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## ABSTRACT

This paper is a report to the Faculty of Arts and Sciences on the changing state of the Harvard College Library and the larger information environment of which it is a part. It is also a call for faculty participation in a strategic planning process designed to reposition the Library to serve an information age university in the twenty-first century. The plan will set priorities and goals for the Library for the next five years and directions for the next decade and beyond. The paper is in three parts. First comes an overview of the external developments that are forcing the Library to change the way it fulfills its mission. These are the price of publications, new computer-based technologies, problems with preservation, an increase in the number of research libraries, and the growth of the information industry. This is followed by a review of the current state of the Library and a glimpse of its future directions. The paper concludes with a description of the strategic planning process and a discussion of the principal issues that need to be addressed, i.e., space, collections, technology, undergraduate libraries, and new media. Supporting statistical materials are appended. (KRN)

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# New Beginnings: A Report to the Faculty of Arts and Sciences on the State of the Library

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February 1, 1991

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This paper is a report to the Faculty of Arts and Sciences on the changing state of the Harvard College Library and the larger information environment of which it is a part. It is also a call for faculty participation in a strategic planning process designed to reposition the Library to serve an information age university in the twenty-first century. The plan will set priorities and goals for the Library for the next five years, and directions for the next decade and beyond.

The paper is in three parts. First comes an overview of the external developments that are forcing the Library to change the way it fulfills its mission. This is followed by a review of the current state of the Library and a glimpse of its future directions. It concludes with a description of the strategic planning process and a discussion of the principal issues that need to be addressed. These are space, collections, technology, undergraduate libraries, and new media. Appended are supporting statistical materials and a timely article on the future of research libraries.

## I. Overview

As we enter the last decade of the twentieth century, there are powerful economic, social, and technological forces at work which are causing a discontinuity in the history and traditions of research libraries. Libraries are at a turning point. They are facing severe fiscal limits, increasing demands, and unprecedented technological change. They must reinvent and reposition themselves for the information age and the next century, or gradually lose their relevance. Fortunately, the same forces that are threatening libraries also provide the incentive and opportunity for positive change. These changes have developed gradually and imperceptibly from external forces that are complex and largely beyond the control of the Library or the University.

### From the Industrial to the Information Age

During the first half of this century when Widener was young, there was little technology and no information industry. Publishers were concentrated in the major cities of Europe and America. The number of titles published was modest,

and their prices were reasonable. Publishing by governments, scientific and learned societies was also limited. In this environment, it was possible for a few great research libraries like Harvard to acquire a significant percentage of the world's scholarly publications at a reasonable cost, and to catalog and make them accessible on open shelves.

This small and stable world of publishing and libraries came to an end with World War II. In the second half of this century, the industrial age gave way to the information age and a number of forces and developments began to transform libraries. Note the following:

- **An explosion in the number and price of publications brought on by new demands and new printing technologies.** Publishing flourished everywhere and in many exotic languages. Scientific publishing was taken over by a few profit-oriented multinational firms, and annual price increases of 20-30 percent became commonplace. Libraries began paying more and more to buy a diminishing percentage of the output of the world's publishers.
- **The development of new computer-based information technologies, including telecommunications and electronic image processing.** These spawned a variety of expensive new formats and equipment for recording and disseminating knowledge. Information in electronic form is beginning to compete with books and journals for the Library's acquisitions dollars. While new technologies expand the reach and range of the Library, the costs are high and largely incremental. The electronic library enhances the traditional library, it does not replace it. There has been no decline in the demand for traditional library services based on printed materials. In consequence, the Library has to maintain all its traditional functions while trying to add this electronic dimension to its capabilities.
- **The emergence of an enormous preservation problem.** Library collections used to be viewed as permanent assets requiring no further investment. Now we know that a large percentage of the books in our collections will be consumed by the "slew fires" burning in the acid paper upon which they are printed unless we take steps to preserve them. This is a particularly burdensome problem for the oldest and largest libraries. As many as a third of the books in the College Library are at risk.
- **An increase in the number and size of research libraries, and the creation of a new and growing commercial and not-for-profit information industry.** The parallel development of the OCLC and Research Libraries Group computer-based library networks are making it possible for libraries to view their mission as a shared responsibility rather than an individual one.

