Digital Cultural Collections in an Age of Reuse And Remixes

Kristin R. Eschenfelder

School of Library and Information Studies University of Wisconsin-Madison eschenfelder@wisc.edu

Michelle Caswell

School of Library and Information Studies University of Wisconsin-Madison mcaswell@wisc.edu

ABSTRACT

This paper reports the results of a survey of U.S. cultural institution (CI) professionals about whether CI should seek to control access to and use of digital cultural collections. It describes motivations that encourage institutions to control access to or use of collections and factors that discourage institutions from controlling access and use. The paper describes the results in terms of three general themes: "Object descriptions, representations and control," "Legal risks and complexities" and "Getting credit: fiscal and social costs and revenue."

Keywords

Digital collections, museums, archives, copyright, privacy, licensing, open access.

INTRODUCTION

This paper describes the results of a study of "controlled online collections" or digital collections which are networked, but which are not accessible to all possible users, or for which use restrictions exist. Many cultural institution digital collections are available for anyone to view on the Web, but not all are open to the public. For example, some collections require registration prior to use. Moreover, most online digital collections have terms of use that dictate how users can make use of collection material beyond simple viewing/listening. Reuse of digital cultural materials — even materials in the public domain- from cultural institution (CI) websites has traditionally required permission from the CI and often payment of fees.

Recently critiques of these reuse control practices have grown, especially control CI exert over digital copies of public domain works, a practice some call "copyfraud." (Bielstein, 2006; Hamma 2005; Hirtle 2003; Mazzone, 2006) Some charge that these control practices, and the costs associated with getting permission for reuse, stunt digital humanities and public scholarship (Bielstein, 2006; Digital Humanities Manifesto v 2 2009). Moreover,

ASIST 2010, October 22–27, 2010, Pittsburgh, PA, USA. Copyright: CC Attribution Non Commercial 3.0.

projects to promote permission-free reuse in "commons collections" have generated press and enthusiasm (Bray,2009; Hirtle and Donovan, 2009; Smithsonian, July 2009.) But research suggests that many CI professionals believe viewers should not download materials from CI websites without permission (Dryden, 2008). Related research has shown that CI employ a variety of policy and technical tools to discourage downloading (Eschenfelder & Agnew 2010). In contrast to reuse controversies, the practice of creating restricted access digital collections has received less attention.

This research aims to begin a conversation about when cultural institutions ought to control reuse of digital cultural materials. In doing so, we hope to bring a complicated and contradictory set of existing conversations about digital cultural property to bear on the question.

One set of voices in this conversation emphasizes the view of digital collections as "virtual display cases" and CI as "moral guardians" that ought to protect cultural works (Roosen-Runge & Roosen-Runge, 2003; Rinehart, 2006). A parallel conversation discusses how CI ought to employ certain popular collection items to produce revenue given declining government support, and sees at least some "commercial exploitation" as essential for sustainability (Pantalony, R.E. 2007; Ross, Donnelly, Dobreva 2004; Smithsonian Institution, April 21, 2009).

Another set of voices suggests that CI collections should become fodder for public reuse. Intellectual property activists like the Open Knowledge call for production of knowledge that is "free to use, re-use and redistribute --without any legal, technological or social restriction" (Open Knowledge). From this perspective, digitized cultural material is something that ought to be free to be reused as part of a "remix," "mash-up," or "collage," creating by reference to build something new (Lessig, 2008).

Finally a third set of voices emphasizes regulating access and use of culturally sensitive materials in order to protect the source group that generated the material (Brown, 2003, Burri-Nenova, 2008, Christen, 2005, 2009). From this perspective, completely open use of cultural materials could dissipate culture through failure to acknowledge source cultures, disrespectful uses, commercial exploitation without compensation, or just plain overuse (Beat-Graber

2008; Brown, 2003). All three of these conversations have important contributions to make to the question of when CI ought to control reuse of digital collection items.

This paper describes the results of a survey of CI professionals at US archives, libraries and museums about circumstances under which CI should seek to control access to digital cultural collections and reuse of digital cultural collections. It describes how CI professionals ranked a set of motivators to control access and use, and how they ranked a set of discouragers to control access and use.

We define *controlling access* as controlling who can access an online collection, from where, and when. For example, a CI might require payment or registration prior to access. We define controlling use as what users can do with the online collections materials to which they have access. For example, a CI might forbid users from saving copies of viewed materials or from reuse of those materials for noncommercial or commercial purposes. Access and use controls may be based on "technological protection measures" such as IP range restrictions, watermarks or software viewers, or they may be based on what Hirtle (2009) calls "aspirational" policy measures, such as posted notices not to download, click-through licenses, or posted terms of use. We defined controlled online collections as digital collections for which CI sought to control either access or use via technological or policy measures.

METHODOLOGY

The study collected data via a paper-based survey mailed to a group of "innovative" cultural organizations in 2008. Ideally innovative institutions were more likely to experiment with access and use controls than a random sample of CIs. Innovative institutions were defined as institutions that met the following criteria:

- 1. The institution had received a grant that had something to do with digital collections during the period of 2004-spring 2008. We included recipients of IMLS, NEH, NHPRC, and NSF DL grants.
- 2. The institution's staff members had presented about their digital collections at conferences during the last 2-3 years. Conferences were suggested by the study consultant and initial interviews.
- 3. Institutions suggested by experts in archives, digital libraries and museums studies. Experts reviewed a draft sample list and suggested additions.

