Role of the Conservator in the Digitization Program at
The Boston College University Libraries

For the conference, *Querying the Library: Digitization & its Impact*, the role of the conservator in the digitization program in the Boston College University Libraries was presented, with emphasis on that role from the beginning of the program. The Digitization Planning Committee, a group whose purpose was to develop a program for digitizing and preserving the unique holdings of the Boston College libraries, was described. The areas in which conservation became directly involved in the digitization workflow, showing examples of materials and conditions which present challenges, were addressed. Then, within the physical space of the conservation lab, how digitization impacted the nature of treatments, complicated the use of the work space, and effected the treatment of materials not in the digitization work-flow was discussed. Digitization as a preservation tool was touched upon. The talk was wrapped up by showing how this program is working at Boston College as a resource, in reference to conservation duties, in particular. Because the talk was limited to thirty minutes, some points were mentioned only briefly.

To give a sense of the challenges faced in beginning to digitize collections at the John J. Burns Library of Rare Books and Special Collections, here is a quick overview of the materials in the library. It is home to more than 260,000 books, 700 manuscript collections, and important gatherings of architectural records, maps, art works, newspapers, music, photographs, films, prints, artifacts and ephemera, as well as the Boston College University Archives (which includes examples of all of the above). Though the collections cover a broad spectrum of human knowledge, the Burns Library has achieved recognition in notable topics of research, including: Irish studies; British Catholic authors; Jesuitica; Fine printing; Catholic liturgy and life in America; Boston history; the Caribbean, especially Jamaica; Nursing; and Congressional archives. There is a need for scholars to access all of these collections both within the library and electronically.

Boston College had already completed numerous digital projects prior to 2009 when Thomas B. Wall, PhD, became the Boston College University Librarian. He created a new strategic plan for the libraries and formed a committee to formalize digital projects into a program. The committee he selected consisted of willing, knowledgeable partners interested in forming a program suitable to the mission of Boston College and the goals of the library. A conservator would not necessarily be involved at this stage; Dr. Wall was innovative in naming a conservator as a
member of the committee. Jane Morris, Scholarly Communications Librarian, headed the committee. The rest of the members were: Elizabeth McKelvey, Head Librarian, Digital Library Programs; William Donovan, Digital Imaging and Curation Manager; Amy Braitsch, Head of Archives; and Justine Sundaram, Senior Reference Librarian. The group designed a program to bring hidden collections to light, to mainstream their use in the curriculum, to expose the breadth of the collections, and to provide opportunities for new scholarship. They identified collections that have high-impact research value and developed criteria for setting priorities for digitization. The committee very quickly identified issues common to whatever collections were proposed as a digital project, including: rights issues associated with the items, research value, conservation issues, hardware and personnel resource needs, and outsourcing possibilities. The initial emphasis for the program was placed on exposing the potential opportunities that the special collections holdings present, rather than on completing large-scale projects.

The Digitization Planning Committee called upon the conservator to focus on areas where conservation became involved in the workflow. In discussion with Amy Braitsch, Head of Archives, the conservator established criteria for review and repairs. In order to move the conservation segment of the program along in a timely manner, the work consists of stabilization and minor repairs, not full treatments. The pair concluded that the initial conservation review could be done by Archives Department staff; usually Shelley Barber, Reference and Archives Specialist, and Adrienne Pruitt, Project Archivist. They maintain records for the repair queue as well.

The conservator traveled with the planning committee to observe and evaluate digital equipment at other institutions. The conservator’s opinion of the suitability of that equipment for digitizing rare materials was both sought after and taken into consideration as Boston College invested in equipment for the program. The conservator selected supports for items to be imaged and made unique supports for out-of-the-ordinary items. Once the program began, the conservator trained staff in safe handling of archival materials and was present to help imaging staff to choose supports; showing which would suit the structure of the item to be imaged. The conservator continues to be called upon to assist with unusual fold-out maps, vellum bindings, and tightly bound books. The conservator does all the necessary stabilization and minor repairs to ready materials for imaging, sometimes on short notice. Boston College students assist a total of 20 hours per week in the lab. The conservator and two students staff the Conservation Department during the academic year.

