well as a scheme requiring publishers to deposit copies of published printed material with the relevant State and Federal archiving bodies,¹² due to a number of significant gaps Australian federal law does not currently support compulsory collection and preservation of digital material (see below).¹³ Digital preservation activities in Australia are thus not governed by uniform standards and requirements. However, a number of voluntary (permission based) digital archiving schemes have been in operation since the 1990s.

PANDORA (Preserving and Accessing Networked Documentary Resources of Australia)

The National Library of Australia’s (NLA) PANDORA project (<http://www.pandora.nla.gov.au>) is the largest digital preservation initiative in Australia. Established in 1996, PANDORA selectively archives and provides long-term access to online publications and websites that are of cultural significance or long-term research value to Australia. The archive consists of records collected by 10 State and Federal government institutions,¹⁴ with each

¹² See <http://www.nla.gov.au/services/ideposit.html>

¹³ Tasmania and the Northern Territory are the only Australian jurisdictions to have passed laws requiring compulsory deposit of electronic material: *Libraries Act 1984* (Tas), s 22; *Publications (Legal Deposit) Act 2004* (NT), ss7 and 13.

¹⁴ National Library of Australia, Northern Territory Library, State Library of New South Wales, State Library of Queensland, State Library of South Australia, State Library of Victoria, State

participating institution focusing on a different category of materials and maintaining their own selection guidelines.¹⁵ Owners and publishers are then contacted for permission to archive, and make accessible online, relevant digital content.¹⁶

In addition to its selective archiving practices, during 2005, 2006 and 2007 PANDORA undertook three large scale harvests of the entire .au domain using HTTrack (www.httrack.com), a free offline browsing software.¹⁷ It hopes to continue to conduct such harvests annually for several years (at a minimum) in order to build expertise in this method of archiving; however, this is subject to funding, policy and legal review. The NLA limits the risk associated with these harvests by:

- not providing public access to the material;
- collecting content only where it is permitted by the robots.txt exclusion standard;¹⁸
- automatically providing a notification to each server harvested; and
- discontinuing harvesting in response to requests to do so.

State Library of Tasmania

Assisted by Tasmanian legal deposit legislation that applies to digital publications (see below), the State Library of Tasmania (SLT) maintains two digital archiving projects. Launched in 1998, the Our Digital Island project (<http://odi.statelibrary.tas.gov.au>) allows access to over 2000 archived Tasmanian websites. The collection can be browsed by subject or title, with accessibility determined by administrators. Meanwhile, its Stable Tasmanian Open Repository Service (STORS) project (<http://www.stors.tas.gov.au/>) facilitates publisher compliance with Tasmania's legal deposit requirements. Publishers upload documents each of which is allocated a permanent URL (web address). Publishers can apply metadata to the document providing publication information such as history, superseded versions and versions in alternate formats. They can also restrict access. Over 2750 electronic publications have been submitted.

The Powerhouse Museum

Library of Western Australia, Australian Institute of Aboriginal and Torres Strait Islander Studies, Australian War Memorial, and National Film and Sound Archive.

¹⁵ For example, the NLA's criteria for selection is that a work must be: about Australia; or by an Australian author; or on a subject of social, political, cultural, religious, scientific or economic significance and relevance to Australia; or by an Australian author of recognised authority and make a contribution to international knowledge. See <http://pandora.nla.gov.au/overview.html#factsheet>.

¹⁶ See <http://pandora.nla.gov.au/selectionguidelinesallpartners.html>.

¹⁷ See <http://pandora.nla.gov.au/documents/auscrawls.pdf>.

¹⁸ See <http://www.robotstxt.org/>.

Australia's largest museum, the Sydney-based Powerhouse Museum (<http://www.powerhousemuseum.com>) selectively preserves its digital holdings, including audiovisual material and computer software and hardware. The museum's collection includes objects relating to Australian and world history, science, technology, design, industry, decorative arts, music, transport and space exploration. An Electronic Resource Management Group is responsible for developing the museum's digital preservation strategy.¹⁹

Museum Victoria

Museum Victoria (<http://museumvictoria.com.au/>), the body established in 1983 to oversee Victoria's State cultural institutions,²⁰ archives digital photographic images held in its collection, as well as digital copies of analogue collection documents such as images, manuscripts and maps. The organisation began saving digital copies (initially CD-ROMs) of deteriorating photographs in 1990.²¹ It is currently in the process of developing a Digital Asset Management system which will become its primary digital preservation system.

