

Access and reproduction policies of university digital collections

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Abstract. We examine and classify the access and reproduction policies of the digital collections of ten leading university digital libraries worldwide according to factors such as the creation type of the material, the acquisition method, the copyright ownership etc. We analyze their relationship, showing how the acquisition method and the copyright ownership affect the access and reproduction policies for the 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 provided usually 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. Finally, we extract the common practice on access and reproduction policies and we map the conventional to digital policies.

Keywords: policies; acquisition; copyright; access; reproduction; digital libraries

1. INTRODUCTION

The libraries are in a transition period from conventional to digital formats and they do not have a common practice and tradition on the policies for the digital material. This prevents cooperation and interoperability in libraries restricting the usefulness of their services. The conventional policies do not map directly to the digital policies. The difference on the policies is due to the easy duplication properties of the digital material etc.

The university libraries have tradition on cooperation and they have leading roles in the production and the dissemination of the digital material. In addition, the university libraries have a leading role in using the new technologies, such as the digital libraries. They have implemented the appropriate infrastructure for the development of digital libraries and policies and they accommodate the students to use the new technologies. 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 diffused to the rest of the libraries (national, public etc.).

We examine the access and reproduction policies of the digital collections of twenty leading university digital libraries from three continents, and we choose to present ten of them, the ones that have the most diversified and innovative access and reproduction policies and are the most active in the area of digital libraries. We are interested in libraries that have large digitization projects and preferably, they use or, even better develop, commonly used software (such as *Greenstone*) to provide their digitized or digital content. In addition, we are 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 examined libraries, corresponding to the above criteria, are central academic libraries of big

universities that act as the coordinating bodies for the entire department libraries of the universities.

Similar work has been done by Meyyappan (2000, pp. 337-355 [6]), who describes the status of twenty digital libraries, mentioning also their access policies. Also, Walters (2003, pp. 160-170 [11]), presents an introduction to the acquisition of video media (DVD and VHS) in academic libraries, with emphasis on the procedures most appropriate for undergraduate colleges. However, nobody gives the emphasis on access and reproduction policies.

To collect our data we derive information from the websites of the libraries and sometimes we use personal communication with the libraries. In section 2, we analyze the access and reproduction policies of the university digital collections for each library separately. In section 3, we classify the policies according to the factors such as the creation type of the material, the acquisition method, the copyright ownership etc. and we derive some quantitative remarks about which factors lead to specific policies. We examine how the factors affect the policies. In section 4, we extract the common practice and derive generalized rules on policies for the digitized and the digital material separately. We present the most common practices on policies that the libraries follow. In section 5, we map the conventional access and reproduction policies to digital and we compare them, showing mostly their differences. We examine which conventional policies can be mapped to new digital policies and which are the advantages and disadvantages of this transition. Finally, we conclude in section 6.

Most libraries facing 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 in campus and by long distance learners. The reader can find useful information on university library practices concerning these problems and about the common practices on access and reproduction policies.

2. POLICIES OF THE DIGITAL COLLECTIONS

In this section, we briefly analyze the access and reproduction policies of the university digital collections for each library separately.

2.1 Policies of the Aladin Digital Library (ADL)

The *Aladin Digital Library* (ADL) contains digitized collections, which, except the *Felix E. Grant Collection* (FEG), are freely accessible for onsite and offsite users through the Internet. In most of the cases, the reproduction for private use is free with a *credit* (mention) to the source. The FEG is restricted to registered onsite users for personal and educational use. Any *other use* (commercial reproduction, distribution, redistribution, publication, transmission whether by electronic means or other, retransmission, copying, storage in any medium, systematic or excessive downloading etc.), needs written permission from and fees paid to the copyright owner (usually other owners or rarely, the *University of the District of Columbia*) [10].

