application REPORT

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# Automated Library Expandable Program Hebrew University of Jerusalem
## A.L.E.P.H

The re-unification of Jerusalem in 1967 resulted in reopening access to the Mt. Scopus Campus, the original site founded in 1920, of the Hebrew University in Jerusalem, thus enabling some of the faculties and schools, located in the new Givat Ram Campus, to be transferred back. Among them were the faculties of Humanities and Social Sciences. It was decided to build a new library to house the collections of the existing twenty three faculty, departmental and seminar libraries serving these faculties thus providing one integrated open-shelf library.

This program required the integration of the catalogues and collections of these various libraries. Since the libraries used different systems for shelf-marking and for subject access to the catalogues, it was decided to convert them all to Library of Congress classification for shelf-marking and to Library of Congress Headings for subject access

An analysis of the work involved in this project indicated that only through automation could the project be carried out and it was decided to convert all the catalogue records, some 220,000, to machine-readable form. Furthermore, as the Hebrew University has already developed its own data-base management system suitable for library information and management, it was only a short step to decide that, after conversion, the Mt. Scopus Library would become an on-line system for catalogue functions.

The libraries of the Hebrew University are typical of most large university libraries in their collections. Hebrew is actually only a small part of the catalogue, and most acquisitions in other languages are, like all university libraries, primarily in English. The 220,000 records in the data base are typical of almost any university library in the humanities and social sciences.

Developed by the university's software designers, using its CDC Cyber 74 and Cyber 720 computing centre, the data-base management system has several unique features. It utilizes a network of hierarchical files with variable length records, important for text updates. Operating under standard CDC operating systems (NOS/BE, SCOPE)

and under System Control Point, it provides efficient multi-user jobs enabling simultaneous on-line update and enquiry. It also includes a data dictionary which standardizes and facilitates the use of the system by both programmers and users.

Thus the original effort has developed into a comprehensive on-line library management system which provides for catalogue-searching, cataloguing and catalogue-maintenance as well as book circulation for all its users, readers and librarians alike. The system has some special features such as the capability of dealing with text written from right to left (Hebrew, for example) as well as left to right. In addition, only upper-case characters are used, no diacriticals have been entered and field tagging was kept very simple, without the MARC detailing of author type. Since the catalogue is intended primarily for on-line use, MARC detail was not considered necessary. Printed catalogues are provided for back-up and for general use but it is envisaged that users will be attracted to the readily available computer terminals for filing of entries as well as for enquiries and other updates.

# Functions of A.L.E.P.H

■ CATALOGUE SEARCHING
Catalogue entries can be accessed by author (whether main or added entry), title (as written, filing title, added titles), subjects (expressed in words) shelf-number, document-number (internal system record number) or by a special key (based on the title). The first three are intended for use by readers and include cross references, while the latter are for use by librarians (although this is in no way so restricted). Other access points such as publisher, series, DDC, UDC, could be easily created.

The search function begins with a query to determine the language



## Functions of A.L.E.P.H.

of instruction preferred by the user. From here the user enters the code of the type of access point by which he wishes to search (NA – authors, TL – titles, SH – subjects) and the beginning of the search term text. This opens the access point file and presents the entries on the screen with a sequence number. The list can be advanced by pressing F. When the appropriate entry is found pressing the sequence number brings to the screen short Catalogue entries (author – title – date – shelf number – document number) with sequence numbers which can also be advanced by pressing F. Pressing a sequence number and + brings copy information (location of each copy, whether in library or on loan, circulation status and other information), or the sequence number alone brings fuller catalogue information.

In order to narrow the initial search on the access points, the search term can include two separate character strings ("and" logic only), or a search for a character string anywhere in the text subject searches include full boolean logic on words.