The National Archives of Australia

Australia's State²² and Federal²³ archives implement various policies for the preservation of digital material produced by their governments. The National Archives of Australia (NAA) (<http://www.naa.gov.au/>) in particular is a national leader in implementing standards for permanent storage of government digital records.²⁴ To allow for storage of the growing volume of digital records, the NAA has adopted an open source document conversion and preservation system called XENA (XML Electronic Normalising for Archives). XENA converts digital records from file formats that may become obsolete into open source file formats that are permanently accessible.

Educational Institutions

¹⁹ The committee is considering: shelf lives of objects stored in digital formats; how to retain equipment to access/play these objects; equipment obsolescence; standards for archiving including international standards; managing the selection process; future interoperability issues; costs involved with developing and maintaining preservation technology and necessary funding; and the extent of the role of digital technology in future museum curating.

²⁰ The institutions managed by Museum Victoria include the Melbourne Museum, Immigration Museum, Scienceworks and the Royal Exhibition Building.

²¹ National Library of Australia, *Museum Victoria Image Capture Project*, available at <http://www.nla.gov.au/libraries/digitisation/dfo16.html>.

²² *Territory Records Act 2002* (ACT); *State Records Act 1998* (NSW); *Information Act 2002* (NT); *Public Records Act 2002* (Qld); *State Records Act 1997* (SA); *Archives Act 1983* (Tas); *Public Records Act 1973* (Vic); *State Records Act 2000* (WA).

²³ *Archives Act 1983*.

²⁴ Storage formats include paper, negatives, prints, sound, film and video. The NAA recognises that most records are now created digitally – see 'Open Standards Key to Digital Preservation' (2006) ZdNet, March 31, available at <http://www.zdnet.com.au/news/software/soa/Open-standards-key-to-digital-preservation/0,130061733,139248913,00.htm>.

A large number of Australian educational institutions maintain digital collections of material produced by students and staff.²⁵ For example, the Queensland University of Technology (QUT), a participant in the worldwide Open Archive Initiative,²⁶ maintains an ePrint repository that archives and provides online access to university research literature in digital format.²⁷ QUT requires its researchers to deposit in the repository copyright works produced in the course of their QUT employment, where those works can be classified as “material which represents the total publicly available research and scholarly output of the University”.²⁸

III. Copyright Challenges for Digital Preservation

Digital preservation necessarily involves the exercise of one or more of the exclusive rights of the copyright author or other right holder. For example, reproduction is a fundamental activity of digital preservation. The right of communication may be implicated by disseminating digital copies to multiple institutions to protect against catastrophic loss. And, to the extent access is required for digital preservation best practices, that access may implicate the right of “making available,” or of public performance or display.

Digital technologies have also changed the manner in which works are distributed and acquired in ways that create tension between long term preservation needs and copyright laws. Previously, copyrighted works were marketed in tangible “hard copy” form, and libraries, archives and other preservation institutions could acquire them on the market (or, in some cases, pursuant to legal deposit laws) for current use and long term preservation. But now, many works are never produced in hard copy. Some works – such as web sites and various types of “user-generated content” available on the Internet – are not made available for acquisition, but only for listening or viewing. Those works cannot be preserved unless they can be copied or otherwise acquired by a digital archive or other preservation institution. Other types of works such as e-journals are available on the market, but the terms of use may not permit the creation or retention of archival copies.

²⁵ For a full list of Australian educational institutions maintaining archive collections, see Appendix One of *A Guide to Developing Open Access through your Digital Repository*, (Open Access to Knowledge Law Project, Queensland University of Technology, 2007) <http://eprints.qut.edu.au/archive/00009671/01/9671.pdf>.

²⁶ See <http://www.openarchives.org/>.

²⁷ Queensland University of Technology, *ePrints Archive*, available at <http://eprints.qut.edu.au>.

²⁸ 1.3.2 ‘F/1.3 E-print repository for research output at QUT’, *Queensland University of Technology Manual of Policy and Procedures* (Queensland University of Technology) http://www.mopp.qut.edu.au/F/F_01_03.jsp. See also ‘E-Print Archive’, *Copyright Guide* (Queensland University of Technology), <http://www.tils.qut.edu.au/copyrightguide/publishingan/eprintarchi.jsp>.

The unauthorised exercise of the rights in a work is likely to result in infringement of copyright unless:

- (1) the material is not protected by copyright (i.e., it is in the public domain);
- (2) the copying is permitted under an exemption in the copyright law or related legislation (e.g. pursuant to an exception or statutory licence for libraries, archives or other preservation institutions); or
- (3) digital preservation is undertaken by or with the permission of the owner of copyright in the work.

