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Exploring New Models for Administering Intellectual Property: The Museum Educational Site Licensing Project

Research and teaching in the university would benefit if high-quality museum images and associated information could be made available over campus networks for educational purposes. For this to be possible, however, museums and educational institutions need to define a common framework for information collection, distribution, and use, that respects intellectual property rights. The Museum Educational Site Licensing (MESL) Project has brought museums and universities together to explore these administrative, legal, and technical issues.

INTRODUCTION

The museum and educational communities have seen the potential for digital imaging and network technologies to make cultural heritage information more broadly accessible. However, the integration of museum digital content into higher education has been hampered by a lack of progress on the definition and administration of intellectual property rights. By their nature, imaging systems require a complex balancing of the interests of numerous rights holders in protecting their intellectual property and the desires of image users to use images in their studies, teaching, and research. A common understanding of rights, permissions, and restrictions and a shared framework for administering rights reflecting broadly accepted terms and conditions for the use of materials would ease the burden of honoring intellectual property rights and enable the educational use of digital materials.

The Museum Educational Site Licensing Project (MESL) brings representative U.S. museums, colleges, and universities together to explore these issues. Their goal is to define the terms and conditions for educational use of museums' digital images and information on campus-wide networks. During this two-year experiment (launched in 1995 by the Getty Art History Information Program [now the Getty Information Institute] in conjunction with MUSE Educational Media), a select group of educational and collecting institutions are collaborating in good faith to study the capture, distribution, and educational use of digital images and their associated texts.
The partners in the MESL project are developing and testing administrative, technical, and legal mechanisms that could eventually make it possible to deliver large quantities of high-quality museum images and information to all educational institutions. Participants are drafting a model site licensing agreement, exploring models for the collective administration of intellectual property rights, and studying the economics of image creation and network distribution. The project has also provided a vehicle for exploring and promoting the educational benefits of digital access to museum collections through campus networks.

This discussion reports on the first eighteen months of activity in the MESL project (January 1995-June 1996) offering both some preliminary impressions of the participants' experiences to date and an assessment of the issues the project faces in its second year of activity.

INTELLECTUAL PROPERTY RIGHTS IN DIGITAL IMAGES

Uncertainty regarding intellectual property rights has been a barrier in the creation of networked information resources for some time. This problem is exacerbated when visual resources are concerned for a number of reasons. First, the rights in digital images are often multilayered and complex. Simply determining who holds the rights in a particular work is often difficult. This problem is exacerbated when the digitization of existing visual resource collections is contemplated, because these collections have been constructed over time and often lack detailed information about the sources of images. Second, existing rights administration systems are inefficient at best. We are without a comprehensive service that offers rights to museum images. As a result, a disproportionate amount of time and effort is expended in the information location and rights-negotiation process. Third, the legal framework has yet to respond to the changes in technology. A solution to these conundrums is unlikely to come from the legislative arena, as the law is by nature responsive and conservative; a consensus on these issues, which is satisfactory to lawmakers and lobby groups alike, is unlikely to emerge in the short term.

WHICH IMAGE? WHOSE RIGHTS?

Basic picture research has always been one of the primary research challenges in disciplines that depend on the visual as a primary information source. Simply locating works of art that may have passed from private collection to private collection or are held, but uncataloged, in a public collection is a specialist task, requiring much ingenuity and not a small amount of serendipity or sometimes blind luck. Much specialist knowledge is required to negotiate the vast number of information sources to identify the particular images that are relevant to a specific line of
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inquiry. A large proportion of research is based on the construction of the corpus of a particular creator—the catalogue raisonnée. There is still no union catalog or finding aid which indexes available images. Much picture research involves separately contacting numerous institutional collections and requires much expert knowledge to identify appropriate visual resources. Many sources go unnoticed, and a disproportionate amount of time and effort is expended in this information location stage.

Once an image has been found, gaining the rights to use it in a publication or multimedia project is an equally complex task. Much of the confusion regarding intellectual property rights in visual images arises from the many ways that they are created and the many sources for images in educational institutions' collections. Digitizing and using digital images for educational purposes requires an analysis of all the rights connected with each image. Determining the rights inherent in an image requires an understanding of the source of the image, the content portrayed, and the nature of the image (whether it is an original visual image or a reproduction).

