

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 in the amount of \$90,552 to partner with the Moravian Archives on the cataloging project "The Moravian Community in the New World: The First 100 Years." In 2013, Lehigh was awarded a grant of \$93,627 to process six civil engineering collections. Both projects utilized a student workforce. This paper will summarize efforts taken to meet our goals in both projects, beginning with the completed Moravian Archives project and describing the current civil engineering project. This paper provides background on the two grants, and is supplemented by two students' essays in which staff share their perspectives and experience on these projects.

Introduction:

Lehigh University received two CLIR Cataloging Hidden Special Collections and Archives grants. In 2009, Lehigh University received funding for the project "The Moravian Community in the New World: The First 100 Years". Lehigh and the Moravian Archives hold collections documenting the material culture, religious values and cultural diversity of the Moravian community of Bethlehem, Pennsylvania, 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 multi-faceted life of this transatlantic community in its interaction with other cultures. Because of the control of the church over every aspect of life within Bethlehem, matters were recorded in order to be reported to church leadership that in other communities went unrecorded. Collections reflect the breadth and depth of life in Bethlehem during this period. Personal papers of artists, tradesmen, missionaries, and sailors were processed, along with business records (ledgers and inventories detailing operations of grist and

saw mills, tailors and weavers; dye works; soap factory; taverns; tannery; & lumberyards). The congregational library (est. 1751) containing books considered helpful in building a settlement in the New World was cataloged. Finally, approximately 800 maps and architectural drawings (maps and drawings of buildings constructed in Moravian communities) showing the earliest documentation of European settlement were included in this project.

In 2013, Lehigh received its second CLIR grant, “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 from this period, including those of 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 cracking of steel bridges around the world, and Birdsall was an expert in cabling and suspension bridges. Bridges addressed by these records include the Tappan Zee, Verrazano, Golden Gate, Brooklyn, and Akashi, as well as the Washington Metro. Slater was a pioneering educator brought to Lehigh to direct the activities of the innovative Fritz Engineering Laboratory in the 1920s. In addition, the project includes a collection of approximately 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 Lehigh’s and other special collections. 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 project staff. Lehigh is committed to creating paid internships for students and providing training that will benefit not only the student, but will also create efficiencies in the course of the project.

The Moravian Archives in the New World: Publicity

Upon notification of receipt of the CLIR Cataloging Hidden Special Collections and Archives grant, both Lehigh University and the Moravian Archives sent press releases to the local media; library, archives, and museum outlets, and scholarly publications to spread the word about the wealth of resources revealed through this CLIR Cataloging Hidden Special Collections and Archives grant. By networking with faculty, students, and life-long learners, the project staff has promoted collections, student internships, and the potential for scholarly research. Project participants presented various aspects of the project in a wide range of venues: The Mid-Atlantic Regional Archives Conference (MARAC, October 2011); The American Library Association Annual and Midwinter Conferences Rare Books and Manuscripts Section Collection Development and Manuscripts and Other Formats Discussion Groups; and Philobiblon Club (Philadelphia Bibliophiles Society). With the assistance of Lehigh University's CLIR Post-Doctoral Fellow, student project staff contributed to a blog documenting some of their more unusual discoveries and experiences on the project. The blog is located at:

<http://hiddencollectionmoravianarchives.blogspot.com/>

Recruiting

As anticipated, recruiting student project staff 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 numerous print and electronic advertisements, project managers developed a pool of candidates from which a diverse group of students was hired. Students were asked to translate a passage from a 19th century German text during the interview, and were given a tour of the facility. Among the lessons learned were that we needed to require excellent English writing skills in addition to a reading knowledge of German. 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. (Several international students we interviewed did not have the vocabulary to offer words such as “correspondence” or “drawing.”) Project staff possessing a general familiarity with foreign languages were identified to work on the book collection through the same process. These students were able to identify bibliographic elements on titles pages (author, title, publisher, etc.) and search them in the OCLC database.

