



Engaging Students in Complex Description: Two CLIR Hidden Collections Projects

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Abstract

Lehigh University's Special Collections received two CLIR Cataloging Hidden Special Collections and Archives grants. In 2009, Lehigh was awarded a grant to partner with the Moravian Archives (in Bethlehem, PA) on the cataloging project *The Moravian Community in the New World: The First 100 Years*. In 2013, Lehigh was awarded a grant to process six civil engineering collections. In both projects we used a student workforce. Here we summarize efforts to meet the goals of both projects. We provide background on both grants, and include two student essays about the experience.

Introduction

Lehigh University received two CLIR Cataloging Hidden Special Collections and Archives grants. The first one, in 2009, supported the project *The Moravian Community in the New World: The First 100 Years*, and was conducted with the Moravian Archives in Bethlehem, Pennsylvania. Both Lehigh and the Moravian Archives hold collections documenting the material culture, religious values, and cultural diversity of the Moravian community of Bethlehem from its founding in 1741 until the opening of the community to non-Moravians in 1844 and the subsequent incorporation of Bethlehem in 1851.

The records reflect the multifaceted life of this transatlantic community in its interaction with other cultures. Because of church control over every aspect of life within Bethlehem, matters that went unrecorded in other communities were recorded in order to be reported to church leadership. The collections reflect the breadth and

depth of life in Bethlehem during this period. We processed personal papers of artists, tradesmen, missionaries, and sailors, along with business records comprising ledgers and inventories detailing operations of grist and saw mills, tailors, weavers, dye works, soap factories, taverns, tanneries, and lumberyards. We cataloged books from the Bethlehem Congregational Library (est. 1751) that were considered helpful in building a settlement in the New World. Finally, we included in this project about 800 maps and architectural drawings of buildings constructed in Moravian communities, revealing the earliest documentation of European settlement.

In 2013 Lehigh received its second CLIR grant, for the project *Bridge and Building Forensics: Civil Engineering Archives at Lehigh University*. The twentieth century saw many advancements in civil engineering technology. These collections include the personal and corporate papers of prominent civil engineers and influential societies including Blair Birdsall, John Fisher, Willis Slater,



and the Council on Tall Buildings and Urban Habitat. Both Fisher and Birdsall made significant contributions to bridge engineering and research. Fisher is best known for his work on fatigue and the cracking of steel bridges around the world, and Birdsall was an expert in cable-stayed and suspension bridges. Bridges represented in these collections include the Tappan Zee, Verrazano, Golden Gate, Brooklyn, and the Akashi (in Japan). Slater was a pioneering educator brought to Lehigh in the 1920s to direct the activities of the innovative Fritz Engineering Laboratory. The project also includes a collection of some 200 postcards featuring American bridges. The field of transportation studies has been gaining momentum in recent years, as evidenced by the number of researchers contacting our special collections and others. Once processed, these archives will provide access to correspondence, reports, subject files, court records, images, and engineering data, among other materials.

A significant component of these two projects was Lehigh's dedicated and often innovative use of student staff. Lehigh is committed to creating paid internships for students and providing training that will benefit not only the student, but the project as well.

The Moravian Archives in the New World

Upon notification of receipt of the CLIR grant, Lehigh University and the Moravian Archives sent press releases to the local media; to library, archives, and museum outlets; and to scholarly publications to spread the word about the wealth of resources that would be revealed through the grant. By networking with faculty, students, and lifelong learners, the project staff has promoted collections, student internships, and the potential for scholarly research. Project participants

presented various aspects of the project at a wide range of venues: the Mid-Atlantic Regional Archives Conference (October 2011), the Rare Books and Manuscripts Section committee meetings at American Library Association conferences, and the Philobiblon Club (a Philadelphia-based bibliophiles society). With the help of Lehigh University's CLIR postdoctoral fellow, staff contributed to a blog documenting some of their more unusual discoveries and experiences on the project (<http://hiddencollections.moravianarchives.blogspot.com/>).

As anticipated, recruiting students with German-language expertise to process archival collections proved to be challenging. Nominations and recommendations for potential candidates from Lehigh University faculty were invaluable. Through correspondence with faculty in a number of academic disciplines and many print and electronic advertisements, we developed a pool of candidates from which we hired a diverse group of students. During the interview, we asked students to translate a passage from a nineteenth-century German text and gave them a tour of the facility. We quickly learned that excellent English writing skills and a reading knowledge of German were required to work efficiently. We found that students who were not native speakers of English translated German texts first into their native languages and then into English, thereby losing too much in translation. Through the same process, we identified student project staff with a general familiarity with foreign languages to work on the book collection. These students were able to identify bibliographic elements on title pages (e.g., author, title, publisher) and search them in the OCLC database.

