Yale University Library 1997–1998

Report by Scott Bennett, University Librarian

Last year was a landmark year for the Yale library. Not since Chauncey Brewster Tinker’s call in 1924 for Yale to create a truly world-class library collection, and not since Sterling Memorial Library opened for service in 1930, has the Yale library more decisively enhanced its capacity to support the university’s mission of advancing knowledge, transmitting it to others, and preserving the record of human experience.

This epochal change came in the spring of 1998, when the book collections of Sterling Memorial Library were for the first time being preserved in excellent environmental conditions. Before describing this remarkable change further, some other of the many highlights of the past year deserve mention.

NOTABLE EVENTS OF 1997–1998

The Starr Main Reference Room in Sterling Memorial Library was rededicated for readers, with every surface of this splendid space thoughtfully restored. Work on the Franke Family Reading Room for periodicals was nearly completed.

Construction of the new Music Library was essentially finished by late summer. The library’s atrium is arguably one of the grandest interior spaces at Yale.

Excellent progress was made in the retrospective conversion to machine-readable form of the library’s card catalog. From the beginning of the conversion project through the end of FY1998, some 2 million authority records—which ensure that works by the same author or on the same subject are found together—were converted, as were some 342,800 bibliographic records, including all the records for the Arts and Divinity libraries. Thanks to the leadership and advocacy of the Advisory Committee on Library Policy, chaired by John Mack Faragher, Arthur Unobskey Professor of History, the retrospective conversion of the card catalog will be completed over the next four years, instead of the much longer period originally anticipated.

Over the summer the Library completed a nearly six month effort to install a major new release of the Orbis software. The ability of readers to renew all their material easily and at the same time was among the many benefits of the new release. This service improvement was particularly meaningful to graduate students.

Construction of the new Library Shelving Facility in Hamden began in March and made very rapid progress over the summer. Throughout the year, library staff consulted closely with faculty about material that might appropriately be shelved at the new facility.

Together the library and Information Technology Services awarded a third year of competitive grants to faculty wishing to use computer and library resources in teaching and research. As in the first two years, most of the awards supported innovation in instruction.

With extraordinary support from the Yale Corporation, the Archives 300 project got underway. Significant progress was made in improving the care of and access to university media material in the archives and in working with university offices on the good management of the records they create.
Achievements in the Preservation of Library Collections

Paper deteriorates because chemical residues from its manufacture react with changes in temperature and humidity to weaken its cellulose fibers, leaving the paper brittle and susceptible to damage during use. Recent analysis indicates that 80% of the dust in the Sterling Memorial Library book stacks is cellulose—the product of the slow but heretofore relentless chemical self-destruction of Yale’s irreplaceable research collections.

The chemistry of paper embrittlement was clearly understood by the late 1950s, and the environmental system of the Beinecke Rare Book and Manuscript Library reflects Yale’s first effort to control changes in temperature and humidity and thereby to slow the chemical self-destruction of its collections. The question of what could be done with other library collections remained to be answered.

Prompted by an increasing awareness of the massive damage being done to research collections, and catalyzed by the devastation of Florence’s libraries by the flooding of the Arno in 1966, Congress funded the National Endowment for the Humanities to undertake, with the nation’s libraries, a large-scale program for reformatting brittle books to microfilm. The object was to save the intellectual content of books, even where there was no chance of saving the embrittled paper itself. The Yale library has been a major contributor to this program, reformatting almost 100,000 volumes over the last fifteen years. The library has consistently been innovative in improving the filming process, in lowering costs, and in caring for the embrittled originals. Last year, the library completed the most successful of its filming projects, this one focused on preserving our large and world-renowned collections in British history.

