

Policy Model for University Digital Collections

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Abstract. The access and reproduction policies of the digital collections of ten leading university digital libraries worldwide are classified according to factors such as the creation type of the material, acquisition method, copyright ownership etc. The relationship of these factors is analyzed, showing how acquisition methods and copyright ownership affect the access and reproduction policies of digital collections. We conclude with rules about which factors lead to specific policies. For example, when the library has the copyright of the material, the reproduction for private use is usually provided free with a credit to the source or otherwise mostly under fair use provisions, but the commercial reproduction needs written permission and fees are charged. The extracted rules, which show the common practice on access and reproduction policies, constitute the policy model. Finally, conventional policies are mapped onto digital policies.

1. Introduction

Libraries are in a transition period from conventional to digital formats and have not yet developed common practices and traditions on policy for digital material. This can prevent cooperation and interoperability in libraries, restricting the usefulness of their services. Conventional policies do not map directly onto digital ones with differences primarily due to the easy duplication properties of the digital material.

University libraries have well established traditions of cooperation and they play a leading role in the production and dissemination of digital material. In addition, they have a leading role to play in using new technologies, such as digital libraries. They have implemented an appropriate infrastructure for the development of digital libraries and policies and they facilitate the use of new technologies by students. Due to their leading position in the academic system and in the scientific community, they have prestige and their practices and policies can be easily disseminated to the rest of the library sector (national, public libraries etc.).

In this paper, the access and reproduction policies of the digital collections of twenty leading university digital libraries from three continents were examined and ten of them are presented here; those which are considered to have the most diversified and innovative access and reproduction policies and are the most active in the area of digital libraries. We were interested in libraries that have large digitization projects and preferably, they use or, even better develop, commonly used software

(such as *Greenstone* [16]) to provide their digital content. In addition, we were interested in libraries which have collections with various *creation types* (digitized, born-digital) or content types of material (video, audio etc.), various copyright owners (libraries, individuals, organizations such as publishers etc.), diversified access and reproduction policies and various acquisition methods (license, purchase, digitization of library or third-party material etc.). The libraries studied, corresponding to the above criteria, are central academic libraries of large universities, which act as the coordinating bodies for the entire library system of their universities.

Analyzing and studying a big sample of university libraries, we realized that the majority of them follow similar policy rules and models. We selected twenty of them to analyze further, because they differentiate on policies, material and vision; more libraries will give us more quantitative but not qualitative results. We present here ten of them, because they contain all applied policies that appear on these twenty libraries, which we analyzed further.

Meyyappan [11], who described the status of twenty digital libraries, mentioning also their access policies, has undertaken similar work previously. In addition, Walters [15], presents an introduction to the acquisition of video media (DVD and VHS) in academic libraries, with an emphasis on the procedures most appropriate for undergraduate colleges. However, no previously studies have focused exclusively on access and reproduction policies.

To collect the data for this study, we derived information from the websites, in some cases supplemented by personal communication with the libraries. In section 2, we classify the policies according to factors such as the type of the material, its acquisition method, copyright ownership etc., and we present some quantitative data, indicating which factors lead to specific policies. We also analyze how the factors affect the policies. In section 3, we present our policy model by extracting common practice and deriving generalized rules on policies for digitized and born-digital material separately. We present the most common practices on policies, which the libraries follow. In section 4, we map conventional access and reproduction policies on to their digital counterparts and we compare them, focusing mostly on their differences. We examine which conventional policies can be mapped to new digital policies and discuss the advantages and disadvantages of this transition. Finally, concluding remarks are made in section 5 and future work is illustrated.

Most libraries face difficulties in resolving the problems that arise due to the properties of the digital material, such as, for instance, the access to university digital collections by students on campus and by distance learners. This paper provides useful information on university library practices concerning these problems and about common practices related to access and reproduction policies.