The first students hired to join the project staff represented a wide range of academic disciplines, including history, civil engineering (with a



minor in German), and political science. Two worked on archival collections, while the other two cataloged printed books. Two graduated during the first year of the project, but we found that the quantity of work they produced in this short period more than offset any investment in training them. As would be typical for most library and archives projects, we had anticipated recruiting students from the English and history departments. But we found that the diversity of this student group easily met project needs. After two students graduated, we hired a supplemental rare book project cataloger to work over the summer. He stayed with the project through the fall and spring semesters.

By the end of the project, we had hired 15 undergraduates and one graduate student. They represented a wide range of academic disciplines, with majors ranging from engineering to the humanities to the social sciences. Two of these undergraduates continued to work on the project as graduate students, and the lone graduate student hired in the first year remained through project completion.

We continued to modify training models established at the beginning of the project to suit needs as new staff were hired. Among the training sessions offered to project staff were German script, printed Fraktur, archival processing, and rare book cataloging. We also presented a Society of American Archivists EAD (Encoded Archival Description) course to all project staff.

Project managers offered specialized training based on the format of the materials. Training project staff to create both original and copy cataloging records was a collaborative effort. Two of Lehigh's catalogers and Lehigh's CLIR fellow coordinated the initial training and creation of the book cataloging portion of the project, while

primary responsibility for daily supervision of project staff remained with a retired special collections curator volunteering at the Moravian Archives. Lehigh staff prepared a schedule to ensure that a supervisor was available to students during their first few weeks of employment.

All students cataloging books were trained to search the OCLC database, and were then divided into searchers and catalogers. We found it was more efficient to have one student vet viable records in OCLC, and to have a second student use the preferred records as a foundation on which to create local records in Mandarin Oasis, the catalog used by the Moravian Archives. Students formulated local notes containing provenance information, as well as the original number of each volume in the nineteenth-century Congregational Library catalog. (A search of the Moravian Archives book catalog using the term "conglib" will reveal records for titles cataloged through this Hidden Collections project.)

Paul Peucker, director of the Moravian Archives and project manager of the Hidden Collections project, introduced students working on archival collections to best and local practices. He trained project staff in archival principles and in using a template created to input records into Augias, the German system in use to process archival collections. Peucker reviewed and revised the work of all project staff handling personal papers and business records. The Moravian Archives staff trained newly hired students in reading German script.

Dr. Peucker also trained the student tasked with cataloging maps and architectural drawings in this process, drawing on his experience managing the cataloging of similar collections of historical documents. Special attention was paid to the diversity of measurement units, as



data describing each drawing was entered into a custom-designed template in Augias. Cataloging of the 1,200 drawings was completed early in the second year of the project.

Because of the diversity of the materials and formats associated with this project, permanent staff at both Lehigh University and the Moravian Archives spent more time on the project than initially anticipated. In the second year, Lehigh assigned its CLIR postdoctoral fellow to the Hidden Collections project to help supervise students and revise student work. This added contribution proved beneficial to all.

As planned, project staff worked with Lehigh's library technology team to develop a mechanism for presenting encoded finding aids in CONTENTdm. The Augias system served as an EAD template capable of producing XML documents for import into CONTENTdm, which is presently being used as a digital repository system at Lehigh (<http://digital.lib.lehigh.edu/hidden/>).

Project staff, including the student processing archivists, scholars, and faculty members identified by the principal investigator and project manager, hosted a visit by the CLIR scholarly engagement survey team. This interaction led to further promotion of the resources the catalogers were bringing to light, as one of the participants, Katherine Faull, professor of German and humanities at Bucknell University, later gave a presentation at Lehigh on her work with early Moravian maps to an audience of faculty, students, and community members.

The Bridge and Building Forensics Project

At time of writing, Lehigh is nearly one year into its second CLIR grant—Bridge and Building Forensics: Civil Engineering Collections at

Lehigh University. While we hope to build on the experience gained from the Moravian Archives and other CLIR Hidden Collections projects, this project presents some unique challenges.

As noted above, Lehigh's Special Collections is able to partner with faculty to identify and recruit project staff with particular academic strengths. We received recommendations from faculty in both the history and civil engineering departments, and hired five students. We found that the two in civil engineering had a strong foundation in terminology acquired through the course of their studies.