The Impact of Copyright and Related Laws on Digital Preservation Activities in Australia

Compared to other jurisdictions internationally, Australian copyright law currently provides libraries and archives with relatively advanced rights for the preservation of digital material held within their collection. Sections 51A and 110B of the *Copyright Act 1968* permit libraries and archives to reproduce and communicate (i.e. electronically transmit) copyright material for preservation purposes. Furthermore, since 1 January 2007, ss51B, 110BA and 112AA have given key cultural institutions²⁹ the right to make up to three copies of material of 'historical or cultural significance' for the purpose of preserving it against loss or deterioration. Finally, a broad exception set out in s200AB (also introduced on 1 January 2007) allows libraries to make any use of copyright material that is for the purpose of maintaining or operating the library or archives, as long as the use passes the following 'three step test'³⁰:

- (1) it is a 'special case';
- (2) it does not conflict with a normal exploitation of the work; and
- (3) it does not unreasonably prejudice the legitimate interests of the right holder.

The use must also not be for the purpose of obtaining a commercial advantage or profit.

Nevertheless, a number of legal barriers to the effective preservation of digital heritage within Australia still exist.³¹ These barriers undermine the practicality of many preservation activities undertaken by libraries and archives, and create conflicts with the collection, preservation and access functions mandated by the

²⁹ 'Key cultural institutions' include the National and State libraries and archives, as well as any other institution prescribed by the regulations.

³⁰ *Copyright Act 1968* (Cth), s 200AB(1).

³¹ For further discussion of the limits of the Australian *Copyright Act's* provisions dealing with preservation, see Kenyon, Andrew T. and Hudson, Emily, "Copyright, Digitisation, and Cultural Institutions" *Australian Journal of Communication*, Vol. 31, No. 1, pp. 89-105, 2004 <http://ssrn.com/abstract=603861>.

archives' founding legislation.³² The main areas of Australian law in which reform is still needed are discussed below.

Legal Deposit

At present, most Australian State and Federal laws do not require publishers to deposit digital objects with the relevant collecting institution,³³ nor do they permit collecting institutions to, without consent, capture digital objects for preservation purposes. Although the legal deposit laws of Tasmania³⁴ and Northern Territory³⁵ do encompass digital materials, they similarly do not support active collection of digital material.

To obtain digital materials for preservation, projects such as PANDORA are therefore forced to rely on an ad hoc system of voluntary agreements and legally 'grey' harvesting schemes that is inefficient and costly. By requiring officers of the relevant institution to actively seek out and negotiate rights in relation to non-print materials, this system results in incomplete and inadequate collection of culturally significant material whilst expending unnecessary manpower and time and exposing the collecting institutions to potential legal risk.

A legal deposit scheme which focuses exclusively on printed materials can no longer be said to provide an accurate record of a country's culture, knowledge and heritage.³⁶ Nevertheless, due to the relative ease with which digital material is created and adapted, the real problems involved in maintaining material (especially through format changes), and the sheer quantities of material posted online, compulsory deposit of all 'published' digital material with a single institution via procedures similar to those currently in place for print materials is clearly impractical. For this reason, the most effective legislative reform is likely to be a hybrid system, which combines compulsory deposit of hardcopy digital

³² See, for example s6 *National Library Act 1960*, <http://scaletext.law.gov.au/html/pasteact/1/761/0/PA000100.htm>.

³³ See *Copyright Act 1968* (Cth) s201; *New South Wales Copyright Act 1879-1952*, ss 5-7; *Publications (Legal Deposit) Act 2004* (NT); *Libraries Act 1988* (Qld), Part 8; *South Australian Libraries Act 1982*, s35; *Tasmanian Libraries Act 1984*, s 22; *Victorian Libraries Act 1988*, s49; and *Western Australian Copyright Act 1895*, ss 4, 7-9.

³⁴ Section 22 of the *Tasmanian Libraries Act 1984* requires the deposit of 'any book, periodical, newspaper, printed matter, map, plan, music, manuscript, picture, print, motion picture, sound recording, photographic negative or print, microphotograph, video recording, and *any other matter* or thing whereby words, sounds, or images are recorded or reproduced' (italics added).

³⁵ Section 4 of the Northern Territory *Publications (Legal Deposit) Act 2004*, requires deposit of any document available to the public including books, newspapers, magazines, periodicals, reports, newsletters, calendars, directories, handbooks, guides, sheet music, maps, pamphlets, audio cassettes, video cassettes, films, multimedia kits, computer magnetic tape, computer optical discs, floppy discs, compact discs, CD-ROMs, DVDs, websites and PDF files.

³⁶ For discussion of the historical and policy rationale of legal deposit law in Australia, see John Gilchrist, *Copyright Deposit, Legal Deposit or Library Deposit? The Government's Role as Preserver of Copyright Material* [2005] Queensland University of Technology Law and Justice Journal 12.

materials such as CDs and DVDs with exceptions permitting cultural institutions to actively harvest material consistent with their statutory preservation mandates.

