AUTOMATION PROCESS BEGINS

In November of 1982 the University of Notre Dame announced the receipt of a major gift from trustee John T. Ryan, Jr. for the automation of the operations of the University Libraries. Since that time, many in the Libraries and elsewhere on campus have devoted major efforts to the determination of needs, the examination of alternatives, the final selection of a system best meeting local requirements, and the preparation of the machine-readable database which will serve as the core of the system. On December 17, 1985 the Executive Committee for Computing Policy and the Provost approved the acquisition of the Northwestern Online Total Integrated System (NOTIS) and related hardware for the University Libraries and the Law Library.

In the weeks since then, the University Libraries have established an Automation Implementation Team to oversee the implementation of NOTIS. That group has been actively planning the network of terminals for the system, which in its most recent iteration exceeds 115 terminals throughout the Memorial Library, the Law Library, the various branch libraries, and several non-library sites. Dial-in access from non-library terminals is also being planned. In an effort to ensure sound decision making on the local level, the Team visited Indiana State and Vanderbilt Universities, two recent NOTIS installations, in late February to get a better sense of potential problems during implementation and possible solutions.

Subsequently the Team will be establishing a number of task forces to address issues in particular operational areas. During this phase it is anticipated that faculty and student input will be sought on matters such as the design and content of help screens for the system.

The University Libraries have also begun recruitment of a Library Systems Manager who will be responsible for the operation and further development of the system. In the meantime, the Libraries have been working closely with the University's Computing Center to specify details of the hardware required for the central site, and the working agreement between the two units to cover mutual responsibilities on the operation of NOTIS. The Computing Center will have continuing responsibilities in this last area.

The overall NOTIS system will be phased in over the next two to three years. Following the loading of the Notre Dame database, expected in the fall of 1986, various editorial tasks will need to be addressed to ensure the accuracy of the records. Public online access on a pilot basis will probably begin sometime early in 1987, with broad campus-wide dial-in access available later that year. It should be noted that the demise of the card catalog, that familiar but costly tradition of the library, is not expected for several years.

KRESGE LAW LIBRARY

Notre Dame's Kresge Law Library is undergoing a period of tremendous growth and change. These developments were prompted by the University's new resolve to improve its research capabilities in general, and those of the Law School in particular.

The implementation of the University's plan to create a major legal research facility began with the appointment of a new Law Librarian, Professor Roger Jacobs, formerly Librarian of the United States Supreme Court.

Since August 1985, the Law Library has hired its first full-time professional cataloger and two additional research librarians with legal training. Online database services at the Law Library have grown from four to eight; these database services now provide improved access to statutes, regulations, case law, and law journal articles; they also cover materials in the major U.S. law libraries, news services and scholarly publications related to law. In addition, the Law Library has been granted "selective depository" status for U.S. government documents.

Major tasks to be addressed at the Law Library include the expansion into the newly constructed addition (scheduled to be completed in August 1986). This addition will double the Library's capacity (bringing it up to 300,000 volumes) and greatly increase its ability to store information in microformats. Other tasks include reclassifying...
AUTOMATION continued from page 1

It is hoped that automation of circulation activities can be tested in 1987, with full replacement of the manual system by the fall semester of 1987 or spring of 1988. The remaining NOTIS subsystems for acquisitions and serials control should be installed during 1988. Thus by the fall of 1988, if all goes well, users throughout the campus -- indeed even off campus in some instances -- should be able to access detailed information on library holdings, loan records or even outstanding orders. Access to this information may be achieved from any one of numerous library terminals or from other compatible terminals or personal computers in offices or residences. Moreover, this access will be much more sophisticated than that permitted by the present card catalog. For example, Boolean searching of the database will be possible, permitting searches using combinations of key words, phrases or subjects.

The full implementation of NOTIS will bring to Notre Dame faculty and students a major improvement in access to library resources, significantly simplified and faster circulation procedures, and more accurate and timely library records and reports. Further enhancements of the system will undoubtedly occur in the years ahead. These may include further refinements in search capabilities, major expansion of the database to include materials not currently separately cataloged, and even gateways to external databases. While the details cannot be predicted at this point, the goal remains the same: to ensure the best possible library service to the University community.