These and other developments are forcing libraries to make the transition from industrial to information age institutions. As the Harvard Library and other great libraries make this transition, their capabilities increase, but the demands on them are overwhelming. The result is a growing disparity between the Library's expanding mission and commitments and the resources available to fulfill them. The Library is being buffeted by forces that make it impossible for it to maintain its traditional commitments and aspirations and satisfy the expectations of the past.

The Harvard College Library is not immune to these forces. In fact, because of the size and age of its collections and its decentralized structure, it is most in need of reorientation and revitalization. The Library's goal has always been to provide the best and most comprehensive research collections for its users. Although that goal still stands, we can no longer achieve it by using the same methods that served us so well in the past. Furthermore, the definition of the best and most comprehensive collections has to be expanded. While books will remain at the heart of the collections for the foreseeable future, resources in new electronic formats and new media must also be included. In addition, we must also extend the reach and range of the Library to include resources in other libraries and information centers.

Throughout most of this century, the Harvard Library has enjoyed the distinction of being the largest, the most accessible, and best-funded university library in the world. Although it will doubtless maintain that distinction in the future, that will not be enough. It must also excel in responsiveness and effectiveness. The Library will be judged not only on the quality of its own collections, but also on its ability to provide access to needed resources wherever they may be. To succeed, it will have to make use of new technologies and new methods of providing library materials and services to its users.

## II. The State of the Library

The Library's mission is to support the teaching and research functions of the FAS, the University, and to the extent feasible, the scholarly world beyond Harvard. It fulfills this mission by acquiring, organizing, preserving, and providing access to recorded knowledge in formats ranging from traditional printed books, journals, manuscripts, and films, to a growing variety of new audio and visual media and electronic databases. While the Library's mission does not change, the way it fulfills its mission does. It must try to keep pace with changes in teaching and research at Harvard, as well as changes in the way knowledge is created, stored, and disseminated.

From the time Widener opened in 1915, the Library fulfilled its mission by building comprehensive collections of books and journals in all subjects of interest and potential interest. It made these collections accessible to scholars in Widener on open shelves in classified order. Widener was the envy of scholars and research libraries everywhere. Harvard librarians and faculty are justly proud of their achievement, and are determined to perpetuate it. Unfortunately, the political, economic, social, and technological changes that have taken place since the 1950's are making this model untenable.

There is a growing disparity between the conventional view of the Library and the current reality, between the Library's traditional aspirations and the nature of its actual achievements. Following are some indications of this disparity:

- The budget was in chronic imbalance, despite annual average increases of 10% a year over the last ten years.
- Book prices are rising at the rate of 12% and journal prices at the rate of 20% a year with no relief in sight. With half our purchases abroad, the decline in the value of the dollar has seriously eroded the value of our book funds. In addition, the number of book and journal titles published each year is increasing, and we spend more each year to buy a diminishing percentage of desirable publications.
- Every year, the Library acquires more materials than it can process and put on the shelves.
- The Widener/Pusey stacks are filled with 3.5 million volumes; this is 700,000 volumes beyond their working capacity of 2.8 million. This has been accomplished by constantly shifting the collections, by shelving books on their fore edges and adding a seventh shelf to each section -- all extremely destructive practices. In addition, we must find space for 100,000 new volumes each year.
- The Library has a growing preservation problem which puts a third of its collections at risk.
- Theft and mutilation of materials in Widener, Fine Arts, and other libraries are serious and increasing. Additional security measures are needed.

These problems and imbalances are symptomatic of our efforts to maintain traditional library policies and practices despite fundamental changes in the Library's external environment.

Many of us have in our minds an ideal model of the Library. No doubt for many of us this model strongly resembles Widener: a large building with all the books and journals we might ever need, within four walls, browsable and fully accessible. But Widener has not been that for a long time, perhaps not ever. And in the future, Widener will resemble that model even less. The collection is already in multiple locations: in Widener, in satellite libraries in and around the Yard, in the libraries of other faculties, in the New England Deposit Library, in the Harvard Depository, and also in such places as the Center for Research Libraries in Chicago. Records of materials in all of these places are now found on the HOLLIS catalog. Also, through the nation's two library networks, OCLC and the Research Libraries Information Network, the catalogs and resources of other research libraries are increasingly accessible. The range and variety of resources available from commercial information providers is rapidly expanding.

The Library of the future at Harvard will be one that successfully deals with these multiple locations as well as the multiplicity of media that will be found in them. The plan for the College Library will address the issues of what to keep where, and how to locate and move materials from various locations. The result will probably be a large selection of browsable collections in open stacks in the libraries in Cambridge, supplemented by a growing amount of material in the Harvard Depository's closed stack, recallable on 24 hours notice.