Visual images can be original works themselves, they can be reproductions of other copyrighted works or, if a reproduction includes original elements, they can be both. Often a digital image is many “generations” removed from the original work that it reproduces. For example, a digital image may have been scanned from a slide, that was copied from a published book, that printed a photographic transparency, that reproduced an original work of art. Each stage of reproduction in this chain may involve an additional layer of rights. The rights in each of these images may be held by different rightsholders; obtaining rights to one does not automatically grant rights to use another. Existing visual resource collections are comprised of many types of images, each with particular rights or layers of associated rights. Digitizing such a collection requires a commitment to the identification of rightsholders and the negotiation of rights to convert an image into digital form.

Figure 1 offers a schematized (and simplified) representation of the sources for digital images.

An original visual image can be defined as a work of art or an original work of authorship (or part of a work) fixed in a visual medium. Original visual images may be in digital or analog form. Examples of original visual images include graphic, photographic, sculptural, and architectural works as well as stills from motion pictures or other audiovisual works. The rights in an original visual image are defined in Section 106 of the U.S. Copyright Act as the right to reproduce the work, to prepare derivative works based on it, to distribute copies of the work, to perform the work, and to display it in public.

A reproduction can be defined as a copy, in digital or analog form, of an original visual image. The most common forms of reproductions are
photographic, including for example, prints, 35 mm slides, and color transparencies. If a reproduction is legally made (i.e., with the permission of the rightsholder in the original work) and includes copyrightable elements, it can be eligible for its own copyright protection, which must be considered in addition to the rights inherent in the original visual image. The original visual image shown in a reproduction is often referred to as the “underlying work.” Many digital images reproduce other works. Digital images can be reproductions of either original visual images—e.g., when an original work is scanned directly—or of other reproductions—e.g., when a scan is made from a transparency reproducing a work of art.

A published reproduction is a reproduction of an original visual image appearing in a publication. Examples of published reproductions include a plate in an exhibition catalog that reproduces a work of art or a digital image appearing on a CD-ROM. Separate copyrights may exist in the publication, the reproduction, and the original visual image.

In some cases, such as copystand photography, a published reproduction may have been further reproduced, creating a copy of a published reproduction. As these types of copies are often mechanical in nature, they may not be copyrightable in themselves. However, rights in the original visual image, the reproduction, and the publication must still be considered.

Figure 1. A schematicized representation of the sources of the digital image
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In this example, a digital image is a single still image stored in binary code—i.e., bits and bytes. Examples of digital images include bit-mapped images (encoded as a series of bits and bytes each representing a particular pixel or part of the image) and vector graphics (encoded as equations and/or algorithms representing lines and curves). A digital image can be an original visual image, a reproduction, a published reproduction, or a copy of a published reproduction; determining in what manner a digital image was created will determine the rights associated with it.

A thumbnail image is a small-scale reproduction of a digital image, often used in an online catalog or image browsing display to enable identification of an original visual image. Thumbnail images are of low resolution and quality (often averaging between 100 x 100 to 256 x 256 pixels) and are considered to be of limited commercial or reproductive value. While there are still rights associated with thumbnail images, they are often distributed more freely than higher quality images as a visual reference to the original work and as a marketing tool.

Visual resource collections in educational institutions often number tens of thousands of images, generally photographic slides, which may be original visual images, reproductions, published reproductions, or copies of published reproductions. The images in visual resource collections have been acquired from a wide variety of sources—i.e., by purchase, donation, or through copy-photography or original photography. Collections have been built over an extended period of time, and it is often impossible to trace the sources of images acquired by purchase in the past or to identify if a work is indeed still available in order to negotiate rights. This complexity makes the conversion of existing visual resource collections into digital form problematic.