Using this strategy, 343 institutions were identified for inclusion in the study.

No prior set of directly relevant survey questions existed, so most of the survey questions were developed from readings of the related literatures and refined in pretesting.

The investigators developed ideas for questions from a number of reports, handbooks and articles from related areas. For example, Intrallect Inc. (2004) detailed

requirements for rights management systems based on input from UK university, publisher and rights collection Results stakeholders. emphasized the need authentication, authorization and tracking of use. The National Initiative for a Networked Cultural Heritage (2002) reported that most institutions only published low quality digital surrogates in order to protect their cultural works while they waited for other technological tools "to become more effective, standardized, widely used, and affordable."(NINCH, 2002) The University of Maryland's Center for Intellectual Property (2006) survey of higher educational institution use of rights management technology found that respondents implemented control systems primarily to "comply with license agreements" (81.3%), "comply with copyright law" (76.5%), "protect sensitive information" (64.3), and "to protect copyright owners rights" (49%). Respondents reported that 16.5% of their control systems limited reuse of materials. (Kelley et al., 2006).

Dryden's (2008) study of Canadian archives' digital copyright practices was the first survey to focus exclusively on protection mechanisms in cultural institutions and cultural digital collections. Her study was published while this survey was in the field, so the instrument for this study did not benefit from Dryden's experiences; however her findings are important to discussion of the study results.

The majority (56%) of Dryden's respondents reported concern that visitors may "may copy or download archival material" from their Website. She found that most (70%) of respondents strongly disagreed or disagreed that it was permissible to republish without permission as long as you credited the home institution. She found that 57% of her respondents strongly agreed or agreed with the statement "It is important to restrict the ability of visitors to our website to copy or download documents from our website without our permission."

Dryden's follow up interviews explored reasons for the concern about downloading suggested that respondents were concerned about:

- Others financially benefiting from the work, and the loss of potential revenue to the institution.
- Ensuring authenticity including accurate labeling, repository identification, and ensuring the work is presented "in context."
- Negative effect on the reputation or legal liability of the archive stemming from misuse
- Lack of discussion with users regarding permissions and downstream uses removes a mechanism of showing impact of the archive and its value to society. (Dryden, 2008).

Additionally, numerous sources on professional ethics and collections sensitivity issues were consulted (e.g.,

ACRL/SAA 1993; Benedict 2003; Bernard-Klodt & Wosh 2005; National Park Service, 2006).

Preliminary questions developed from the literature were modified during a lengthy process of preliminary interviews with CI personnel, pretesting with volunteers and pilot studies (Eschenfelder, 2009).

The survey was mailed to individuals at each institution with titles such as: manager of digital collections or digital projects, IP manager, rights manager or head curator.

The survey fielding in spring/summer 2008 included three mailings: a full mailing with cover letter to all 343 institutions (including a cover letter, questionnaire, and business reply envelope), a postcard reminder, and two additional full mailings to institutions who had not responded to the previous mailings as recommended by survey methodologists (Dillman, 2000). The survey included a 2 dollar bill inducement (Fricker & Schonlau, 2002).

All data analysis was done within the statistical software SPSS.

The survey was returned by 234 respondents for a 68% response rate. This total response however, included 80 respondents that reported they did not have, and did not plan to create, controlled online collections. The remaining 154 respondents reported having or planning controlled collections. This set included 53 archives, 60 libraries and 41 museums. The majority of the data reported in this paper describes only those 154 institutions with controlled collections. The data on discouragers for controlling collections however includes data from the full 234 responding institutions.

Of the 53 main archive respondents, 22 respondents were state government archives, 18 were college/university archives, 6 were historical society archives, 4 were museum archives, 2 were independent archives and 1 was a federal government archive.

The 60 main library respondents included 49 academic libraries, 2 public libraries, 1 library affiliated with an archive, 1 state library agency, 1 library affiliated with a museum, and 6 "other" libraries.

The 41 main museum respondents included 16 art museums, 6 natural history museums, 3 history museums, 3 science and technology museums, 2 arboretum or botanical gardens, 2 historic houses/sites, 1 general museum, 1 nature center, and 7 "other" museums.

Before proceeding to the findings, it is important to point out several important limitations. First, the findings are represented in aggregate form for each CI type (archive, library, museum) obscuring important differences within each group (e.g., art museums vs. natural history museums). The data should be interpreted as representing the dominant organization form within each CI type: government

archives or college/university archives, academic libraries and art museums.

Another limitation is that the survey defined a controlled online collection, but did not explicitly define an "open collection." Results suggest that respondents interpreted open collection differently: "Open collection" could mean "commons collections" with no fees and no permissions required for non-commercial reuse. Alternatively, it could be a collection for which there are no impediments to viewing or playing a work online, but permission is still required for reuse. Future studies to use more explicit definitions of open collection.