## From Decentralization to Integration

The Widener building has dominated the Library's history since it opened in 1915. Widener began as a universal library covering all fields of knowledge except Law. With its superb collections on open shelves, its reading rooms, stalls, faculty studies, and seminar libraries, Widener was the envy and model of scholars and academic librarians everywhere. However, only 22 years after it opened, Widener was in crisis. Its reading rooms and stacks were filled beyond capacity, and the concept of a universal library in one large building had lost its viability.

Keyes Metcalf, who directed both the University and the College libraries from 1937 to 1955, effectively solved the space problem for forty years by gradually decentralizing Widener's collections and services. In the 1940's, he planned and built three new buildings, each designed to meet a particular need. The first was the New England Deposit Library, a cooperative storage facility for lesser-used materials from Widener and other libraries in the region. The second was the Houghton Library for rare books and manuscripts. The third was the Lamont Library (1950) for undergraduate collections and services. These three satellite libraries temporarily relieved the pressures on Widener and set the pattern of decentralization that has characterized the College Library ever since.

Now, fifty years later, we are again faced with an urgent space crisis. Not only Widener, but all our libraries, except the Harvard Depository, are filled to capacity. Metcalf's decentralization strategy has run its course. We need a new strategy that will carry us through the next several decades. Decentralization must give way to integration and unification through the use of new technology. We must integrate the College Library's eleven separate units into a unified and coordinated library service with effective connections to the world of information beyond Harvard.

Fortunately, the two principal components of such a strategy are already in place. One is the Harvard Depository, which has excellent climate controls, security, and virtually unlimited storage capacity. Used appropriately, it can free us from our chronic preoccupation with space and enable us to build the library of the future. The other component is HOLLIS, the Harvard Library's electronic catalog. The success of the concept of our new system of storage and access depends entirely on HOLLIS. It is the spine that connects it all -- on which all systems of location and delivery will depend.

HOLLIS has been a success since it began in 1988. Last year, it processed 4.2 million user requests for information about materials and produced a positive response (i.e., located material matching the request) in 75 percent of the cases. It has the capacity to locate materials by author and title, of course, but it also allows the collection to be searched by subject, by keyword, and by call number. In this way, a user can browse the collection electronically, looking at information about materials in widely scattered locations. A versatile electronic catalog allows us to be inventive and flexible in the physical location of material.

The main limitation of the HOLLIS system at this time is that it contains only a third of the records of the Harvard collection. The conversion and entry of the rest of the records must be given the highest priority. This will make one of the University's most valuable capital assets fully available to the Harvard community.

Another important component in reinventing the Library for the next century will involve a fundamental rethinking and restructuring of the role and place of Widener and the other libraries in the Yard and their relation to the other units of the College Library.

Until the 1940's, Widener was the College Library. Since then decentralization has gradually shifted the balance. Today, nearly half the collections are located in libraries outside of Widener. In twenty years, only a quarter of the Library's growing collections will be in Widener. As the center of gravity of the collections shifts, patterns of use will change and some of Widener's traditional functions will have to be shared with the other libraries. And as electronic information and new media assume increasing importance in research and instruction, we must expand the mission of our libraries to accommodate these new forms.

A number of steps are now being taken to reorder the Library's priorities, restructure its organization and management, and deal with its arrearages and other pressing operational problems. However, there are larger issues which must be addressed jointly by the Dean, the faculty, and the librarians. That is the purpose of the Library's planning process.

### III. The Planning Process

In November, the College Library initiated a planning process with two principal objectives. One is the process itself, which will give all involved a renewed sense of purpose and stimulate us to refocus the Library's mission and formulate a common vision of its future. The other product is a strategic plan, which will set goals and priorities for the Library over the next five years, and directions for the next decade and beyond.

The planning effort is a structured and iterative process involving the College Library staff at all levels, as well as faculty, students, administrative officers of FAS, and the Director of the University Library. The process will be completed at the end of this academic year and a strategic plan will be submitted to the Dean and the faculty in the fall.

The planning process involves extensive consultation of the Library's various constituencies -- faculty, students, and staff -- in order to try to learn how these groups perceive the Library and what they will want and need from it in the

future. The discussions at these meetings are being recorded and summarized, and will help to shape the final plan.