Commercial Availability

Both the general preservation and the key cultural institution exceptions provided by the *Copyright Act* include a 'commercial availability' test. Under this test, published material (as opposed to manuscript or original works) may only be copied or communicated for preservation purposes where another copy of the material (not being a second hand copy) cannot be obtained within a reasonable time at an ordinary commercial price.

This test creates a significant barrier to the effective preservation of digital works. Format obsolescence means that such materials must be regularly and routinely reproduced simply to ensure continued access. If interpreted broadly, the commercial availability test would appear to require libraries to purchase copies of expensive computer programs each time they are released in a new format, rather than merely format-shifting the copy to which they already have access. This differs from the analogue environment, in which libraries may rely on the same copy of a book for decades, generally long after it has left the commercial market. The test also prevents libraries from undertaking pro-active preservation by format shifting material into new and better formats as they become available, rather than waiting for old formats to disappear from the market entirely.

S200AB Three Step Test

The broader s200AB exception should, in theory, be able to fill some of the gaps left by the preservation exceptions. Section 200AB is specifically designed to be flexible, and to permit reproduction and communication of material where it serves a public purpose and does not unreasonably impact the copyright owner. Unfortunately, the positive effect of s200AB is curtailed by the uncertainty surrounding the application of the three-step test it incorporates. This test is based on the requirements for exceptions enshrined in the major international copyright treaties,³⁷ and it is not clear yet how it will be applied in a domestic legal context. The 'special case' element of the test seems particularly likely to cause problems for digital preservation, as would seem to preclude the provision from applying to any ongoing or systematic preservation projects.

Technological Protection Measures

Currently Australian law prohibits in most cases the manufacture, supply and use of devices that circumvent any technological protection measure (TPM) used by a copyright owner to control access to, or reproduction and communication of,

³⁷ See, for example, articles 1(4) and 10 of the WIPO Copyright Treaty; Article 9 Berne Convention; and Article 13 TRIPS.

digital objects.³⁸ Although there are exceptions to this rule which allow some copying by non-profit libraries and archives, these are very narrow and currently only permit:

- manufacture, provision and use of circumvention devices for the purpose of making acquisition decisions;³⁹ and
- use (but not manufacture or provision) of circumvention devices for the purpose of implementing the libraries and archives exceptions set out in the *Copyright Act*.⁴⁰ This permits individual libraries and archives to hire personnel to create one-off circumvention programs; however, it does not permit the acquisition of circumvention programs from external sources or the sharing of programs between libraries.

As many TPMs (also known as digital rights management or DRM) are virtually impossible for even the most skilled of technicians to circumvent, particularly where obsolete technologies are involved, most institutions will lack the ability to circumvent TPMs themselves or the resources to hire skilled technicians on a case-by-case basis. This means that, in effect, the TPM exceptions provided by the Act have very few practical applications, with the result that the law leads to an effective 'digital lock-out' preventing preservation of any TPM protected material. This will only become more significant as time passes and TPMs attached to current storage formats become obsolete. Indeed, this is already occurring, with US shopping giant, Wal*mart, reportedly informing customers of their online music service that they must create a hardcopy 'back up' (e.g. on a CD) of any music bought before February 2008, as the TPM system used to provide access to the music will no longer be supported after October 2008.⁴¹

Unfortunately, the Australia United States Free Trade Agreement places strict limitations on exceptions to the TPM provisions.⁴² In the absence of changes to this Agreement, it is highly unlikely that exceptions permitting more effective access to circumvention devices will be provided. Alternative measures to ensure institutions are able to effectively preserve and provide access to digital materials in their collections, such as requiring publishers to provide materials free of TPMs, may, however, be possible and should be explored at a governmental and institutional level.

³⁸ *Copyright Act 1968* (Cth); civil infringement provisions sections: 116AK – 116AQ; criminal: sections 132APC-132APE.

³⁹ *Copyright Act 1968* (Cth) ss 116AN(8), 132APC(8), 132APD(7) and 132APE(7).

⁴⁰ *Copyright Act 1968* (Cth) ss 116AN(9) and 132APC(9) exempt from liability circumvention acts prescribed under the *Copyright Regulations 1969* (Cth). The prescribed acts are listed in Schedule 10A of the *Regulations* and they apply to purposes authorized under sections 49, 50, 51A, 110A and 110B of the Act.

