CHARLES BABBAGE INSTITUTE
NEWSLETTER
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THE CENTER FOR THE HISTORY OF INFORMATION PROCESSING

Developing Research-Grade Oral Histories

Oral history is a research tool that careful historians approach cautiously. Some have dismissed its research value entirely, pointing out that oral history is tainted because it is inordinately skewed by the biases of both interviewer and interviewee and by its removal in time from the events being discussed. Among historians of modern events, however, it would be unlikely to find a program of research that does not rely on personal interviews to some extent. Where there are too many traditional records, oral interviews can quickly focus the direction of research. Where there are too few records, oral interviews become the principal means of acquiring historical information.

Oral history has been denigrated by researchers largely because so much poor work has been done under its name. The term "oral history" itself is ambiguous; it has included everything from a historian's interviews of research subjects to group reminiscences. The most important issue for scholarly research institutions is whether the problems and expense of oral history can be justified by its research value.

That topic recently was the focus of discussion at CBI's last Program Committee meeting. The Institute has been involved in an oral history program for five years, and has amassed over 100 interviews conducted by CBI staff, other historians engaged in research, and professional groups in the computer industry. This experience, coupled with input from researchers, has enabled CBI to chart the boundaries of its own oral history program.

Five interrelated elements guide the production of interviews conducted by CBI staff. While some of them are controversial among those who regularly produce oral histories, CBI feels that these criteria will ensure the development of "research-grade" interviews:

1. **The research value of the interview is the most important criteria in determining whether or not to conduct an interview.** While oral history can be justified on other grounds, CBI is most concerned that an interview have the potential for use by many researchers.

2. **Oral history is not justified when information is easily obtained from other sources.** Oral history is most effective when it fills information gaps that are left when more traditional records cannot be found or when they never existed. Generally, an oral history will only be conducted when other means of documenting a historical subject have been exhausted.

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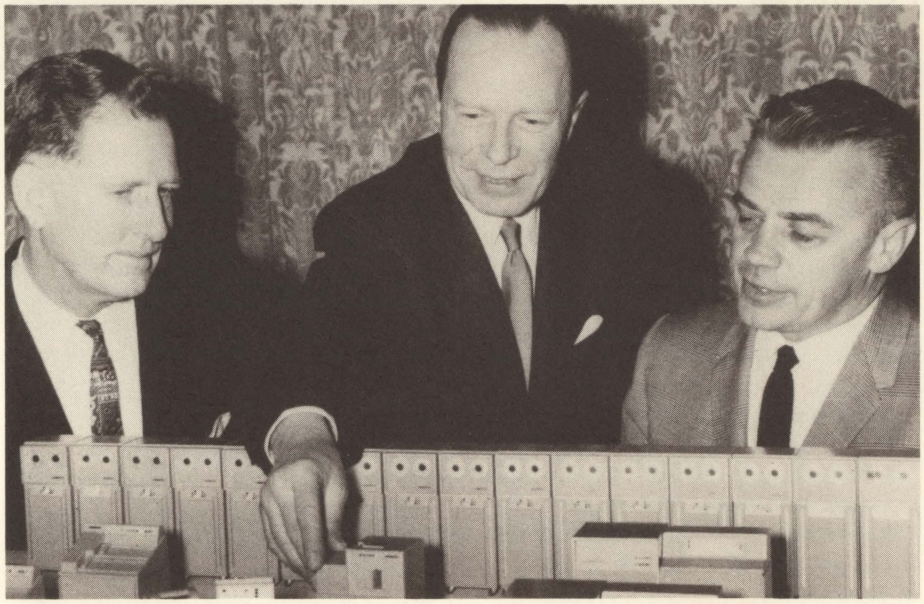
FROM CBI'S PHOTOGRAPH COLLECTION



Ray R. Eppert, former president of Burroughs Corporation, James R. Bradburn, and Ken T. Bement gaze upon a model of the Burroughs' B5000 computer systems in this 1961 photograph from CBI's collection. The achievement and impact of the B5000 was the subject of a one-day session sponsored by AFIPS and the Burroughs Corporation. Over twenty individuals responsible for the development and marketing of the computer attended the session last September. CBI is involved in preparing a transcript of the proceedings, which will soon be made available to researchers and others interested in the history of this important computer.