■ CATALOGUING
This is the function of cataloguing new publications, adding copies or volumes or changing existing catalogue records.
Its important feature is that information already entered on file from previous records can be
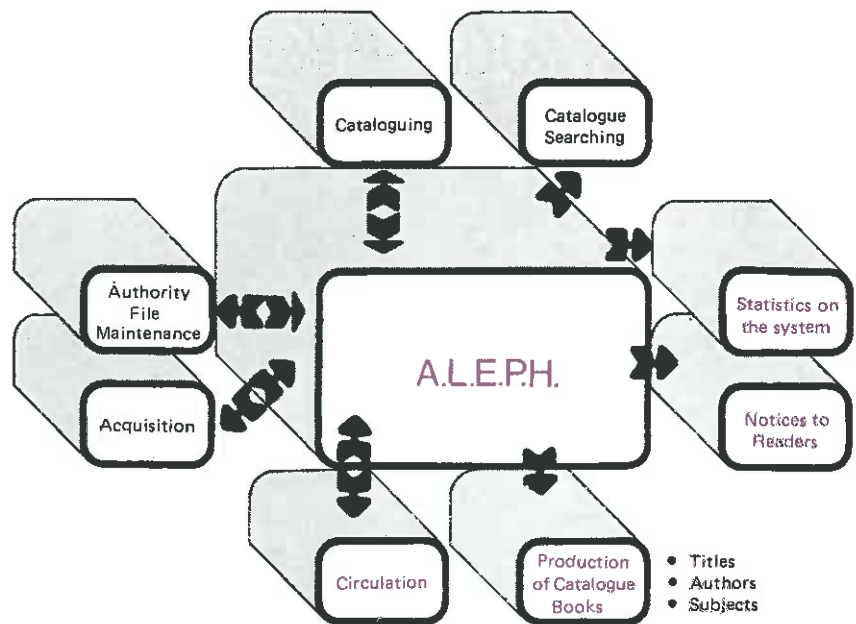
copied either as is or duplicated for modification thus preventing typing errors.

Cataloguing is free-form (enter field code and text) and corrections can be made on a "draft" catalogue form. Details of the number of physical volumes create separate records for circulation purposes and are routed through a program for printing spine labels and bar code labels for each volume.

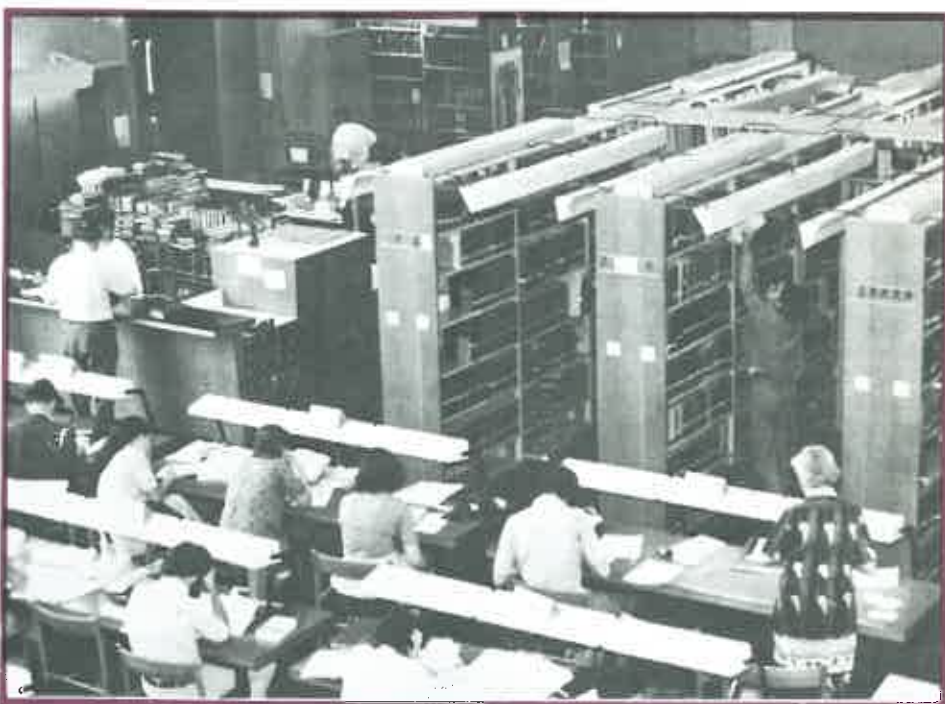### ■ AUTHORITY FILE MAINTENANCE

The access files of names, titles and subject headings are entities unto themselves, including much more information than the terms themselves. They also include cross-references and bibliographic notes for the use of the librarians. The ease of up-dating these files is an immeasurable improvement over manual methods of catalogue maintenance. Changing an entry in these files instantaneously changes the information of all the catalogue records to which it is linked. If it is ever proven that Shakespeare really was Bacon, one change of Shakespeare to Bacon will correct the hundreds of catalogue entries for which Shakespeare is an access. This ease of up-date was invaluable in correcting the typographical errors from the conversion process.