Finally, because the survey employed close-ended questions, the data largely answers "what" sorts of questions and not "why" sorts of questions. The next section summarizes the major results of the survey. Interested parties can find the survey instrument and the raw data at http://minds.wisconsin.edu/handle/1793/38251

FINDINGS: MOTIVATION FOR CONTROL

The survey asked respondents to rate motivations for creation of controlled collections. Respondents rated each item on a list of possible motivations with one of the following values: "not at all," "a little," "somewhat," and "a lot." Table 1 summarizes data on the motivators. It includes two values:

Motivator Ranking: This is an overall ranking of motivators. Because some factors had the same percent values, the table shows ties for some rank values.

Percent listed: This is the percentage of institutions that marked each factor as motivating them "somewhat" or "a lot" to create controlled online collections

Table 1 shows that institutions are motivated to create controlled online collections because the following motives:

- Avoid misuse/misrepresentation
- Proper object description and repository identification
- Avoid legal risk
- Donor or owner requirements

These four motivators were ranked highly across archives, libraries and museums.

Middle-level motivators showed more variance across institution types. For example, libraries ranked "Cannot obtain rights" 4th, but archives and museums ranked it 10th, and it did not even qualify as a mid level motivator for museums. In another example, museums ranked "Control information about endangered or valuable objects, animals, cultural events/items" 5th, but archives and libraries ranked it 13th and 15th respectively. Finally, archives and museums ranked "Control access to sensitive materials (racial, ethnic, religious, health)" as a mid-level motivator (7th and 8th) but it was ranked quite low by libraries (14th).

	Motivator Ranking			
	(% marking fa	ctor as "a lot" or "some Controlled Online	ewhat" of a motivator to create Collection)	
Motivators	Archives	Libraries	Museums	
Avoid misuse/misrepresentation	2nd (66 %)	1st (80%)	2nd (66%)	
Proper object description and repository identification	1st (72%)	5 th (52%)	1st (71%)	
Avoid legal risk	3rd (51 %)	3rd (68%)	3rd (44%)	
Donor or owner requirement	4 th (45 %)	2nd (73%)	4 th (39%)	
Cannot obtain rights	10 th (25 %)	4th (53%)	10 th (22%)	
Generate Income	5 th (42 %)	10th (18%)	9 th (27%)	
Protect privacy	6 th (40 %)	9th (20%)	6 th (34%)	
Control access to sensitive materials (racial, ethnic, religious, health)	7 th (38 %)	14th (10%)	8 th (29%)	
Recover costs of IP management	8 th (30 %)	12th (13%)	11 th (17%)	
Reduce download times for users	8 th (30 %)	11 th (15%)	11 th (17%)	
Control server/network loads or storage space	9 th (26 %)	13th (12%)	10 th (22%)	
Limit exposure to materials authors intend to publish, patent, commercially exploit	9 th (26%)	8th (32%)	8 th (29%)	
Maintain exclusivity	10 th (25 %)	7th (37%)	10th (22%)	
Burden of rights search	11 th (24 %) 12 th	6 th (38%)	7 th (32%)	
Protect public safety or national security information	(19 %)	16th (3%)	13th (2%)	
Avoid conflicts with financial supporters or governing bodies	12th (19 %)	11th (15%)	12th (15%)	
Control information about endangered or valuable objects, animals, cultural events/items	13 th (17 %)	15th (8%)	5 th (37%)	
Control access to potentially offensive materials (sexual, anatomical, drug-related)	14 th (13%)	16th (3%)	12th (15%)	

Table 1: Motivators for Creating Controlled Online Collections

FINDINGS: DISCOURAGERS TO CONTROLLING ONLINE COLLECTIONS

The second set of results describes reasons why institutions might avoid employing access or use controls. The survey asked respondents to rate possible discouragers to controlling collections. Respondents rated each of a list of possible discouragers by marking one answer from the values: "no discouragement," "a little discouraging," "somewhat of a discouragement," or "discourage a lot." Table 2 includes two values:

Discourager Ranking: Ranking of which factors most discouraged controlling collections.

Percent listed: The percentage of institutions that marked each factor as discouraging them "somewhat of a discouragement" or "discourage a lot" from controlling access to or use of a collection.

The top discouragers varied, but the following top discouragers were shared across institution types:

- "Belief that open collections have greater impact"
- "Concerns with legal complexity"

• "Institutional mission, policies or statutory requirements"

Additionally, "Institutional level technology choices" was ranked 2nd by archives, 3rd by museums but 6th by libraries.

Middle-level discouragers varied by institution types. Archives indicated "Concerns about end user

dissatisfaction," and "Concerns about negative perceptions by partners, funders or peers." Libraries also indicated "Concerns about negative perceptions by partners, funders or peers" and also marked "Concerns with technological management complexity," "Do not have content appropriate for controlled online collection" and "Few best practices or examples from which to model." Museums were also concerned about "Technological management complexity."