We also learned that transportation between Lehigh and the Moravian Archives was not as much of a hurdle for the students as linguistic expertise. Student project staff who did not own cars were able to carpool with other project staff and other with classmates to secure rides to the facility, which is approximately 2.5 miles from the Lehigh University campus.

Student Project Staff

The first students hired to join the project staff represented a wide range of academic disciplines, including history, civil engineering, 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. It should be noted that the civil engineering major was also a German minor. His experience working with architectural drawings and maps greatly benefited our project, as he cataloged the drawings and maps. Like most library and archives projects, we had anticipated recruiting students from the English and History departments, but found the diversity of this group easily met the needs of the project. Following the graduation of two students, a supplemental rare book project cataloger was hired to work during the summer. He continued his work on the project in both the following fall and spring semesters.

Lehigh offers its highest-ranking seniors, known as “President’s Scholars”, a fifth year at Lehigh tuition-free, should they so desire. We were fortunate to hire two of these young scholars to work on the project.

By the end of the project, a total of fifteen undergraduates and one graduate student were hired. 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 upon graduation. The only graduate student hired in the first year saw the project through to completion.

Training

Training models established at the beginning of the project continued to be modified to suit the needs of the project as new staff were hired. Among the training sessions offered to project staff were German script, printed Fraktur, archival processing, and rare book cataloging. An Encoded Archival Description (EAD) course, presented by the Society of American Archivists, was presented 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 establishment of the book cataloging portion of the project, while primary responsibility for daily supervision of the 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 the students during their first few weeks of employment.

Students cataloging books were all trained to search the OCLC database, but then were divided into searchers and catalogers. We found that 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 upon which to create local records in Mandarin, the catalog utilized by the Moravian Archives. Students formulated local notes containing provenance information, as well as the original number of each volume in the 19th 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 Hidden Collections Project Manager, introduced students working on archival collections to best and local practices. He trained project staff in archival principles and also in use of 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 working on personal papers and business records. The Moravian Archives staff provided newly-hired students with training in reading German script.

Dr. Peucker also trained the student cataloging maps and architectural drawings in this process, drawing upon his experience managing the cataloging of similar collections of historical documents. Special attention was paid to the diversity of units of measurement, as data describing each drawing was entered into a custom-designed template in Augias. Cataloging of the 1200 drawings was completed early in the second year of the project.

Due to the diversity of the materials and formats associated with this project, permanent staff at both Lehigh University and the Moravian Archives expended more time on the project than initially anticipated. During the second year, Lehigh University assigned its CLIR Post-Doctoral Fellow to the Hidden Collections project to assist with supervision of students and revision of student work. This additional contribution proved to be advantageous to all participants.

Technology

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, presently being used as a digital repository system at Lehigh. The project's website is:

<http://digital.lib.lehigh.edu/hidden/>

Site visit

Project staff hosted a visit by the CLIR scholarly engagement survey team, which included student project staff, scholars, and faculty members identified by the Principal Investigator and Project Manager. This interaction led to further promotion of the resources being exposed by the catalogers' efforts, 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 members of the community.

Bridge and Building Forensics: Beginnings

At the time of this writing, Lehigh is nearly one year into its second Cataloging Hidden Special Collections and Archives grant, "Bridge and Building Forensics: Civil Engineering Collections at Lehigh University". While we hope to build upon the experience gained from the Moravian Archives and other CLIR Hidden Collections projects, this project presents some unique challenges.

Recruiting and Training

As noted in the Moravian Archives project, 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 from the Civil Engineering had a strong foundation in terminology acquired through the course of their studies.

In order to understand the complexity of the structural technology and the basic concepts and terminology of civil engineering in general, the processing staff were trained by Lehigh's Engineering Librarian on Engineering Village (web based discovery platform) and Compendex (engineering literature database). In the question-answer and show-and-tell training sessions, the librarian demonstrated how to navigate the sites and utilize the search functions in order to find the most proper terms as well as other related topics.

The processors' hands-on basic processing training covered familiarity with the "More Product, Less Process" philosophy, archival arrangement, preservation and description basics. The rest of the training issues (e.g. understanding the personal papers and business records, provenance issues, archival classification, and identifying various audio-visual formats, etc.) were addressed as the questions arose when the actual processing went on.