⁴¹ See Doctorow, C, 'Wal*Mart shutting down DRM server, nuking your music collection -- only people who pay for music risk losing it to DRM shenanigans' (*Boingboing*, 26 September 2008) <http://boingboing.net/2008/09/26/walmart-shutting-dow.html>

⁴² See Articles 17.4.7(e) and (f) of the *Australia United States Free Trade Agreement* (2004) <http://www.dfat.gov.au/trade/negotiations/us_fta/final-text/chapter_17.html>

Private Agreements

The 2002 *Copyright and Contract*⁴³ report by the Copyright Law Review Committee (CLRC) found that in Australia, copyright owners (principally publishers) frequently supply digital material to libraries and other users under licences that specifically limit or exclude acts permitted by the *Copyright Act*. In particular, restrictions are often placed on the right of institutions to:

- copy works for preservation purposes (ss51A and 110B);
- make inter-library loans (ss49 and 50);
- make 'fair dealings' for research or study (s40); and
- make copies of works available online on library premises (s49(5A)).

Although from a strict legal stand point it is not clear that private agreements which seek to exclude statutory exceptions have effect,⁴⁴ the uncertainty in this area means that collecting institutions must, in practice, assume that this is the case. The failure of the Federal Government to clarify the situation in the *Copyright Act*, despite repeated recommendations by its own advisory committees in favour of enshrining library and other user rights,⁴⁵ suggests that this will remain the case for the foreseeable future.

Orphaned Works

It is common practice for libraries and archives to address the limitations and uncertainty of the current preservation exceptions by obtaining permissions directly from the copyright owners of material held in their collection. The practicality of this approach, however, is undermined by the failure of Australian law to deal with the issue of 'orphaned works' (ie works for which copyright owners cannot be contacted).

Due to the current length of copyright protection (ie up to life of the author plus 70 years) and the lack of any compulsory or voluntary registration system for copyright materials, it is often impossible to locate or even identify the copyright owners of significant portions of the collections held by any institution. This is particularly the case for digital-born works, which are by their nature prone to becoming 'orphaned'. Many (such as blogs and web pages) are informally

⁴³ *Copyright and Contract* (Copyright Law Review Committee, 2002), http://www.clrc.gov.au/www/agd/agd.nsf/Page/Copyright_CopyrightLawReviewCommittee_CLRC_Reports_CopyrightandContract_CopyrightandContract.

⁴⁴ It could be argued that the statutory exceptions are intended to apply absolutely – ie, prohibition of contracting-out is implied in the exceptions – but the more orthodox interpretation is that contract can exclude exceptions.

⁴⁵ See the Copyright Law Review Committee, Parliament of Australia, *Copyright and Contract* (2002), 274 and Recommendation 33 House of Representatives, Legal and Constitutional Affairs Committee, *Review of Technological Protection Measures Exceptions*, Parliamentary Paper 54/2006 (Feb 2006), <http://www.aph.gov.au/house/committee/laca/protection/report.htm>.

created, with no real indicator as to who is the original creator. Others (such as wikis) can be the result of the collaboration of dozens or even hundreds of authors, many of whom may not be locatable. Finally, many digital works (such as software) are created and owned by companies that have a far shorter lifespan than the copyright period of the works, meaning that there is simply no one to seek permission from.⁴⁶

The new key cultural institution and s200AB provisions have the potential to assist with the one-off preservation of orphaned works. However, due to the limited nature of these provisions – in particular s200AB’s requirement that it only apply to ‘special cases’ and the restriction of ss51B, 110B and 112AA to activities by only a few cultural institutions – they do not provide a solution for large-scale preservation projects seeking to deal with orphaned works.⁴⁷

Moral Rights

Australian copyright law provides the creators and performers of certain works with moral rights. To comply with these rights, users of copyright material must ensure that they correctly attribute the creators and performers of material,⁴⁸ and that they do not subject the material to derogatory treatment.⁴⁹ Certain preservation activities could constitute an infringement of these rights (eg where the author or performer was not properly attributed or changes to the format of the material amounted to derogatory treatment). However, the *Copyright Act* provides a defence against moral rights actions where the act in question is ‘reasonable in all the circumstances’ which is likely to allow any activities undertaken with due care by a collecting institution in the course of maintaining its collection.⁵⁰

Performers’ Rights

In addition to moral rights, the *Copyright Act* also grants performers certain rights over their live performances, including the right to authorise the recording and communication of the performance⁵¹ and joint copyright ownership of any sound recording of a performance.⁵² These rights mean that the performers’ permission

⁴⁶ See, for example, Graham Greenleaf, *Unlocking IP to stimulate Australian innovation: An Issues Paper A submission to the Review of the National Innovation System* (30 April 2007) at 37-41, [http://www.innovation.gov.au/innovationreview/Documents/504\(R\)-Graham_Greenleaf.pdf](http://www.innovation.gov.au/innovationreview/Documents/504(R)-Graham_Greenleaf.pdf).