The strategic and philosophical question is, if the policy should be articulated at the beginning of the design of digital library or in practice before making electronic resources available to public. We distinguish the policy implementation mechanisms and the policies themselves. The mechanisms should be designed from the beginning with the necessary flexibility in order to apply policies, which may be determined later on during the use, and should be customizable to the needs of the user community that each digital library focuses on. However, we should have from the beginning an idea of the policies that will be used, but mostly, we have to implement flexible mechanisms. As long as we have the policy implementation mechanisms, we

can choose or change the appropriate policy for each kind of material whenever we need. Situations like these are common, especially for organizational or interoperability reasons.

2. Classification of Policies

In Table 1, we classify the access and reproduction policies of the university digital collections, according to the type of the material, the acquisition method and copyright ownership. The relations among the factors and the policies are analysed and the diversification of policies that arise is illustrated and presented in section 3, where we analyze the proposed policy model.

The majority of *values* in Table 1 are abbreviations, used for formatting reasons. The values are mentioned for each column and case and they are explained below. The table is ordered according to the creation type of the material (third column, value: *C-t*). There are three blocks or categories: digitized (value: *Dig*), digitized and born-digital (value: *Dig, B-d*), and born-digital (value: *B-d*). Subsequently, each block is sorted according to geographical location (second column, value: *Loc*), and finally, the collections or the libraries (first column, value: *Col/Lib*) are ordered alphabetically for each geographical location.

The first (*Col/Lib*) and second (*Loc*) columns give information about the name of the collection and their location. The first column contains the collection names from ten university libraries. Each row represents either a whole library or some of its parts (split into separate rows), because they are diversified in terms of factors and policies from the rest of the collections of the library presented as a whole. We present the abbreviations of the libraries and collections in turn: *Aladin Digital Library* (ADL), *Felix E. Grant Collection* (FEG [14]) of ADL, *Historical Monograph Collection* (HM [4]) of *Cornell University Library* (COUL [3]), *Image Collections* (IC [4]) of COUL, *Northwestern University Library* (NUL [13]), *North Carolina State University Libraries* (NCSUL [12]), and *Samuel J. May Anti-Slavery Collection* (SJMAS [5]) of COUL. *Cambridge University Library* (CUL [1], [2], [8]), *Miguel de Cervantes Digital Library* (MdCDL), *New Zealand Digital Library* (NZDL [16]), *Harvard University Library* (HUL [10]), *Glasgow Digital Library* (GDL [9]), *Dartmouth College Digital Library* (DCDL [6], [7]), *Past Masters* (PM) and *Patrologia Latina* (PL) of COUL.

The third column (*C-t*) shows how the digital material was created. We have two cases: *digitized* (*Dig*) or *born-digital* (*B-d*) and a collection can have either one or both (*Dig, B-d*) types of material. The fourth column (*A-m*) shows the acquisition method of the material, which has five values: *library* (*Lib*), *third-party* (*T-p*), *license* (*Lic*), *purchase* (*Pur*) and *voluntary deposit* (*V-d*). *Library* means that the library has created its own digitized or born-digital material. *Third-party* means that the library has digitized and/or acquired born-digital third-party material, which may be free or restricted by the owner. *License* means that the library has acquired digitized and/or born-digital material through license. *Purchase* means that the library has purchased digitized and/or born-digital material. *Voluntary deposit* means that the library has acquired born-digital material through voluntary deposit.