The months ahead will be very busy ones for the University Libraries. Many individuals will in effect be carrying a double load: their regular work and the implementation of NOTIS. There is no doubt that there will be great pressures on current activities in many areas, particularly in cataloging, and that backlogs may develop. The times will test the patience of many in and out of the Libraries, but the ultimate benefits will without doubt outweigh any temporary inconveniences. In order to keep the University community informed, regular progress reports will be issued through Access and other media. In the meantime, specific questions and concerns should be addressed to the Director of Libraries.

Robert C. Miller

NEW ACQUISITION:
THE ROSETTA STONE

The University Libraries have acquired, from the British Museum, a full-scale reproduction of the Rosetta Stone.

The acquisition was made possible by a gift of an alumnus, Mr. Allan J. Riley ('57) of New York City.

The Rosetta Stone is a compact slab of black basalt which bears an inscription in three scripts and two languages, Greek and ancient Egyptian. The Egyptian text is represented both in hieroglyphs and in cursive script called Demotic. The inscription concerns the honors (including priestly privileges granted) bestowed on Ptolemy V by the temples of Egypt in return for services rendered by him to Egypt both at home and abroad.

The Stone was discovered by French troops during Napoleon's occupation of Egypt in 1799. It was subsequently brought to England in 1802 and has since formed part of the collections of the British Museum.

The Museum copy acquired by Notre Dame is an exact reproduction in black resin cast on a square
frame and has the characters highlighted in white. The Greek text is available in English translation in an accompanying booklet.

The Rosetta Stone was the means by which Thomas Young (1773-1829) and Jean-François Champollion (1790-1832) deciphered the ancient Egyptian hieroglyphs. This acquisition represents a significant addition to the University Libraries’ collection of materials on the history of writing.

David E. Sparks

THE NOTRE DAME COLLECTION

The Notre Dame Collection, located in the Department of Special Collections of the Memorial Library, is an historical collection of books, periodicals, faculty publications, student publications, periodical off-prints, theses, dissertations, brochures, announcements and reports published by or under the auspices of the University. This collection reflects the publishing productivity of the University and its personnel by preserving printed materials for historical purposes.

The collection is organized in four parts: monographs, serials and non-book media; theses and dissertations; off-prints; and pamphlets and ephemera. The greater part of the collection consists of the works of scholarship published by the Notre Dame faculty and graduate students (monographs, theses and dissertations, and off-prints) and printed documents reflecting the history of the University and its administration.

Growth of the Notre Dame Collection occurs through various means: gifts donated by the faculty or through University offices; works published by the University Press; and trade books ordered and purchased by the Libraries. The Notre Dame Report is the major information source used for the purchase of current faculty publications. Other sources are book reviews, approval plan books, news releases, etc.

Because the majority of scholarly publications by Notre Dame authors takes place through journals, more attention has been given recently to the growth of the Notre Dame off-print file. It is comprised of journal articles written by faculty members during their appointment at the University. Solicitation of these articles is made by the Department of Special Collections every year. This year, in addition to off-prints, copies of professors’ bibliographies have been requested. The response has been quite favorable, expanding the file to over 6,000 journal articles representing more than 1,500 faculty members both past and present. Thus far, 40 bibliographies have been added to this collection; these will be useful tools for identifying lacunae and indexing the collection. All faculty are requested to forward appropriate materials to the Department of Special Collections in the Memorial Library.

Theses and dissertations are the next most abundant source of scholarly publications. After a dissertation or thesis is approved by the Graduate School, a copy of the work is cataloged and automatically sent to the Notre Dame Collection. A non-circulating policy assures scholars of the availability of these works for research purposes. This part of the collection also includes other papers of historical interest that are part of University degree requirements.

Thanks to the support and generosity of the University community, the Notre Dame Collection is a complete and rich repository of scholarly works produced at Notre Dame.

Susan E. Saavedra

IRISH MANUSCRIPT UNVEILED

Some years ago a small codex volume was given to the University Libraries by the Reverend E. P. Lorigan of Chilton, Wisconsin. It contained a sequence of texts in the Irish script written in pen and ink on paper. Many of the pages of the little volume were
blank. Many of the pieces were signed in brief colophons (also in Irish script): William O'Foley.

Now, with the help of Father Padraig Ó Fiainnachten of the College of St. Patrick in Maynooth, we have a complete description of the contents of this interesting document.