One of the largest collections in the project consists of solely civil engineering testing photographs and negatives. To understand the context and the concepts better, the project team took a field "expedition" to Lehigh University's Fritz Engineering Laboratory to observe the individual testing setups and equipment, and ask questions to the testing professionals. This visit, to the "actual scene where the tests took place" was indispensable.

Student Voices

In the following two essays, student project staff share their perspectives and insights gained from their participation in these two CLIR Hidden Collections projects. No analysis of the students' work on these two projects would be complete without a word from the students themselves. Following are representative voices from both the Moravian Archives and Civil Engineering projects. We open with an essay from Andrew Stahlhut, doctoral candidate at Lehigh University, who served as a project cataloger for the duration of the Moravian Archives project, and conclude with remarks by Gregory Edwards, a recent graduate of Lehigh who earned his degree in History with a concentration in Public History, on the current civil engineering project.

The Moravian Archives: Student Impressions

My perceptions of my part of this larger Lehigh University/Moravian Church Archives project, both past and present, are shaped by my identity as a doctoral candidate in colonial American history but also by my personal interest in historical book and print culture. I cataloged the approximately 1700 books held in the Moravian Congregational Library when they settled Bethlehem, Pennsylvania in the early 1740s. My motivations to participate in such a project spanned from professional curiosity about what kinds of books a sect of 18th century pietists in colonial America kept in their congregational library, but also 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. Thus, for me, the project was something I wanted to, not simply employment or a line on my CV. It's a really rewarding feeling knowing that I have such an intimate understanding of a colonial-era library.

My project with the congregational library was only one of several projects under the larger Hidden Collections. I find it interesting that all of these student workers brought their personal and professional experiences and interests to their specific projects. One undergraduate student was an engineering major, and his engineering background allowed him to work more efficiently with the architectural diagrams and blueprints he was sorting and cataloging. Although someone with a background in the humanities, such as myself, might have eventually been able to do basic sorting and cataloging, I certainly wouldn't have appreciated what I was seeing and working with like an engineering student. For him, this wasn't just a series of manual tasks – it was the practice of something interesting to him. Another graduate student worker had a background in political science and international studies. Her task was to read, sort, and catalog 18th century manuscripts – mostly letters, I think – written by Moravians in Bethlehem. Her fluency in German made this task possible and she performed a task someone such as myself, without knowledge of the German language, simply could not do. These two students are just examples, but they represent the larger idea that the students working on this project came from a variety of backgrounds to see the program through successfully. These were not just library science or archival students performing simple sorting tasks – we accomplished what we did because we were a diverse body of students. I think this is a really important point to remember and we should all keep this in mind when dealing with future projects.

My work on the project had both obstacles to overcome but also offered valuable lessons, again on both a professional and personal level. The biggest obstacle was that I did not speak or read German. This turned research surrounding the books I was cataloging into simply matching words from title pages to works in online databases because they looked the same, rather than meant the same. In a lot of ways it was more like comparing symbols rather 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 imprint or pagination, to supplement my inability to fully understand a title. In retrospect this initial obstacle led to new ways of problem-solving in correctly identifying books, so I suppose this also counts as a lesson learned and new skill honed.

This and other obstacles did not deter me in my enthusiasm in the project, and led to more lessons and appreciation of the nuances of the Congregational library. At a professional level I was awed at how diverse a library the mid-18th century German colonists had.

Admittedly, most of the library was composed of religious texts. However, the library also contained a number of books on mathematics. This included works that explained numerical and geometric theories behind shapes and simple machines, applying them to the contexts of everything from pulleys to large military fortifications. Another book was more purely academic, teaching mathematic proofs very similar to anything a modern high school student would face. 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 contained books on unexpected religious topics, such as two books from the 1730s about vampires. I'm not making that up. See me after the panel if you'd like photos. Certainly, although settling in America's proverbial wilderness, the Moravians still had links to the larger world of knowledge outside of their immediate local environment.