	Concern Ranking		
Discourager	Archive	Library	Museums
Belief that open collections have greater impact	1st	1st	1st
	(59%)	(77%)	(54%)
Concerns with legal complexity	3rd	2nd	2nd
	(29%)	(59%)	(44%)
Institutional mission, policies, or statutory requirements	2nd	3rd	5 th
	(42%)	(47%)	(20%)
Institutional level technology choices	2nd	6 th	3rd
	(42%)	(30%)	(30%)
Concerns about end user dissatisfaction	4th	3rd	6 th
	(27%)	(47%)	(17%)
Concerns about negative perception by partners, funders	4 th	6 th	7 th
or peers	(27%)	(33%)	(15%)
Concerns with technological management complexity	5 th	5 th	4 th
	(23%)	(40%)	(29%)
Do not have content appropriate for a Controlled Online	5 th	7 th	9 th
Collection	(23%)	(25%)	(10%)
Few best practices or examples from which to model	5 th	7 th	4 th
·	(23%)	(25%)	(24%)
Concerns about unknown consequences	6 th	8 th	5 th
·	(17%)	(17%)	(20%)

Table 2: Discouragers to Controlling Online Collections

DISCUSSION: WHY DO CULTURAL INSTITUTIONS SEEK TO CONTROL ACCESS TO DIGITAL COLLECTIONS OR USE OF DIGITIZED CULTURAL WORKS?

This discussion tries to sum up the CI motivations for control in terms of three general themes: "Object descriptions, representations and control," "Legal risks and complexities" and "Getting credit: fiscal and social costs and revenue." In this section, each theme is discussed with reference to the study data and the extant literature of the CI and cultural studies fields to assist in explaining the study findings.

Please recall that given the dominance of certain CI subgroups among the respondents, the results should be interpreted as most representative of those dominant CI subtypes. For example, among archives the responses were split between state government or college and university archives. Among libraries, academic libraries overwhelmingly dominated. Among museums, art museums dominated, but a number of natural history

museums also responded. Analysis that compares the CI subtypes will be reported in a separate manuscript.

Theme 1: Object Descriptions, Representations And Control

Issues related to description and representation of works emerged as top motivators for CI to control access and use of collections. "Proper object description and repository identification" was ranked first and second by archives and museums but 5th by libraries. "Avoid misuse and misrepresentation" was ranked first by libraries and second by archives and museums.

These motivations allude to at least three interrelated debates in the CI profession: issues of accuracy in description, issues of misuse, and repository identification.

Issues of authority and description have long created professional anxiety in cultural stewardship. A description is a major part of the representation of an object: it shapes interpretation and contributes to its value to the public. Traditional views of archival and museum descriptions see

cultural professionals as "impartial craftspeople" producing descriptions representing impartial truths inherent in the objects and contributing to universal ordering structures (Cameron & Robinson, 2007; Duff & Harris, 2002). Arguably, CIs generate value to society through creation of authoritative descriptions (Smithsonian Institution, April 21, 2009). Studies show that authenticity and credibility of works and their descriptions is key for certain users of CI images ((Canadian Heritage Information Network (CHIN, 1999).

But postmodern critiques have cracked the façade of the "authoritative voice" created by CI descriptions (Walsh, 1997). First, CI self-reflection has led to recognition of professionals' partiality in creation of descriptions: an admission that authoritative descriptions are developed by fallible humans with incomplete knowledge and unconscious biases and preferences (Cameron & Robinson, 2007; Duff & Harris, 2002).

Secondly, new postmodern sensibilities about cultural authority highlight how authoritative descriptions hide underlying disagreements about facts and interpretations. Object descriptions regularly change as new facts arise or as interpretations change (Smithsonian Institution, April 21, 2009; Walsh, 1997). Moreover, authoritative descriptions may represent source individuals or communities in ways with which they do not agree (Shilton & Srinivasan, 2007).

Critiques have emphasized the need to embrace the "polysemy of objects" or the idea that an object may have different meaning for different groups, and that various interpretations of an object are generated as different groups interact with it in different contexts (Cameron & Robinson, 2007). Some postmodern CI theorists argue that increased public participation should replace the façade of the infallible, omnipotent voice of the CI with multiple user voices (Light and Hyry, 2002; Duff and Harris, 2002).

Ongoing debates within CI about use of technologies that facilitate public input— such as tagging or commenting—illustrate the tensions between traditional and postmodern approaches. Proponents argue that public input will increase the value of collections, both enriching object descriptions and increasing public commitment to works (Krause and Yakel, 2007; Srinivasan, Boast, Becvar, & Furner, 2009). It could engage remote and previously unknown amateur experts to assist with research (Cox et al, 2007; Krause and Yakel, 2007).

On the other hand, public participation in description raises concerns. The brand value of institutions may fall if others perceive they sponsor inaccurate content. Public input could increase legal risk if users produce incorrect information, or if critical public comments lead to charges of libel (Wienand, Booy, & Fry, 2000). Moreover, many users prefer a tidy authoritative summary to a confusing multiplicity of narratives requiring more reading, judgment and synthesis (Cameron & Robinson, 2007).

The potential reuse of works without permission intensifies all of the above concerns. "God only knows what people are going to do with it [copy of object]," remarks the manager in Michael Edson's humorous video commentary "Web Tech Guy and the Angry Staff Person." Hamma complains that despite increased postmodern sensibilities, institutions continue to "control all voices but their own" by controlling who uses their images and how (Hamma, 2005).

But, there are important practical and ethical reasons for wanting to ensure accurate descriptions of cultural content. Unlike public input to an institutional tagging site, which staff have administrative rights to edit, CI staff have no opportunity to edit the unauthorized reuse of materials on third party sites. The most they can do is send a letter requesting that the user modify or remove the work.