2.2 Policies of the Dartmouth College Digital Library (DCDL)

The *Dartmouth College Digital Library* (DCDL) contains born-digital material copyrighted by the DCDL or licensed (material) and copyrighted by other owners. Due to licensing agreements, many digital resources have a variety of access policies [free, *onsite* (students, faculty and staff) only, on-campus onsite only etc.] [3]. Beyond fair use, the reproduction requires the written permission of the copyright owner (DCDL or other owners) [4].

2.3 Policies of the Harvard University Library (HUL)

The *Harvard University Library* (HUL) contains digitized and/or born-digital material, which is owned, held or licensed by the *Harvard University* (HU) and is provided solely for the purpose of teaching or individual research. Any other use requires permission of the HU [5]. The HU is responsible for the use and the reproduction of the material, independently of the copyright ownership. Most digital resources are only onsite accessible. Others are only on-campus onsite accessible because of the type of the material (e.g. CD-ROMs) or the licensing agreements. The offsite users have not access to the most digital resources.

2.4 Policies of the Northwestern University Library (NUL)

The *Northwestern University Library* (NUL) acquires born-digital material through license and/or purchase and digitizes its own copyrighted or free third-party material. Each collection or type of material may have different copyright or reproduction restrictions. The reproduction is on case-by-case basis according to the copyright ownership. The born-digital material is provided with various access policies (free, onsite only, on-campus onsite only, onsite and some offsite etc.) according to the user category (students, faculty and staff, alumni, affiliates and visitors). The digitized collections are freely accessible, except some cases (e.g. *Video Encyclopedia of the 20th Century*) where the access is restricted to onsite users only.

2.5 Policies of the North Carolina State University Libraries (NCSUL)

The *North Carolina State University Libraries* (NCSUL) digitize their own copyrighted material and acquire third-party copyrighted born-digital material through license and/or purchase. However, the copyright of the digital material is complicated and varies as the access (free, onsite only, onsite and some offsite etc.) from collection to collection. Only the onsite users may reproduce the licensed resources for non-commercial, personal or educational purposes. Any other use is prohibited [7]. Except cases of fair use, the reproduction requires the written permission of the copyright holder and/or license fees.

2.6 Policies of the Cambridge University Library (CUL)

The *Cambridge University Library* (CUL) acquires third-party copyrighted born-digital material through license and/or purchase or rarely through

voluntary deposition (*code of practice* [9]), and digitizes its own copyrighted material. The born-digital material has various access policies (free, onsite only, on-campus onsite only etc.) [1]. The digitized collections, except for the *Gutenberg Bible* collection, are freely accessible and provided for private study and non-commercial use. Any other use requires the written permission of the CU and possible fees or when the material has other copyright owners, written permission from and possible fees may be paid to the owners, but the CUL reserves the right to charge a facility fee.

2.7 Policies of the Cornell University Library (COUL)

The *Cornell University Library* (COUL) digitizes its own copyrighted material or acquires third-party copyrighted digital material through license and/or purchase. The digital collections that are copyrighted by COUL can be used for personal and research purposes only. Any other use, beyond that allowed by fair use, needs written permission from the COUL, which will be granted or not, on case-by-case basis. In addition, a usage fee may be required depending on the type of the proposed use [2]. In digital collections that are copyrighted by other owners, the use, beyond that allowed by fair use, requires written permission from and fees paid to the copyright owner. The digital collections have two access policies: free (*Samuel J. May Anti-Slavery Collection* – SJMAS, *Historical Monograph Collection* – HM, *Cornell University Image Collections* – IC etc.) and on-campus onsite only (*Past Masters* – PM, *Patrologia Latina* – PL etc.). However, even the freely accessible digital collections, have differences in access, copyright and reproduction terms.

2.8 Policies of the Miguel de Cervantes Digital Library (MdCDL)

The *Miguel de Cervantes Digital Library* (MdCDL) digitizes its own or public domain or free third-party material and creates its own born-digital material on which has the copyright. In addition, the MdCDL acquires digitized and born-digital material through license, which is copyrighted by individuals or by the MdCDL depending on the license. The access (onsite and offsite) and the reproduction for private use are free in all collections. The commercial reproduction is strictly prohibited.