A general description: 19th Century, paper, 15 cm. x 8.7 cm., 280 pp. (pp. 54-134 and pp. 222-280 blank), all unnumbered. The scribe: William Ó Foghludha. The dialect, possibly that of Tipperary. The scribe copied some parts and may have composed others. The second half of the document is closely related to Royal Irish Academy, Irish MS 23 L 10 written by a certain Thomas Meager in Killamory in 1833. Suggested dates for our MS: 1820-1850.

The contents: The Adventure of the Great Fool, 61 quatrains; A Description of the Pains of Hell, 17 quatrains; A Description of the Heavenly Palace, 9 quatrains; In Praise of the Blessed Sacrament, 5 verses; A Prayer to the Trinity by Father James Lawlor, 20 prayers to various saints; The Powerful King, 34 verses; Big Denis O'Daly, 8 quatrains; The Voice of the Rich is Sweet, 1 quatrain; John Mac Comnara's Air, 18 verses; This Jovial Ormond Court, 10 verses; The Golden Doctrine, 190 lines; A Reply to the Golden Doctrine (containing verses to the Ten Commandments), 232 lines; The Commandments of the Church and the Seven Capital Sins, 30 lines; and The Blind Man's Mirror, 235 verses.

Father Fiannachten's analysis is far more detailed than is reported here and includes the standard Romanization of the titles of the pieces, the Irish and English transcription of the incipits, and some appropriate notes. The manuscript is held in the vault in the Department of Special Collections.

David E. Sparks

INVASION OF COMPUTER SOFTWARE -- PART II

Since the enactment of the 1976 Copyright Act, much has been written about copyright as it applies to printed literature. Questions about whether computer software is protected by the Copyright Act have appeared mostly during the last two years. These discussions are providing some common understanding of the terminology and issues relating to copying computer software. For the purpose of this discussion, computer software represents subject-oriented application packages which support instruction (such as a program on Advanced Electricity). Still, a number of knotty questions need to be addressed:

How much of a computer program is covered by copyright?

Is the copying which is essential for running the program (debugging, or backup) a violation of law?

How are copyright laws interpreted regarding making copies of software for use in the classroom?

Is it legitimate in some instances to make multiple copies of a program, one for each individual in the class, as it is to make multiple copies of reading materials?

What are the implications of an institution purchasing one copy of computer software and placing it on a hard disk to be used by ten individuals via a multi-user network?

In other words, what are the legal uses of computer software?

There appears to be a consensus that computer software is protected by the Copyright Act but there is a lack of agreement on what the owner of the program can do with it once he/she has purchased the program. There also appears to be acknowledgement that there is widespread copying of computer software.

Why Widespread Copying?

There are many reasons why people copy computer software but three are most often discussed: (1) public ignorance, (2) no guilt associated with copying, and (3) high purchase price of programs. Even though many people are aware of copyright and photocopying issues, they do not seem to view copying computer software in the same light. Even though widespread microcomputer applications in higher education is a fairly recent development, ignorance is a poor excuse for copying software. Common sense should tell one that computer software is a creative work and therefore falls under the protection of the Copyright Act. Perhaps as more news stories appear concerning software publishers bringing lawsuits against "pirates" who copy computer software, public consciousness will be raised.

Even a heightened public awareness is no guarantee that copying will noticeably decrease. Many people simply do not feel it is wrong to make a copy for themselves or for class use. After all, they have been copying television programs at home on their VCR or swapping copies of purchased or rented movies with a friend. For many individuals, this behavior does not seem wrong and they copy without feeling guilty.

The cost of computer software is a factor in people's attitudes toward copying. Unlike having to purchase additional copies of a periodical article or a book, which are fairly inexpensive, com-
mercial software programs typically cost from $50 to $1,000. The high cost of computer software, coupled with the ease of duplication, certainly contributes to the temptation to copy.

Computer Software
Authors and Publishers Respond

Computer software authors and publishers have much at stake. According to Future Computer Inc., for every authorized microsoftware business package there exists one unauthorized copy, a situation that could cost U.S. vendors $800 million in lost revenue in 1985.

