## Judy Levi Answers Questions about Early ALEPH History (January, 2017)

(The questions are in red.)....

- 1. "When did you start at the Jewish National and University Library?"
- 1. I began working at the Jewish National and University Library as a full-time professional librarian in November 1966, in Serials Cataloging and Reference (they were headed by the same person and therefore considered one department).
- 1.1 After the unification of Jerusalem, following the <u>Six-Day War</u> of June 1967, the University was able to return to Mount Scopus. It was decided to merge the Departmental libraries of the Humanities faculty and the library of the Social Sciences faculty into a single library that would serve the teaching and research needs of the departments that were moving to Mt. Scopus. BTW, Education and Law also moved to Scopus, but retained separate libraries. As a reference librarian I was asked to supply information for the committee that was involved in planning the library building. Thanks to a book published in 1965: *Planning academic and research library buildings* / Keyes D. Metcalf.

Planning academic and research library buildings / Keyes D. Metcalf.
Keyes DeWitt Metcalf 1889-1983; Association of Research Libraries; Association of College and Research Libraries; c1965; New York: McGraw-Hill
I gained expertise, and became very involved in planning the building,

In 1968, upon retirement of Dr. Kurt Wormann, who had been director of the JNUL from 1947-1968, Dr. Israel Adler (no connection with Elhanan Adler) was appointed as library director, and I was appointed to the position of Assistant for Planning and Development, to work with him on various projects, including automation. I was sent, by the library, to study Systems Analysis. The university engaged the services of a management consultant firm (Cresap, McCormick and Paget) to present a proposal for organization of the JNUL, with an eye to introducing automation. I was assigned to work with the management consultant, accompanying him as librarian and translator. We spent months interviewing librarians and wrote very detailed reports and recommendations. I gained a tremendous amount of knowledge of all library processes.

We very much depended on the requirements and desires of the Mt. Scopus Library for the Humanities and Social Sciences for input for requirements and for testing the system.

1.2 We did a full analysis of the library departments and processes (which gave me excellent background for my work in ALEPH, certainly better than my Library School studies did). So, although I had been working as a cataloger (and in reference) I gained deep knowledge of all library processes.

2. "Did Hebrew University Library or Jewish National and University Library (-- they were separate, right?) have any automation *before* ALEPH?

There was no "Hebrew University Library", only the "Jewish National and University Library" which served as both the National Library and as the research library for the

Hebrew University, mainly for Humanities, partially for Social Sciences, and hardly at all for the Sciences. The university had many libraries (some at the faculty level, most at the department level) in addition to the Jewish National and University Library.

Yes, there was some automation before ALEPH.

- 1. A punched-card circulation system was implemented. The JNUL had (and has) a closed stack system. The first time a book was requested for loan a punched card with short author/title information was prepared and inserted in a book pocket. Readers were issued a reader badge. The reader badge (10 columns) and book card (70 columns) were fed into IBM data collection equipment and taken daily to the university's computing center, to produce printouts of items on loan and print requests to return due items.
- 2. Automation was initiated at the university's Medical Library before ALEPH was initiated. Knowledge and experience were gained.

\_\_\_\_\_

3. Clearly, since you had books in both Hebrew and English, you needed to have multi-language capability, but you didn't necessarily need to be following MARC. What was behind that decision? Was that decided on before the ALEPH project, after the ALEPH project was in progress, or, at the same time, as part of(?) the ALEPH project.

MARC was carefully studied several years before ALEPH, and initially was **NOT** used in ALEPH. We used mnemonic codes for fields,

From 1969-1971, when there were plans for automating the JNUL, a team of three, made up of myself, an additional librarian whose expertise was cataloging (who studied systems analysis at the same time I did) and a computer person thoroughly studied Henriette Avram's "Final Report of the MARC Pilot Project", and came to conclusions that were basic to development of ALEPH

- 1) the MARC breakdown of heading type was more sophisticated than need be, and would be too difficult for librarians;
- 2) Punctuation between fields was redundant, programs could insert the required punctuation
- 3) The initial version of ALEPH did not use MARC fields, and was much simpler than MARC; documentation is available in the first manuals we produced, which are probably in a basement somewhere; here is what I remember:
  - a. AU main author, personal name
  - b. SB main author, corporate
  - c. CO main author, conference
  - d. TL title
  - e. PT parallel title
  - f. ST subtitle
  - g. PZ statement of responsibility
  - h. PL place of publication
  - i. PB publisher
  - j. YR year of publication

- k. FY filing year (required for Hebrew publications where YR was expressed in the Hebrew form of characters, and not in Arabic numerals; also used for reprints
- 1. NB bibliographic note
- m. NN note
- n. AE added entry
- o. AT added title
- p. SH subject heading
- q. CN call number
- r. LC LC card number

MARC encoding was adopted as the standard and the bibliographic data was converted when it was realized that we could not market the system in North America if we did not conform to the MARC standard. WHEN did this happen? I cannot date it.