Practically, many people viewing digital surrogates of works want to know where to get more information, for example to license use of the work in an advertisement, a book or a documentary. Inaccurate metadata published on a third party Website can increase the logistical work needed to get an interested user connected with the correct licensing manager.

Reuse increases risk of disrespectful framing of a work or defamatory uses. Cultural professionals may fear third party representations that present works, their source communities, or people pictured in the works as illegitimate, absurd, laughable or to be hated. This is particularly troublesome if the source community is a historically disadvantaged or misrepresented group and/or the object in question is considered a traditional cultural expression (TCE). Collections staff may therefore seek to control reuse of collections in order to ensure that they are not disrespected, or to ensure that all uses are serious or academic in nature (Max Planck, 2008, 2009). CI professionals may feel a "duty" to ensure respectful uses (Tanner, 2004).

As part of this sense of obligation to preserve the integrity of works, some CI deny use requests that: disrespect or are detrimental to the artist work or institution, contradict the values of the institution, seek to crop or modify the work, reflect "poor taste," are "undignified," are political or religious in nature, will promote unsavory products such as alcohol or tobacco, and depict people who are still alive (Rights and Reproductions Information Network (RARIN), 2004; Tanner, 2004).

This drive to control representations also stems from promises made to donors; for example, a CI might promise that a work never be used by third parties without special permission by the donor. Unauthorized reuse could lead donors to perceive a lack of custodial responsibility discouraging future donations.

The licensing and permission process is a way of ensuring accurate descriptions and ensuring respectful and appropriate uses of a work. These motivations explain in

part why CIs require users to seek permission and sign a license dictating terms of use - regardless of whether the use qualifies as fair use or whether the item is in the public domain (Dryden, 2008; Schlosser, 2009). The licensing process permits only those uses deemed respectful or appropriate.

A word of caution here: While we may be sympathetic to the idea of permissions to ensure respectful use of cultural works from indigenous communities, the same licensing tools can be employed by art owners and museums to stifle critique of contemporary art (Max Planck Institute 2008). One participant in a Berkman Center workshop in Fall 2009 suggested a Creative Commons "respect license (cc:respect)" as a potential solution: Users of works would essentially promise not to use it in a disrespectful manner. However, which uses constitute "respectful" use are open to interpretation.

Theme 2: Legal Risks and Complexities

Proponents of open collections must keep in mind the complex legal and ethical obligations associated with collection stewardship. The obligations CI face are demonstrated in the top ranking of "Avoiding legal risk" as a top motivator of control. The vague wording of the survey choice makes it impossible to say what legal risks motivated participants; however, attention to the more specific, but lower ranked, answers suggests a variety of legal concerns including compliance with donor requirements, protecting rights that IP owners may wish to exploit, obtaining rights for digitization and publication, and protecting privacy.

The 4th highest ranked motivator "Donor or owner requirement" stems from the legal and ethical obligations created between donors of works and CI when donors sign deeds of gift and transfer cultural works to a CI. As explained earlier, the rights a CI has with regard to a given donation are dictated by the terms of those contractual agreement, as well as by the legal status of the object (e.g., its various copyright statuses, privacy statutes). In some instances, the deed may require institutions to limit further use of the work. For example, the donor may give the institution the right to display a digital copy of a photograph, but not to permit any 3rd party uses. In this case, an institution may simply not have the rights to permit any reuse.

Intellectual Property (IP) concerns including "Protect things people are going to publish, patent or commercially exploit" "Burden of Rights Search," and "Cannot obtain rights" were ranked as mid-level motivators. The modest showing of these IP motivators is surprising given the attention given to orphan works in the CI literature. One explanation for the modest ranking is that some institutions may have avoided IP concerns by choosing not to digitize risky copyright material (Dryden, 2009). Alternatively, institutions may have developed other strategies to reduce IP risks to tolerable levels. Institutions are using an array of

access and use control technologies and policies to avoid copyright-related risks such as Internet protocol address limitations to limit access and use to on-campus or inbuilding users (Eschenfelder, 2009; Eschenfelder & Agnew, 2010). As outlined elsewhere, a significant percentage of institutions limit access to some collections to subsets of their user community or to individuals who go through a registration and approval process (Eschenfelder, 2009). Limiting access to a smaller group of users who can demonstrate educational use reduces risk both by strengthening a fair use claim and also by maintaining a low profile about the digital collection.

Privacy related concerns were also ranked modestly: 6th by archives and museums and 9th by libraries. One explanation for this modest ranking is that institutions may not digitize works that have privacy issues, or donors' deeds of gifts may not permit digitization (Boles, 2005). Alternatively, not all of the CIs in the study may have material with the same degree of privacy concerns. Some living donors and the estates of deceased donors maintain the right to screen researchers before granting access to the physical collection items, while other donors place a seal on sensitive physical material for a designated time period, usually past the expected life span of third parties associated with the collection (Boles, 2005; Hodson, 2004). Alternatively, institutions may have found alternative means of alleviating privacy risks. For example, an institution may bury a digitized work by purposefully using poor metadata or simply by avoiding placing the work in any prominent location (e.g., the splash page for a collection.). This privacy protection through digital obscurity may provide good enough protection for images that do not put donor relations at risk or conflict with federal or state privacy laws.