Even if it is possible to identify who holds the intellectual property rights to an image, locating that rightsholder may be a very difficult task and negotiating the rights an arduous process. Within museums, rights administration procedures are now based on a print model of publication and distribution and are focused on the single image. Each image often requires a separate request with its own forms and permissions to negotiate. Museums are without a single fee scale, and the fees that are charged are also based on the print model. What may have seemed reasonable for a high quality art book containing at the most fifty images seems unreasonable for a multimedia publication containing ten times that many images. In addition, each museum has defined its own terms and conditions under which an image can be used. As a result, a content user has to negotiate (and renegotiate) with many separate institutions in order to build up an archive of usable content. This redundancy adds a level of overhead to the rights acquisition process which impedes the use of large numbers of images and may serve as a deterrent to the negotiation of rights to use images.
DIGITIZATION OF COLLECTIONS

These restrictive forces are in clear opposition to an increased demand for multimedia content in the educational community. Experiments in using new technologies are maturing to become new tools for providing increased access to research resources. Where in the past, for example, undergraduate art history students were unable to use institutional slide libraries for review after class, collections of digital images made available online enable consultation both on- and off-site at a time convenient to the student.

The creation of digital image collections in a systematic and uniform way offers a real benefit to the educational and research community, enabling the creation of teaching resources to support the curriculum and providing a source of quality content to support the integration of new technology into teaching and research. However, the digital conversion of existing slide collections is not necessarily an ideal solution. Slides may be of uncertain age or many generations removed from the original work and therefore of limited quality. Rights in the original visual images and their reproductions may be uncertain and their use restricted. In addition, documentation may be incomplete. The ability to acquire quality digital images from a reliable source, accompanied by authoritative textual descriptions, would be of significant value to the educational community.

MUSEUM/UNIVERSITY COLLABORATION

The Museum Educational Site Licensing (MESL) Project was established to respond to the need for educational access to high quality rights-cleared museum images and accompanying texts. The project brings museums (as information providers) and universities (as information users) together to define the terms and conditions for the educational use of digital resources drawn from museum collections. It is exploring an alternative method for distributing digital content drawn from museum collections to the educational market.

Museums are in a position to offer the educational community a quality information package of text and image—in effect a multimedia description and analysis of the works of art in their collections. Under appropriate licensing terms, it would be possible to make this depth of knowledge about museum collections available for research and teaching. What is required is a contractual arrangement under which museums could supply content to educational institutions at predictable terms and for a reasonable cost.

Bringing the information providers and the information users together to prototype a licensing agreement also offers a means to address
the uncertainty of the legal framework. Rather than having to rely on the courts to define the application of old laws to new technology, both parties can negotiate a mutually beneficial licensing agreement. The terms and conditions for this license are being established through experimentation, entered into in a good-faith spirit of cooperation, and that will result in a contractual agreement that meets the needs of both sides.

Museums and universities have been ideal partners in this experiment. In addition to the obvious attraction—i.e., that museums have content that universities want—there are other factors that have contributed to the success of the MESL experiment. Both share a common culture of teaching and learning. This common focus has enabled the definition of licensing terms that enable a full range of educational uses. In addition, museums and universities are both information users and information providers. Museums often engage in research that requires the consultation and use of images in other collections; universities hold collections of unique materials in their libraries' special collections and in campus museums. This duality has enabled the negotiation process, as participants have been able to see issues from both sides.

The participants in the MESL project were selected in a competitive call for participation issued in the fall of 1994. Fourteen participating institutions (seven universities, and seven museums or collecting institutions) were chosen to represent a broad range of sizes and governance structures. Technological experience was also highly ranked, as it was seen as an essential precondition for full project participation. Each institution has fielded an interdisciplinary project team: museum teams include members from the curatorial, registration, photo services, and administration departments along with the museum library and research centers; university teams include faculty, instructional technology, library, and campus computing and administration representatives. The project is managed by the Getty Art History Information Program and advised by a management committee.

Between January 1995 and June 1997, MESL participants will focus their attention on defining the terms and conditions for the educational use of museum digital content and exploring appropriate technical and administrative mechanisms for enabling the distribution of high quality information. This will require the balancing of the requirements of rights holders and rights users and addressing a number of technological and pedagogical challenges.

NEEDS OF RIGHTS HOLDERS AND RIGHTS USERS

As information providers and rights holders, museums' paramount concern is maintaining the integrity of the original works of art that they preserve and interpret in trust. A distribution system must, therefore,
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ensure the accuracy of the information distributed and provide adequate protection from alteration or unauthorized copying. It must also acknowledge both the artist and the collection and offer some sort of remuneration for the intellectual property created by the museum.

