

Extinguishing Slow Fires: Cooperative Preservation Efforts

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For years filmmakers in Hollywood have relied on the image of a book burning to illustrate intolerance. In the movie *Indiana Jones and the Last Crusade* Steven Spielberg utilizes this image to make clear to the audience that Nazism was an evil ideology. It is safe to say that librarians would agree with Hollywood's view of book burning as the ultimate form of censorship and intolerance. Fortunately, book burning is a rare occurrence, at least in democratic nations. However, untold numbers of books are being destroyed, not by book burnings, but through the slow fires of deterioration. These flames of destruction are not being fanned by intolerance or censorship, but by a lack of funds or indifference to the problem. One promising solution is cooperative preservation programs that can provide a viable cost-effective way to preserve important and significant publications.

There is no question that the preservation of printed materials must be given a high priority if we are to save these resources for future generations of students and scholars. Large portions of most libraries' published holdings are printed on substandard acidic paper that will become embrittled. Paper is considered brittle when it breaks after less than two double folds. Recent condition surveys at the University of Kansas Libraries indicate that six percent of library holdings have embrittled

paper.¹ In addition, some holdings, such as Russian and Soviet publications, have a much higher percentage of brittle volumes with 17.43 percent currently evaluated as brittle.² Complicating matters is the fact that over 65 percent of the general collections and 87 percent of all Russian and Soviet holdings at the University of Kansas Libraries are printed on acidic paper that will eventually become brittle.³ Although the percentage of brittle materials may vary by institution, most research libraries face similar challenges with significant percentages of brittle collections.⁴ If these items do not receive some type of preservation treatment, they will eventually deteriorate to the point where they will be unusable. There is no debating that preservation efforts must be made to save meaningful materials—the important question is how can this be accomplished?

Preservation specialists can employ a number of treatments to save publications. These treatments range from relatively simple repairs to rebinding materials to major conservation work to reformatting materials. Generally, brittle items are preserved by the latter. Reformatting involves the transfer of the information in the original publication to digital images, microforms, or preservation quality photocopy facsimiles. Unfortunately, the process can be expensive, and a single library could

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not afford to save all of its holdings that need this type of preservation treatment. In an effort to be cost-effective, libraries need to work together. This paper will briefly review reformatting options and then examine past and current cooperative programs which have successfully mobilized resources to preserve publications.

It is important to use the appropriate format when preserving materials. One should not fall into the trap of using one format for all preservation projects. For example, digitizing all items in a preservation project simply because it makes use of cutting-edge technology is not the best use of preservation funds. Many publications, such as individual volumes in the social science or humanities, are best preserved on microfilm or photocopy facsimiles.⁵

There is no doubt that electronic formats are often more versatile than paper publications because full-text or key word indexing provides excellent searching capabilities. Many publications such as encyclopedias, indexes, bibliographies, and other reference works generally benefit from the enhanced access and storage capabilities of digitization. However, its limitations and drawbacks must be considered when working on preservation projects. First and foremost is the issue of cost. After an item is digitized, there are ongoing storage costs. A recent study shows that on-site storage of electronic information costs a library sixteen times more than housing books and serials.⁶ Moreover, there are many unanswered questions regarding the feasibility of archiving electronic information. Given the rapid development of computer technology and the lack of format and storage standards, one has to wonder if current electronic information will be accessible in five to ten years. As Marcia Watt and Lisa Biblo observed: "What use is a disc that can last 500 years, even 100 or 50 years, if there is no machine which provides access to the information on the disc?"⁷

Furthermore, when choosing a reformatting treatment, one must also consider the patron's needs and preferences. In libraries we often see users printing off page upon page of electronic text. While electronic formats provide ease of access, users often prefer to print off the text into hard copy for their use. In a recent essay, Umberto Eco observed that rather than moving us towards a "paperless" society electronic texts have actually resulted in the increased production of printed material. Rather than dealing with published books and journals, we will have to cope with "tons and tons of

unbound sheets of paper."⁸ Eco believes that new technologies will render only some types of publications, such as multi-volume encyclopedias, obsolete. Most printed books which are durable, portable, and economical will continue to prosper.