A \$100,000 planning grant from the Council on Library Resources jointly to the College and University libraries is funding part of the above effort in addition to other studies with University Library-wide implications.

## Principal Issues for Consideration

### 1. Space

The acute shortage of space for books is the most urgent problem confronting the College Library. Widener and nearly all of the other ten libraries that comprise the College Library are filled to or beyond their working capacity. The College Library has a total of nearly 7 million volumes and adds about 150,000 volumes a year. At current growth rates, it will double in size in 25 years.

The Widener/Pusey space problem is particularly acute. It has a working capacity of 2.8 million volumes, but now exceeds that capacity by approximately 700,000 volumes. In addition, it acquires, on the average, 100,000 volumes a year and there is simply no place to put them.

This space crisis was anticipated ten years ago by Oscar Handlin, then Director of the University Library. He initiated plans that led to the design and construction of the Harvard Depository (HD) under his successor, Sidney Verba. The Harvard Depository is a state-of-the-art closed stack facility for books and archival materials on Harvard land in Southborough, 35 minutes from Cambridge. The first unit, with a capacity of 1.6 million volumes, was opened in 1986 and is nearly filled to capacity. A second 1.6 million volume unit (half the capacity of Widener/Pusey) is now under construction. The plan provides for nine additional units as they are needed. Materials are stored in secure, climate-controlled space, and are delivered to Widener on 24 hours notice. The chief objection to the use of HD is that the materials there are not accessible for browsing. The College Library has some 200,000 volumes in HD and another 400,000 volumes in the New England Deposit Library in Allston.

It is interesting to note that, like many other library innovations, the idea of selecting lesser-used books from the Library's collection and storing them offsite in an inexpensive building on inexpensive land originated at Harvard. President Eliot, who was bedeviled by the Library's space problem in Gore Hall (Widener's predecessor) throughout his long tenure, first proposed the idea in his annual report of 1901. The committee he appointed to study it was unanimous in its opposition, but Eliot's controversial idea eventually prevailed. By now all the world's great libraries have been forced by space and economic pressures to house large portions of their collections in offsite storage facilities.



Given the extent and urgency of the Widener space problem, the question is not whether we are going to have to make more use of HD, but what materials will go and how they will be selected. The immediate challenge is to develop a rationale and a process in collaboration with the faculty which will win their support and still enable the librarians to do the job in a timely and cost-effective way. Such an effort is now in progress.

One part of the solution to the space problem may be to build the addition to Pusey that was provided for in the original plan. This would cost an estimated \$40-50 million, and take ten years to raise the money and build the building. The President's House would have to be demolished or moved to clear the site. For it to be approved, such a building would have to be an essential component of a larger master plan to deal with the Library's long-term space and programmatic needs, rather than simply another stack addition to Pusey. Whether such a building will be part of the solution will depend on the results of the strategic plan and the financial prospects at the time. It may well be that, with a proper overall plan, we can avoid the need for new construction. The options remain open.

In sum, we are not just dealing with a "space problem," the solution to which is either to build an addition to Pusey or decide which materials to move from Widener to HD, or perhaps both. Our real challenge is to develop a new consensus on how best to use our valuable library space in Cambridge and the Yard. Logic suggests that library space in the Yard should be used to house the most important and useful working collections on open shelves, while lesser-used, and other materials that need not be on open shelves, should be sent to HD. Lesser-used does not mean less important or less valuable. They can be our most valuable materials, including old, rare, expensive, and fragile items which would benefit from the Harvard Depository's superior security and climatic environment.

## 2. Collections

The glory of the College Library is its incomparable collections. These collections were built over the last century by collecting comprehensively in nearly all areas of the humanities and social sciences. This policy is the fundamental tenet of the Harvard Library culture. The goal of that policy must be continued, but the means of achieving it must change. Our challenge is to find new ways of providing access to comprehensive collections in the face of unrelenting increases in the cost, number, and variety of new publications and information in new electronic formats. Not only must we develop more efficient and cost-effective ways of selecting, processing, and providing access to those materials we do acquire, but we must also develop our ability to provide access to the growing array of resources in print and other formats that are located elsewhere and that are not available for purchase.

The more resources we devote to our heroic but faltering efforts to maintain our traditional policies and practices in today's environment, the fewer the resources we have available for other vital library functions. It is not enough to purchase materials. They must also be cataloged, shelved, preserved, and made accessible to users. A library's collection policies and practices are the single most critical factor in the management and stewardship of a library. Each new acquisition has a multiplier effect. It triggers a succession of labor-intensive processing and service costs and commits the Library to pay for the preservation and storage of the physical volume in perpetuity.