2.9 Policies of the New Zealand Digital Library (NZDL)

The *New Zealand Digital Library* (NZDL) digitized collections are freely accessible for onsite and offsite users through the Internet and can be searched and browsed with *Greenstone* digital library software. The copyright of the material may belong to various owners or to nobody (public domain) however, the collections are freely accessible. The user can view, download and print the material without restrictions or fees (e.g. *Computer Science Technical Reports*, *Music Library*, *Humanity Development Library* – HDL). The reproduction for private use is free with a credit to the source, but the commercial reproduction is prohibited. Especially, the HDL collection is not only freely accessible through the Internet, but is also available on CD-ROM (for a fee), for distribution in developing countries.

2.10 Policies of the Glasgow Digital Library (GDL)

The *Glasgow Digital Library* (GDL) is a distributed digital library based in Glasgow, which contains digitized and born-digital material that is created and maintained by different projects (GDL and other institutional, university and library projects), by organizations, institutions, universities, libraries and individuals. The material is freely accessible for onsite and offsite users through the Internet. The copyright belongs to various copyright owners, such as publishers, libraries, individuals etc. depending on the collection. The metadata of every collection refer the copyright and reproductions terms. Usually, the reproduction for non-personal use requires the written permission of the copyright owner.

3. CLASSIFICATION OF POLICIES

In Table 1, we classify the access and reproduction policies of the university digital collections, according to the creation type of the material, the acquisition method and the copyright ownership. We analyze the relation among the factors and the policies and we show the diversified policies that arise. Then, we present the access and reproduction policies used for the digitized and the born-digital material separately.

The first column shows how the digital material was created. We have two cases: *digitized* or *born-digital* and a collection can have either of them or of both. The second column shows the acquisition method of the material, which has five values: *library*, *third-party*, *license*, *purchase* and *voluntary deposit*. *Library* means that the library has created its own digitized or born-digital material. *Third-party* means that the library has digitized or acquired third-party material. *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.

The third column presents the copyright owner, which has five values: *library*, *individual*, *organization*, *vary* and *public domain*. *Library* means that the copyright of the material is owned by the organization that the library belongs to, and is administrated by the library. *Individuals* and/or *organizations* mean that the copyright belongs to owners other from the library, which can be individuals and/or organizations respectively. *Vary* means that the copyright varies from collection to collection. *Public domain* means that nobody has the copyright of the material.

The access policies are stated in the fourth and the fifth column. *The on-campus access for onsite users is always free*. The fourth column shows the off-campus access policy for onsite users and the fifth 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 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 merely provided. 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, we also have the values *mostly no*, meaning that the offsite access is not provided in most of the cases, and reciprocal, *mostly yes*, meaning that the offsite access is provided in most of the cases.