Table 1. Factors of access and reproduction policies for digital collections

Col/Lib	Loc	C-t	A-m	C-o	Off-c	Offsite	P-r	Commercial reproduct		
								Allow	W-p	Fee
ADL	USA	Dig	Lib	Lib	Yes	Yes	Yes	No	N/A	N/A
FEG	USA	Dig	Lib	Lib, Ind, Org	No	No	Yes	Yes	Own	Own
HM	USA	Dig	Lib	Lib, P-d	Some	Some	Fair	Yes	Lib	Lib
IC	USA	Dig	Lib, T-p	Lib, Ind,	Yes	Some	Fair	Yes	Lib, Own	Lib, Own
NUL, NCSUL	USA	Dig	Lib, T-p	Lib+	Yes	M-yes	Case	Case	Case	Case
NCSUL	USA	Dig	Lib	Vary	Yes	Some	Fair	No	N/A	N/A
SJMAS	USA	Dig	Lib	Lib	Yes	Yes	Fair	Yes	Lib	Lib
CUL	UK	Dig	Lib, T-p	Lib+	Yes	M-yes	Yes	Yes	Lib, Own	Lib, Own
MdCDL	ES	Dig	Lib, T-p	Lib, P-d	Yes	Yes	Yes	Some!	Lib	No
NZDL	NZ	Dig	T-p	Lib, Ind, Org, P-d	Yes	Yes	Yes	No	N/A	N/A
HUL	US	Dig, B-d	Lib	Lib	Yes	M-no	Yes	Yes	Lib	Lib
			Lic, Pur,	Lib, Org	Some	M-no	Yes	Yes	Lib	Lib, Own
MdCDL	ES	Dig, B-d	Lic	Vary	Yes	Yes	Yes	No	N/A	N/A
GDL	UK	Dig, B-d	Lib, T-p	Lib, Ind, Org	Yes	Yes	Yes	Yes	M-Own	Own
DCDL	USA	B-d	Lib	Lib	Yes	Some	Fair	Yes	Lib	Lib
			Lic, Pur	Org	Some	No	Fair	Yes	Own	Own
NUL, NCSUL	USA	B-d	Lic, Pur	Lib, Org	Some	No	Case	Case	Case	Case
NCSUL	USA	B-d	Lic, Pur	Vary	Yes	Some	Fair	No	N/A	N/A
PM, PL	USA	B-d	Lic	Ind	Yes	No	Fair	No	N/A	N/A
CUL	UK	B-d	Lic, Pur, V-d	Org	Vary	M-no	Yes	No	N/A	N/A

+ The library is usually the owner of the digitized material, but sometimes there are other owners or the material is in public domain.
! The commercial reproduction is usually prohibited, but in some cases is merely permitted with written permission from the MdCDL.

The fifth column (*C-o*) presents the copyright owner, which has five values: *library (Lib)*, *individual (Ind)*, *organization (Org)*, *vary* and *public domain (P-d)*. *Library* means that the copyright of the material is owned by the organization that the library belongs to, and is administered by the library. *Individuals* and/or *organizations* mean that the copyright belongs to owners other than the library, which can be individuals and/or organizations respectively; this is the meaning of the term *other owner(s)* that is used frequently on the following sections. *Vary* means that the

copyright varies from collection to collection. *Public domain* means that nobody has or claims the copyright of the material.

Access policies are stated in the sixth and the seventh columns. *On-campus access for onsite users is always free*. The sixth column (*Off-c*) shows the off-campus access policy for onsite users and the seventh (*Offsite*) the offsite access policy. In these columns, we have three values: *yes*, *no* and *some*. *Yes* means that the off-campus onsite and the offsite access are both free. *No* means that the off-campus onsite and the offsite access are not provided. *Some* means that the off-campus onsite and the offsite access are provided in some cases. In off-campus onsite access, we also have the value *vary*, meaning that the off-campus onsite access varies from item to item. In the offsite access column, we also have the values *mostly no (M-no)*, meaning that the offsite access is not provided in most of the cases, and reciprocal, *mostly yes (M-yes)*, meaning that the offsite access is provided in most of the cases.

The off-campus onsite access always refers to onsite users, students, faculty, staff etc., which are affiliated with the university, and they may access the material outside of the university, independently of their location, usually by using user name and password authentication. For example, a Greek student may have access to e-journals of CUL, from its home in Greece, during summer. In contrary, offsite access refers to the rest of the users that are not affiliated with the university, which use the Internet, for accessing the material – without having the privilege of authentication and most of the times with different and restricted access rights from off-campus onsite users.

The eighth column (*P-r*) shows the *private reproduction* policy (or reproduction for private use), which has three values: *yes*, *fair use (Fair)* and *case-by-case (Case)*. *Yes*, means that the private reproduction is free with a *credit* (mention) to the source, *fair use* means that it is provided under fair use provisions and *case-by-case* means that it is on a case-by-case basis.