Of course a similar argument can be made against the use of microfilm. Most patrons find it very difficult to read microfilm and use it as a last resort in their research, often printing articles that they need from the film. In addition, microfilm does not offer either enhanced or remote access to the resource like electronic formats. What microfilm does offer, however, is a relatively inexpensive way to preserve and store materials long term. This is a low-tech preservation solution that will remain easily accessible, regardless of technological innovations.

Another reformatting alternative, and one that addresses the user's preference for a hard copy, is the use of preservation-quality photocopy facsimiles to create reproductions of the original publication. When done professionally, photo reproduction technology enhances the text and illustrations so they are sharper than the deteriorated original. The reproductions are printed on acid-free paper and bound in book format for easy access and long term storage of several hundred years. Another advantage of preservation-quality photocopy is its cost. Orders for multiple copies of an individual title lowers the overall price making this ideal for cooperative programs.

Preservation-quality photocopy facsimile is the format currently used in two successful cooperative preservation ventures, *Brittle* and *SlavCopy*, which are operated at the University of Kansas. The goal of these programs is to preserve important individual works. While *Brittle* and *Slavcopy* currently use facsimile reproductions, both programs are exploring other options, such as digitization, that may optimize preservation resources.

Brittle and SlavCopy

Brittle is an international cooperative effort founded and administered at the University of Kansas.⁹ The purpose of *Brittle* is to facilitate the acquisition of preservation photocopies of embrittled volumes at reduced prices. The *modus operandi* for *Brittle* is an electronic listserver to which participating libraries post titles they wish to preserve. If other libraries wish to acquire preservation copies of a listed title, the price for that title is reduced. Currently there are over 60 active members of *Brittle* in the United States and Australia.

Building on the success of *Brittle*, a Slavic version of the cooperative program was established called *SlavCopy*. Brad Schaffner, the Slavic Librarian at the University of Kansas is primarily responsible for this effort and does most of the work. The focus of the list is the preservation of Slavic and other East Central European language publications. With over 20 members, *SlavCopy* is smaller than *Brittle*, but libraries actively participate resulting in the preservation of a number of important Slavic titles.

Brittle and *Slavcopy* essentially work the same way, but for ease, this paper will focus its discussion on *Brittle*. The preservation process begins when a participating library posts a title to the *Brittle* list. Full bibliographic information is given for each title along with the estimated reproduction price. Each citation also includes a list of libraries requesting a copy of the item. The *Brittle* list is distributed on the listserver weekly with updates that identify the libraries requesting a copy. Such information allows other librarians to make informed decisions regarding the need for their library to acquire a preservation copy of the work based on the number of other libraries planning to purchase the title. It is not necessary for each library to acquire a copy of every title posted, particularly if the monograph falls outside of the collection development parameters of the institution. Because *Brittle* identifies each library ordering a copy of the work other libraries know that the title will be available through interlibrary loan. Each citation appears on the list for one month so that libraries have time to examine their copy of the publication to determine if a preservation quality photocopy is needed to replace the original work.

After one month, the posting library sends the volume to the Preservation Department at the University of Kansas Libraries where it is processed as part of a *Brittle* shipment. Having all *Brittle* orders originating from the University of Kansas reduces the chance of error and helps the process run smoothly—ultimately reducing costs. In addition to the normal preparation procedures of erasing marks in the text, mending tears, and checking for missing text, the University of Kansas staff also prepare a special flag to notify the vendor which libraries have requested a copy of the title. Once prepared, the books are sent to National Bridgeport Bindery who is partnering with the University of Kansas to provide the *Brittle* photo reproduction service.

Generally, within six to eight weeks from the time a title is removed from *Brittle*, National Bridgeport Bindery will send a replacement copy and an invoice directly to each library that has requested a copy of the title. Bridgeport also returns the original volume, which was taken apart to facilitate the copy process, a replacement copy, and an invoice to the library which submitted the title for copying.

