Digital Rights Challenges in a World of Technological Convergence

Teknolojik Yakınsama Dünyasında Dijital Haklarla İlgili Meydan Okumalar

John N. Gathegi

University of South Florida, School of Library and Information Science, 4202 E. Fowler Ave., CIS1040 Tampa, FL. 33620, USA. jgathegi@cas.usf.edu

Abstract: The convergence of communication, caused in part by the convergence of media and digital content, is a continuing phenomenon. Many intellectual property challenges loom in this environment. This paper focuses on the situation in the Unites States. The peculiar features inherent in digital content that exacerbate the intellectual property problem, such as non-permanent, multiple, and heterogeneous media are discussed. A few US cases that illustrate some of the problems in this area are also examined. The paper concludes by looking at the multiple goals of digital content collections and the problem of intellectual property.

Keywords: Digital rights, intellectual property, digital content

Öz: Kısmen medya ve dijital içeriğin yakınsaması nedeniyle oluşan iletişimin yakınsaması sürekli bir olgudur. Bu çevrede entellektüel mülkiyetle ilgili birçok meydan okuma bulunmaktadır. Bu bildiri ABD'deki durum üzerine odaklanmaktadır. Kalıcı olmama, çoklu ve heterojen medya gibi dijital içeriğe özgü ve entellektüel mülkiyet sorununu zorlaştıran özellikler tartışılmaktadır. Bu alandaki sorunları örnekleyen ABD'deki birkaç vaka incelenmektedir. Bildiri dijital içerik dermelerinin çoklu amaçlarına ve entellektüel mülkiyet sorununa göz atarak sona ermektedir.

Anahtar sözcükler: Dijital haklar, entellektüel mülkiyet, dijital içerik

Introduction

This paper examines the continuing phenomenon of convergence of communication, caused in part by the convergence of media and digital content. We review some of the intellectual property challenges that loom in this environment, with an emphasis on the situation in the Unites States. We also discuss some of the peculiar features inherent in digital content that exacerbate the intellectual property problem, such as non-permanent, multiple, and heterogeneous media. Also, we examine a few US cases that illustrate some of the problems in this area. We conclude by looking at the multiple goals of digital content collections and the problem of intellectual property.

Dynamism and the Problem of Non-permanence

Unlike its print counterpart, digital content has some unique features that pose legal challenges in both management and development. In this paper, we shall examine three such features: digital content may have more than one media format, may suffer issues of non-permanence, and is dynamic.

Dynamism is a key characteristic of digital content. Corrections and modifications are constantly being made to specific files and databases, and items are constantly being added and as the need arises. Thus, a file today may not be exactly the file one looked at yesterday. The preservation of digital content and vouching for its integrity then become pressing questions.

There are many problems that come with preservation efforts. Chief among these is how to ensure the efforts do not result in the infringement, not just by avoiding unauthorized exercise of the authors' exclusive rights, but also by determining the scope of copyright protection, especially where availability to content and agreement with copyright holders is desired. Whether the digital content manager still has the necessary rights to the e-content is a crucial question. The dynamism and non-permanence of digital content may raise issues of ethics, privacy, and confidentiality, especially where health and personal data is involved (Anderson, 2004).

Lavoie and Dempsey note that despite perceptions to the contrary, "digital information is in fact fragile and at risk" (Lavoie and Dempsey, 2004). Some digital files can be rendered corrupt and unreadable, due to changes in technology.

124 Gathegi

Uncertainty with information preservation increases with the length of the time frame required for future access. Changes in metadata content, data definitions and format are some of the challenges confronting the digital content manager (Anderson, 2004, p. 7). This is especially a problem because many formats have protection and are continually evolving, more complex versions with newer features and functions are developed. This sometimes results in earlier versions being 'orphaned' (Arms, 2000). Contractual limits to access by a proprietary owner or a proprietary owner who goes out of business can also present legal access problems (Barnes, 2006).

Migration of data, both in terms of software and hardware, is one way of handling format changes in digital preservation. Sometimes this will involve re-arranging the sequence of structural and data elements (Arms, 2000). Migrating data usually involves copying information, which infringes the exclusive right of the author to reproduce. Re-arranging the structural and data elements may also trample on the exclusive right of the author to make derivative copies. Thus, it is conceivable that one might need to seek permission from the copyright holder to migrate the information. Whether a file conversion would violate the Digital Millennium Copyright Act is an issue in the United States, as is the question of whether a migrated file is the same as the original file for evidentiary purposes.

The Complexity of Multi-media Content

Digital content may also contain a mixture of different media formats, including text, sound, graphics, video, and a variety of other file formats in addition to being dynamic and raising the problem of non-permanency.