The ninth, tenth and eleventh columns refer to the commercial reproduction policy (*Commercial reproduct*). The ninth column (*Allow*) shows if commercial reproduction is permitted, which has four values: *yes*, *some*, *no*, and *case-by-case (Case)*. *Yes* means that the commercial reproduction is permitted with written permission from and fees paid to the owner (library and/or other owners), but sometimes (e.g. MdCDL), even if written permission is needed, fees are not charged. *Some* means that the commercial reproduction is sometimes permitted, *no* means that it is not authorized and *case-by-case* means that it is on a case-by-case basis.

The tenth column (*W-p*) states who gives the written permission for the commercial reproduction, if it is needed. We have five values: *library (Lib)*, *owners (Own)*, *owners mostly (M-own)*, *case-by-case (Case)* and *N/A*. *Library* means that the written permission is given by the library, *owners* means that it is given by owners other than the library, *owners mostly* means that it is given mostly by other owners and less by the library. *Case-by-case* means that the written permission is examined on case-by-case basis and *N/A* means that it is not applicable. *Library* and *owners* can appear as value *Lib*, *Own*, if both the library and the owners require written permission.

The eleventh column (*Fee*) states to whom the fee should be paid for commercial reproduction, if it is needed. We have five values: *library (Lib)*, *owners (Own)*, *case-by-case (Case)*, *no* and *N/A*. *Library* means that the fee is paid to the library. *Owners* mean that the fee is paid to owners other than the library. *Case-by-case* means that the

payment of the fee is examined on case-by-case basis, *no* means that a fee is not charged and *N/A* means that it is not applicable. If the value *library, owners (Lib, Own)* appears, the fee should be paid to both library and owners.

Some general rules for the handling of digitized and born-digital material can be derived from Table 1 and its discussion, showing that there is a variety of arrangements depending on ownership of the material and its copyright. We present those rules and their exceptions on section 3, where we analyze and present our policy model.

2.1 Quantitative Analysis of Table and Remarks

From the analysis above, we see that specific factors lead to specific policies. We can derive some quantitative data and remarks that are extracted from Table 1, about which factors lead to specific policies, which are usually related to the copyright factor.

2.1.1 Acquisition and Copyright

- Libraries seem to prefer (79%) digitizing their own material on which they have the copyright.
- Libraries also often digitize free third-party (43%) or public domain (21%) material.
- Born-digital material is acquired mostly (70%) through license and/or purchase from copyright owners (organizations, individuals etc.).
- Sometimes (in 30% of cases) libraries create their own born-digital material on which they usually have the copyright.
- Born-digital material is voluntarily deposited in 10% of cases, meaning, rarely.
- When the acquisition of born-digital material is mostly through license and/or purchase, then the copyright belongs to other owners (43% of cases) or to the library and other owners (29%) otherwise it varies from item to item (28%).

2.1.2 Copyright, off-campus onsite and offsite access

- In 68% of cases, off-campus onsite access is provided. 22% provide it in a limited sense. Only 5% do not provide off-campus onsite access and, in 5 % of cases, it varies according to the collection.
- 42% of the libraries provide full offsite access. 21% provide limited access and 37% do not provide access at all.
- When offsite access is limited or not provided, there are licensing restrictions and/or the copyright belongs to other owners, or sometimes (in approximately 11% of cases), the library, even if is the copyright owner, provides only onsite access.
- In 47% of cases, off-campus and offsite access are different. In such cases, when off-campus onsite access is limited, offsite access is not provided due to licensing and copyright restrictions. In addition, when off-campus onsite access is provided, offsite access is limited or it is not provided because either the library provides only onsite access or the copyright belongs to other owners. Finally, when off-campus onsite access varies from item to item, offsite access is not provided.