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

Creation type of the material	Acquisition method of the material	Copyright owner	Off-campus onsite access	Offsite access	Private reproduction	Commercial reproduction			Collection or Library examples	Geographical location
						Allowed	Written permission by	Fee to		
Digitized	Library	Library	Yes	Yes	Yes	No	N/A	N/A	ADL	USA
Digitized	Library	Library, Individuals, Organizations	No	No	Yes	Yes	Owners	Owners	FEG	USA
Digitized	Library	Library, Public domain	Some	Some	Fair use	Yes	Library	Library	HM	USA
Digitized	Library, Third-party	Library, Individuals	Yes	Some	Fair use	Yes	Library, Owners	Library, Owners	IC	USA
Digitized	Library, Third-party	Library+	Yes	Mostly yes	Case by case	Case by case	Case by case	Case by case	NUL, NCSUL	USA
Digitized	Library	Vary	Yes	Some	Fair use	No	N/A	N/A	NCSUL	USA
Digitized	Library	Library	Yes	Yes	Fair use	Yes	Library	Library	SJMAS	USA
Digitized	Library, Third-party	Library+	Yes	Mostly yes	Yes	Yes	Library, Owners	Library, Owners	CUL	UK
Digitized	Library, Third-party	Library, Public domain	Yes	Yes	Yes	Some!	Library	No	MdCDL	ES
Digitized	Third-party	Library, Individuals, Organizations, Public domain	Yes	Yes	Yes	No	N/A	N/A	NZDL	NZ
Digitized, Born-digital	Library	Library	Yes	Mostly no	Yes	Yes	Library	Library	HUL	USA
	License, Purchase	Library, Organizations	Some	Mostly no	Yes	Yes	Library	Library, Owners		
Digitized, Born-digital	License	Vary	Yes	Yes	Yes	No	N/A	N/A	MdCDL	ES
Digitized, Born-digital	Library, Third-party	Library, Individuals, Organizations	Yes	Yes	Yes	Yes	Owners mostly	Owners	GDL	UK
Born-digital	Library	Library	Yes	Some	Fair use	Yes	Library	Library	DCDL	USA
	License, Purchase	Organizations	Some	No	Fair use	Yes	Owners	Owners		
Born-digital	License, Purchase	Library, Organizations	Some	No	Case by case	Case by case	Case by case	Case by case	NUL, NCSUL	USA
Born-digital	License, Purchase	Vary	Yes	Some	Fair use	No	N/A	N/A	NCSUL	USA
Born-digital	License	Individuals	Yes	No	Fair use	No	N/A	N/A	PM, PL	USA
Born-digital	License, Purchase, Voluntary deposit	Organizations	Vary	Mostly no	Yes	No	N/A	N/A	CUL	UK

+ 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 sixth column shows the *private reproduction* policy (or reproduction for private use), which has three values: *yes*, *fair use* and *case-by-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 case-by-case basis.

The seventh, eighth and ninth columns refer to the commercial reproduction policy. The seventh column shows if commercial reproduction is permitted, which has four values: *yes*, *some*, *no*, and *case-by-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 needed. *Some* means that the commercial reproduction is merely permitted, *no* means that it is not authorized and *case-by-case* means that it is on case-by-case basis.

The eighth column states who gives the written permission for the commercial reproduction, if it is needed. We have five values: *library*, *owners*, *owners mostly*, *case-by-case* and *N/A*. *Library* means that the written permission is given from the library, *owners* means that it is given from owners other than the library, *owners mostly* means that it is given mostly from other owners and less from 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 *library*, *owners*, if both the library and the owners require the written permission.

The ninth column states to whom should be paid the fee for the commercial reproduction, if it is needed. We have five values: *library* meaning that the fee is paid to the library, *owners* meaning that it is paid to owners other than the library, *case-by-case* meaning that the payment of the fee is examined on case-by-case basis, *no* meaning that the fee is not needed and *N/A* meaning that it is not applicable. If the value *library*, *owners* appear, the fee should be paid to both library and owners.

The tenth column contains names of specific collections – or libraries for all their collections use this policy. Finally, the eleventh column states the geographical location of the collections or the libraries.

We sort the table according to the creation type of the material. We have three blocks or categories: digitized, digitized and born-digital, and born-digital. Afterwards, we sort each block according to the geographical location, and finally, we put the collections or the libraries alphabetically for each geographical location.

3.1 Factors and policies for the digitized material

The off-campus onsite access is free when the library digitizes its own material and has the copyright (e.g. ADL, SJMAS). The offsite access is usually free (e.g. ADL) or sometimes it is not provided (e.g. HUL). The private reproductions is free with the sole requirement to *credit* (mention) the source (e.g. ADL) or rarely under fair use provisions (e.g. SJMAS). The commercial reproduction is allowed with written permission from and fees paid to the library (e.g. SJMAS) or sometimes it is not authorised (e.g. ADL).