Benefits of Participating in *Brittle*

The primary benefit of participating in *Brittle* is substantial savings on the cost of preservation photo reproductions. The savings can be as much as 50 percent off the listed catalog price for photocopying services offered by some vendors. In addition to price reductions, libraries participating in *Brittle* reduce the overhead costs involved with processing materials for preservation reformatting. These reductions are achieved through the distribution of processing activities amongst the members of the cooperative and represent a significant savings of time and money to participants.

Such activities include the elimination of the need to conduct bibliographic searches to determine if a reprint is available because this search has been conducted by the posting library. In addition, participating libraries are saved the hours of tedious work needed to prepare a book for photocopying. This includes reviewing the text page by page to mend tears, erase marks, and check for missing text. This process is further complicated when pages must be ordered through interlibrary loan to replace missing text.

Often, many of the titles posted on *Brittle* are heavily used and badly damaged. One of the advantages to this cooperative effort is that the *Brittle* citations indicate that the volume is badly damaged and request that other libraries consider supply their title for photocopying. On numerous occasions *Brittle* and *SlavCopy* have orchestrated the reproduction of a single title by using copies of the work held by two or more libraries. In some cases, these titles were only one use away from disappearing forever. Had it not been for the cooperative efforts of those participating in *Brittle* and *Slavcopy* it would have been impossible to create a complete preservation copy of the item.

It is clear that libraries can benefit through cooperative preservation efforts. When multiple libraries participate in cooperative programs such as *Brittle* and *Slavcopy*, significant amounts of time and money are

saved. These savings can be applied towards the preservation of additional materials that are at risk. Given the current financial environment such cooperative efforts are extremely important.

Future Directions for Cooperative Efforts

Digitization and modern communication networks have opened many new possibilities for cooperative preservation efforts. *Brittle* and *Slavcopy* were made possible as a result of the creation of electronic mail which facilitates quick and easy communication with all of the participants. Thanks to digitization, it is currently possible to scan a book, store the information electronically, and print a paper copy with a high quality image; all done in less time than it takes to simply produce a preservation photocopy. Scanning and digitization allows for on-demand printing. Bridgeport Bindery is rapidly moving towards incorporating this technology into the *Brittle* and *Slavcopy* program. High resolution, high speed scanners make it possible to quickly capture, organize, and reproduce text and all types of images in a number of formats with very little degradation of text or image. A digitally captured original text can be reproduced as a near flawless book facsimile; as high resolution, high contrast microfilm; as image files on a web page; or it can be converted to a text file using OCR (optical character recognition) technology which is continually becoming more sophisticated. This technology, combined with the interactive capabilities of the Internet and World Wide Web, will allow cooperatives to maintain a catalog of digitized titles on a web site. Interested libraries, in return, may search the list at their convenience for desired titles to replace their embrittled volumes.

This on-demand capability to create copies of reformatted materials addresses a major concern that many funding agencies have had regarding the preservation of materials. In the past, government grant funds for the preservation of materials were limited to projects that used microfilm. Microfilm is a good preservation format because it has proscribed standards for the production and cataloging of three generations of film for each title including a preservation master, a print master, and a use copy to ensure the preservation of the title. It can be easily reproduced providing institutions or researchers around the world with access to the preserved material. Until recently, other formats did not offer such reproduction options, but thanks to technology there are several options available for capturing in-

formation, storing it long term, and reproducing it on demand. The success of microfilm projects have benefited national preservation efforts in demonstrating what can be accomplished with adequate leadership and funding.¹⁰ Funding agencies need to recognize that microfilm projects have limitations which can effectively be addressed with today's technology and, therefore, preservation initiatives should not restrict themselves exclusively to microfilm.

One limitation of past microfilm cooperative efforts was the focus on preserving information at a macro level. Materials were selected for filming based on their date of publication and general subject area. Like fishing with a net, collection level preservation projects captured many less important works and items that were not in need of immediate preservation attention along with core materials that were in dire need of preservation. This approach facilitated the preservation of important subject collections. However a collections based approach to preservation of embrittled materials is no longer necessary. Using current technological advances, institutions can work cooperatively to identify embrittled materials for preservation on a title by title basis allowing academic and research libraries to take advantage of their staffs' subject expertise to select materials for reformatting based on the scholarly or cultural value of the item.