### ■ ACQUISITION

Short catalogue information can be entered when a book is ordered, together with the date, providing a simple follow-up of book orders. When the book is received this same catalogue entry is expanded to provide full cataloguing details. Budget encumbrances are not presently done by the system, nor are the book orders themselves, since these functions are centralized in the Jewish National and University Library, which is the central library of the Hebrew University.

### ■ CIRCULATION

Each book has been provided with a unique bar code. The bar code number is based on the system document number and added digits for physical volume. Each reader is also issued a card with a bar code label, and reading each of the bar codes registers the loan transaction. The date due is computed based on the loan status registered in the file, and a person searching in the catalogue is presented with immediate information on the actual location of each physical volume of a catalogue entry — if loaned out, when due, if on reserve, etc. Holds can be registered both for regular and reserve books.
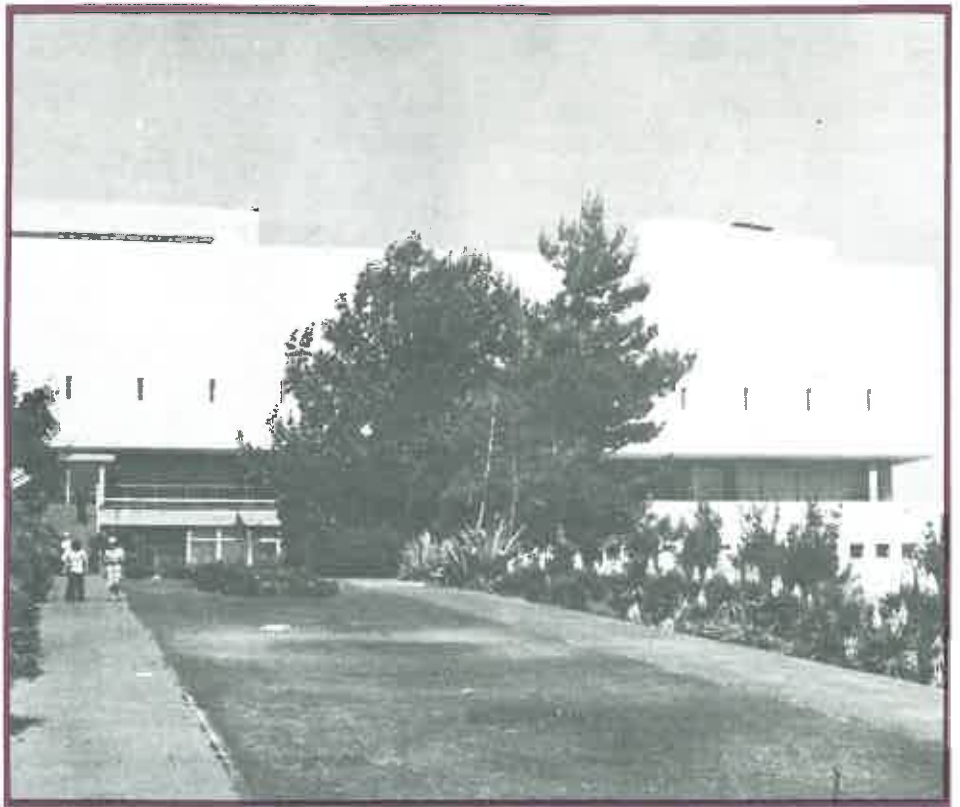
### ■ OFF-LINE FUNCTIONS:
1. Book catalogues —
   author
   title
   subject
   reserve collections
2. Spine and book labels
3. Notices to readers
4. Bibliographic lists
5. Statistical reports

Functions not yet present in
A L E P H, but which could be
developed, are book acquisition and
periodical check-in. Another
function yet to be developed is
bibliographic retrieval using a
combination of various fields in
the catalogue record. For example,
books on mathematics written in
Spanish published later than 1975.
Also, subject heading access could
be expanded to full text search.

A L E P H at its present capabilities
answers the specific needs of the
Mt. Scopus Library of the
Humanities and Social Sciences, for
catalogue search, cataloguing and
catalogue maintenance and
circulation. The need to provide for
these requirements was pressing,
since the library was planned for
opening in October 1980. Over the
next year A L E P H will continue
to be expanded at the Hebrew
University of Jerusalem.