The off-campus onsite access is free or it is merely, or not provided when the library digitizes its own material but the library and/or other owners and/or *nobody* (public domain) have the copyright (e.g. NCSUL, HM, FEG). The offsite access is merely (e.g. HM), or not provided (e.g. FEG). The private reproduction is under fair use provisions (e.g. NCSUL) or rarely, it is free with a credit to the source (e.g. FEG). The commercial reproduction is not authorized (e.g. NCSUL), or it is allowed with written permission from and fees paid to the library (e.g. HM) or to other owners (e.g. FEG).

The off-campus onsite access is free when the library digitizes its own and third party material, and mostly the library has the copyright (e.g. NUL CUL). The offsite access is mostly free (e.g. NUL CUL). The private reproduction is free with a credit to the source (e.g. CUL) or it is on case-by-case basis (e.g. NUL). The commercial reproduction is on case-by-case basis (e.g. NUL), or it is allowed with written permission from and fees paid mostly to the library or sometimes to other owners (e.g. CUL).

The off-campus onsite access is merely provided when the library acquires digitized material through license and purchase, and mostly the library has the copyright (e.g. HUL). The offsite access is mostly not provided (e.g. HUL). The private reproduction is free with a credit to the source (e.g. HUL). The commercial reproduction is allowed with written permission from the library and fees paid mostly to the library or sometimes to other owners (e.g. HUL).

The off-campus onsite access is free when the library digitizes its own and/or third party material or acquires digitized material through license, and the library and/or other owners and/or nobody have the copyright (e.g. NZDL, MdCDL, IC). The offsite access is free (e.g. NZDL) or rarely, it is merely provided (e.g. IC). The private reproduction is free with a credit to the source (e.g. MdCDL) or rarely under fair use provisions (e.g. IC). The commercial reproduction is not authorized (e.g. NZDL) or rarely, it is merely allowed with written permission from the library (e.g. MdCDL), or it is allowed with written permission from and fees paid to the library or to other owners (e.g. IC).

The university libraries of the USA provide the private reproduction mostly by applying the fair use doctrine. The rest allow the private reproduction with reference to the authors. Similar observation holds for the born-digital material.

3.2 Factors and policies for the born-digital material

The off-campus onsite access is free when the library creates its own born-digital material and has the copyright (e.g. DCDL). The offsite access is merely (e.g. DCDL), or not provided (e.g. HUL). The private reproduction is free with a credit to the source (e.g. HUL) or under fair use provisions (e.g. DCDL). The commercial reproduction is allowed with written permission from and fees paid to the library (e.g. HUL).

The off-campus onsite access is or merely provided or it varies according to the collection when the library acquires born-digital material through license and/or purchase and/or voluntary deposit, and other owners have the copyright (e.g. DCDL, CUL, PM, PL). The offsite access is mostly not provided (e.g. DCDL). The private reproduction is free under fair use provisions (e.g. PM) or rarely with a credit to the source (e.g. CUL). The commercial reproduction is not authorized (e.g. PL) or it is allowed with written permission from and fees paid to the owners (e.g. DCDL).

The off-campus onsite access is merely provided or it is free when the library acquires born-digital material through license and/or purchase, and the copyright belongs to the library and other owners or varies from item to item (e.g. HUL, NUL,). The offsite access is not provided (e.g. NUL) or rarely, it is or merely provided (e.g. NCSUL). The private reproduction is free with a credit to the source (e.g. HUL), or under fair use provisions (e.g. NCSUL), or it is on case-by-case basis (e.g. NUL). The commercial reproduction is not authorized (e.g. NCSUL) or it is allowed with written permission from the library and fees paid mostly to the library or sometimes to other owners (e.g. HUL), or it is on case-by-case basis (e.g. NUL).

3.3 Quantitative table analysis and remarks

From the analysis above, we see that specific factors lead to specific policies. We derive some quantitative remarks about which factors lead to specific policies. The remarks of polices are clustered usually under the copyright factor.

