Digitization of Slide Collection

Fischer Fine Arts Library
University of Pennsylvania

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Executive summary
The Fischer Fine Arts Library of the University of Pennsylvania would like to request your support of 79,500$ for the digitization of approximately 100,000 35mm core teaching slides. The slides are part of our vast slide-collection, which represents the careful selection of generations of librarians and scholars. At present, this collection is sadly underused. It is underused, because the slides are in an anachronistic, inflexible, and inaccessible format. The underuse is a waste of a great resource – for both teaching and research. By digitizing these slides we will provide a new access to, and facilitate the renewed use of, this resource. This will benefit both students and faculty at the University of Pennsylvania for generations to come.

To ensure that we digitize the slides that best will help our students and faculty, the selection of slides will be based on core course needs as defined by the School of Design and Department of History of Art. The digitized slide collection will be made available to the university community on the Library’s website. Due to copyright restrictions the collection will not be accessible to the larger public.
Background – who we are

The Fischer Fine Arts Library
The Fischer Fine Arts Library is a branch within the University of Pennsylvania’s library system. The Fischer library’s collections are developed to serve the School of Design and the Department of the History of Art. The library supports study, teaching, and research in contemporary and historical aspects of art, architecture, city and regional planning, historic preservation, landscape architecture, studio art, and urban design. In the 1950s, former Dean of the School of Fine Arts (today School of Design) Holmes Perkins, developed standards for the collections. The curricula he crafted required library resources of the highest quality for architecture, city planning, and urban design. He wanted students to take a long view of society and culture and see how ideas could be traced through history. It was his conviction that the library’s collections should facilitate this end and he worked diligently to make it happen. (Keller, 2000) With this end in mind, we have designed collections that contain texts and images in both analogue and digital formats. Our image collection provides visual resources for the study, teaching, and research needs of students and faculty. (University of Pennsylvania 2009, Anne & Jerome Fischer Fine Arts Library)

Our community and patrons
The University of Pennsylvania (Penn) is a private, not-for-profit, research university located in Philadelphia. Penn was founded by Benjamin Franklin in 1740 and is one of the oldest institutions of higher education in the United States. As of fall 2009 Penn had a total of 24,599 students served by approximately 4000 faculty. At Penn we take pride in being a place where students and faculty can pursue knowledge without boundaries; a place where theory and practice combine to produce a better understanding of our world and ourselves. (University of Pennsylvania 2008)
The Fischer Fine Arts library serves all the university’s students and faculty through its collections and its physical facilities. Yet, first and foremost it serves the undergraduate and graduate students and the faculty of the School of Design and the Department of History of Art. In recent years we have experienced a strong shift in our patrons’ preferences away from analogue and towards digital resources.

The School of Design and Department of History of Art offer undergraduate and graduate programs as well as lectures and seminars. Architectural courses were first offered at Penn in 1868, which makes Penn the second oldest architectural program in the U.S. The University of Pennsylvania’s School of Design, founded in 1890, is today dedicated to promoting excellence in design across a diversity of programs – Architecture, City Planning, Landscape Architecture, Fine Arts, Historic Preservation, Digital Media Design, and Visual Studies. (University of Pennsylvania 2008)

Our staff
The Head of Fischer Fine Arts Library is Dr. Keller, who will also be the person in charge of our digitization project. Other key staff members involved in this project is the staff of the Fine Arts Library image collection, which consists of one fine arts curator (who is also assistant fine arts librarian), two bibliographic specialists, and one library imaging assistant.

Statement of need
At The Fischer Fine Arts Library we have an impressive collection of slides. Totally, the library currently posses approximately 500,000 35mm slides of drawings, paintings, sculptures, prints, photographs, architecture, landscape architecture, city and regional planning, historic preservation, contemporary art, and more – from prehistory to the modern age. This collection presents a vast resource. It is, however, a presently underused resource. The faculty and students of the Department of the History of Art and the School of Design use the collection for study and class-
room display. And once in a rare while, students from the College of General Studies or interdisciplinary graduate programs find their way to the collection. In short, presently the slides are used by only a handful of the members of the Penn community. And if the current trend continues, there will soon be no users at all. The explanation for this sad fact is clear: the users have shifted from slides to digital images. It is gradually becoming the case that the slides are a forgotten treasure. They stand there in our basement, awaiting rediscovery.