The Library's collection policies should be reviewed and updated in consultation with the faculty, and brought into line with current publishing and budgetary realities. Unnecessary duplication and materials of marginal research value should be eliminated. At the same time, expansion into new areas of interest should be explored. To what extent, if any, should we be increasing our collecting in the areas of popular culture and ephemera, international studies, new media, and archives and manuscripts, among others? What existing commitments can we deemphasize in order to reallocate resources to new fields? What new resources are needed and how can we obtain them?

Our science libraries are facing a particularly difficult problem. For three decades, the increase in the cost of science journals has far exceeded inflation. In recent years, the prices of science journal subscriptions have been rising at the rate of 20-30 percent a year while the value of the dollar has been declining. There seems to be little we can do to save our most expensive subscriptions in the face of these relentless and destructive price increases. Adding additional funds only encourages the publishers to continue to raise prices. Any further effort we make to reallocate resources from other library functions will undermine the rest of the Library and only postpone the inevitable. There is no short-term solution to this problem. Our best hope is that market forces will eventually force a correction or a restructuring of the scientific publishing system.

### 3. Technology

Many of the Library's technology initiatives in the next five years will be based on HOLLIS, the University Library's electronic catalog and internal processing system. HOLLIS was made available in 1988 and is an unqualified success. However, its capabilities are not yet being fully exploited, either by the Library's public or its staff. HOLLIS is much more than a computerized version of the card catalog. It is a powerful and versatile tool, not only for browsing the Library's collections, but also for facilitating the transfer of materials between Widener and the Harvard Depository. Unfortunately, only one-third of the College Library's catalog records are represented in HOLLIS, and this is a serious impediment to its use.

In 1976, the Library changed from a manual to an on-line computer cataloging system. Nearly everything cataloged since that date is in HOLLIS, and everything before that date (except for the separate file of incomplete "Old Widener" records) is accessible only through the card catalogs. We know that many users only consult HOLLIS and neglect to search the card catalog. They thereby deprive themselves of access to two-thirds of the Library's holdings. In addition, operating a library that is only partially computerized is inefficient because the staff has to work with two systems.

To make HOLLIS a fully effective public catalog and library management system, all the remaining pre-1976 catalog records must be converted to machine-readable form and made available on HOLLIS. Preliminary estimates put the number of records to be converted (in the College Library's catalogs) at three million, and the cost of contracting out the project at \$6 million. This is not an unreasonable price to pay to facilitate access to the Library's older and most important research collections. The Library has an enormous investment in these collections; if they are in HOLLIS they will be used, if not, they may be overlooked. Another benefit will be the recovery for other use of the valuable space now being occupied by our two massive card catalogs. Clearly, a retrospective conversion project with a five-year completion target should be one of the strategic plan's high-priority goals.

Finally, no computer system is ever complete and HOLLIS is no exception. Much development work remains to be done and the pace must be accelerated. Users are demanding access to a growing number and variety of on-line and CD-ROM electronic databases, and many of these can be made available through HOLLIS and the university network.

#### 4. Undergraduate Libraries and New Media

The concept of the undergraduate library originated at Harvard in the 1940's. Fifty years have passed and it is time to reexamine and refocus the mission of Lamont and Hilles. Undergraduates are making increasing use of research collections in Widener and its satellites. Inexpensive paperbacks and copying services are diminishing the need for course reserves. Although used intensively during exam and other peak periods, the undergraduate libraries are underused during much of the rest of the year -- particularly Hilles.

Although the College Library has the largest print collections of any academic library in the world, it has no facility for collecting and providing access to the growing array of research materials on video and sound recordings and in multi-media. The Music Library, the Poetry Room, and Hilles have specialized collections and facilities, but there is no library policy or program for dealing with research materials in these new media. The Judaica Division's growing collection of Israeli video tapes and sound recordings are being serviced by the Department of Media

Services in Boylston Hall in an ad-hoc arrangement. However, the mission of Media Services is to support classroom instruction; it does not maintain research collections.

Should Lamont's mission be expanded to support teaching and research based on new audio-visual media and information in electronic formats? Can more intensive use be made of the space in Hilles by an imaginative reorganization of its seating and shelving? These and other ideas will be explored in the planning process.