The library has paired an aggressive binding and collections care program with its filming activities to ensure that as much of the collection as possible remains fit for readers’ use. Such book-by-book treatment and the reformatting of brittle books are costly and generally leave the books themselves vulnerable to further embrittlement. By far the most cost-effective means of dramatically slowing the chemical self-destruction of books is to stop the daily and seasonal changes in temperature and humidity that accelerate embrittlement. Over the last three years, excellent environmental controls have been installed in the Sterling Memorial Library book stacks—a building never originally designed to maintain such conditions. The renovation of some of Sterling’s principal reading rooms and other public spaces produced much more dramatic visual changes, but environmental improvements in the book stacks constitute the most significant part of our renovation work. Starting in the spring of 1998, the millions of books held in the Sterling book stacks have for the first time benefited from a finely controlled environment: 68º±3°F and 42.5%±2.5%RH, along with excellent air filtration, the exclusion of damaging external ultraviolet light, and the provision of fire safety equipment. The process of paper embrittlement for the Sterling collections has now been slowed very significantly. There is no other accomplishment that might be recorded in this annual report that could give more satisfaction to the Yale community and to researchers around the world who depend on the magnificent library collections assembled in New Haven over the last three hundred years.

The new Library Shelving Facility is built to maintain even more exacting environmental conditions, so that the long-term preservation of the collections held there is also assured. With Sterling, the Beinecke, and the Library Shelving Facility offering excellent environmental conditions, only the Seeley G. Mudd Library still requires overhaul of its environmental controls.

In 1991, only the Beinecke among Yale’s libraries held its collections in proper environmental conditions. Were the work on the mechanical systems of the Mudd library done by 2001, Yale would have fundamentally transformed shelving conditions for its research collections in the course of just a decade. Surely there could be no fitter way for Yale to celebrate its tercentenary than by having taken the steps necessary to ensure her print-based library collections will be available for use over the next 300 years and beyond.

Cicero. De Officiis [German]. Augsburg, 29 April 1531.

In the 1530s a number of classical Latin works were printed in German translation for a growing bourgeois clientele created by the mercantile success of German banking and trading companies. This edition of Cicero’s treatise on duties, written for his son Marcus, was translated by Schwarzenberg and illustrated with over a hundred woodcuts by Hans Weiditz.
Open Issues in Preserving Digital Library Collections

While paper will long remain a primary carrier of scholarly information, digital formats are fast emerging as vital means of scholarly communication. We have the same need to preserve digital publications as we do paper-based works. When we turn to digital materials, however, we discover many open issues that arise from unprecedented conditions for preserving material created in digital form. I focus on these matters in this report, as I did on licensing digital information in last year’s annual report, because of the importance but unfamiliarity of these issues to many in the academic community.

What, then, are the unresolved difficulties in preserving digital library collections?

- Libraries customarily lease access to digital information but do not own it, as they own their paper-based collections. It is not clear what stewardship responsibility libraries can have for material they do not own. It is equally unclear that many publishers will feel responsible for the preservation of their material once its commercial value begins to wane. It is now hard to say where the responsibility for preserving digital information lies and what the incentives for meeting that responsibility are.

- Printed paper has been a remarkably stable technology for scholarly communication. Digital technologies are remarkably unstable, with major changes occurring in three year, not three-hundred-year cycles. Because of this instability, digital information must often be preserved early in its economic life cycle, and publishers have commercial concerns about the preservation activities of libraries that they typically did not have when libraries could wait decades after publication before taking any preservation action.

- Libraries have always tied their preservation activities to improving access to the material they preserve. Publishers will invoke their position as copyright owners to limit the use of preservation copies libraries make of digital resources.

Reasonable progress is now being made toward understanding and addressing the technical problems of preserving digital information. Recent copyright legislation has even secured for libraries the right to make preservation copies of digital information. But that legislation restricts the use of the digital preservation copy to the premises of the library. This bar on networking limits the ability of libraries to maintain access to information that is still protected by copyright, though it may not be accessible (either permanently or temporarily) as a matter of ordinary commerce. In this way, copyright remains a central factor in the preservation responsibilities of libraries, but the right of libraries to act on that responsibility and the incentives for such action have become quite obscure.

Bringing these open issues to closure will require unprecedented negotiations between the publishing and library communities, and the management of copyrighted property will be central to those discussions. The academic community might greatly strengthen its position in these discussions by adopting a new stance toward copyright.
Many faculty authors now regard their copyrights, especially of journal articles, as having no commercial value and readily agree to sign over their copyrights to publishers. Not a few publishers, once possessed of these rights and recognizing their real value, impose strict limitations on the further use of the articles. Publishers' copyright restrictions often frustrate a wide range of not-for-profit educational uses of articles; they complicate and restrict the course reserve services of libraries; they drive up the cost of students' course packs substantially; and they inhibit timely preservation. These restrictions often burden authors who wish to re-use their own work in their courses and in subsequent publications. Many academic authors maintain personal web sites, where they post their recent scholarly work, or post their work to professionally managed preprint sites. Some publishers are beginning to use their copyright ownership position to restrict such postings.