As information users, universities require easy access to a large body of high quality material from a central or coordinated source. Materials should be predictably high quality and available under a reasonable fee structure, according to common terms and conditions, regardless of source. High administrative overheads and processing costs should be avoided, and the materials licensed should be of uniform quality.

ADMINISTERING INTELLECTUAL PROPERTY RIGHTS

An effective and efficient system of administering intellectual property rights is key to the development of educational use of museum digital content. Establishing such a system depends on the definition of a set of standard terms and conditions for the use of quantities of material, the development of equitable pricing models, and the creation of a framework within which it is possible to negotiate rights efficiently.

Traditionally, rights are assigned by holding individuals or institutions for the specific use of a particular work. This kind of licensing, focused on the individual item, is difficult to adapt to the in-depth research requirements of higher education, where access to a broad range of material is essential and depth of content may be as critical as access to a particular work. MESL is exploring a model whereby museums offer collections of material to universities under a single site license. A range of digital images and information from museum collections is made available under the same terms for use by all members of a campus community.

Many pricing structures and systems being developed to support digital commerce are premised on a “pay-per-bit” or “pay-per-view model.” This type of transaction-based pricing did not fit well with the educational goals of the MESL project. It was feared that per-use charges would inhibit access and discourage the exploration of a new kind of information. In addition, participants did not have the monitoring systems in place that would be required to gather individual usage statistics. Finally, as we were introducing a new resource to the campus community, it seemed impossible to predict usage levels and therefore derive realistic pricing models. The pricing model that MESL is exploring is based on a subscription—a predictable fee paid for unlimited use of a defined information set.

There are a number of models for the administration of license terms and fees, each with its own pros and cons. These can be characterized as:
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1. **The rights holder's collective model.** A collective body acts for rights holders and represents their interests to copyright users. Often a standard set of terms and conditions with a single fee scale is applied, regardless of the information supplier or user. Examples of this type of organization include the Copyright Clearance Center (CCC) that acts for publishers, and the American Society of Media Photographers (ASMP) that represents photographers.

2. **The brokerage model.** A third party administers rights for a fee, which is often charged as a percentage of the license fee negotiated for the use of intellectual property. The terms of each transaction may vary. Examples include Picture Network International (PNI) or the Kodak Picture Exchange (KPx).

3. **The rights reseller model.** A third party acquires rights and then resells them, with or without consulting the original rights holder. Examples include Corbis Media and stock photo agencies.

4. **The consortium model.** A membership organization, such as Research Libraries Group (RLG), agrees to exchange information for mutual benefit.

5. **The locator service model.** Not truly a rights administering body, a locator service acts as a finding agency, passing requests through to rights holders, which define the terms and conditions of use and negotiate licenses individually. An example includes Academic Press's planned Image Directory (ID) service.

Each of these administrative models has pros and cons, often trading simplicity in administrative structure for flexibility in licensing terms. MESL participants are examining these models to see which would best serve the needs of museums and universities and best satisfy the requirements for integrated information location and intellectual property rights acquisition services. Any organization founded on one of these models would also have to resolve the legal terms of the license agreement and the technical framework for information collection and distribution.

MESL PROGRESS TO DATE

The participants in MESL adopted an experimental methodology to explore the issues of licensing museum digital intellectual property for educational purposes. Over the course of the two-year project, the participating collecting institutions agreed to make a significant number of images from their collections available for educational use on the campus networks of the participating educational institutions. This allowed the project participants to gain real experience with the technical issues
associated with the digital distribution of museum information and to
develop a framework of use within which to define and test the terms of a
model site-license agreement.

LICENSING AGREEMENT

As a basis for their collaboration, all participating MESL institutions
signed a cooperative agreement. This document outlined the goals of
the experiment and defined the responsibilities of each participant. It
also outlined the terms and conditions for the use of museum informa-
tion on campus networks—i.e., the first draft of the terms and conditions
of a site license.