⁴⁷ Hudson, E. and Kenyon, A. “Without Walls: Copyright Law and Digital Collections in Australian Cultural Institutions” (2007) 4(2) SCRIPT-ed 197 at 212, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1007391.

⁴⁸ *Copyright Act 1968* (Cth), ss 193 and 195AC.

⁴⁹ *Copyright Act 1968* (Cth), s 195AQ. Infringing the right of integrity of authorship involves subjecting the work, or authorising the work to be subjected, to derogatory treatment.

⁵⁰ *Copyright Act 1968* (Cth), ss 195AR and 195AS.

⁵¹ See *Copyright Act 1968* (Cth), pt XIA.

⁵² *Copyright Act 1968* (Cth) s22(3A). This right is subject to any agreement to the contrary, and does not apply to commissioned performances or performances conducted in the course of employment - s 97(3).

must be obtained for any reproductions and communications of their recordings that go beyond the exceptions provided the *Copyright Act*. Due to the difficulty of identifying and locating performers after the performance, this could significantly compromise any digital preservation activities for which negotiated permissions must be obtained.

Access to Digital Material

Although not strictly required for preservation purposes, providing adequate access to digital materials held within institutions' collections is a vital part of any effective collection management strategy. While Australian law currently provides a number of exceptions for the preservation of digital material, it is still extremely limited in the rights it provides for libraries to allow access to these materials. Reproduction and communication exceptions for libraries and archives allow limited one-off copying and communication of some digital material for researchers and between libraries and archives.⁵³ But they fail to provide for more general access to material, even where it is rare or no longer commercially available. This is a particular problem for digital materials due to their ephemeral nature, short commercial lifespan, and the rapid obsolescence of the hardware and software tools required to access them.

Government Material

As an important aside, it should also be noted that while private copyright owners may raise concerns with providing greater preservation and access rights to libraries and archives, at the very minimum there is a strong argument that such rights should be provided in relation to government owned and publicly funded material. The question of access to and re-use of materials produced by government and other publicly-funded bodies has emerged as an important issue in recent years.⁵⁴ This interest has been driven not only by technological advances but also by a growing appreciation of the economic advantages to be gained by states which enable access to and re-use of public sector information.⁵⁵

⁵³ *Copyright Act 1968* (Cth) ss49, 50, 51A, 110A and 110B.

⁵⁴ See, for example, Directive 2003/98/EC, 17 November 2003, OJ L345/90, 31 December 2003 http://europa.eu.int/information_society/policy/psi/docs/pdfs/directive/psi_directive_en.pdf; the New Zealand National Digital Strategy (2007), <http://www.digitalstrategy.govt.nz/Parts-of-the-Digital-Strategy/Content/New-Zealand-Digital-Content-Strategy/>; and *Public Access Policy* (National Institute of Health, 2007), <http://publicaccess.nih.gov>.

⁵⁵ See for example, Peter N. Weiss, *Borders in Cyberspace: Conflicting Public Sector Information Policies and their Economic Impacts* (2002), US Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, http://www.weather.gov/sp/Borders_report.pdf at 11 April 2007. The benefits of open access policies are also noted to in the recent *Seoul Declaration for the Future of the Internet Economy* from the Organisation for Economic Co-operation and Development (OECD) 18 June 2008 <<http://www.oecd.org/dataoecd/49/28/40839436.pdf>>

Improved preservation and dissemination of Government could be achieved by amending Australian copyright law to provide libraries and archives with separate preservation and access rights to Crown copyright material. Alternatively, uniform open access policies that require State and Federal governments to license their material to grant library and archives broad access and use rights could achieve a similar result.⁵⁶

IV. Solutions

Legislative Solutions

Australian federal copyright law does not facilitate digital preservation for two main reasons:

- (1) the legislation does not require publishers to deposit copies of digital objects with the NLA and relevant State archives, nor does it permit them to 'harvest' objects without consent; and
- (2) the current provisions of the Australian *Copyright Act* do not support the regular format-shifting and multiple copying that is required for effective digital preservation.