Rediscovery will happen only if we digitize the slides. Presently, the approximately half a million slides are filed according to the Fogg Classification Scheme. Approximately 200,000 of the slides are cataloged in MARC format and are searchable in our online catalog. But none of our slides are currently available in digital format. As preferred image formats continuously change – from the mounted image to the lantern slide to the 35mm slide and now to the digital image – it has been and remains essential for the Image Collection to keep up with the changing technology to keep up with the needs of our patrons. Today, this means that we need to digitize our slides. (University of Pennsylvania 2009, Image Collection)

The use of visual images is an essential part of teaching and research in the fields of the fine arts, architecture, and design. The slide collection documents the entire range of works of art and architecture from prehistoric times to the present and is thus a remarkable and immensely valuable resource for teaching and research. The Fischer Fine Arts image collection reflects the efforts of generations of librarians and faculty that selected and collected relevant images, which has resulted in a resource that represents the efforts and tradition of Penn scholarship. Moreover, even though each slide alone is of limited value, each slide adds value to the other slides in the collection – each slide adds a layer to the set of slides that is relevant for a period, a style, a genre, an art-form, and so on. This means that the collection of these slides as a whole is of im-
mense value. While we presently offer access to image collections from various vendors, these cannot match or substitute the value of the present collection.

A recent study of the use of digital images for teaching and learning at liberal arts institutions conducted by The National Institute for Technology and Liberal Education in cooperation with Wesleyan University suggests that access to digital images is valuable in a number of ways. The study shows that digitizing image collections lead to increased use and flexibility, and that greater flexibility leads to greater creativity. Digital images are more accessible to students than slides and can be used by more than one patron at the same time. Access to digital images has also been found to increase the use of visual resources amongst students. Teachers use the images in a more flexible manner and have a tendency to use more images in teaching materials. It is also easier to collect teaching materials and it is possible to retrieve images real-time when in class-session, which makes for a livelier classroom experience. (Green 2006, p. 19-35)

In sum, digitizing these slides is necessary for ensuring the continued use of this valuable collection. The benefits of digitization are immense. The costs of doing it are not insubstantial. But it is a one-time investment that will profit many future generations of members of the Penn community.

**Initiative proposal**

*Project goals*

It is our proposal to digitize 100,000 slides in two years. Our goal is not, however, the digitization itself, but to increase the use of these slides by the members of the Penn community. To ensure this goal, we need to:

- Digitize approximately 100,000 core teaching 35 mm slides
- Make the digitized images available and searchable online for the Penn Community
- Make the Penn community aware of the availability of these slides
If the Penn community is aware that these 100,000 high quality digitized slides are easily accessible, then we have no doubt that they will use them to a high degree. Thus, we will reach our goal of having these slides rediscovered and used. A benefit to the Penn community.

Methods: digitization, online accessibility, and awareness

First, we must digitize the slides. The faculty of the School of Design and the Department of history of Art will conduct the selection of slides to be digitized from the image collection. This selection process will prioritize core teaching slides.

Initial investigations suggest that outsourcing part of the project rather than performing all steps in-house is cost-efficient. To scan 100,000 slides in two years the library would have to hire additional staff as well as invest in equipment such as scanners and servers. This level of investment would not be prudent, insofar as we do not need the equipment in our daily operations – even if they were expanded. So, we plan to have the actual scanning done out-house.

On the other hand, some aspects of the pre- and post-scanning are best done in-house. This includes creating batch data to accompany the scans in order to facilitate linking the images with the appropriate data. Doing this in-house will insure better control over the process and quality. (Harvard College Library 2006)

The digitization project will be executed over a two year span. During this time period the collection should still be almost completely available to the patrons. Thus we propose to pack and send 1500 slides per week for the out-house scanning.

Second, we will make the slides available through the library web-page. If the digitization is done right and meta-data correctly added, this will be a matter of straightforwardly linking the collection to the already existing web-page for digital images collections.

Third, we will make the Penn community aware of the availability of these slides. This can be combined with the ongoing effort to increase awareness of the available library resources
– including the digital image collections. One cost-free and effective initiative targeted to history and design students is to introduce the image collection to faculty and teaching fellows and have them use the collection as part of their coursework. To make the wider community aware of this resource, we will draw on our colleagues at the other branch libraries, spread the word among teachers, highlight the availability of the collection on our home-page and on the university’s web-pages, and in general use the standard procedure for communicating with the Penn community.

**Planning and implementation**

The biggest and costliest of the tasks is to have the slides digitized. Converting collections of 35mm slides into useful digital content requires more than just a scanner. Several steps are needed in the process of digitizing slides (Chemjor 2006):

- **Slide preparation**: selection of slides, assessment of slides and documentation of their condition, register in catalog (batch data)
- **Scanning**
- **Post-scanning image preparation**: digital cleaning, image manipulation, and color correction
- **Post-scanning storage**: storing in database with metadata
- **Quality control and assurance**
- **Making the collection available to patrons through the library’s home page**

The selection and quality control of slides returning from the vendor will be performed by faculty and graduate students. Assessment and registration will be performed by undergraduate assistants. Scanning and post-scanning image preparation will be performed by an out-house vendor. The library’s web-manager will be responsible for making the collection accessible to the Penn community via the library home page. All steps will be coordinated and supervised by our library fine arts curator who reports to a project managing committee that in addition to her consists of the head of the library, a representative of the faculty, and a representative of the students. The
idea is to have input from the perspectives of the different kinds of users that will benefit from the digitization.