3.3.1 Acquisition and copyright

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

3.3.2 Copyright, off-campus onsite and offsite access

- The off-campus onsite access is provided (approximately 68%) or it is merely provided (approximately 22%) otherwise it is not provided (approximately 5%) or it varies according to the collection (approximately 5%)

- The offsite access is provided (approximately 42%), or it is merely provided (approximately 21%) or it is not provided (approximately 37%)
- When the offsite access is merely, or not provided there are licensing restrictions and/or the copyright belongs to other owners. Sometimes (approximately 11%), even if the library is the copyright owner, the offsite access is merely or not provided because the library provides only onsite access
- The off-campus and the offsite access are sometimes (approximately 47%) different. In such cases, when the off-campus onsite access is merely provided, the offsite access is not provided due to the licensing and copyright restrictions. In addition, when the off-campus onsite access is provided, the offsite access is merely provided or it is not provided because either the library provides only onsite access or the copyright belongs to other owners. Finally, when the off-campus onsite access varies from item to item, the offsite access is not provided

3.3.3 Copyright and private reproduction

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

3.3.4 Copyright and commercial reproduction

- The commercial reproduction is allowed (approximately 53%) with written permission from and fees paid to the owner (library and/or other owners) or it is prohibited (approximately 37%) or it is on case-by-case basis (approximately 10%)
- When the commercial reproduction needs written permission from the owner, then fees are also paid to the owner
- The commercial reproduction is allowed with written permission from and fees paid to the library in approximately 75% (when the library has the copyright) and in approximately 40% with written permission from and fees paid to the owners (when the library and individuals and organizations have the copyright)
- When organizations have the copyright, then the commercial reproduction is allowed (approximately 50%) with written permission from and fees paid to the owners or it is not authorized (approximately 50%)

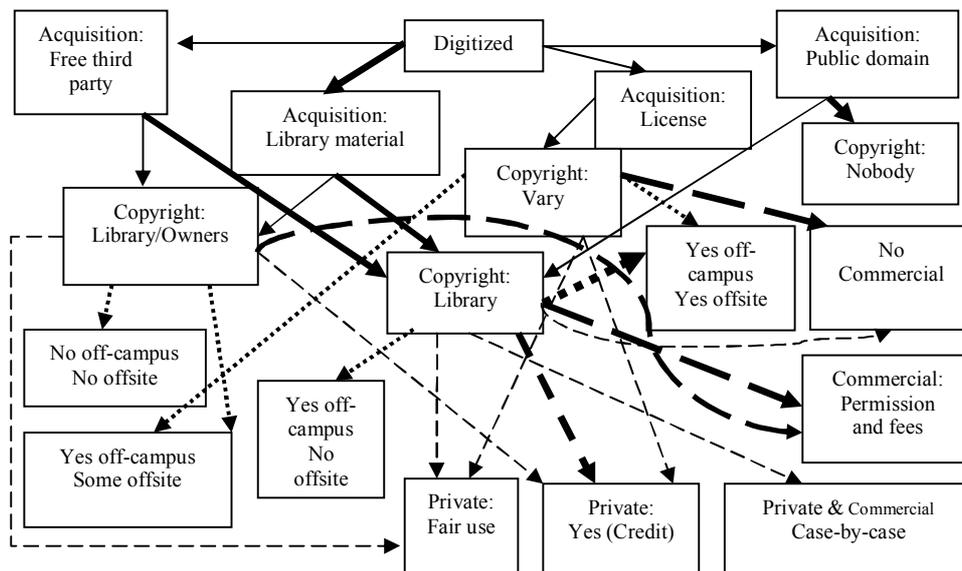
- When individuals have the copyright, then the commercial reproduction is usually not authorized
- When mostly the library has the copyright, then the commercial reproduction is allowed (approximately 67%) with written permission (mostly from the library and rarely from the owners) and fees paid to the library and the owners or it is on case-by-case basis (approximately 33%)
- When the library and organizations have the copyright, then the commercial reproduction is usually on case-by-case basis
- When the library and individuals have the copyright, then the commercial reproduction is allowed with written permission (from the library or other owners) and fees paid to the library and to other owners
- When the library and/or nobody has the copyright, then the commercial reproduction is merely allowed with written permission from the library or it is allowed with written permission from and fees paid to the library.