Amending the *Copyright Act* to make digital collection compulsory, whether on a comprehensive deposit or a selective harvesting basis, is technically feasible. In its 2004 election policy *Strengthening Australian Arts* the former Coalition Government committed to consider the viability of expanding the Commonwealth scheme for legal deposit to include the deposit of electronic and audiovisual material.⁵⁷ This commitment led to the release of a discussion paper and call for public submissions on the issue in late 2007, with submissions due by 11

⁵⁶ See, for example, 'Government Information and Open Content Licensing: An Access and Use Strategy' (2006) Queensland Spatial Information Council, [http://www.qsic.qld.gov.au/QSIC/QSIC.nsf/0/F82522D9F23F6F1C4A2572EA007D57A6/\\$FILE/Stage%202%20Final%20Report%20-%20PDF%20Format.pdf?openelement](http://www.qsic.qld.gov.au/QSIC/QSIC.nsf/0/F82522D9F23F6F1C4A2572EA007D57A6/$FILE/Stage%202%20Final%20Report%20-%20PDF%20Format.pdf?openelement); Intrallect Ltd (E. Barker, C. Duncan) and AHRC Research Centre (A. Guadamuz, J. Hatcher and C. Waelde), *The Common Information Environment and Creative Commons: Final Report to the Common Information Environment Members of a study on the applicability of Creative Commons Licenses* (2005), http://www.intrallect.com/index.php/intrallect/knowledge_base/general_articles/creative_commons_licensing_solutions_for_the_common_information_environment_1/; and Mireille van Eechoud and Brenda van der Wal, *Creative Commons licensing for public sector information: Opportunities and pitfalls* (2007) Institute for Information Law, University of Amsterdam http://www.ivir.nl/publications/eechoud/CC_PublicSectorInformation_report_v3.pdf.

⁵⁷ *The Coalition Government Election Policy 2004 Strengthening Australian Arts* (The Nationals, 2004), http://www.nationals.org.au/downloads/australian_arts_policy_document.pdf, p.13.

January 2008.⁵⁸ The current government's response to the paper is still forthcoming.

A more permissive legislative approach to the preservation of copyright material is unlikely, however, until legislators are convinced that allowing for format-shifting and multiple copying will not undermine the copyright owner's commercial market. Nevertheless, there is a strong argument that at a minimum libraries and archives should be granted greater rights to reproduce government and publicly funded material, whether through amendments to the *Copyright Act* or the introduction of effective, government-wide open access schemes.

Any legislative amendments to facilitate digital preservation, whether for all or only certain copyright materials, would also need to:

- clarify the application of the commercial availability and three-step tests to digital materials so as to enable adequate format-shifting of aging digital material;
- provide for practical circumvention or disabling of TPMs for preservation purposes;
- protect cultural institutions against liability for infringement of moral and performers rights; and
- invalidate any contractual provisions that seek to exclude libraries' rights to undertake preservation activities.

Ideally, the amendments would also loosen current provisions restricting access to obscure digital material.

Industry Initiatives

Another consideration relevant to reform proposals is the fragmentary character of current digital preservation initiatives in Australia. Reform of the Federal copyright law would ideally be accompanied by uniform legislative or policy reforms to create consistency in digital deposit and preservation activities in the Australian jurisdictions.

As well as individual projects such as PANDORA and Our Digital Island, a number of institutions and industry bodies are participating in national and international initiatives designed to address the weakness of Australia's current legislative position on digital preservation and access. These include:

- the NLA's Preserving Access to Digital Information (PADI) initiative, which is led by a multinational advisory group made up of members from the international library community;⁵⁹

⁵⁸ 2007 Discussion Paper on the Extension of Legal Deposit (Department of Broadband, Communication and Digital Economy, 2007), http://www.arts.gov.au/_data/assets/pdf_file/80928/legal_deposit_discussion_paper_2007.pdf.

- a *Code of Practice for Providing Long-Term Access to Australian Online Publications* developed jointly by the Australian Publishers' Association and the NLA;⁶⁰
- the NAA-led Australasian Digital Recordkeeping Initiative (ADRI), which brings together the expertise of all ten national, state and territory public record institutions in Australia and New Zealand to facilitate collaboration on the “development, articulation and implementation of a common set of strategies for enabling the making, keeping and using of the digital records of governments”;⁶¹
- the federally-funded Australian Partnership for Sustainable Repositories (APSR) project, which aims to establish a centre of excellence to develop best practice in Australia in the management of scholarly assets in the digital format;⁶²
- the Australian Research Repositories Online to the World (ARROW) project, which aims to identify and test software and technological solutions to support best practice institutional digital repositories;⁶³ and
- the broad range of education, research and standard development activities being undertaken by the Australian Library and Information Association.⁶⁴

V. Study Recommendations

Australian Recommendations

The following recommendations were provided in the Australian chapter of the ISICLDP Report. They are intended to accommodate the concerns of Australian copyright owners as well as the preservation requirements of cultural institutions.