MESL institutions desired to fashion terms that would enable the
broadest possible use of museum digital intellectual property within the
educational context, but which protected the investment museums have
made in its creation. MESL information may be distributed over the
campus network for educational use only, including research, teaching,
and student projects. Any commercial use or redistribution beyond the
bounds of the campus is not permitted.

In the next year, the cooperative agreement will be rewritten as a set
of model site-license terms. These will address the use of museum infor-
mation for educational purposes but will not define the legal framework
for a licensing body or the technical framework for information collec-
tion and distribution.

INFORMATION COLLECTION AND DISTRIBUTION

Each MESL collecting institution agreed to make at least 1,000 im-
ages and associated information available to the educational participants
over the course of the project. Images were supplied in as high a quality
as the participating museum was comfortable releasing and in the file
format they had available. Text was reformatted according to a project-
defined data dictionary. This information was collected by the Univer-
sity of Michigan, duplicated, and distributed to participating educational
institutions. Each university then made its own decisions regarding de-
ployment of that data on its campus network.

This strategy acknowledged the diverse nature of the technological
infrastructures on each of the participating university campuses. By sepa-
rating the content from the deployment systems, it has been possible to
leverage the investments already made on each of the campuses. This
also acknowledges the heterogeneous nature of the participating
insitutions and the difficulty of developing consensus on a common de-
ployment strategy at the outset of the project.
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USE OF MUSEUM INFORMATION

From its outset the MESL project has encouraged the broadest possible use of the information made available. As well as supporting teaching and research in Humanities disciplines (including art history, history, anthropology, cultural and religious studies), museum information has been used in multimedia development, (including communications and interface design analysis), and information and computer science (including research into image database access, image description, search and retrieval, and image processing). For example, in the first year of the project MESL images have also been used in joint studio and art history projects at the University of Maryland, a Religious Studies course at the University of Virginia, an Information Science course at the University of Michigan, a history of Photography course at the University of Illinois, an Art History course at American University, and the Art Humanities course required for all undergraduates at Columbia University.

EVALUATION

The second year of the MESL project will focus on evaluating and documenting the experience of making over 8000 museum images available on campus networks. This will include profiling the distribution systems developed on each of the campuses, assessing the interface choices and delivery options made in each MESL implementation, gathering statistics about use, conducting a study of the benefits of the availability of the information and working with faculty and students to assess the impact of integrating new technologies into the curriculum.

The distribution system will also be documented, and a report developed which offers recommendations regarding technical standards and requirements based on the MESL experience, and outlines areas for future exploration. The impact of the project on museum documentation procedures will also be studied, and requirements for information export from collections documentation systems defined. The Andrew W. Mellon Foundation has also funded a study of the economics of the distribution of visual information which will use the MESL project as a case study, and examine the costs and benefits of the introduction of new technologies to manage visual resource collections.

These evaluative reports will provide a clear statement of the costs and benefits of introducing digital museum information into the educational community.

CONCLUSION

There are many potential benefits for research and teaching if high-quality museum images and associated information can be made over
campus networks for educational purposes. For this to be possible, however, museums and educational institutions need to define a common framework for information collection, distribution and use. The MESL project has brought together museums and universities to explore the administrative, legal and technical issues underlying the development of a new model for the distribution of museum intellectual property for educational use. In the first eighteen months of the project, through the experimental distribution of over 8,000 museum images and associated information, MESL participants have demonstrated both the feasibility and the desirability of such an alliance. In the project’s second year, this experience will be codified and reported, and the results shared.

The success of the Museum Educational Site Licensing Project has been built upon the contributions and enthusiasm of its participants. Project teams have actively embraced the challenges that developing a new distribution model has placed on their technical infrastructures, reassessed conceptions of information distribution and licensing, and re-designed curriculum to take advantage of new resources. As a result, the students in MESL institutions have had an unprecedented opportunity to explore, in depth, parts of the collections of significant U.S. museums. This glimpse of the potential for new technology to bring knowledge and appreciation of cultural heritage to a new generation whose interest is essential for its preservation, it is in itself justification for the struggle to redefine our methods of providing access to collection, and should provide sufficient motivation for both museums and universities to face the challenges of redefining their traditional approaches to the negotiation of intellectual property rights.\(^1\)

NOTES

1 The participants in the meeting which launched the Getty AHIP Imaging Initiative urgently expressed this: “Imaging and copyright issues are on a collision course” states the report of their discussions (Initiative on Electronic Imaging and Information Standards, Meeting Report, Getty Art History Information Program [AHIP] March 3-4, 1994).