It's this last point that especially makes the project valuable to researchers. Of course my work has facilitated historians of the Moravian Church, or religion generally, by helping make the existence of these works known so people can visit and utilize them. If people don't know these books exist, they can't come use them. However, the collection's diversity of topics mean that researchers seeking to access books on other topics, like mathematics or navigation, could

visit the Archives and access those works as well. This diversifies the Archives' role as just a repository for texts relating to the Moravian Church and perhaps more accurately reflects the links the 18th 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. Maybe this was a function of growing up in a world of bar codes and ISBNs, and perhaps the self-important view that comes with being cloistered in the ivory tower contributed to faulty understanding that catalogs just sort of existed on their own. The task of becoming one of those catalogers for a couple years made me realize otherwise. A lot of work goes into an accurate catalog record. For any specific book I had to check the title and subtitle very carefully – remember, I didn't speak German. 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, although I couldn't necessarily claim the flower was that old. In some cases 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. That's especially important seeing as how I rely on historical research so much in my daily life.

In sum, the project was a great experience in my life and I wouldn't have traded it for anything. Notice that I called it an experience, and not a job, because it was more than a job. I'm very much a bibliophile in my personal life, and while I was certainly getting paid it was something I loved to do. It was employment only in the technical sense. I often joked that it was

something I would have done for free. Being trusted with access to the two vaults of books meant a lot to me and honestly I treat it as an important milestone in my bibliophilic life. Until that point, archives and old books were locked in vaults or kept behind. Being on the other side of that line between “the public” and “the insiders” was exciting. Although I’m quickly becoming a stuffy old academic I will now pursue my 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

This paper will explore aspects of collection processing as applied to the civil engineering collections specified in the CLIR Hidden Collections grant awarded to Lehigh University. Of particular focus is the difficulties and challenges associated with this endeavor and any solutions or recommendations for overcoming such obstacles. Following is an analysis of these elements as pertaining to the item level processing of each collection. Six civil engineering collections are included in the grant: the Council on Tall Buildings and Urban Habitat collection, the Blair Birdsall Papers, the John Fisher papers, the Fritz Laboratory Negatives and Photographs collection, the Slater Papers, and the Bridge Postcards collection. For the purpose of this investigation, the most attention will be paid to the four largest collections involved; that is the first four present in the above list.

Council on Tall Buildings and Urban Habitats

The Council on Tall Buildings and Urban Habitat (abbreviated CTBUH) collection is the largest of those involved in this grant, composed of a significant amount of both visual media and paper materials, and presents a number of unique challenges to the processor. Foremost among such hurdles lies with the original order of the collection and the organization methods of

the individual responsible for creating the material. Lynn S. Beedle, one the founders of the CTBUH and later head of Fritz Laboratory at Lehigh University is the source of this collection. Using a custom numerical system to differentiate topics, a system of sometimes triplicate duplication, and a tendency to separately store related material, Beedle created a vexing system of organization. While an index does exist to assist in navigation, it is partial and incomplete. These obstacles are prevalent in the visual portion, composed in part by a series of several thousand slides housed in plastic sleeves in three ring binders. Accompanying the binders is an index and cases of duplicates. Problems arise because of the incomplete nature of the index, which lacks entrances for many slides while providing entrances for other absent ones. To complicate the matter, the duplicate cases occasionally contain slides absent from either the binders or the index alongside the sometimes dozens of copies of the same image. 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 due to interspersed originals. Patience, attention to detail, and perseverance are the proposed solutions to such difficulties as these. It is necessary to not place too much reliance on a partial index, and be thorough in the examination of the collectin due to its separated nature.

Blair Birdsall Papers

This trend of organizational difficulties continues in 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. Therein lies one of the difficulties encountered during processing. The papers are a conglomeration of material from different authors, many of

whom used separate and distinct indexing systems. Any original order present in the many series of papers combined into the Birdsall collection has become jumbled and confused creating an environment in which it is difficult to determine the author of many papers and the indexes make little to no sense. In essence, the collection has become a well shuffled deck, requiring extensive effort in untangling the threads into distinct series. While the attributes previously listed as helpful for processing the CTBUH collection apply here as well, a method found to be particularly effective is attentiveness to physical elements. Folder color, paper type, and other physical identifiers have proven useful in reorganizing the papers in a way that recaptures the original order.