2.1.3 Copyright and private reproduction

- Private reproduction is usually free with a credit to the source (in 53% of cases) or under fair use (37%) or it is on case-by-case basis (10%).
- When the library has the copyright of the material, then private reproduction is free with a credit to the source (in 50% of cases), or under fair use provisions (50%).
- When mostly the library, or the library and other owners have the copyright, then private reproduction is free with a credit to the source (in 60% of cases), or it is under fair use provisions (20%) or it is on case-by-case basis (20%).
- When other owners have, the copyright, then private reproduction is under fair use provisions (67% of cases) or it is free with a credit to the source (33%).

2.1.4 Copyright and commercial reproduction

- 53% of cases allow commercial reproduction with written permission from and fees paid to the owner (library and/or other owners). 37% prohibited it and 10% decide it on case-by-case basis.
- When the commercial reproduction needs written permission from the owner, then fees are also paid to the owner.
- 75% allow commercial reproduction with written permission from and fees paid to the library. 40% allow it with written permission from and fees paid to the owners (when the library, individuals, and organizations have the copyright).
- 50% allow commercial reproduction when organisations have the copyright with written permission from and fees paid to the owners. In 50% of cases, it is not authorized.
- When individuals have, the copyright, then commercial reproduction is usually not authorized.
- 67% permit commercial reproduction when the library mostly has the copyright with written permission (mostly from the library and rarely from the owners) and fees paid to the library and the owners. The remainder (33%) allow it on case-by-case basis.
- When the library and organizations or library and individuals have the copyright, then the commercial reproduction is usually decided on case-by-case basis, or it is allowed with written permission from and fees paid to owners.

3 Policy Model: Rules and Exceptions

From this analysis, we can derive some generalized rules, policy model, about which factors lead to specific policies. Common practice shows that the on-campus onsite access is always free, independent of copyright ownership and the creation type of the material. In addition, when there are copyright uncertainties, notwithstanding the creation type of the material, a common solution is that reproduction (private and commercial) is decided on case-by-case basis (e.g. NUL, NCSUL).

We present a policy model that contains rules for the digitized (Figure 1) and the born-digital (Figure 2) material separately. The rules refer to the common practices that the majority of university libraries follow and use. We divide the rules mostly by

using the factor of copyright ownership. In addition, we present the exceptions of the rules that supplement the policy model.

On the two figures presented below, the thick arrows show the most common rule; the dots indicate the access policies and the dashes the private and commercial reproduction policies. The figures are organised onto three layers. The first contains the creation type of the material and its acquisition methods; directs to the second one that represents the copyright ownership; and finally, directs to the third one that represents the access and reproduction policies, showing how the factors affect the policies.

3.1 Policy Model for the Digitized Material

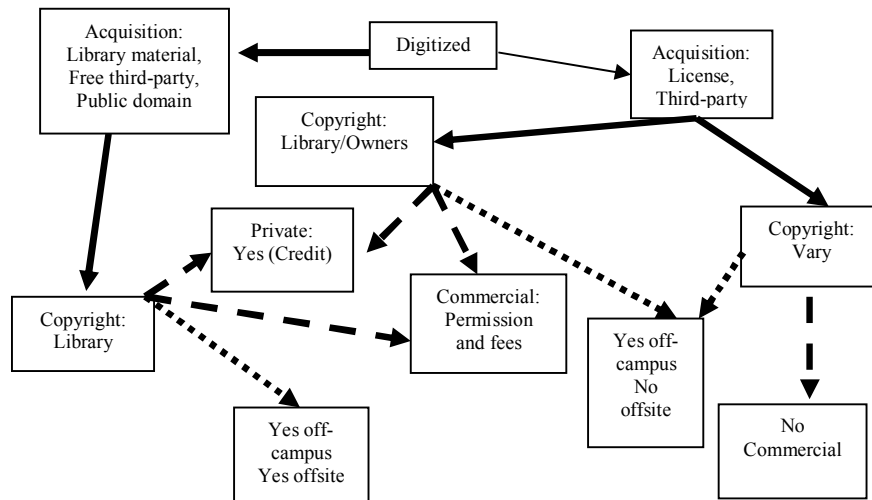


Fig. 1. Policy model for the digitized material (dots = access policies; dashes = reproduction policies)

Most libraries have decided to digitize their own material on which they have copyright. Common approaches showing that the libraries have the copyright for the digitized version of the free third-party and public domain material. A reasonable choice for the libraries would be to provide their own copyrighted digitized material with free onsite (on and off-campus) and offsite access, to permit private reproduction with a credit to the source and to require written permission and fees for commercial reproduction.