While controlling access to or use of collections through technology or policy tools might diminish some legal and ethical risks, controlling collections also adds new administrative burdens. These burdens are reflected in the participants' high ranking of "Legal Complexities" as a discourager to seeking to control access to collections or use of collections. Controlling collections may require rewriting of terms of use statements, acceptable use statements, and copyright policies. Moreover, in cases where access is restricted to select groups, institutions may feel the need to provide a justification for the chosen access or use restrictions in order to address the potential conflict between restricted access and CI missions and ethics statements that require equality in access to collections.

Theme 3: Getting Credit: Social and Financial Costs and Benefits

Institutions want to receive social and financial credit for the resources they invest in digitization, description and stewardship. But, the social and financial credit motivators are largely predicated on control, and reducing control over reuse arguably complicates generation of credit. Arguably, the traditional permissions-based reuse practice is integral to CI getting credit. If users contact CI for permissions, CI can generate data on use of collections materials. They can then argue that this use data shows impact, and in showing impact they can thereby accrue social and financial benefits. Data about use is therefore "an important asset" (Bray, 2009).

Use of collections materials is an important indicator of impact in several ways. Reference to a host repository in published works brings social credit to the repository (Beilstein 2006; Max Plank 2009). Moreover, institutions are under pressure to show that digital initiatives have measurable cultural benefit, and use data is one measurable form of cultural benefit (Bray, 2009; Smithsonian Institution, April 21, 2009). Social and financial credit are closely tied together: good data on impact tends to increase funding opportunities from granting agencies, donors and government funding bodies. Given the link between measurable impact and credit, it is not surprising that "Proper object description and repository identification" was ranked second as a motivator of control. Moreover, the importance of use counting may explain in part why many CI professionals view attribution without permission as suboptimal (Dryden, 2008).

But levels of concern about reuse without permission are likely mediated by the unique situation of the specific work that has been reused and on the degree of publicness of that use (i.e., private setting vs. Web). Unauthorized public reuse on the Web without attribution might be more of a concern if it wastes an opportunity for social credit. Concerns about reuse would logically be higher for works that have copyright, privacy or cultural sensitivity issues. Level of concern might vary in light of whether the reuse facilitates further unauthorized copying.

CI may also fear social costs associated with embarrassing misuse of materials by third parties. Some fear that misuse could reflect badly on the institution that made the initial digital copies available (Dryden, 2008). More liberal terms of use statements could leave CIs open to charges of lack of stewardship by donors if those works are then reused in a demeaning or controversial manner and damage relations with donors as noted in the previous section. Some worry that 3rd party misuse makes institutions a target for litigation, especially by commercially minded artists or estates (Tanner, 2004). This concern may be particularly strong for collection items that are socially sensitive (e.g., first peoples' material, racial material, endangered species, and archeological maps). While not a top motivator, museums ranked controlling access to "endangered or valuable animals, cultural events/items" fifth. Archives and museums ranked controlling access to "racial, ethnic, religious or health" 7th and 8th respectively.

There are also social costs associated with heavy controls over reuse -- there is danger of being portrayed as "hoarding" cultural works. Many have criticized public institutions for copyright statements that imply ownership or the right to dictate reuses of digital copies of public domain works (Beilstein 2006, Mazzone, 2006; Public.Resource.Org, 2007). Perceptions of unfair institutional restrictions on use of cultural content can generate bad publicity and create funding problems for tax-supported public institutions (Trescott, 2006).

Studies suggest that institutions are sensitive to potential criticism: "Concern about end user dissatisfaction" was ranked 3rd as a discourager of use of access or use controls by libraries and it was ranked 4th and 6th by archives and museums. "Concerns about negative perceptions by partners, funders and peers" was also ranked as a mid-level discourager of access controls or use controls.

Financial credit may also come from licensing fees. "Generate income" and "Recovery of IP management costs" appeared as mid-level motivators in the survey results suggesting that respondents believe that at least some collections should bring in money. However, the degree to which licensing for non-commercial use can generate revenue or even cover costs is now questioned (Allen, 2009; Max Planck, 2008). Licensing is manpower intensive; rights managers review each request, set costs and develop contracts.

Many have dreamed that automated licensing systems would keep transaction costs low, but licensing remains largely manual and, many charge, highly inefficient (Beilstein, 2006; Tanner & Deegan, 2003). As the Smithsonian Institution Web and New Media Strategy argues, "Attempting to directly monetize access to, and use of, museum content does not appear to be a sustainable business model" (Smithsonian, July 2009 pg 21). Proponents of freer non-commercial uses emphasize that more liberal use terms will more effectively support scholarship and draw positive attention to collections (Allen 2009; Bray 2009; Hirtle and Donovan 2009).