John Fisher Papers

A noteworthy challenge associated with the John Fisher Papers deviates from the previous two examples. What differentiates this collection from the others involved in the grant is the fact that John Fisher is still employed at Lehigh University, and still actively engaged in using his papers. Special Collections and John Fisher have already reached an agreement to keep his papers 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 also creates a break in the context of the collection. The creation of series and subseries is complicated by the fact that all material is not immediately available. Chronologically the materials are largely in order, allowing for logical series in that manner, but topical and format based organization suffers.

Fritz Laboratory Negatives collection

One obstacle prevalent throughout all of the collections, yet especially applicable to the Fritz Laboratory Negatives and Photographs, is the specificity of material content. Each of these collections are primarily composed of civil engineering information. These four collections contain items exploring very specific and detailed fields of civil engineering, which can be incredibly difficult to understand for a processor not well versed in the intricacies of the field. For example, the Fritz Lab negatives contain many series of step by step tests of structural elements. It is difficult to understand and properly describe a series of negatives depicting an unknown material undergoing an unknown test on an unknown set of equipment for an unknown result. Often, the negatives come in a series of close up views that can be very trying to identify and provide only a very limited understanding of the true subject matter. This difficulty is translated to many aspects of processing, making it challenging to accurately select subject headings or group material into series. This proved a significant task across all of the collections. The best solution to such an undertaking is the utilization of the resources available at the processing institution. In the case of three of the discussed examples, the collections were created by individuals who at one point worked for Lehigh University. A trip to Fritz Lab on campus and an exploration of its multitude of testing apparatus proved to be the greatest help in attempting to understand the collection of negatives. Individual testing setups, terminology, and locations were able to be identified with the assistance of the staff and faculty.

Solutions to Challenges

Thus far the various involved collections have been described along with the accompanying challenges and a few brief notes on methods to move past them. A more in depth look at the specifics of personnel and strategies as related to working through the variety of confronted difficulties. 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. Only one staff member has any sort of formal civil engineering education; Meghan Briden, class of 2015. Her background in civil engineering has proven incredibly valuable in her work on the John Fisher collection, allowing her to more quickly understand and identify key concepts. This is in contrast to some of the other staff, including Zion Um, Bioengineering class of 2015, and myself, a history major. This unfamiliarity with the subject matter of the collections proved a significant challenge to overcome. Utilizing the resources at Lehigh in the form of Sharon Siegler, Senior Engineering Librarian, proved an effective method of coping with the lack of engineering experience. Training in navigating and utilization of engineering databases, specifically the Engineering Village Compendex, under Sharon's guidance proved a valuable aide in identify appropriate language and vocabulary for description of the collection material.

Conclusion

In conclusion, each collection brings with it distinct obstacles, with some issues universal across all processing efforts. Organization and original order proved a hurdle in every case, as well as difficulty understanding and analyses subject matter. While these problems exist in some form in almost any collection, they come to the forefront when item level processing is performed on such large and complex instances. Attempts to overcome such adversities should include a utilization of any available resources connected to the collections, such as contacting creators or visiting original sites. While this approach was applicable in several of the discussed cases, it is often impossible or implausible to attempt in others, however a simple field visit can

yield unexpectedly helpful results. When combined with external resources, the personal efforts of the processor are what determines the outcome. More often than not, an attention to detail, physical, organizational, and otherwise, is what holds the key to successfully processing a collection such as the ones contain within this paper, whether it be sifting through thousands of slides, or sorting folders based on shades of manila.

Challenges and Opportunities for All

Librarians, archivists, and student project staff at both Lehigh University and the Moravian Archives have benefited from the experience of exposing these diverse scholarly collections. We look forward to interacting with scholars as they uncover this wealth of resources exposed by these two CLIR Hidden Collections projects.

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