When the copyright varies (libraries and other owners, other owners only, varies from item to item) – on licensed or third-party digitized copyrighted material – the common approach is the provision of free onsite and no offsite access. Private and commercial reproduction should be permitted to onsite users only (as the access) with a credit to the source and with written permission from and fees paid to the owner (library and/or other owners) respectively. Another frequently used practice is the

prohibition of commercial reproduction, which is used very often when the copyright varies on item-by-item basis. The digitized material is not so often acquired by license or third-party, but when this happens, the previous model and rules are applied on access and reproduction policies.

On the previously presented policy model, there are some exceptions of the rules. The exceptions may be applied on three cases. First, when the libraries have or administer the copyright for the digitized version of free third-party and public domain material, it is possible to provide it with free onsite and no offsite access, to apply fair use provisions for the private reproduction, and to examine the commercial on case-by-case basis.

Second, when libraries and other owners, share the copyright of the free third-party digitized material, the access could be prohibited mostly or be provided for onsite users only and be *limited* (some) for offsite. Fair use provisions may be applied for the private reproduction; and for the commercial, the basic rule of written permission from and fees paid to owners (library and/or other owners) is followed.

Finally, when the copyright varies on item basis, which is encountered mostly on the licensed material, the access may be provided to all users, the private reproduction may follow the fair use doctrine, but the commercial follows the rule of prohibition.

3.2 Policy Model for the Born-Digital Material

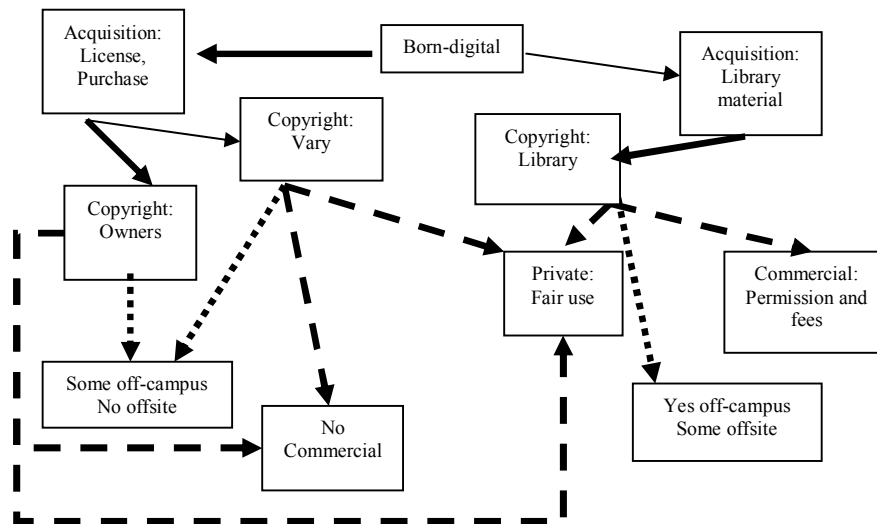


Fig. 2. Policy model for the born-digital material (dots: access policies, dashes: reproduction policies)

Most libraries acquire born-digital material through license and/or purchase with organizations (e.g. publishers) and individuals. Most libraries have decided to acquire licensed born-digital material if they will be responsible for the use of this material. Common practice shows that mostly other owners have the copyright of the licensed

material. A reasonable choice would be for the libraries to provide their own copyrighted born-digital material with free onsite and some offsite access, to permit private reproduction under fair use provisions and to require written permission and fees for commercial reproduction. Libraries do not very often create born-digital material, but when this happens, they have the copyright; and the previous model and rules are applied on access and reproduction policies.

