The Book Repair Program at Brigham Young University:  
An Institutional Profile  
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Introduction
Brigham Young University's (BYU) Harold B. Lee Library (HBLL), situated in the arid Intermountain West, is a research library containing slightly more than three million volumes. The library consists of a main library, as well as separate business, museum, and learning resource center libraries. The Law Library is a separate organizational entity. All repair work is handled by the HBLL's Book Repair Unit. Located in the main library, the Book Repair Unit is an organizational component of the Preservation Department within the HBLL's Technical Services Division and reports directly to the Preservation Librarian. The HBLL also has a Conservation Lab responsible for the treatment of its special collections material. While separated physically within the main library from the Book Repair Unit, the lab collaborates with the Book Repair Unit as needed to help establish and improve treatment standards, order specific supplies, and provide advanced training.

Historical background
Oral tradition traces the Book Repair Unit's operation to the early 1960's. Originally, the program used "piece work" as an incentive to induce productivity. The early techniques included the use of clear or black pressure-sensitive tape for spine repairs, double-stitched binding tape for reattaching book blocks to their covers, and the nailing of temporary bindings (a local refinement on the stabbed sewing). This last technique, when "properly" executed, required that sixpenny nails be driven through the spine edge of an incomplete serial set over a piece of iron forcing the nail tip to curve back into the material on its underside to prevent patrons from getting cut on the protruding point.

Craig Jensen was appointed as the library's first conservator in 1977 and, after a one year internship at the Library of Congress, initiated a new era in book repair for the library. He focused primarily on rare book conservation but gave considerable attention to improving the repair standards for the collection. In a shop comprised exclusively of student employees, Craig trained student employee Kirby Packam in the new techniques he devised. He then made him the Book Repair Supervisor to maintain the ongoing training of other student employees. Unfortunately, after showing great promise as a trainee, Kirby became intractable and the program once more lapsed into performing repairs that would prove damaging over the next ten years. Most significantly, the use of polyvinyl acetate applied directly on the spine of all repaired books, often times in lieu of proper mending and sewing techniques, created a legacy that continues to haunt us as these materials resurface in need of further repair.
In 1983, Randy Silverman became Robert Espinosa’s Assistant Conservator in the Conservation Lab. Two years later he took over the Book Repair Unit under the supervision of the Preservation Librarian, Ellen McCrady. Combining his commercial background (Dobbs Brothers Restoration and Conservation Company) with training as a rare book conservator, he and Robert worked to blend the shop’s existing techniques with some commercial bookbinder’s speed-tricks and a number of efficient book conservation techniques.

Major improvements included:

- the use of a first layer of Japanese paper and wheat starch paste in spine lining, over which a second layer of polyvinyl acetate and crash are applied;
- sewn-on endpapers as a standard procedure; the use of a reinforced case binding structure to afford maximum durability;
- the use of a pamphlet binding structure that prevents adhesive from coming into direct contact with the pamphlet;
- the use of cloth rebacking instead of rebinding (when appropriate) to preserve many original 19th and 20th century publishers’ cloth bindings; and,
- the standard application of laser printed paper labels for titling finished work.

James Fairbourn became the Book Repair Supervisor in 1987 after working in the shop for 1 1/2 years as an (incredibly) talented student employee. During his tenure, training standards and the quality of shop production have consistently improved. He has implemented many experimental techniques that are now considered norms while carefully maintaining a standard of excellence and service that has endeared the Book Repair Unit’s work to the library at large. This accomplishment is more impressive given the work force he is responsible for training: twenty student employees and one volunteer! From this diverse pool of talent (and conflicting class schedules), he consistently produces beautiful work, and, on occasion, turns out someone who has gone on to a career in the library conservation profession.

Mission of BYU’s Book Repair Unit

Under the direction of the Book Repair Supervisor, the Book Repair Unit is responsible for in-house repair of all general collections material deemed inappropriate for commercial library binding. This determination is based upon the physical characteristics of the designated material, the economic merit of in-house treatment, or the user demands that would prioritize in-house treatment because of time constraints. The repairs performed by the Book Repair Unit must:

1. incorporate techniques that will not prove damaging to the collection over the life of the material,
2. be expeditious to perform, and
3. retain the original integrity of the object being treated whenever appropriate.

The Book Repair Unit, in collaboration with the Preservation Librarian and the Library Conservator, constantly strives to develop techniques that meet these criteria. In addition, the Book Repair Supervisor is responsible for: maintaining tools and equipment and ordering raw materials of suitable permanence and durability; hiring and training personnel to implement repair techniques appropriately; consistently monitoring quality and work flow within the shop; and, determining treatment specifications for material requiring repair. The Book Repair Supervisor also maintains an overview of the physical condition of the entire collection to insure that in-house book repair services are distributed equally throughout all library departments.