During the presentation, slides were shown to illustrate some of the typical challenges that institutions may come across when digitizing or imaging special collections. It was suggested that policies and procedures should be
established by them to save time in the decision making process, both in terms of repair choices or whether to digitize items at all. Instances where the items, especially archival materials, need to be considered on an individual basis also were mentioned.

The first presentation slide depicted a fragile Coptic papyrus fragment 300-600 A.D., which gave difficulties when it was being imaged for a publication. Because there were handling concerns, it was important that a conservator be present to position it for the photographer, spending approximately an hour in the process. This fragment had been stored in an archival folder, and after the photo shoot, a preservation enclosure was made for it. This example shows the need for a policy decision—if digital images already exist for preservation purposes, will an institution allow a photographer to take additional pictures, exposing the item to more handling? The situation required the assistance of a conservator, but such requests typically are decided by curators. They should determine their institution’s policy after weighing the cost of the impact on the archival item with the benefits of publicity for the library. The policy at John J. Burns Library allows such photo shoots. The library staff works on a regular basis with trusted professional photographers who are employed by Boston College. Institutions without staff photographers must factor that in their policy decision.

Whether damaged materials should be repaired, stabilized, or left as is, should be decided early in digitization program planning. Many such choices can be determined as a blanket policy, but care should be taken to note items that do require individual attention. Those requiring more attention very likely should be discussed between a conservator and a curator. Not all repair decisions can be made by a conservator, the history and value of the items in question likely will be better known by a curator. Repairs should not compromise the research or monetary value of archival materials. The presentation revealed the decisions made at the Burns Library in the examples that follow.

The next slide illustrated Cinderella, or the little glass slipper, 1814, a paper covered pamphlet with numerous dog ears, that is, pages with corners folded. Dog ears are frequently encountered, often they can be left untouched, but sometimes the folds cover text. Additionally, the folds can
make pages difficult to open. The example shown came to the conservation lab to be repaired so it would be easier for imaging staff to handle. This sort of repair should routinely be placed in the conservation queue.

Sometimes, as mentioned earlier, items need to be reviewed by a curator and a conservator. The sample shown in the slide show was a 19th century letter, written by Michael H. Leary, a Union soldier from Massachusetts. It had been folded for mailing and then sealed with wax. The wax had a paper fragment attached to it, torn from another part of the letter. An examination of the letter clarified that the fragment contained information that would be inaccessible unless the fragment was removed from the wax. Before conservation work could be done, the conservator discussed whether treatment should go forward with the Head of Archives. Clearly the damage was done to the letter when it was opened by the recipient during the Civil War, so from an archival point of view, the letter was in its original state. However, on balance, it was written by the soldier, and the fragment contained his writing, so the agreed upon conclusion was that was the more important historic feature. It was decided that the best course of action was to repair the letter so that no information would be lost or inaccessible. Examination of archival materials can be a tricky process; there is no “one size fits all” judgment call, time should be allocated to make well thought-out decisions.

Special collections often include many pamphlets. Those from the 19th century can be especially challenging because they generally were inexpensively made, consisting of wood-pulp paper and using inferior binding techniques.

Two pamphlets were shown and the repair choices for them were explained. These pamphlets were handled differently than conservators would have dealt with pamphlets before the advent of digitization. The first pamphlet, *The Short Catechism extracted from the Catechism*, 1891, was broken into single leaves which could be individually captured lying flat for easy camera focus, so it was repaired afterward. In the past it would have been repaired first, for instance, if a scholar needed to use it for research.
The second pamphlet, *In Memoriam. Sister Sainte Claire, order of St. Ursula*, 1876, had brass fasteners that made it impossible to open it wide enough for the cameras to focus. Again the conservator needed to engage in discussion with Head of Archives, because from a conservation point of view, the pamphlet was undamaged and did not need repair. The Archivist, as custodian of this collection, decided that the fasteners were not the most important part of the pamphlet; rather the information contained in it was. Additionally, the pamphlet was printed in a large run and did not have a unique structure. The fasteners were removed and, after digitization, the pamphlet was re-sewn with thread. Yet another item with brass fittings was discussed, in that instance no alteration was made because the document was comprised of citizenship papers. It seemed wrong to change the structure from what the new citizen had been given; those papers were unique.