Moreover, risk management is required. A previous digitization project conducted at Harvard’s Fine Arts Library report that negotiations with vendors can be time consuming and even undercut the entire project (Harvard College Library 2006). In dealing with private contractors, there is always a risk of breaches of contract, so the University’s department of legal affairs will serve as consultants in the contract-negotiations with the vendors. To accommodate the various risks attached to the project, we have added extra time for the completion of the project (Harvard ran out of time and had to quit the project before completion) and allocated extra funding to deal with unforeseen costs, should such occur.

The scanning project will kick off officially in January 2011. Prior to this the project coordinator will have a six month preparation period, where she will find the best vendor, plan the workflow in detail, and find the faculty and students that will assist with the various tasks. In this period the selection committee will select the slides to be digitized.

The scanning project will continuously be evaluated to ensure that the project keeps the timetable, meets quality standards, and keeps the budget. Every six month an official evaluation report will be submitted (we return to the timing and criteria of evaluation below).

<table>
<thead>
<tr>
<th>Timetable for the project:</th>
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<tbody>
<tr>
<td>06/2010 – 12/2010</td>
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<td>01/2011 – 01/2013</td>
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<tr>
<td>06/2011</td>
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<tr>
<td>03/2012</td>
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<tr>
<td>01/2013</td>
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<td>03/2012 – 09/2012</td>
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Evaluation
Ongoing evaluation is the key to success. We define success as the achievement of our overall aim: that the images in our slide collection are used by both faculty and students. We will achieve this aim through achieving the following subservient aims:

- That the slides are digitized in good quality.
- That the digital images are available for easy online access.
- That both faculty and students are aware of the availability of the images.

For the evaluation to be helpful, it is not enough to measure the success in achieving the overall aim. Improvement should always be the purpose of evaluation, and to understand how we can improve the use of the collection in light of the evaluation, the evaluation must also provide data about how well the sub-goals have been achieved. (NISO, 2007) So, the following should be evaluated:

- The extent to which the digital images are used by faculty and students.
- The quality of the digital images.
- The availability of the digital images.
- The extent to which the Penn community is aware of the availability of the digital images.

The Head of the Fischer Fine Arts Library will have the overall responsibility for the timeline of project and the evaluation.

The different areas of evaluation call for different methods of evaluation. The use of the slides can be evaluated simply by counting how many times they are accessed. Quality control will be determined by the standards already implemented by the library for digital image quality. Quality control will focus on: digital cleaning, color, metadata, and software used. The quality of the slides will be evaluated by the committee that is also responsible for the selection of the slides. They will view the digitized slides as these arrive from the digitization contractor and de-
cide whether the quality matches what was agreed upon with the vendor. The vendor will be contractually obliged to fix any issues and resubmit images for evaluation if standards are not met.

The availability of the slides does not really require a method of evaluation separate from the evaluation of the awareness of the availability of the slides in the Penn community. The awareness of the slides can be measured by asking library patrons to fill in a quick questionnaire when they log on to their Penn portal or access the library home-page. This evaluation method has the added benefit that it itself serves to spread the knowledge that the digitized slides are available. To ensure that the students participate in such a survey, the survey should take no more than a few minutes to complete and taking it provides a chance to win an attractive prize such as an iPod Touch or gift cards to the campus bookstore. This has proven to be an incredibly effective way to get the students to participate. Selected faculty will be interviewed for their perception of how the collection is received in the faculty body of the Penn community and for how they use the collection in their teaching and research.

The first round of evaluation of awareness and use should follow approximately four to six months after the launch campaign. A year and a half to two years after the slides has been made available there should be a final evaluation of the overall success of the project at which point it will also be time to decide whether to digitize more of the slides. It is our hope and expectation that the project will be so vast a success that there will be a basis for a second round of digitization.
Budget

Program costs

<table>
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<td>Shipping costs</td>
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<td>Payment to vendor for digitization</td>
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<td>Post-scan process: quality control, upload</td>
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<td>Evaluation</td>
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<td>Contingencies</td>
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<td><strong>Total Cost</strong></td>
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Program funding

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<td>University of Pennsylvania’s Library</td>
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<td>Solicited grant</td>
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<td><strong>Total funding</strong></td>
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Conclusion

To continue to serve the Penn community’s quest for excellence in teaching and research, it is crucial that a part of the slide collection at the Fisher Fine Arts Library is digitized. With your support of $79,500 we can digitize 100,000 slides. Your support would thus greatly benefit present and future members of the Penn community.
Appendixes

- Copyright
- Staff resumes
- Image specifications
- Scanning specifications
- Selection process and selection criteria
- Budget calculations

References


University of Pennsylvania (2008) About Penn, retrieved from http://www.upenn.edu/about/