When there are licensing restrictions and the copyright varies (libraries and other owners, other owners only, varies on item-by-item basis), the common approach is the provision of free on-campus, some off-campus and no offsite access. Common practice shows that private reproduction is permitted under fair use provisions, and commercial reproduction is not authorized. The previous rules are applied also, when the libraries acquire born-digital material through voluntary deposition – something that happens rarely – and the copyright belongs to other owners.

On the previously presented policy model, there are some exceptions of the rules. The exceptions may be applied on three cases. First, when libraries create their own copyrighted born-digital material, the only exception-difference from the previous model is on access. Instead of providing free onsite and some offsite access, the libraries provide free onsite but prohibit offsite access.

Second, when libraries and other owners share the copyright of the licensed and/or purchased material, which is an alternative approach of the basic rule that other owners have the copyright, the exceptions refer to the private and commercial reproduction; the access follow the rule: free on-campus, some off-campus and no offsite. The private reproduction is sometimes permitted with a credit to the source and the commercial, with written permission from and fees paid to owners, whoever they are, libraries and/or other owners. Another alternative reasonable choice is the examination of private and commercial reproduction on case-by-case basis.

Finally, when the copyright varies on item-by-item basis, the exception refers on access. Instead of following the rule of free on-campus, some off-campus and no offsite access, the libraries may provide free access for all or free for onsite and some for offsite. The private and commercial reproduction, follow the rule of fair use doctrine and prohibition, respectively.

4 Mapping Conventional onto Digital Policies

Conventional access and reproduction policies were mapped onto and compared with their digital counterparts. Differences were apparent. Conventional access inside library premises for printed material corresponds to Internet access inside library premises for digital material. However, Internet access (digital material) can be concurrent and simultaneous through workstations inside library premises, unlike conventional access because of the restricted number of copies (printed material). Conventional library loans for on-campus onsite users correspond to on-campus onsite Internet access. Unlike conventional loans for which the user must visit the library, on-campus onsite Internet access is remote (e.g. campus room, workstations outside of the library).

Conventional *inter-library loan* (ILL) corresponds to off-campus onsite and offsite Internet access. However, ILL is complicated, time-consuming, restricted to users of specific affiliated libraries and needs the intermediation of the librarian. In contrast, off-campus onsite and offsite Internet access is simple, rapid, and can be remote, independent of the user's affiliation or location, and without intermediation. In general, libraries can implement more liberal digital policies than with conventional material, because of the relaxing of the physical copy restriction or the protection problem. However, copyright limitations may restrict the digital policies too.

Digital reproduction (credit or fair use) corresponds to conventional reproduction (photocopying) inside library premises under fair use provisions and to conventional document delivery procedures. However, the librarian can restrict the extent of conventional photocopying or document delivery procedure and enforce limitations on local users. In contrast, limitations on digital reproduction cannot be enforced and it is the user's responsibility to respect the fair use doctrine. However, in cases where there are licensing and copyright limitations, the library may forbid not only reproduction but also remote access.

5 Conclusions and Future Work

The relationship among specific factors and the access and reproduction policies of the digital collections of leading university digital libraries has been examined. Policies were analysed and classified; quantitative remarks were extracted and a policy model was proposed. The proposed policy model is not only comprised of the most common practices that the libraries implement, but also, of new ones that have not been implemented so far, and may offer solutions on the selection of policies. In addition, it consists of generalised rules, about which factors lead to specific policies, supplemented by their exceptions; and recommendations for decision-makers or library managers in forming policies of digital libraries.

For example, when there are copyright uncertainties, in complex material, notwithstanding the creation type of the material, a common solution is that reproduction, both private and commercial, is decided on case-by-case basis. In addition, copyright ownership defines commercial reproduction policy, which, when allowed, needs written permission from, and fees paid to, the owner. The recommendations given contain not only rules, e.g. previously mentioned, but also exceptions that decision-makers should not follow. For example, for the licensed born-digital material the library should be responsible for the use, in every case, even if it is not the copyright owner; so decision makers should not acquire licensed born-digital material if they do not have control on its use. Another finding is that the university libraries of the USA allow private reproduction mostly by applying the fair use doctrine. The rest of them allow private reproduction with reference to the authors. Consequently, decision makers should follow the rule for private reproduction based on geographical criteria.