4. Rules and proposals for policies

We derive some generalized rules about which factors lead to specific policies. The common practice shows that the on-campus onsite access is always free independently of the copyright ownership and the creation type (digitized, born-digital) of the material. In addition, when there are copyright uncertainties and independently of the creation type of the material, a common solution is the reproduction (private and commercial) to be on case-by-case basis (e.g. NUL, NCSUL).

We present the policy rules for the digitized (Figure 1) and the digital (Figure 2) material separately. The thick arrows show the most common rule. The dots indicate the access policies and the dashes the private and commercial reproduction policies.

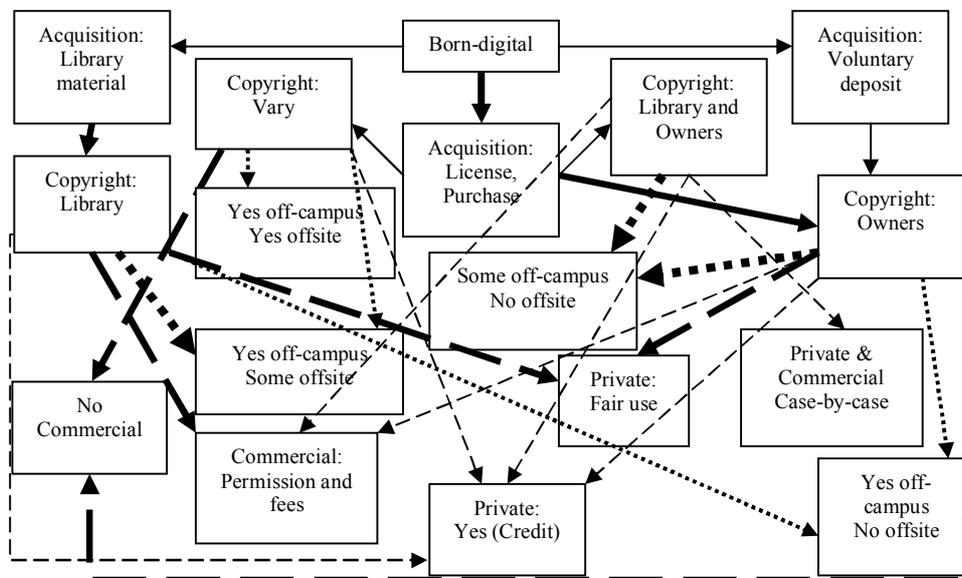
Figure 1: Policy rules for the digitized material (dots: access policies, dashes: reproduction policies)



Most libraries have concluded to digitize their own material on which they have the copyright. Common approaches are that the libraries have the copyright for the digitized version of the free third-party and the public domain material. 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 the private reproduction with a credit to the source and to require written permission and fees for the commercial reproduction.

When the copyright varies (libraries and other owners, other owners only etc.) the common approach is the provision of free onsite and no offsite access. The private and commercial reproduction should be permitted to onsite users only 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 the commercial reproduction.

Figure 2: Policy rules for the born-digital material (dots: access policies, dashes: reproduction policies)



Most libraries acquire the born-digital material through license and/or purchase with organizations (e.g. publishers) and individuals. Most libraries have concluded to acquire licensed born-digital material if they will be responsible for the use of this material. The common practice shows that other owners usually copyright the licensed material. Another reasonable approach is that the libraries and 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 the private reproduction under fair use provisions and to require written permission and fees for the commercial reproduction.

