

## **ARL Annual Statistics 1990-91: Remembrance of Things Past, Present...and Future?**

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The library is a living, breathing repository of what Alain Resnais, in his film about the French Bibliotheque Nationale, called *Toute la Memoire du Monde*. Connecting time past, present and future is the mission of the 119 North American institutions that comprise the Association of Research Libraries. The recently published "ARL Statistics 1990/91" takes the measure of those institutions, and particularly of the ARL's 94 U.S. university members, which expend about 40% of the entire acquisitions budgets of the 3000-plus academic libraries in the U.S.

### **Looking Past and Present**

The statistics show five years of steady climbers: overall expenditures up by 43% since 1986; library staff by 6%; total student population by 10%; graduate students by 11%; and faculty up by 16%. Library usage also increased, led by interlibrary borrowing and lending. Indeed, ILL--book and article document delivery within the library community, done under the "fair use" provisions of the Copyright Act--was by far the fastest-growing service, showing an increase of some 45% in five years as ARL libraries borrowed 1.3 million items, mostly from one another.

However, the upwardly mobile statistics were not all to the good. In general, the increase in expenditures came nowhere near the rate of unit cost increases of books (climbing steadily at about 8% per annum) and serials (a steady 12% annual increase). ([See Figure 1](#)).

Mr. Micawber would find the situation familiar--expenses exceeding income--and the statistics document the libraries' continuing retrenchment. The news is worst for book readers: monograph purchases are 15% below the level of five years ago, with ARL university libraries typically buying 5000 fewer books in 1990/91 than in 1976. Clearly this decline has had a negative effect on the sales of specialized, scholarly press titles, for which libraries used to be the steady, robust, key market.

In the serials department, purchases have slipped by .5% for four successive years, and the prognosis is more slippage at a greater rate. In a survey conducted by ARL last fall in which two-thirds of the members responded, 60% of those reported plans for deep cuts to subscriptions, averaging close to \$ 150,000 ; 18 reported plans to cancel in excess of \$250,000 each. Last year, U.C.-Berkeley's \$400,000 cancellation project was a high-water mark; in 1992 at least six members plan to exceed it.

As the average subscription nears \$150, prices and increases show no signs of leveling off, and everyone involved in the scholarly communication process--librarians, publishers and learned societies--shares the concern that information is no longer reaching the researcher as smartly as it once did. For example, the American Physical Society, publisher of the Physical Review series, indicates that the number of subscriptions per institutional library is perhaps half of what it was 20 years ago, while the numbers of researchers and students have continued to grow.

It used to be that cancellations were of duplicates or more marginal, inexpensive titles, and were more likely to be in the humanities or social sciences. Two librarians, Karen Schmidt and Tina Chrzastowski, are conducting a research project based on cancellations in the CIC group (Consortium for Interuniversity Cooperation) of university libraries. Their preliminary research suggests that a profile of today's "endangered" serial would be: in the sciences, published in the U.S., in the English language, with a price-tag 45% above the average for the discipline. And early returns suggest that more than 90% of cancellations are for titles "unique" to the region, thereby supporting fears that collections are less comprehensively geared to research than they once were.

### **Time Present Meets Time Future**

Cutbacks play out against a scenario in which demand for information is increasing on campuses. ILL has grown not only as a result of cutbacks, but also because the relatively recent phenomenon of online public catalogues (OPACs) makes library usage increase. The card catalogue is hardly "user-friendly" compared to the electronic, menu-driven, multi-point OPAC search, even at a black-and-white monitor. Circulation and reshelving in this electronically assisted climate increase by leaps and bounds.

For journals, there are parallel, much more recent developments: indexing/abstracting services in electronic form, particularly an explosion of CD-ROM products. In addition, there are comprehensive online, electronic table-of-contents services. The first significant populist provider was CARL, the Colorado Alliance of Research Libraries, keying contents for the 10,000 most widely held journals in its UnCover service, which aims metaphorically to strip the covers off journals, opening up the inside to every subscriber.

Beginning last fall, UnCover supported an article delivery service using high-tech scanning equipment and fax, at times able to deliver as rapidly as two hours after receipt of order. These orders can be placed via a direct online connection and charged to a library account or a personal credit card, at a fee of \$6.50 per article plus the publisher or CCC fee.

Simultaneously, others--such as Faxon Express (whose parent company is the large Boston-based subscription agency--entered the high-tech realm of accelerated delivery, also in partnership with research libraries. All these information providers are looking for the key to the magic combination of user needs, price structure and market as they plunge into uncharted economic seas. While one or two "accesses" are cheap enough, users are concerned that the point at which a local subscription would be cheaper comes quickly. Thus, the tradeoff between subscriptions and access is as vexing for libraries as it is for publishers. Some reassurance does come, however, from the indexing and abstracting industry, which has delivered citations and abstracts cost-effectively for users--and profitably for themselves--for some years.

## Time Future

If access is soaring, and local acquisitions are a leaky--or sinking--boat, then accelerated article delivery could be the prototype spaceship of the electronic future. If that is the case, what might be the effect on research libraries--and on scholarly publishers?

The only certain thing about forecasts is their uncertainty. However, recent trends in ARL statistics have been consistent, and extending them might be a useful exercise. In 1986, ARL university libraries purchased 30 monographs and 14 serials for each faculty member. By 1991 the monographs had declined to 22 and the serials to 12 per faculty member. At that rate, by 1998 the 11 monographs that libraries purchase for each faculty member will equal the number of borrowing transactions. ([See Figure 2](#)).

If the curve were extended even further, by 2007 ARL libraries would stop buying books entirely, and only purchase serials; by 2017 they would buy nothing, and instead access everything. But in the near term, at least, this scenario is unlikely, for as Tom Shaughnessy, director of libraries for the University of Minnesota, puts it, "You can't borrow, if no one owns it."

Continuing to gaze into the crystal ball, one might predict, optimistically, that by the time the current generation of publishers, librarians and scholars retires, technology will have transformed the way information is created, stored and distributed. Current works living only in electronic form and significant earlier works resident as machine-readable text will enable the research library patron to sit at a computer, retrieve citations, scan the "hits," and actually import to the home machine the full text of what he or she seeks--and more--after refereeing by scholarly peers.

One publisher, Chadwyck-Healey, is already moving into the electronic future with its *English Poetry 6001900*, computer texts of the complete corpus of English poetry. But somewhat unrealistically, in this futuristic vision, electronic information is created mostly by individuals, with very little intervention by libraries or publishers in its preparation, distribution, and service processes.

Such a "cyberspace" scenario unnerves, excites, compels--and costs. Indeed, there are indications that can be extrapolated from the "ARL Statistics" that the level of cost of electronic access is matched by only one other cost in the library: science journal subscriptions. For research institutions and their libraries, re-tooling for the hardware and software requirements of the "virtual library" is no less pricey than re-training the staff and users.

The prognosis? An extended "Middle Earth." The University of Texas-Austin, library director Harold Billings describes it as "the bionic library." The bionic research library is a mix of many kinds of information--owned and accessed in a variety of formats and media. It lives and breathes within an information universe that is rapidly changing, demanding, challenging, and offers opportunities to re-think roles, services and budgets. The half-empty version is that money will be tighter, causing libraries and research institutions to downsize expectations while trying to retain some kind of vision. A difficult economic climate exacerbates tensions among librarians, faculty and the publishing community--even as solutions to the problems facing us all require mutual, creative work.

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