Other issues requiring conservation attention include folded newspaper clippings and mold. There will always be folded newspaper clippings in archival collections. Information will be lost and the paper likely damaged if they are not repaired prior to digitization; they should routinely be repaired. Mold will contaminate imaging equipment and other archival items, and presents risk to staff if not cleaned prior to imaging. The mold may obscure text as well, compromising a complete capture of information. The page shown in the presentation was from a collection with more than two thousand contaminated documents. The large task of cleaning was undertaken in a small conservation lab in a short time period. Fortunately, the collection was not in the digitization queue when the problem was identified. This emphasizes the need to have archive staff assessing collections before getting them in the queue. At Boston College, the Archives Department is actively processing materials and is well-trained to identify problems.
Two tightly rolled up posters from the Seamus Connolly Collection were shown during the presentation. These posters could not be candidates for digitization in this state. Many institutions have large collections of maps, prints, and documents that have been rolled because of storage constraints. If such items have not been thoroughly cataloged, they may have to be unrolled to determine if they are unique and should be digitized. This means treating items that may not otherwise have been treated and may not have been chosen to digitize. Projects with large numbers of rolled up maps and posters impact the workflow in the conservation lab because of the amount of work space taken up. Also, depending upon the equipment available in institutions, large format maps and posters can present imaging challenges. Such projects might need to be outsourced and may have funding implications to consider before undertaking them. More resources will go into that process and the priorities of the institution will need to be reviewed.

Some institutions have vellum documents in their collections and often those documents are unique and should be digitized. The vellum document from the Howard Belding Gill papers shown at Rhode Island College had been folded in half for many years and was very brittle. It was impossible to image while folded, and it was gradually unfolded over a period of two weeks during muggy July weather. It was suggested that, when setting up a digitization queue, be sure that vellum items have been reviewed for conservation treatment and that a reasonable time period is allowed for the treatment.

Because archival collections include books and bound materials as well as documents, the slide presentation illustrated some challenges frequently encountered when digitizing books.
A dramatically soiled book which if left unclean would be a hazard to staff, equipment, and other archival materials was shown. If left unclean, the resulting images would not be satisfactory and would make an institution look bad. Boston College does not have books this dirty; for that slide, a treatment completed at the Boston Athenaeum was shown. The audience was informed that the book, a ledger from the India Wharf Rats collection, had arrived at the Athenaeum in that condition. The donor had stored their archive on shelves above a kitchen stove. Materials were damaged during a stove fire.

Books with uncut pages were reported upon. Those books should be noticed by staff before they get into the digitization queue. Library staff can easily be trained to open the pages; this type of work does not need to go to the conservation lab. Burns staff has been trained how to do this by the conservator and they in turn have trained the students who work in the library. Pages which have been glued together are a different situation. A typical specimen, *The Goblin Market and Other Poems*, 1865 had been re-gifted in the 19th century. It was deemed important for researchers to see both inscriptions. If those pages were blank, they probably would have been left as is. The pages were separated by the conservator. A curator may wish to decide a policy for this type of situation at their institutions, this will save time when reviewing large numbers of books headed for digitization.
Like documents, sometimes books will require a review or discussion with a curator before the conservator begins any treatment. The next slide showed a volume entitled *China Monumentis*, 1667 which presented multiple problems requiring discussion before conservation work or digitization could be completed. The book is an important volume from the Jesuitica Collection. That collection is made up of books written by or about the Jesuits and published before the suppression of the order in 1773. In this book there were oversized maps bound too closely to the gutter for the cameras to capture the entire page, the curve of the book made ideal focus impossible, and some maps had been badly repaired at an earlier time with areas misaligned. A faculty member wanted to do both an exhibit and a publication using this book and wanted the best possible images; it was necessary for all of those problems to be resolved. Several members of the Digitization Program Planning Committee discussed this project. They concluded that some of the maps would have to be removed from the volume to satisfy the needs of the faculty member. Our goal at Boston College University Libraries is to provide access and support to faculty and students and this project was important to a faculty member.

To give the conference attendees a fuller sense of the Boston College decision process, they were shown another book which is too tightly bound for cameras to capture all the text. Unlike the previously discussed book, the binding and text block are in very good condition. There is no immediate request for it to be used for exhibit or publication, the conservator declared that the book be left as is and not digitized, and that view was accepted by the committee. It seems fundamentally wrong to take apart leather bindings in good condition. If digital images are needed, a possible solution would be to locate a digital version in another institution. At this point in the talk, it was indicated that a best practice is to
track the items that should not be digitized; it is a waste of time to review the same ones as they can come up as projects over and over again. Of course, the audience was reminded, as circumstances change institutions need to be flexible about some decisions not to digitize items.