Other CI professionals argue that fees and tracking for scholarly use are necessary (Max Plank, 2008). Providing digital copies of works requires labor: Requests requiring new photography or research may incur substantial costs (Town Hall Meeting 2007). Moreover, licensing of popular works can subsidize development of other parts of a collection (Smithsonian Institution, April 21, 2009). Museum staff believe licensing ensures image quality, and that the burden of the process discourages over-use of the service or an image (Tanner, 2004). Others feel that public institutions in tight economic situations need to charge for visible costs, and show that they make some money in order to appear fiscally responsible

CONCLUSION

What types of control CI should exert over unauthorized non-commercial downloading and reuse of digital cultural works? Based on the data, this paper argues that there is no one-size-fits-all answer to the question of whether CI should control access to, or use of, digital cultural collections. In a society where informal digital cultural production is increasingly important, CI should seek to reduce reuse restrictions and permissions requirements for low risk materials. But collections with legal or ethical entanglements may require greater access or use control. CI should aim to develop a multiplicity of access and use regulations that acknowledge the varying sensitivity of collections and the varying level of risk associated with different types of reuses.

ACKNOWLEDGMENTS

This study was funded by IMLS Laura Bush 21st Century Research Grant RE-04-06-0029-06. Thanks to CI professionals who took the time to participate.

REFERENCES

- ACRL/SAA Standards for ethical conduct for rare book, manuscript, and special collections librarians, with guidelines for institutional practice in support of the standards, *College & Research Libraries News*, 54 (11), 207-215.
- Allen, N. (2009) *Art Museum Images in Scholarly Publishing*. Houston: Rice University Press.
- Beat-Graber, C. (2008) "Using Human Rights to Tackle Fragmentation in the Field of Traditional Cultural Expressions: An Institutional Approach" in C.B. Graber and M. Burri-Nenova (editors). Intellectual Property and Traditional Cultural Expressions in a Digital Environment. Cheltenham, UK: Edward Elgar.
- Benedict, K. M., & Society of American Archivists. (2003). Ethics and the archival profession: Introduction and case studies. Chicago: Society of American Archivists.
- Behrnd-Klodt, M. L., & Wosh, P. J. (Eds.). (2005). Privacy and confidentiality perspectives: Archivists and archival records. Chicago: Society of American Archivists.
- Bielstein, S.M. (2006). *Permissions a survival guide: Blunt talk about art as intellectual property*. Chicago: University of Chicago Press.
- Boles, F. (2005) Selecting and Appraising Archives and Manuscripts. Chicago: Society of American Archivists.
- Bray, P. (2009). Flickr commons:Open licensing and the future of collections. *Museums and the Web* 2009, Indianapolis, IN.
- Brown, M. F. (2003). *Who owns native culture?*. Cambridge, MA: Harvard University Press.
- Burri-Nenova, M. (2008) "The long tale of the rainbow serpent: New technologies and the protection and promotion of traditional cultural expressions," in C.B. Graber and M. Burri-Nenova (editors). *Intellectual property and traditional cultural expressions in a digital environment.* Cheltenham UK: Edward Elgar, pp. 205-236.

- Cameron, F., & Robinson, H. (2007). Digital knowledgescapes: Cultural, theoretical, practical and usage issues facing museum collection databases in a digital epoch. In F. Cameron, & S. Kenderdine (Eds.), *Theorizing digital cultural heritage: A critical discourse* (pp. 165-192). Cambridge, MA: MIT Press.
- Canadian Heritage Information Network (CHIN). (1999). Like light through a prism: Analyzing commercial markets for cultural heritage content. Canadian Heritage Information Network (CHIN).
- Christen, K. (2009). Access and accountability: The ecology of information sharing in the digital age. *Anthropology News.* 4-4.
- Christen, K. (2005). Gone digital: Aboriginal remix and the cultural commons. *International Journal of Cultural Property*, 12, 315-345.
- Cox, R.J. et al, (2007) "Machines in the Archives: Technology and the Coming Transformation of Archival Reference," *First Monday* 12:11 (November 2007), http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/f m/article/view/2029/1894.
- Digital humanities manifesto 2.0.(2009). (http://www.digitalhumanities.ucla.edu/images/stories/me llon_seminar_readings/manifesto20.pdf)
- Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. New York: John Wiley & Sons.
- Dryden, J. (2009). "Copyright Issues in the Selection of Archival Material for Internet Access," *Archival Science*, 8:2, 123-147.
- Dryden, J. (2008) *Copyright in the Real World: Making Archival Material Available on the Internet*. Unpublished Dissertation, Toronto: University of Toronto.
- Duff, W.; Harris, V. (2002) "Stories and Names: Archival Descriptions as Narrating Records and Constructing Meanings," *Archival Science* 2, no. 3-4.
- Eschenfelder, K.R. (2009). Controlling Access To And Use Of Online Cultural Collections: A Survey Of U.S. Archives, Libraries And Museums For IMLS. Madison, WI: University of Wisconsin-Madison School of Library and Information Studies.
- Eschenfelder, K.R. and Agnew, G. (2010) Technologies Employed to Control Access to or Use of Digital Cultural Collections: Controlled Online Collections. *D-Lib Magazine* (doi:10.1045/dlib.magazine)ISSN:1082-9873.
- Fricker, R. D., & Schonlau, M. (2002). Advantages and disadvantages of internet research surveys: Evidence from the field. *Field Methods*, 14(4), 347-365.
- Hamma, K. (2005). Public domain art in an age of easier mechanical reproducibility. *First Monday*, 11(11)
- Hirtle, P.B. (2003). Society Of American Archivists

 Presidential Address: Archives Or Assets?