2 This section is based on discussions and draft texts of the Guidelines for the Fair Use of Visual Image Archives developed by the Image Archives, working group of the Committee on Fair Use (CONFU). I have been an active participant in these discussions and have drafted portions of that text. I would like to thank other participants in that process, particularly Mary Levering of the U.S. Copyright Office, for their contribution to my understanding of these issues. The rights defined for each of these image types are those which apply under U.S. law. While the issues are similar in other legal jurisdictions, the legal framework and the nature of the rights assigned by copyright and other intellectual property legislation vary from country to country. Creating intellectual property management frameworks that work in an international context is a significant challenge being addressed by projects such as IMPRIMATUR, an initiative of the European Union, which has U.S. representation in the form of the Interactive Multimedia Association (IMA).

3 In addition, the moral rights of the creator (as defined in Section 106A) must be considered.

4 As of this writing, there has yet to be a determination as to whether the digitization process involves sufficient creativity to be a copyrightable work (as is the case with
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reproductive lithography) or if it is mechanical in nature and without creativity (as is the case with photocopying) and therefore does not produce a protected work. Given the amount of skill involved in the creation of an accurate scan and the need for accuracy and fidelity in the process (color balancing, cropping, etc.), there is a strong argument, voiced by major suppliers of digital images including Corbis Media and Luna Imaging among others, that reproductive digital images are indeed copyrightable.

When discussing the transaction costs for the identification and acquisition of intellectual property rights, Joseph Lebersole estimates that “as much as ninety percent of the costs of a multimedia work may be allocated to these problems. Something will have to be done to keep new industries from strangling before they come even close to reaching their potential” (Joseph L. Ebersole, Protecting Intellectual Property Rights on the Information Superhighways, A Report for the Information Industry Association, March 1994, p. 84).

This issue is explored in more depth by D. Bearman & J. Trant, Museums and intellectual property: Rethinking rights management for a digital world (Special issue: Copyright and fair use: The great image debate). Visual Resources, 12(3-4).


Participating Universities: American University, Washington, DC; Columbia University, New York; Cornell University, Ithaca, NY; University of Illinois at Urbana-Champaign, IL; University of Maryland, College Park, MD; University of Michigan, Ann Arbor, Dearborn, and Flint, MI; University of Virginia, Charlottesville, VA.

The configuration of each team varies, depending on local circumstances and interests. Full lists of project team members can be found on the MESL WWW site: http://www.gii.getty.edu/mesl

The MESL Management Committee is comprised of Maxwell Anderson, Art Gallery of Ontario and Information Technology liaison for the Association of Art Museum Directors; David Bearman, Archives and Museums Informatics; Howard Besser, University of California, Berkeley; and Clifford Lynch, University of California, Office of the President, and is chaired by Jennifer Trant, MESL Project Director.

A good example of this kind of arrangement is the Sample License Agreements for CD-ROM Production distributed by the American Association of Museums.


The text of the agreement is available on the MESL WWW site: http://www.gii.getty.edu/mesl

The agreement has already provided the basis for the collaboration of the members of the Art Museum Image Consortium (AMICO), an initiative of the Association of Art Museum Directors (AAMD) to provide collective licensing of works from member institutions’ collections. See http://www.amn.org

Defining the administrative framework for a collective licensing body and the technical framework for information collection and distribution have fallen beyond the bounds of the current MESL project. In addition, technical specifications would be best dealt with as a schedule appended to the agreement, as this would provide the flexibility required to respond to changing circumstances. These issues were discussed in detail at the spring 1996 MESL Participants’ Meeting (report available on the MESL WWW site).

A full report of the issues raised in the first year of information collection and distribution has been prepared by Howard Besser and Christie Stephenson for presentation at the EVA Conference, London, July 1996.

A full list of the courses taught during the project can be found on the MESL WWW site.