The last book-related slide in the talk showed a commercially made protective pamphlet binder. The pamphlet housed within the binder probably could have been digitized while still in the binder, however, the pamphlet, *The Solitary Life*, 1960, is from the Thomas Merton Collection and is inscribed by him.12 Because of the importance of the collection to Boston College, it was decided that the pamphlet should be removed from the protective binder. It was easier for the imaging staff to handle and minimized the possibility of damage. A custom archival enclosure was made to house the pamphlet afterwards. The topic of re-housing will come up as collections are digitized. Plan to have resources available for improved storage; it is efficient to re-house collections as a part of a digital program.

Other examples of re-housing were brought up as well. Most collections have framed maps, drawings, and documents. Unfortunately, many are in unsuitable materials and need to be unframed because of that. Framed items must also be unframed if they are part of a digital project. Two examples were shown; first, a drawing from the Howard Belding Gill papers with a plastic sheet riveted to the front of it13 and second, a framed letter written by Boston College President the Reverend Robert Fulton, S.J. with broken glass plate.14 In the case of the plastic-covered drawing, wear and tear on the plastic gave the drawing a hazy appearance and the plastic was cracked. Dirt and debris had accumulated between the plastic and the drawing. Ideally, when going to the
expense of digitizing collections, the goal is to obtain the clearest images possible. The Boston College archives staff placed this item in the conservation queue and the conservator removed the plastic covering and surface cleaned the drawing. It is now ready to be scanned.

The second item presented risk to staff because the glass plate in the frame was broken and sharp shards were a danger to them as well as the framed letter. The framing materials were acidic and when it was brought to the conservation lab the letter, written by Father Fulton and the accompanying honors medal were immediately removed from the frame. Many institutions have framed archival items. Both for digitization projects and storage constraints, those items may need to be unframed. A policy concerning framed materials will need to be developed, taking into consideration the history of the collection.

The final category of archival material discussed in the presentation was newspapers. The sesquicentennial of Boston College was approaching and the library staff selected digital projects that would be useful for exhibits and publications in the planning stages. The Heights project was a worthy project for digitization, this periodical contained information important to the history of Boston College. The Heights, a student publication started in 1919, has continued to be printed on a weekly basis during the academic year, with occasional special supplements for key sporting events, most notably the football games versus arch rival, The College of the Holy Cross. The Boston College Libraries developed this as a major digitization project, covering the November 1919 thru June 2010 issues. The project utilized many library resources and required funds from other departments. Betsy McKelvey, Head Librarian, Digital Library Programs, pulled together a budget and a strategic plan with lots of input from Amy Braitsch, Head of Archives. Archives staff reviewed the bound and unbound issues looking for damage requiring conservation attention and flagging those pages for easy identification. The conservator provided the conservation estimate for the project and
executed and supervised the actual repairs. The conservator, with the assistance of one Boston College student, surface cleaned hundreds of pages and made hundreds of paper repairs.

*The Heights* project clearly illustrated the impact that large scale digital projects can have on a conservation lab. The conservation lab in the John J. Burns Library is 16’ by 24’, and has two work benches. In the presentation two views of the lab showed the space as it looked at the time that multiple bound and unbound copies of the *Heights* were being repaired. All the bench space in the lab was in use. While the *Heights* volumes were being worked on and were drying, there was no room to engage in other repair projects. When out of room on the work benches, the student assistant would work on tasks in other parts of the library. The conservator worked on reports, planned other projects, and wrote an article for the Burns Library blog when all the bench space was filled. When considering large scale digitization the size of the conservation lab and number of staff members should be taken into account. At Boston College concern was expressed to the digitization planning committee that the conservation lab might prove to be a bottleneck. Exhibit preparation also takes place in this lab and that often takes up all the work space as well. So far, because of successful communication regarding the needs of the departments concerned, digital projects have been planned so that they mesh with other duties. Of course, outsourcing some conservation work could be an alternative, but this brings into play issues such as choosing a vendor, negotiating costs, packing materials, tracking them as they travel back and forth, and accepting the possibility of loss or damage in transit. The library has occasionally sent materials off-site, but generally the choice is to do projects in-house.