 http://www.archivists.org/governance/presidential/hirtle.a
 sp

- Hirtle, P.B.; Donovan, T.C. (2009) Removing All Restrictions: Cornell's New Policy on Use of Public Domain Reproductions. *Research Library* Issues no. 266 (October): 1–6.
- Hodson, S. S. (2004) "In Secret Kept, In Silence Sealed: Privacy in the Papers of Authors and Celebrities," *American Archivist* 67:2, , p. 194-211.
- Hodson, Sara S. "Archives on the Web: Unlocking Collections While Safeguarding Privacy," First Monday, 11: 8, August 7, 2006, http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1389/1307.
- Intrallect Inc. (2004). *Digital Rights Management*. Linlithgow, UK: Intrallect Ltd.
- Kelley, K. B., Bonner, K. M., Lynch, C. A., & Park, J. (2006). Digital rights management (DRM) and higher education: Opportunities and challenges. In K. Bonner (Ed.), *The Center for Intellectual Property Handbook* (pp. 107-121). New York: Neal-Schuman.
- Krause, M.G.; Yakel, E. (2007) "Interaction in Virtual Archives: The Polar Bear Expedition Digital Collections Next Generation Finding Aid," *American Archivist* 70:2, p. 282-314.
- Lessig, L. (2008) Remix: Making Art and Commerce Thrive in a Hybrid Economy. New York: Penguin Press.
- Max Planck Institute for the History of Science (January 11, 2008) Workshop Report: "Scholarly Publishing and the Issues of Cultural Heritage, Fair Use, Reproduction Fees and Copyrights"
- Max Planck Institute for the History of Science. (2009).

 Best practices for access to images: Recommendations for scholarly use and publishing. Berlin: Max Plank Institute. Retrieved from http://www.mpiwg-berlin.mpg.de/PDF/MPIWGBestPracticesRecommendations.pdf
- Mazzone, J. (2006). Copyfraud. New York University Law Review, 81(3), 1026-1100.
- National Initiative for a Networked Cultural Heritage. (2002). *NINCH guide to good practice in digitization and management of cultural heritage materials*. Washington DC: NINCH.
- National Park Service. (2006). NPS museum handbook: Part I "ethical issues", part III "legal issues" Washington DC: National Park Service. Retrieved from:
- Open Knowledge Foundation (http://www.okfn.org) Last accessed April 2010.
- Pantalony, R. E. (2007) WIPO guide on Managing Intellectual Property for Museums. Geneva: WIPO
- Public.Resource.Org. (May 19, 2007). Dear internet, RE: SmithsonianImages.SI.edu., January 2009, from http://public.resource.org/memo.2007.05.19.html

- Rights and Reproductions Information Network (RARIN). (2004). AAM member museums rights and reproductions survey 2004. Washington DC: American Association of Museums.
- Rinehart, R. (2006) *Nailing down bits: Digital art and intellectual property*. Canada: Canadian Heritage Information Network (CHIN).
- Roosen-Runge, P.H.; Roosen-Runge, A.P. (2003). *The virtual display case: Making museum assets safely visible* (3rd edition) Canadian Heritage Information Network (CHIN) at http://dsp-psd.pwgsc.gc.ca/Collection/Co61-17-2003E.pdf, accessed 1 January 2010.
- Ross, S.; Donnelly, M.; Dobreva, M. (2004) "Rights management and payment technologies." DigiCULT: Emerging Technologies for the Cultural and Scientific Heritage Sector Technology Watch, 2(2).
- Schlosser, M. (2009). Unless otherwise indicated: A survey of copyright statements on digital library collections. *College & Research Libraries*, 70(4), 371-385.
- Shilton, K., & Srinivasan, R. (2007). Participatory appraisal and arrangement for multicultural archival collections. *Archivaria*, 63, 87-101.
- Smithsonian Institution. (April 21, 2009). *Smithsonian 2.0 forum webcast.*, July 2009, from http://smithsonian20.si.edu/forum.html
- Smithsonian Institution (July 30, 2009) Smithsonian Institution Web and New Media Strategy Version 1.0 (http://smithsonian-webstrategy.wikispaces.com/file/view/20090729_Smithsonian-Web-New-Media-Strategy_v1.0.pdf
- Srinivasan, R., Boast, R., Becvar, K. M., & Furner, J. (2009). Blobgects: Digital museum catalogs and diverse user communities. *Journal of the American Society for Information Science & Technology*, 60(4), 666-678.
- Tanner, S. (2004). Reproduction charging models & rights policy for digital images in american art museums. London: King's Digital Consultancy Service.
- Tanner, S.; Deegan, M. (2003). Exploring charging models for digital library cultural heritage. *Ariadne*, 34
- "Town hall meeting on intellectual property: Museum image licensing the next generation". (2007). *Museum Computer Network Conference*, Chicago
- Trescott, J. (Dec 16, 2006) Smithsonian Deal With Showtime Passes Muster: GAO Finds Researchers' Access Is Unaffected. *The Washington Post*.
- Walsh, P. (1997). The web and the unassailable voice. Museums and the Web: An International Conference, Los Angeles CA.
- Wienand, P., Booy, A., & Fry, R. (2000). *A Guide To Copyright For Museums And Galleries*. London: Routledge.