Many faculty are becoming aware of the restrictive copyright practices of publishers because their own network-connected desktop computer puts in their hands a power to control scholarly communication in ways that could not be imagined ten years ago. The long-established practice of surrendering copyrights to publishers is alien to the new environment of scholarly communication; it drives up costs and complicates or restricts other uses of the faculty person's writings.

What can be done to put the faculty author more in control of the process of scholarly communication? Consider, for instance, the surrender of copyright requirement typified by Elsevier Science Ltd:

By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publishers, if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform or any other reproductions of similar nature and translations. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, mechanical, photocopying, recording or otherwise without permission in writing from the copyright holder. (Quoted from the November 1998 issue of Clinical Psychology Review.)

Consider the following alternative:

The Author grants to the Publisher, [publisher's name, e.g., Elsevier Science Ltd], exclusive first publication rights for the Work, [name of the article], and further grants to the Publisher a non-exclusive license for other uses of this Work for the duration of its copyright in all languages, throughout the world. The Publisher shall include a notice in the Work saying, "© [author's name]." Readers of this article and libraries may copy it without the copyright owner's permission, if the author and publisher are acknowledged in the copy and the copy is used for educational, not-for-profit purposes, including preservation.

This alternative allows the publisher to do everything it would normally do with the article, except to exercise exclusive control over it for the lifetime of the author plus 70 years. But by virtue of the non-exclusive license granted to the publisher, the author retains as much control as the publisher does over any commercial exploitation of the work. To those who wish to use the article for educational, not-for-profit purposes the author grants unrestricted copying rights. This helps the author gain the widest possible attention to his or her work, the primary aim of most faculty authors. Variants on this agreement are possible, to meet the needs of particular situations, but the essential aim of the non-exclusive license is to secure the widest possible freedom and flexibility for faculty in controlling the use of their own work for teaching, learning, and research in a fast-changing technological environment.

The persistence of traditional copyright agreements in digitally based scholarly communication imperils the library's ability to preserve the digital scholarly record.
as it has preserved the print record. Happily, the computer also positions faculty to regain control of their own writing and to permit libraries to preserve their work. If they retain their copyrights, faculty can advance their own research and teaching programs and, at the same time, vastly strengthen the ability of libraries to meet their obligation to preserve the scholarly record for the long term. Short-term commercial considerations, which now greatly complicate the preservation of digital information, need not be a barrier to the preservation and access-enhancing activities of libraries.

**Donor Support**

Amid all of this change in scholarly communication, donor support remained unwavering. Again last year, many alumni and friends supported the library with extraordinarily generous gifts for the renovation of Sterling and the construction of the new Irving S. Gilmore Music Library. Others chose to support acquisitions, preservation, and technology. The library received gifts totaling $3.7 million in FY1998. Each gift, whether for construction or the collections, helped the library support the university's outstanding academic programs.

Quite notable vision and purpose animate the Yale library’s donor community. David Kruidenier '44 of Des Moines, Iowa exemplified this in making the very first gift to support new environmental controls for the Sterling book stacks. He wished that his gift “would serve as a model for future donors toward this preservation project. Time is of the essence, and I hope that many other Yale friends and alumni will heed the call... What better purpose could one have than to help preserve the book collection of one of the world’s great universities?” What better purpose, indeed! The library was fortunate that hundreds of alumni and friends heeded the call and followed Mr. Kruidenier’s example.

Supported by such generosity, and with an ongoing investment in print publications matched by few other places in the world, a deep commitment to the preservation of the written record of humanity, and a rich supply of new electronic information resources, the Yale University Library remains true to its remarkable past and dedicated to shaping the future of scholarly communication.

—Scott Bennett, University Librarian

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**Yale University Library Facts for 1997–98**

Includes the Medical Library; excludes the Law Library. Collections data excludes Government Documents.