Modern communications and digitization technologies enable libraries to be much more interactive in identifying texts to preserve. Moreover, these technologies allow a library to preserve a text in the format best suited to how the text will be used—be that film, preservation photocopy, or a permanent electronic format. The challenge is now for cooperative programs such as *Brittle* and *Slavcopy* and future ventures to utilize these resources to their fullest potential. Funding agencies and other institutions which support preservation activities also need to acknowledge that there are a variety of versatile preservation formats currently available. Therefore, preservation funds should not be restricted to a single format, such as microfilm or even digitization. All formats, from microfilm to digitization to codex form all have advantages and disadvantages. Funds are best spent when we choose the appropriate preservation format based on the needs of both the embrittled title and potential users of the title.

Conclusion

Cooperative programs are not without their challenges. It is difficult to maintain the level of energy needed to develop a program and make sure it continues to thrive. To have success requires a commitment from all involved. For cooperative programs to succeed they must be managed by an organization dedicated to the goals of the program, have secure funding, and operate under accepted standards which are flexible enough to accommodate the inclusion of new technologies.

We live in a world where the cost of acquiring library materials is growing faster than library budgets. For this reason, libraries must look to cooperative ventures to reduce preservation costs. We must utilize modern technologies to save important texts from around the world in the format best suited for the text, and use cooperative programs to preserve these texts in the most cost-effective manner possible.

Endnotes

1. Brian Baird, Jana Krentz, and Bradley Schaffner, "Findings from the Condition Surveys Conducted at the University of Kansas Libraries," *College & Research Libraries* 58 (March 1997): 122.
2. Bradley L. Schaffner, and Brian Baird, "Into the Dustbin of History? The Evaluation and Preservation of Slavic Materials," *College & Research Libraries* 60 (March 1999): 4.
3. Baird, Krentz, Schaffner, "Findings from the Conditions Survey," 122; and Schaffner, and Baird, "Into the Dustbin of History?," 5.
4. Unfortunately, condition surveys at other libraries such as Yale, the University of Illinois, and Syracuse University Library have indicated that the percentage of embrittled volumes can be as high as 25 percent of the entire collection. The geographic location of the library as well as storage conditions, such as climate control, play a major factor in the deterioration of printed materials. See: Gay Walker, et al., "The Yale Survey: A Large-Scale Study of the Book Deterioration in the Yale University Library," *College & Research Libraries* 46 (March 1985): 111–32; Tina Chrzastowski, et al., "Library Collection Deterioration: A Study at the University of Illinois at Urbana-Champaign," *College & Research Libraries* 50 (September 1989): 577–84; Randall Bond, et al., "Preservation Study at the Syracuse University Library," *College & Research Libraries* 48 (March 1987): 132–47.

5. For a good discussion of this topic, see: Dan Hazen, Jeffrey Horrell, and Jan Merrill-Oldham, "Selecting Research Collections for Digitization," Washington, D.C.: Council on Library and Information Resources, 1998.

6. Charles B. Lowry and Denise A. Troll, "Carnegie Mellon University and University Microfilms International 'Virtual Library Project,'" *The Serials Librarian*, v. 28, nos. 1/2 (1996): 165.

7. Marcia Watt and Lisa Biblo, "CD-Rom Longevity: A Select Bibliography," *Conservation Administration News* (January 1995): 11–13. This issue is also discussed in: Paul Conway, *Preservation in the Digital World*, Washington, D.C.: Commission on Preservation and Access, 1996.

8. Umberto Eco, "Gutenberg Galaxy Expands," *The Nation*, v. 264 no. 1 (January 6, 1997): 35.

9. For a fuller explanation of how the *Brittle* or *SlavCopy* programs work, see Brian J. Baird, "Brittle: Replacing Embrittled Titles Cooperatively," *College & Research Libraries News* 58:2 (February 1997): 83–84, 95; or e-mail bried@raven.cc.ukans.edu.

10. *Abbey Newsletter*, September 1991, p. 83.

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