When there are licensing restrictions and the copyright varies (libraries and other owners, other owners only etc.), the common approach is the provision of free on-campus, some off-campus and no offsite access. The

common practice shows that the private reproduction is either permitted with a credit to the source or under fair use provisions, and the commercial reproduction is not authorized. Another alternative reasonable choice is the provision of commercial reproduction with written permission from and fees paid to the owners.

5. MAPPING BETWEEN CONVENTIONAL AND DIGITAL POLICIES

We map the conventional access and reproduction policies to digital and we compare them, showing mostly their differences. The conventional access inside the library premises for the printed material corresponds to the Internet access inside the library premises for the digital material. However, the Internet access (digital material) can be concurrent and simultaneous through the workstations inside the library premises, unlike the conventional access because of the restricted copies (printed material). The conventional library loan for the on-campus onsite users corresponds to the on-campus onsite Internet access. Unlike the conventional loan for which the user must visit the library, the on-campus onsite Internet access is remote (e.g. campus room, workstations outside of the library).

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

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

6. CONCLUSIONS AND FUTURE RESEARCH

We examined the relation among the factors (creation type of the material, acquisition method, copyright ownership etc.) and the access and reproduction policies of the digital collections of leading university digital libraries. We analyzed and classified the policies, and we concluded with some generalised rules about which factors lead to specific policies. For example, when the library has the copyright of the material, the private

reproduction is free with a credit to the source in approximately 50% or under fair use provisions in approximately 50%. In addition, the copyright ownership defines the commercial reproduction policy, which when allowed, needs written permission from and fees paid to the owner. Finally, we extracted the common practice on access and reproduction policies, and we mapped and compared the conventional to digital policies.

For future research, it would be interesting to link the motivations of the libraries, when they decide to provide digital content, with the policies. The motivations refer to the thoughts and the reasons that lead the decision makers of the libraries to provide digital content. For example, the library desires to provide digital content in order to be widely and permanently accessible or easily preserved or to accommodate the students with concurrent multiple digital copies or to use the new technologies, or to get exposure and fame by digitizing and providing its special collections etc. The motivations may define the access and reproduction policies. Finally, we can compare the usage of the conventional versus digital material and correlate the usage with the policies.

REFERENCES

- [1] Cambridge University Library 2003. Access to Electronic Resources, <http://www.lib.cam.ac.uk/electronicresources/AccessTable.html> [Viewed 19-05-04].
- [2] Cornell University Library, 2003. Guidelines for Using Text and Images from Cornell Digital Library Collections, <http://cdl.library.cornell.edu/guidelines.html> [Viewed 19-05-04].
- [3] Dartmouth College Library, 2003. Access the Digital Library from Off-Campus, <http://diglib.dartmouth.edu/libserv/offcampus.shtml> [Viewed 19-05-04].
- [4] Dartmouth College Library, 2004. Copyright Policy and Guidelines, <http://www.dartmouth.edu/copyright/index.html> [Viewed 19-05-04].
- [5] Harvard University Library, 1999. LDI Intellectual Property and Copyright, <http://hul.harvard.edu/ldi/html/copyright.html> [Viewed 19-05-04].
- [6] Meyyappan, N. 2000. A review of the status of 20 digital libraries, *Journal of Information Science*, **26** (5) pp. 337-355.
- [7] NCSU Libraries, 2002. Electronic Resources – Conditions of Use, <http://www.lib.ncsu.edu/eresources/conditions.html> [Viewed 19-05-04].
- [8] Northwestern University Library, 2003. Rights, Permissions and Reproduction, <http://www.library.northwestern.edu/policy/rpr/index.html> [Viewed 19-05-04].

[9] Secretary of State 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> [Viewed 19-05-04].

[10] University of the District of Columbia, 2003. Radio Interviews, <http://jazz.wrlc.org/fgrant/interviews.html> [Viewed 19-05-04].

[11] Walters, W.H., 2003. Video media acquisitions in a college library, *Library Resources & Technical Services*, **47** (4) pp. 160-170.

[12] 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> [Viewed 19-05-04].