Electronic books, or e-books, are good examples of multimedia digital content. For instance, one might find an article about a country, a video about parts of the country, and a sound file of examples of music from the country in an e-book.

E-books can be accessed through a central server, but are often proprietary devices. Just like with any other digital content, e-book collections are equally susceptible to easy copying. In order to protect the exclusive rights of copyright owners, e-books use digital rights management technology to control access to copyright protected content. Not all e-books are so protected, however. A digital manager can link to much e-book content that is available free of copyright protection (Esposito, 2005). By negotiating intellectual property rights with publishers, e-book aggregators are able to provide 24/7 access to content hosted on their servers. Legal issues are less of a problem here, because aggregators usually implement their own digital rights management technology (Garrod, 2003).

It is important that the digital collection manager understand limitations on access that come with digital rights management systems, as well as the variations in pricing models, which vary from outright purchase to limited term leases. Leases can include terms that restrict certain uses such as printing and downloads, as well as what content can be accessed and the number of person that can have access at the same time.

The fact that some media formats are covered by rules specific to the media, sound files, for example, complicates legal issues in this area. As discussed above, copyright infringement may be triggered by conversion from one format to another. In the United States, the date on which the sound recording was first fixed may determine what legal protection exists. Prior to February 15, 1972, for example, federal law did not provide copyright protection to sound recordings. This situation was corrected by the Sound Recording Amendment Act of 1971, which for the first time provided copyright protection to such works (Besek, 2005). Until February 15, 2067, however, pre-1972 works may be protected against unfair competition or misappropriation by state criminal law statutes or common law (17 USC 301 (c)).

Document Icons and Page Thumbnails

Also presenting new legal issues are other newer versions of familiar formats, such as document icons and page thumbnails. Document icons can be described as visual representations of documents in a reduced format (Janssen, 2004). They usually contain format or genre information about a document, whether, for example, the document is a pdf, a web page, or simply a file folder. Similarly, page thumbnails are represented as small images of a page that can be enlarged for viewing by the user, and generally have a lower resolution.

Thumbnails have an impact on two rights exclusive to the copyright holder. While crawling, search engines make copies of the images they encounter. Thus, they may be in violation of the author's exclusive right to make reproductions of a work (17 USC 107). When they show the thumbnails to the user, search engines may in some cases also be in violation of the right to public display, which is an author's exclusive right (17 USC 107). But such a claim can sometimes be refuted by relying on a limitation of the author's exclusive rights provided by the Fair Use doctrine, as the Kelly v. Arriba (2002) and Perfect 10 v. Google (2006) cases below do.

In the Kelly case, a visual search engine operator had built up a database by copying images from web sites. It would then reduce these images into thumbnails that a user could enlarge by simply clicking on them. The operator then displayed these thumbnails on its website, and licensed others to do the same on their websites. A photographer sued the operator for displaying the photographer's copyrighted images. Finding that the character and purpose of the operators use of the images was "significantly transformative and the use did not harm the market for or value of [the photographer's] works," the lower court ruled that the use of the thumbnails was fair use (Kelly v. Arriba, 2002). That ruling was affirmed on appeal by the 9th Circuit Court of the US Court of Appeals.

A website operator/publisher got a chance to sue Internet search engines in Perfect 10 v. Google (2006). Perfect 10 had invested heavily in developing a brand name for a web site and a magazine in which it published adult photographs. The search engines operators Google and Amazon, whose search engines following a search string query would retrieve thumbnail images, included Perfect 10's images retrieved from Perfect 10's web site. Perfect 10 sued both search engine operators. In response to Perfect 10's motion for an injunction, trial judge explained:

The principal two-part issue in this case arises out of the increasingly recurring conflict between intellectual property rights on the one hand and the dazzling capacity of internet technology to assemble, organize, store, access, and display intellectual property "content" on the other hand. That issue, in a nutshell, is: does a search engine infringe copyrighted images when it displays them on an "image search" function in the form of "thumbnails...? (Perfect 10 v. Google, 2006 at 831).

The trial judge issued the preliminary injunction against Google's creating and displaying Perfect 10's images, because he believed there was a likelihood of success in Perfect 10's claim of Google's direct infringement of its copyrighted images. According to the trial judge, this case was different from Kelly v. Arriba because Perfect 10 conceivably had a market for downloading adult images thumbnails into mobile phones, and that Google's action would harm that market. On appeal, the 9th Circuit threw out that argument, ruling, as it had done in Kelly, that because they did not detract from the economic value of the images, Google's use of the thumbnails were fair use, opening the door for Google's continued used of Perfect 10's thumbnails (Perfect 10, Inc. v. Amazon.com, 2007).