- 1 The Australian Federal government should commission an independent study to determine the effect of digital preservation on commercial markets for digital publications.

⁵⁹ Preserving Access to Digital Information, *About PADI*, available at <http://www.nla.gov.au/padi/about.html>.

⁶⁰ See National Library of Australia, *Nurturing Our Digital Memory: Digital Archiving and Preservation at the National Library of Australia*, available at <http://www.nla.gov.au/nla/staffpaper/2002/berthon1.html>.

⁶¹ Australasian Digital Recordkeeping Initiative, *About ADRI*, available at <http://www.adri.gov.au/content.asp?cID=14>.

⁶² Australian Partnership for Sustainable Repositories, *About*, available at <http://www.apsr.edu.au/about.html>.

⁶³ Australian Research Repositories Online to the World, *About ARROW*, available at <http://arrow.edu.au/about/>.

⁶⁴ Australian Library and Information Association, *ALIA Policies*, available at <http://www.alia.org.au/policies/preservation.html>.

- 2 All Australian jurisdictions should reform their digital deposit laws and practices on a consultative and, so far as possible, complementary and uniform basis.
- 3 Preservation institutions should be encouraged to agree on uniform principles or guidelines for digital preservation to ensure effective conservation of Australia's cultural heritage.
- 4 Preservation institutions should, at a minimum, be granted rights to reproduce government and publicly funded material for preservation and dissemination purposes, either legislatively or via the use of uniform open access licensing schemes.
- 5 The Australian Federal *Copyright Act* should be amended to:
 - a) extend the current legal deposit laws to digital materials, including granting the right for deposit institutions (notably the NLA) to actively harvest online material;
 - b) explicitly permit format-shifting and multiple copying of digital holdings for preservation purposes;
 - c) clarify that agreements purporting to modify the operation of certain exceptions to infringement (including the library and archive exceptions) have no effect;
 - d) provide libraries with the ability to effectively preserve material that is subject to TPMs, whether by extending the current exceptions to the TPM provisions or by requiring legal deposit material to be TPM free; and
 - e) permit the communication of digital holdings, particularly where they are no longer commercially available, in and outside institutional premises to facilitate access as per the institutions' fundamental role.

International Recommendations

In addition to the Australian-specific recommendations detailed above, the ISICLDP Report provided the following general recommendations as guidelines for national copyright and related rights laws and policies that concern the preservation of digital works.

Countries should establish laws and policies to encourage and enable the digital

preservation of at risk copyrighted materials. These laws and policies should, at a minimum:

1. Apply to all non-profit libraries, archives, museums and other institutions as may be authorized by national law (hereafter, "preservation institutions") that are open to the public, provided they do not undertake these activities for any purpose of commercial advantage.
2. Apply equally to all categories of copyrighted materials, including literary, artistic, musical and dramatic works, as well as to motion pictures and sound recordings.
3. Apply equally to copyrighted materials in all media and formats, whether hard copy or electronic, born digital or digitized for preservation.
4. Allow preservation institutions to proactively preserve at risk copyrighted materials before they deteriorate, are damaged or are lost, and before any software or hardware required to access and use the material becomes obsolete, subject to measures appropriate to protect the legitimate interests of right holders.
5. Allow preservation institutions to undertake preservation activities as necessary and in accordance with international best practices for digital preservation, including
 - (a) Reproduction and retention of such copies as may be necessary for effective digital preservation;
 - (b) The serial transfer of copyrighted works into different formats for preservation in response to technological developments and changing standards; and
 - (c) The communication of works within the preservation institution for administrative activities related to preservation, or between the preservation institution and legally authorized third party preservation repositories as necessary for the purpose of maintaining redundant preservation copies to protect against catastrophic loss.

All of the foregoing should be subject to measures appropriate to protect the legitimate interests of right holders.

6. Enable relevant preservation institutions comprehensively to preserve copyrighted materials that have been made available to the public in digital form, by means of
 - (a) A legal deposit system;

- (b) The legal ability to harvest publicly available online content for preservation purposes;
- (c) Incentives for contractual arrangements for preservation activities; and/or
- (d) Some combination of the foregoing.

It is also recommended that

7. Preservation institutions should work with right holders to develop workable approaches to the digital preservation of copyrighted materials protected by technological measures such as encryption or copy protection.
8. Preservation institutions should develop best practices for digital preservation.
9. Further research should be undertaken on the national level with regard to whether and under what circumstances access to digital preservation copies can be provided without harm to right holders.
10. Further research should be undertaken on the national level to re-examine the interaction between copyright and private agreements as it relates to digital preservation.

The research suggested in recommendations 9-10 will help in determining whether common approaches to these issues can be developed.