Staffing and organization

The Book Repair Unit is staffed by one full-time equivalent (1FTE) supervisor, twenty half-time student technicians (10 FTE), and one half-time volunteer (0.5 FTE). The staff is non-union, with the salaries ranging from $5.00-5.40 per hour for student technicians, $7.50-8.00 per hour for student supervisors, and $21,000-30,000 per year for the full time supervisor. The entire staff receives in-house training, with student technicians learning from their student supervisors and ultimately from the Book Repair Supervisor. Improvements in technical and operating procedures come from a number of sources: the Book Repair Supervisor, the Preservation Librarian, the Library Conservator, the student supervisors, and occasionally
from the student technicians themselves. A premise we share is that the shop can always stand improvement, and any good suggestion is welcome, encouraged, and rewarded (if only through recognition).

In an effort to eliminate the library's backlog of circulating material needing repair, the HBLL operated a night shift from 1989-1992. This shift was responsible for eliminating most of the 500+ books in the backlog – the first time in the library's history that the backlog had been brought current. The task was accomplished by using two six-person teams, each of whom were required to bind 30 books per month from the backlog in addition to their normal load of incoming daily work. The rest of the shop focused on incoming work as usual, and maintained a turn-around time of approximately 30 days on most materials (except for the inevitable stragglers that seem to haunt the bindery). Most of the books in the backlog constituted the worst repair problems in the library because “easier” work had systematically been chosen over time in preference to these “problem” titles. The two teams chose to meet their quotas using different methodologies: one chose to have each individual perform every operation on every book independently; the other chose a team approach, with each individual specializing in specific steps of the treatment in an assembly-line fashion. Despite our expectation that one team would probably outshine the other, both approaches seemed to work equally well and produced excellent work. From this, we've confirmed that people respond well to a positive work environment regardless of the tasks required or the methodology used to accomplish the task. Additionally, small groups increase the amount of time that the student supervisor can spend giving personalized supervision to the technicians.

Professional development

The Book Repair Unit Supervisor has generous support from the library for professional development, and during the past four years has been able to attend one national and one statewide conference relating to book conservation per year. Additionally, technicians are encouraged to attend local activities that contribute to their professionalism. One year, a student supervisor with professional aspirations was even able to “piggyback” on two other staff members' attendance at an annual American Institute for Conservation meeting. The Book Repair Unit Supervisor also serves on library committees and represents the department when appropriate.

Work flow and treatment specifications

Ninety percent (90%) of the Book Repair Unit's work load is identified by the Circulation Department when material is returned to the library. Badly damaged work is also identified by shelvers working in the stacks. Treatment specifications are determined by the Book Repair Unit Supervisor. The material is checked out to either the Book Repair Unit or the Bindery Preparation Unit (for commercial library binding), and assigned a tracking number on a dated, color-coded identification slip. This procedure allows work to be traced and/or recalled for patron use while it is in the Preservation Department.

Other sources of books requiring repair include non-circulating material (serials, reference books, government documents, and books from the Reserve Library); books received in damaged condition through the gift or order processes; and, folio or quarto books that receive in-house use but do not circulate because of their awkward dimensions. Additionally, incomplete serial and periodical sets are routed to the Book Repair Unit from the Bindery Preparation Unit for temporary bindings until the set is completed and can be library bound commercially. This material receives standard temporary bindings, with the sewing style determined by the leaf attachment of the material to be bound.

Books containing paper too brittle to bind are reformatted as preservation photocopies under the supervision of the Book Repair Unit Supervisor, and sent to the Bindery Preparation Unit for commercial library binding.

Finished work is discharged from the Book Repair Unit to the Lettering Department (which is not part of the Preservation Department) using the NOTIS on-line computer system. After the work receives its call number label, it is routed back to the Circulation Department where it is discharged from Lettering and re-shelved for patron access.

Books repaired on a rush basis for the library's seven reference areas and three learning resource centers
are dropped off and picked up by employees of the various departments, expediting the turn-around time on material that is in high demand.

**Prioritizing work**

Preservation treatment priorities are determined collection-wide by correlating physical condition with current use patterns. This system for determining preservation treatment priorities allows limited resources to be focused on material that is both currently damaged and at the greatest risk of receiving further damage through continued use. Implied in this policy is that while material may require some form of repair due to its poor physical condition, unused material at rest in the collection is in relatively little danger of sustaining further damage.

Currently, no grant-driven repair project exists at BYU, although certain collections do receive priority—a condition that is not always desirable. For example, BYU owns a collection of violin and viola music (the Primrose Collection) of international significance that requires binding before it can be cataloged. After cataloging, the records are contributed annually to an international bibliography. Consequently, a large number of pieces from this collection are bound each year, regardless of actual or anticipated demand. Additionally, thousands of nineteenth century books received by the library as a gift require repair before they can be shelved, despite their projected low use. Again, this has a negative impact on the Book Repair Unit, placing demands on it that undermine its ability to keep up with repair problems in the heavily-used circulating collection. This issue of the Book Repair Unit’s need to prioritize its own work based on use patterns continues to be a small problem despite a policy drafted by the Preservation Department and adopted by the library that addresses this issue. As with many problems of this sort, our only hope of rectifying this problem may be the passing of time.