The problem publishers face is that high technology products are very costly to create. For example, Apple Computer's Lisa Personal Office System required 200-person years and $150 million to develop and market. Consequently, software publishing firms are taking more aggressive action against software copying violators by bringing suit to help recover development costs. The use of a lawsuit is intended to be a dramatic highlight to a broader campaign designed to make companies and educational institutions aware of the illegality and penalties involved in unauthorized copying of computer software.

More than 750 software publishers have joined forces and are supporting the Association of Data Processing Service Organizations (Adapso), which has brought suit against several large corporations for violating copyright agreements. Adapso is focusing its efforts on four "target" groups: professional software pirates who resell copied software for a profit, institutional copiers such as corporate and collegiate users, those who aid and abet piracy, and the casual home copier. Most emphasis so far has been on the first two groups, involving several $1 million suits brought forth by Adapso or individual software companies. Bringing suit against organizations is just one way of combating copy violators.

Alternatives for Protecting Computer Software

The Trade Secret Law, in some instances, has been used by software companies to protect computer software. To qualify for this protection, the software has to satisfy a number of factors including the provision that the software must not be widely known outside the owner's business. However, the use of access to software has changed significantly during the past few years. Advances in computer technology have changed computers from large, costly machines to small, less expensive table-top machines. This has made computers available to a larger segment of the population. Software to accompany these machines is also widely available and can be purchased over the counter and through the mail. Consequently, the Trade Secret Law may no longer be an effective method of protecting software.

Patents have also been considered for the protection of computer software. However, this method is widely used to protect computer software because the vast majority of programs do not meet the criterion necessary to receive a patent.

The limitations of trade secret and patent laws have resulted in software publishers relying on copyright laws for protection. The 1976 Copyright Act, as amended by the Computer Software Act of 1980, clearly extends copyright to computer software, particularly through changes in Sections 101 and 117. What is in dispute, nonetheless, is just how much and what can be copied under Sections 107 and 108 of the Act. Rather than detail the specifics of the Copyright Act and its applications, readers are urged to consult the sources listed, as well as other articles in the literature.

Some software publishers have turned to "copy protection" devices which involve the way the program is recorded on the disk. Ordinarily when a microcomputer copies a program from one disk to another, it expects the program it is copying to be in a certain form. However, a publisher using copy protection may put part of the program on the first track and part between the third and fourth tracks, or leave blank spots on the tape. By doing so, the computer will not be able to copy the program. The problem with using copy devices to protect software is that they may discourage the casual thief but will not withstand the efforts of the serious hacker. In fact, since some publishers are slow in providing replacements for damaged disks, software developers have already introduced two products called Locksmith and Nibbles Away which are programs that can be used to decode other software. Obviously, additional development will be necessary if "copy protection" is to work effectively.

In addition to declaring protection under the Copyright Act, many publishers have turned to license or user agreements which they consider binding on the buyer. In most cases the agreement has to be signed and returned before the buyer receives the program and related documentation. Many publishers feel such agreements provide them with added or better protection against unauthorized copying than what is available under the Copyright Act because acceptable use of the software is clearly spelled out. However, license or user agreements need to be entered into with caution by the institution because they may limit the institution's rights to far less than what is permissible under the Copyright Act.

License and user agreements may provide an acceptable alternative to copyright. In fact, many people would echo Sue Martin's comments on the topic which suggest that computer software should be given a category of a licensable or patentable product rather than copyrightable material.
What Higher Education Institutions Can Do

Every college and university should give serious consideration to the possible uses of computer software programs. The following steps may clearly reduce an institution's chances of copyright infringement litigation:

* Have legal counsel review standard licenses, agreements, and the Copyright Act to help determine the institution's rights.

* Create a written policy to be approved by senior management.

* Communicate the policy to all employees and post notices where appropriate.

* Conduct spot checks to determine if software has been properly acquired.

* Take action if piracy occurs when employees copy beyond the institution's rights.

Conclusion

Computer software is appearing in large quantities on most campuses. Since software is covered under the Copyright Act, and in many cases by a user agreement, it is important that a legal review be undertaken; that a written policy be communicated; and that librarians, faculty, and administrators work to protect themselves by copying within the legal limits for support of instruction and research on campus.

Ronald G. Leach
Indiana State University

Sources:


The Friends of the Library
IRISH DAY
Monday, March 24, 1986
7:30 p.m.
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