At the end, we mapped and compared conventional and digital policies, focusing mostly on their differences. We made this mapping because many problems arise by the fact that conventional policies do not map directly but indirectly to digital ones.

We tried to answer the question if digital polices are more liberal than the conventional or restricted by copyright and licensing terms.

For future work, we should try to describe our policy model in a more formal way, e.g. by means of ontologies. In addition, we may examine more libraries and try applying statistical or data mining methods for our quantitative analysis. Finally, it may be of interest to extend our policy model from university to also national libraries, by providing generalized policy rules that are common, on national and university libraries, or unique, and to compare the diversified policies that may arise to better explore and generalize the similarities and differences between national and university library policies.

References

- 1 Cambridge University Library, 2003. *Access to Electronic Resources*, <http://www.lib.cam.ac.uk/electronicresources/AccessTable.html> [Accessed 28-02-05]
- 2 Cambridge University Library, 2002. *Passwords for Electronic Resources*, <http://www.lib.cam.ac.uk/electronicresources/athens.htm> [Accessed 28-02-05]
- 3 Cornell University Library, 2004. *Cornell Library Digital Collections*, <http://cdl.library.cornell.edu/> [Accessed 28-02-05]
- 4 Cornell University Library, 2003. *Guidelines for Using Text and Images from Cornell Digital Library Collections*, <http://cdl.library.cornell.edu/guidelines.html> [Accessed 28-02-05]
- 5 Cornell University Library, 2003. *Samuel J. May Anti-Slavery Collection: Copyright Restrictions*, <http://www.library.cornell.edu/mayantislavery/permissions.htm> [Accessed 28-02-05]
- 6 Dartmouth College Library, 2003. *Access the Digital Library from Off-Campus*, <http://diglib.dartmouth.edu/libserv/offcampus.shtml> [Accessed 28-02-05]
- 7 Dartmouth College Library, 2004. *Copyright Policy and Guidelines*, <http://www.dartmouth.edu/copyright/index.html> [Accessed 28-02-05]
- 8 Department for Culture, Media and Sport Working Party, 1998. *Code of practice for the voluntary deposit of non-print publications*, <http://www.bl.uk/about/policies/codeprac.html> [Accessed 28-02-05]
- 9 Glasgow Digital Library, 2002. *Collection Development and Management Policy*, <http://gdl.cdli.strath.ac.uk/documents/gdlcollectionpolicy.htm> [Accessed 28-02-05]
- 10 Harvard University Library, 1999. *LDI Intellectual Property and Copyright*, <http://hul.harvard.edu/ldi/html/copyright.html> [Accessed 28-02-05]
- 11 Meyyappan, N., 2000. A review of the status of 20 digital libraries, *Journal of Information Science*, 26 (5) pp. 337-355
- 12 North Carolina State University Libraries, 2002. *Electronic Resources – Conditions of Use*, <http://www.lib.ncsu.edu/eresources/conditions.html> [Accessed 28-02-05]
- 13 Northwestern University Library, 2003. *Rights, Permissions and Reproductions Policies*, <http://www.library.northwestern.edu/policy/rpr/index.html> [Accessed 28-02-05]
- 14 University of the District of Columbia, 2003. *Radio Interviews*, <http://jazz.wrlc.org/fgrant/interviews.html> [Accessed 28-02-05]
- 15 Walters, W.H., 2003. Video media acquisitions in a college library, *Library Resources & Technical Services*, 47 (4) pp. 160-170
- 16 Witten, I.H., 2003. Examples of Practical Digital Libraries: Collections Built Internationally Using Greenstone, *D-Lib Magazine*, 9 (3), <http://www.dlib.org/dlib/march03/witten/03witten.html> [Accessed 28-02-05]