## Conclusion

By choice or by default, the College Library in the year 2000 will be profoundly different from what it is today. We cannot afford to drift into the future. We must recognize and come to terms with the major forces that are changing the library environment, and by so doing, take charge of the Library's future. Our challenge is to use this planning process to create a new vision of the College Library that is appropriate to our time, and to build a consensus for achieving it. This is a time for new beginnings.

# HARVARD COLLEGE LIBRARY<sup>1</sup>

## SUMMARY TABLE

1989-1990

HARVARD COLLEGE LIBRARY (Main Collections)	GROWTH IN VOLUMES (GROSS)	GROWTH IN VOLUMES (NET)	PRESENT EXTENT IN VOLUMES & PAMPHLETS	TOTAL EXPENDI- TURES (\$)
Cabot	3,148	2,360	150,283	740,890
Fine Arts	5,263	5,146	237,820	1,766,429
Geological Sciences	980	977	58,889	237,112
Harvard-Yenching	14,735	14,198	735,832	1,681,290
Hilles	4,687	886	204,881	1,238,835
Houghton	7,410	7,193	370,385	2,345,661
Lamont	5,968	2,845	209,108	1,316,841
Littauer	4,681	3,821	448,910	681,147
Loeb Music	2,483	2,423	113,630	933,374
Tozzer (Peabody Museum)	3,980	3,965	178,134	793,056
Widener	118,794	87,904	4,112,549	17,121,277
<b>TOTALS</b>	<b>172,129</b>	<b>131,718<sup>2</sup></b>	<b>6,820,421<sup>3</sup></b>	<b>28,855,912<sup>4</sup></b>

<sup>1</sup>These units represent the major collections of Harvard College.

<sup>2</sup>The difference between gross and net volumes added in Widener is due largely to the relocation of materials to the storage libraries.

<sup>3</sup>Of this total, 398,000 volumes are in the New England Deposit Library and 189,000 are in the Harvard Depository.

<sup>4</sup>Total expenditures include salary, benefits, book and other library materials, binding, automation, and some building expenses.

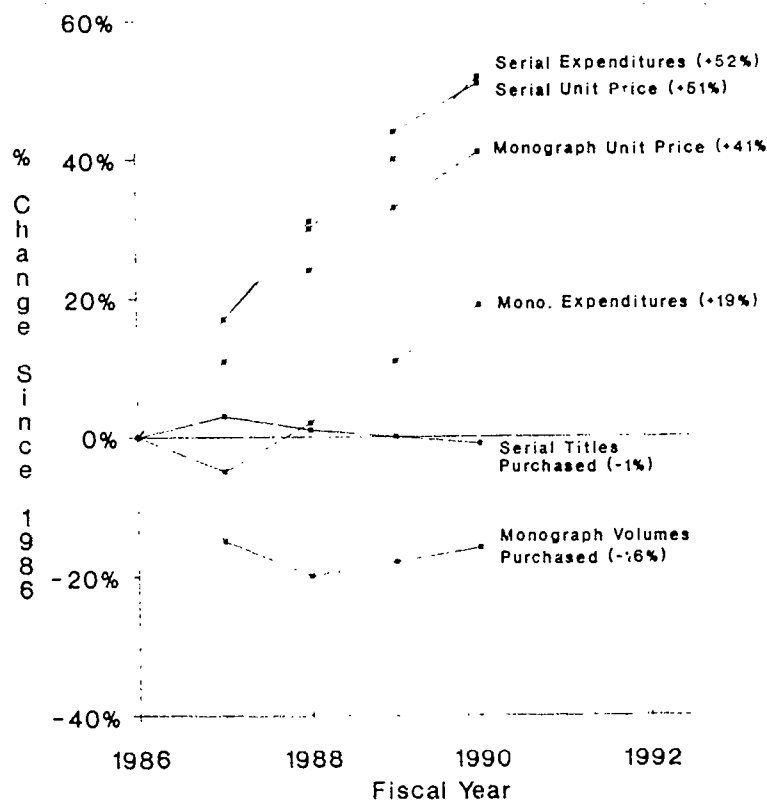
Volumes circulated during 1989-1990: 1.2 million

Requests through HOLLIS: 4.2 million

Successful HOLLIS transactions: 3.0 million



**Figure 1**  
**Monograph and Serial Costs**  
**in Research Libraries,**  
**1985-86--1989-90**



**Figure 2**  
**Overall ARL Library Expenditures and CPI**