The Legal Complexities of Multiple, Heterogeneous Content

Digital collections have multiple, heterogeneous content. There are two ways of looking at this characteristic. One is by looking at the different types of digital collections, and the other is by looking at the different goals of digital collections, while acknowledging that digital collections often has multi-type content designed for multi-type goals.

One ubiquitous example is the Internet itself. From one vantage point, this can be considered as one giant digital collection; something we might call a "meta-collection." Libraries and individuals, usually through linking and bookmarking, take subsets of this "meta-collection" to organize their own special collections. In Europe, unlike in the US, linking has generated some legal challenge; Bookmarking on the other hand has seen no such challenge.

Digital collections may include commercial databases, which bring with them their own issues regarding copyright protection and licensing. As far as data sets (which may be a type of commercial database) go, there is more emphasis on licensing issues as opposed to copyright.

A special focus on collective works and compilations is appropriate at this point. In the US, a compilation is defined as "a work formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship. The term 'compilation' includes collective works." (17 USC 101).

The US copyright law specifically mentions that compilations are included as a subject matter of copyright, but with a caveat: only what the author has contributed is protected, the underlying or pre-existing material is not, and neither unlawfully-used pre-existing material (17 USC 102, 103).

Collective works and compilations may or may not have common characteristics. In a collective work, individual components are generally independent copyrightable works, while compilations may include material that is not necessarily copyrightable (Roy Export Co., 1982). Separate contributions to a collective work can have copyright protection that is distinct from copyright in the collective work as a whole. Owning a copyright in a collective work only entitles the copyright owner to "the privilege of reproducing and distributing the contribution as part of that particular collective work, any revision of that collective work, and any later collective work in the same series (17 USC 201(c))." The court in New York Times Co., Inc. v. Tasini (2001) explored the question of whether a copyright owner in a collective work who republished all or a part of the compilation in an electronic database could prevail against an

126 Gathegi

assertion of copyright infringement from the author of a contribution in the compilation. The case involved freelance writers who had sued a newspaper publisher for making their articles available in electronic databases. The newspaper asserted a privilege offered by section 201(c) of Title 17. Under section 201(c):

Individual components of a collective work can generally have their own independent copyright protection, but material that is not necessarily copyrightable may be present in compilations (Roy Export Co., 1982). Copyright in the collective work as a whole is distinct from copyright protection of the separate contributions. Copyright in a collective work entitles the owner only to "the privilege of reproducing and distributing the contribution as part of that particular collective work, any revision of that collective work, and any later collective work in the same series (17 USC 201(c))." This doctrine was re-affirmed in New York Times Co., Inc. v. Tasini (2001), a case that looked at whether a collective work copyright owner could republish all or a part of a database in spite of an assertion of copyright infringement from a contributor to the work. In this case, a newspaper publisher had made articles authored by free-lance authors available in electronic databases. The authors sued the newspaper. Section 201(c) of Title 17 offers a privilege, which the newspaper asserted:

Copyright in each separate contribution to a collective work is distinct from copyright in the collective work as a whole, and vests initially in the author of the contribution. In the absence of an express transfer of the copyright or of any rights under it, the owner of copyright in the collective work is presumed to have acquired only the privilege of reproducing and distributing the contribution as part of that particular collective work, any revision of that collective work, and any later collective work in the same series. (17 USC 201(c)).

Rejecting the newspaper's reliance on the privilege offered by section 201(c), The Supreme Court looked at how the user would perceive the articles as presented in the database. Under the right circumstances, however, the privilege continues to be available. For example, the National Geographic publisher compiled past issues of the magazine and digitized them making transforming them into a database dubbed the Complete National Geographic, that electronically searchable. When freelance photographers and authors sued objecting to their work being used in this new media, a second circuit court affirmed the granting of summary judgment to the publisher (Faulkner, 2005). The Court concluded that the digital Complete National Geographic was a new version of the print National Geographic Magazine, and that the original context of the magazine was present in the new version. Users of the database in Tasini were, however, unable to view the underlying works in their original context, unlike in the National Geographic Case.

Different Goals

Digital collections are heterogeneous, are in multiple formats, and have different goals. Preservation is on of the goals of digitization. US copyright law grants some institutions a legal privilege to exercise the author's exclusive right to reproduce, for the purposes of preservation. Preservation and conservation needs in the US are taken care of by Section 108 of the U.S. copyright code (17 USC 108). Along with copyright, evidence is among other legal issues that are likely to emerge in this area.