During the presentation, the question of digitization as a preservation tool was discussed from the viewpoint of a conservator. The short answer given to the question was “yes and no.” It was pointed out that if, for example, a rare 16th century book is digitized and then the physical book continues to be regularly used, then “no”, digitizing the book will not help in its preservation. The information contained in the book will be saved, but the use will continue to cause wear and tear to the book. There are gray areas to think about too, for example the practice of disbinding books to be digitized and then not re-binding them because of resource constraints. In those instances,
the original objects have not been properly preserved. Considering 19th century books which are rapidly crumbling into dust, “yes,” digitization is a preservation tool, the books and the information both would be lost over time. This applies to millions of books and documents, so clearly digitization can be a sensible preservation choice. Do remember though, preservation worries are actually compounded by digitizing collections—ideally, the physical collections must continue to be preserved, and care for digital collections with separate preservation concerns and expenses will have to be undertaken. This is not to say do not digitize collections, just be aware of the full spectrum of preservation. Digitization has become an important aspect of library initiatives precisely because there are many positive outcomes of digitization beyond the preservation aspect.

The role of the conservator at the John J. Burns Library, in addition to collections treatment and care, includes: training students; exhibition preparation; presentations for classes, library staff, and outside groups; and writing articles for publication. Digital collections have been useful for those duties in a number of ways. When training students, digital collections are needed; many historic binding examples are shown on a monitor and this reduces the amount of handling the books would have received. Digital images help in many ways for exhibits: to take the place of fragile items, to allow multiple pages in a book to be exhibited, and to use in advertising materials, to name a few possibilities. In the past it was more complicated to use photographic images. Digital images are great for presentations such as this one at Rhode Island College—no one wants to go back to slide carrousels! Printed images are so much easier to create now and being able to quickly provide good quality images for publication is important for institutions. A Burns Library image of King William III, from *Histoire de Guillaume III*, 1703, was used for an article written about a Boston Athenaeum collection.16 The article, written while working at the Athenaeum, was not ready to go into print until after the conservator had begun working at the Burns Library. At the last minute, the publisher asked for an image of William III, and the use of a digital image helped to meet the publication deadline.

Digitization takes planning and cooperation in order to minimize its impact on the library staff and collections. Having a conservator involved early in the Boston College University Libraries digitization program development was
useful as equipment was selected and the workflow was established. Conservation issues were addressed by establishing criteria, creating a repair queue, and making policy decisions up front. Digitization is successfully working for the libraries as a preservation tool and an educational resource, in part because the process was developed with willing, knowledgeable partners interested in forming a program suitable to the mission of Boston College and the goals of the library.
ROLE OF THE CONSERVATOR IN THE DIGITIZATION PROGRAM

Notes

1See Coptic papyrus fragment, c. 300-600 A.D., 2008 Donation of ancient manuscript fragments and artifacts, Manuscript Archives, Burns Library, Boston College University Libraries.

2See Cinderella, or, The little glass slipper: designed for the entertainment of all good little misses: ornamented with engravings, by Charles Perrault, 1814, Albany: E. & E. Hosford, General Collection, Burns Library, Boston College University Libraries.


4See The Short Catechism extracted from the catechism ordered by the National Synod of Maynooth, and approved by the Cardinal, Archbishops, and Bishops of Ireland, for general use throughout the Irish Church, National Synod of Maynooth, 1891, Dublin: M.H. Gill & Son, Irish Collection, Burns Library, Boston College University Libraries.

5See In Memoriam: Sister Sainte Claire, order of St. Ursula, by B.F. DeCosta (Benjamin Franklin), 1876, Charlestown, Mass.: Advertiser Press, Burns Library, Boston College University Libraries.


7See Seamus Connolly Papers, 1929-2013, IMC_M064, Irish Music Archives, Burns Library, Boston College University Libraries.


9See Records, India Wharf Rats (Club), 1886-2008, Volume 1, MSS .L714, Boston Athenaeum.


14See Robert Fulton, SJ, President’s Office records, 1866-1895, BC1986-020B, University Archives, Burns Library, Boston College University Libraries.