To ensure that students understood the complexity of the structural technology and the basic concepts and terminology of civil engineering in general, Lehigh's engineering librarian trained the processing staff on Engineering Village (a web-based discovery platform) and on Compendex (an engineering literature database). In the Q&A and show-and-tell training sessions, the librarian demonstrated how to navigate the sites and use the search functions to find the most proper terms.

The processors' hands-on basic processing training covered the "more product, less process" philosophy, archival arrangement, preservation, and description basics. Training in provenance, in understanding personal papers and business records, in archival classification, and in identifying various audiovisual formats occurred as questions arose during processing.

One of the largest collections in the project consists solely of civil engineering testing photographs and negatives. To better understand the context and concepts, the project team took a field trip to Lehigh University's Fritz Engineering Laboratory to observe individual testing setups



and equipment, and ask the testing professionals questions. Visiting the actual scene where the tests took place was indispensable.

Project Staff Perspectives

One of the key elements of these two projects was the use of student project staff. Lehigh University perceived the significant educational opportunity contained within these two grants. By using a student workforce, we enriched the education of multiple students, at the same time introducing fresh faces to the world of archives and special collections. This benefited the institution and the students. With such an emphasis on student work, it is only fitting that we include student perspectives. Below are essays by Andrew Stahlhut, a doctoral candidate at Lehigh who was a project cataloger for the Moravian Archives project, and by Gregory Edwards, a recent Lehigh history graduate who was a project archivist for the civil engineering project.

► The Moravian Archives: Student Impressions

Andrew Stahlhut, doctoral candidate, Lehigh University; project cataloger, Moravian Archives

My perceptions of the project are shaped by my identity as a doctoral candidate in colonial American history and my personal interest in historical book and print culture. My motivations to participate stemmed from professional curiosity about what kinds of books a sect of eighteenth-century pietists in colonial America kept in their congregational library, and a personal desire to work with and organize old books. I'm very much a bibliophile in my private life and the opportunity to help organize and catalog a library collection like this for the first time was something I couldn't pass up. I cataloged the roughly 1,700 books accumulated in the Moravian Congregational Library from the

time the Moravian community settled Bethlehem, Pennsylvania, in the early 1740s.

My project with the congregational library was only one of several under the larger project. I find it interesting that all of the students involved with the Hidden Collections project brought their personal and professional experiences and interests to their work. We were not just library science or archival students performing simple sorting tasks. We accomplished what we did because of our diverse skills and disciplines. For example, in sorting and cataloging architectural diagrams and blueprints, an undergraduate engineering major worked more efficiently and with more appreciation for the task than a humanities student such as me might have. Another graduate student with German fluency and a background in political science and international studies read, sorted, and cataloged eighteenth-century manuscripts written by Moravians in Bethlehem. Her fluency in German made this task possible and she performed a task that someone such as myself, without knowledge of the German language, simply could not do.

The project presented both obstacles and valuable lessons. The biggest obstacle was that I do not speak or read German. For the books I was cataloging, all I could do was match words from the title pages to works in online databases because they looked the same. It was more like comparing symbols than words, because of the German Fraktur printing that graced so many of the title pages. Often I had to resort to other ways of identifying a book such as by the imprint or pagination. This initial obstacle led to new ways of problem solving, so I suppose it counts as a lesson learned and an opportunity to hone a new skill.

The work led to more lessons and an appreciation of the nuances of the congregational library. I was awed at how diverse a library the



mid-eighteenth century German colonists had. Admittedly, most of the library comprised religious texts. However, it also contained a number of books on mathematics, which included works that explained numerical and geometric theories behind shapes and simple machines and applied them to everything from pulleys to large military fortifications. Another book was purely academic, teaching mathematic proofs. The library also contained a large, hand-numbered atlas composed of dozens of printed, hand-colored maps of Europe, Africa, and Asia. The collection even held books on unexpected religious topics such as vampires. Although the Moravians settled in America's proverbial wilderness, they maintained links to the larger world of knowledge.

It is this last point that especially makes the project valuable to researchers. Of course my work has aided historians of the Moravian Church, or religion generally, by helping make the existence of these works known so people can visit and use them. However, the collection's diversity of topics means that researchers seeking to access books on other topics, such as mathematics or navigation, could visit the Archives and access those works as well. The diversity of the collection thus diversifies the archives' role beyond that of a repository for texts related to the Moravian Church and perhaps more accurately reflects the links the eighteenth-century Moravians had to the larger Atlantic world around them.