### COLLECTIONS

<table>
<thead>
<tr>
<th>Category</th>
<th>1996-97</th>
<th>1997-98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of books &amp; serial volumes in the library (30 June 1998)</td>
<td>9,156,544</td>
<td>9,301,493</td>
</tr>
<tr>
<td>Number of serials (journals, annuals, etc.) currently received</td>
<td>53,345</td>
<td>50,330</td>
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<tr>
<td>Number of volumes added to the collections in FY1997 (net)</td>
<td>162,698</td>
<td>163,591</td>
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<tr>
<td>Total volume of manuscript &amp; archival holdings (linear feet)</td>
<td>52,801</td>
<td>53,969</td>
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### INSTRUCTION

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<tr>
<th>Category</th>
<th>1996-97</th>
<th>1997-98</th>
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<tbody>
<tr>
<td>Number of classroom sessions &amp; workshops offered</td>
<td>760</td>
<td>894</td>
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### SERVICES AND OPERATIONS

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<tr>
<th>Category</th>
<th>1996-97</th>
<th>1997-98</th>
</tr>
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<tbody>
<tr>
<td>Professional and managerial staff (full-time equivalent employees)</td>
<td>179</td>
<td>195</td>
</tr>
<tr>
<td>Clerical and technical staff (full-time equivalent employees)</td>
<td>288</td>
<td>289</td>
</tr>
<tr>
<td>Student employees (full-time equivalent employees)</td>
<td>85.5</td>
<td>68</td>
</tr>
<tr>
<td>Searches in online catalog and citation files (Orbis only)</td>
<td>3,003,359</td>
<td>2,925,597</td>
</tr>
<tr>
<td>Items charged to readers (first time only)</td>
<td>585,847</td>
<td>568,190</td>
</tr>
<tr>
<td>Items requested through Eli Express</td>
<td>9,949</td>
<td>10,827</td>
</tr>
<tr>
<td>Number of new full-level online records created</td>
<td>100,500</td>
<td>330,066</td>
</tr>
<tr>
<td>Number of full-level records converted to machine-readable form</td>
<td>12,744</td>
<td>233,054</td>
</tr>
<tr>
<td>Total number of online bibliographic records</td>
<td>3,472,735</td>
<td>3,817,594</td>
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### PRESERVATION

<table>
<thead>
<tr>
<th>Category</th>
<th>1996-97</th>
<th>1997-98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circulating collection volumes commercially bound</td>
<td>34,207</td>
<td>31,953</td>
</tr>
<tr>
<td>Circulating collection volumes repaired</td>
<td>2,808</td>
<td>2,800</td>
</tr>
<tr>
<td>Special collections volumes and single sheet items treated</td>
<td>10,046</td>
<td>11,267</td>
</tr>
</tbody>
</table>
Library Income

- University general appropriations
- Endowments
- Grants & contracts
- Non-operating costs
- Gifts & other income

Library Expenditures

- Compensation
- Library collections & binding
- Equipment, supplies, & services
- Building alterations & maintenance, utilities, University assessments

DONOR SUPPORT

($ millions, except number of funds) 1997–98 1996–97

- New endowment gifts $1.0 $0.8
- New gifts for construction 2.2 5.8
- New expendable gifts 0.1 0.1
- Gifts for current use 4 3
- Total of all gifts to the library (excluding gifts of books, etc.) $3.7 $7.0

- Total market value of endowment ($ millions) 677.6 560.8
- Income from endowment 17.5 15.4
- Number of endowed funds 521 517

LIBRARY BUDGET ($ millions)

INCOME

- University general appropriations $29.3 $30.9
- Endowments 13.7 12.4
- Grants and contracts 0.8 0.9
- Non-operating costs, including construction 18.1 16.6
- Gifts and other income (excluding pledges) 4.6 3.7
- Total $66.5 $64.5

EXPENDITURES

- Compensation $21.3 $21.2
- Library collections and binding 15.4 13.8
- Equipment, supplies, and services 6.0 7.2
- Building alterations and maintenance, utilities, University assessments 23.8 22.3
- Total $66.5 $64.5