When considering preservation for evidentiary purposes, the issue of non-permanence becomes critical. It is telling that Electronically Stored Information (ESI) was added in December 2006 as a new category of evidence in the U.S. Federal Rules of Civil Procedure to work within the existing rules for production of "documents" during discovery. Parties in litigation have to provide each other with: "a copy--or a description by category and location--of all documents, electronically stored information, and tangible things that the disclosing party has in its possession, custody, or control and may use to support its claims or defenses..." (Federal Rules). The version of the electronically stored information to be produced is not specified, but Rule 26(f) obliges the parties to meet and "...discuss any issues about preserving discoverable information" and "any issues about disclosure or discovery of electronically stored information, including the form or forms in which it should be produced" (Federal Rules).

Authenticity in evidentiary terms is an issue that is closely related to non-permanence. Tampering with or corrupting digital information is not an uncommon occurrence. To preserve authenticity, it may be necessary to employ authenticating tools like encryption, digital signatures, and version control, among others (Germain, 2007).

In conclusion, we have to emphasize that access and preservation are much inter-twined. Access to information can be for many different reasons, such as research, safeguarding culture, or even entertainment. The issue of copyright protection is always present, and is complicated by the fact that there are different duration terms for different works, depending on the creation or publishing date. In preservation, licensing for access is likely to be the most frequently occurring issue. However, the scope of this paper unfortunately precludes a discussion of access as defined by use.

References

17 USC 101 (Title 17 of the United States Code, Section 101)

17 USC 102, 103

17 USC 107

17 USC 108

17 USC 201(c)

17 USC 301(c) provides: "With respect to sound recordings fixed before February 15, 1972, any rights or remedies under the common law or statutes of any State shall not be annulled or limited by [Title 17] until February 15, 2067."

Anderson, W.L. (2004). Some challenges and issues in managing, and preserving access to, long-lived collections of digital scientific and technical data. *Data Science Journal*, 3, 191-201. Retrieved June 29, 2009 from http://www.jstage.jst.go.jp/article/dsj/3/0/191/_pdf p.7)

Arms, C. (2000). Keeping memory alive: Practices for preserving digital content at the National Digital Library Program of the Library of Congress. *RLG DigiNews*, 4 (3). Retrieved June 11, 2010 http://webdoc.gwdg.de/edoc/aw/rlgdn/preserv/diginews/diginews4-3.html#feature1

Barnes, I. (2006). *The preservation of word processing documents*. Canberra: Australian Partnership for Sustainable Repositories, 2006. Retrieved June 29, 2009 from http://www.apsr.edu.au/publications/word_processing_preservation.pdf).

Besek, J.M. (2005). Copyright issues relevant to digital preservation and dissemination of pre-1972 commercial sound recordings. Washington, DC: Council on Library and Information Resources and Library of Congress, p.16-17

Esposito, J. (2005). The processed book. *First Monday*, 8, 3. Updated from the 2003 article in http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1038/959

Faulkner v. National Geographic Enterprises Inc., 409 F.3d 26 (2d Cir. 2005)

Federal Rules of Civil Procedure 26(a)(1)(A)(ii)

Garrod, P. (2003). Ebooks in UK libraries: Where are we now? *Ariadne*, *37*. Retrieved January 30, 2010 from http://www.ariadne.ac.uk/issue37/garrod/

Germain, C.M. (2007). Legal information management in a global and digital age: Revolution and tradition, *International Journal of Legal Information*, 35(134), 156-157.

Janssen, W.C. (2004). Document icons and page thumbnails: Issues in construction of document thumbnails for page-image digital libraries. Palo Alto, CA: Palo Alto Research Center.

Kelly v. Arriba, 280 F.3d 934 (9th Cir. 2002).

Lavoie, B. & Dempsey, L. (2004). Thirteen ways of looking at...preservation. *D-Lib Magazine*, 10, 7/8. Retrieved January 30, 2010 from http://dlib.org/dlib/july04/lavoie/07lavoie.html

New York Times Co., Inc. v. Tasini, 533 U.S. 483 (2001).

Perfect 10 v. Google, 416 F. Supp. 2d 828 (C.D. Cal. 2006).

Perfect 10, Inc. v. Amazon.com, Inc., 508 F.3d 1146 (9th Cir. 2007).

Roy Export Co. Establishment of Vaduz, Liechtenstein, Black Inc., A. G. v. Columbia Broadcasting System, Inc., 503 F. Supp. 1137 (S.D. N.Y. 1980), judgment aff'd, 672 F.2d 1095 (2d Cir. 1982).