My participation in the project has fundamentally changed how I perceive the behind-the-scenes activity of libraries and archives. Like most academics, I used to take catalogs for granted. Now I realize just how much work goes into an accurate catalog record. For any specific book I had to check the title and subtitle very carefully. I checked all information in the imprint, the pagination, and

to make sure our catalog records represented our unique, specific copy of the book I made notations for inscriptions, signatures, marginalia, or any other unique markings. In one case I found an old pressed flower in an eighteenth-century book. Sometimes, several smaller books would be bound together and I'd have to make sure each was cataloged accurately but keeping the same base call number for all of them. It was a lot of work, and I loved every minute of it—and I now appreciate archivists and catalogers that much more.

In sum, the project was a great experience in my life and I wouldn't have traded it for anything. I call it an experience, and not a job, because it was more than a job. It was something I loved to do. I often joked that it was something I would have done for free. Being trusted with access to the two vaults of books was an important milestone in my bibliophilic life. Being on the other side of the line between the public and archives insiders was exciting. I will now pursue my academic career with a greater respect for the amount of work that happens on the other side of that line.

► **Bridge and Building Forensics:
A Student's Perspective**

Gregory Edwards, Lehigh University graduate, history/public history; project archivist, civil engineering project

The Council on Tall Buildings and Urban Habitat (CTBUH) collection, the largest collection in the grant, comprises a significant amount of both visual media and paper materials, and presents many unique challenges in processing. Foremost among such hurdles is original order, and disorganization. Created by Lynn S. Beedle, one of the founders of CTBUH and later head of Fritz Laboratory at Lehigh University, this collection, as found, uses a custom numerical indexing system, contains much duplication, and separates related materials. An index does exist, but is incomplete.



These issues are prominent in the roughly 7,500 slides in the visual portion of the collection, which are accompanied by related notebooks, prints, and cases of thousands of duplicates. To complicate things, the duplicate cases occasionally contain slides absent from either the binders or the index, while the index lacks entries for many slides and contains entries for many slides that are missing. What results is a complicated situation in which the processor must take painstaking measures to attempt to maintain the original order of the slides while reconciling the differences between the organization of the materials and the index while searching item by item through thousands of duplicates to check for interspersed originals.

These organizational difficulties carry over into the Blair Birdsall Papers, a collection containing materials created by Birdsall, Steinman, and other engineers involved with the Roebling firm and, later, the Steinman firm. The papers are a conglomeration of material from different authors, many of whom used separate and distinct indexing systems, so organization is difficult. It is hard to determine the author of many papers, and the indexes make little sense. Attentiveness to physical elements such as folder color and paper type proved useful in reorganizing the papers in a way that recaptured the original order.

A challenge with the John Fisher Papers is that John Fisher, still employed at Lehigh University, remains actively engaged in using his papers. He has agreed to keep them at Lehigh, but they are being transferred in sections for processing. Benefits and difficulties come from such a situation. Fisher is available for limited contact and consultation during processing, but his use of the papers also creates a break in the context of the collection. It is difficult to create series and subseries when not all of the material is immediately available. Chronologically, the materials are largely in order, allowing for logical

series in that manner, but organization based on topic and format suffers.

One collections-wide challenge that especially applies to the Fritz Laboratory Negatives and Photographs is the specificity of content. These four collections contain items exploring specific and detailed fields of civil engineering that can be very difficult for a non-engineer processor to understand. For example, the Fritz Lab negatives contain many close-up images of step-by-step testing that are nearly impossible to identify without proper context. This difficulty translates to many aspects of processing, making it challenging to accurately select subject headings or group material into series. The best solution was a trip to Fritz Lab, on campus, where we explored testing apparatus. With the help of lab staff and faculty, we were able to identify individual testing setups, terminology, and locations.

The personnel acquired for this grant proved to be an interesting variable. Considering this grant is composed of six civil engineering collections, in an ideal situation processing staff would simply be plucked from the readily available supply of engineers that Lehigh University has to offer. Unfortunately, it seems that the engineering students were not of the same mind. Thus far, only one civil engineer has joined the project staff. Her background has proved very valuable in her work on the John Fisher collection, allowing her to more quickly understand and identify key concepts. Enlisting campus resources such as Sharon Siegler, the senior engineering librarian, proved effective in coping with the lack of staff with engineering experience. Sharon trained us in navigating and using engineering databases, which helped us identify appropriate vocabulary for collections description. Importantly, patience and attention to detail were immensely helpful in processing these civil engineering collections, and we will continue to learn more as the project continues.