4. I've always really liked the edit\_field / edit\_paragraph / edit\_doc structure. It's simple but tremendously flexible and powerful. Do you remember when it was introduced into Aleph? Was it your idea or Yohanan's or xxxx's?"

"Ideas" originated with one person only in a very raw state. Development and decisions were a team effort, and in the first years, when the Mt. Scopus library was the only and then the main user, Mt. Scopus requirements and desires influenced the development. Moreover, Mt. Scopus was the testing ground.

edit\_field / edit\_paragraph / edit\_doc structure must have been quite early, but I don't remember when.

In general, the original ALEPH system, which ran centrally on a CDC mainframe computer, was a hard-coded system where everything was set in the programs. Yohanan got tired of making changes (at the whim of the librarians), and when the system was re-written for Digital VAX computers, there was a shift to a table-driven system where the libraries gained more control through the configuration in tables.

5. Does "1978" sound to you like the correct date for the start of the ALEPH Project?

Yes, 1978 is correct. My daughter was born in February that year and I remember a meeting in my home while I was on maternity leave with the Dr. Elisheva Yaron (who was appointed to be the person in charge of organizing the amalgamation and move of the various libaries to Mt. Scopus. Operation of the new library was expected to take place in fall 1980, but it was postponed to fall 1981.

6. You say: "when we met with CDC in Minneapolis/St. Paul in March 1981". I'm curiously exactly who, from the Hebrew University side, was present at this meeting.

We were three, Yohanan and myself from the Hebrew University, and Seffi Ben Yosef from the Israeli office of CDC.

Which puts me in mind of another source person if you are interested in going back to pre-Ex Libris days.

The ALEPH project started with a group of employees (programmers and a systems analyst) from the Organization and Methods Dept. of the Hebrew University and myself (a systems librarian) from the Jewish National and University Library, which at that time was part of the university. The O & M Dept was headed by Avner Navin. When the Aleph-Yissum company was set up he retired from the University and took the position of director of Aleph-Yissum. He remained in this position until the amalgamation of Aleph-Yissum and Ex Libris, at which time Udi Arad from Ex Libris took over as general manager. [See <u>Avner Navin</u>: My part in the history of Ex Libris (1978-1999).]

## 7. Who picked the name "ALEPH"?

Since all the other systems that we knew about at the time had an acronym - e.g.

WLN - Washington (state) Library Network

**ULISYS** - University of Toronto

DOBIS - Dortmund University, developed and marketed by IBM, renamed DOBIS/LIBIS when functions were added the Leuven University

we figured we should have a name as well. The name "ALEPH" was the brilliant suggestion of Daphne Spruch, Yohanan's wife. We played around with words to fit the acronym and came up with Automated Library Expandable Program Hebrew [University]. We didn't add "U" for University because we liked "ALEPH" and didn't like "ALEPHU"! We justified "expandable" by saying that it did not yet include all the functions. The system was named quite early, certainly the name was in existence when we met with CDC in Minneapolis/St. Paul in March 1981, in order to convince them that they should list it in their marketing material as software that could be used on CDC computers.

## 8. Order of development of functions

Looking at this again, I have to re-order it.

- 1. Cataloging + Authority control
- 2. Catalog search
- 3. Circulation + Reserve Reading
- 4. Journal prediction and check-in
- 5. Acquisitions + Budget control

From the outset we had **authority control**, because of the design of the file system --- it was a hierarchical database. All access points to the bib record were held separately, and not in the record itself, with pointers from the access point (author, title, subject) to the bib record and in reverse, from bib record to the access record. Therefore, correcting an access record automatically "corrected" all related bib records. When we we doing massive conversion of card catalogues this provided a

tremendous advantage for record correction. "See" x-refs was a method of achieving corrections. Later on (when? maybe with the move to VAX? don't remember) the hierarchical database structure was dropped, because fast search performance became more important than storage space.

Although **reserve reading** didn't have an interface for the faculty, we did achieve access by course and instructor simply by adding them to the bib records.

I don't actually remember, but taking into account the administrative setup of **journals** and **acquisitions** (ordered through the National Library but sent directly to the Mt. Scopus library), I think that journal prediction and check-in probably pre-dated acquisition control.

**Integrated system** - from the outset, basic to the functional design.

I probably wrote the CDC blurb ( 1980-ca-Automated-Library-Expandable-Program-HebrewU.PDF ).