The Charles Babbage Institute Annual Report 1984-85

During the past year, The Charles Babbage Institute expanded the scope of its activities, focusing on two primary objectives:

- identifying and preserving the documents that chronicle the history of computing
- expanding a base of research to enhance the quality of international archival efforts

To achieve these objectives, CBI initiated a series of discussions with archivists, curators, historians, and computer scientists on archival questions, and appraised archival holdings in different settings. We reported on our findings and prepared multiple coordinated proposals for new initiatives. These initiatives will result in the addition of many collections in archives around the country, and, as a whole will constitute the United States' contributions to this international enterprise.

NEW INITIATIVES

Understanding and appraising records for the history of computing: A national problem—A national solution

Even though there has been a recognition since the mid-1950s that the Information Revolution was forming, the records needed to provide an historical perspective on the revolution have not been collected, analyzed, or evaluated in a systematic and thoughtful manner. CBI's most important activity of the past year was to initiate a plan for understanding and appraising these records. The plan involves a major, multiphased program to assemble the necessary information for establishing an effective collecting strategy that will involve a national network of archivists, curators, historians, and computer scientists.

The objectives of this three year effort include:

(1) Providing sufficient historical analysis to facilitate the identification of appropriate records that adequately describe the development and application of the digital computer;
(2) Assessing the universe of records, both those already in repositories and those still in private hands;
(3) Developing appraisal guidelines that can be used in all the different personal and institutional situations in this history; and
(4) Evaluating the methods used and the reports produced and, subsequently designing a National Collection Strategy to appraise and preserve the necessary documentation for research into the history of this new technology.

Corporate Records: Defining the Problem

Corporate records were a special focus in archives research this year. Included among CBI's initiatives were a symposium to analyze the issues, and a unique field test accomplished with the cooperation of a major corporation.

- Documentation Workshop

As part of its archival mission, CBI, with the support of the National Endowment for the Humanities, convened a workshop to analyze one aspect of records of the computer industry. A group of computer scientists, historians, archivists, and records managers assembled in Minneapolis to examine the nature and availability of technical records in computer businesses. The details of the inventiveprocess in the development of computers, the nature of the records generated in this process, the similarities and differences of these records from records of earlier technological developments, historical issues in computing that are similar to historical issues involving other technological developments, and the problems with accessibility to the records were evaluated. Recommendations for future CBI initiatives were determined and are being evaluated.

- Sperry Corporation and CBI: A Joint Project

CBI and the Defense Systems Division (DSD) (now known as the Computer Systems Division, of Defense Products Group) of the Sperry Corporation organized and pursued a project to assess the historical records of this division and its predecessors in the Minneapolis-St. Paul area during the period of 1945 through 1960.

A survey of records transfer forms gave CBI enough descriptive information to select from 17,000 boxes of materials 350 that seemed to hold the most promise of containing historically valuable material. The contents of each box were examined, and notes were made describing the records, their inclusive dates, an assessment of value, and any discrepancies between the information in the survey forms and what the staff actually found. After that process, the staff started over and carefully scanned the shelves for older material that might have been missed. During this second inspection, nearly 1,500 more boxes were examined.

The project identified records of historical value. These were brought to the attention of Sperry personnel, and plans are being made for their preservation.

Historical Research

With support from the National Endowment for the Humanities and the National Science Foundation, archival and historical research is underway on the origins and influence of Engineering Research Associates (ERA). Entitled "Computers and Commerce: A History of the Role and Influence of ERA," this study will trace the interaction between ERA and industrial, governmental, and academic scientists, engineers, entrepreneurs, and managers engaged in computer research, development, and marketing. This will be a case study of the relations between government and high-technology industry in the post World War II period. The work will result in two major products: the newly acquired and processed manuscript collections and oral histories; and a scholarly history that will characterize the strategy and structure of ERA. An emphasis will be placed on how this firm developed its concepts and allocated resources for research and development, historical significance of ERA, the diffusion and reception of new knowledge having its origins in ERA's activities, and the role of government in this firm, and, by extension, its role in the developing computer industry.

Providing the Tools for Research

A new accessioning system for oral histories and a biographies file were created. Along with the accessioning system for oral histories came increased attention to CBI's inventory of oral history tapes and transcripts. Ninety-five oral histories ex-

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CBI COLLECTION ACQUISITIONS IN 1984-85

The following is a list of collections donated to CBI during the past year. CBI is grateful to the individuals who donated these records, and encourages inquiries about the research use of the collections.

Curt Anderson, Burr-Brown. *The Orbit* (ERA), 1952-1954.

Association of Women in Computing — Twin Cities Chapter. Records, 1982-1984.

Auerbach Publishers. Near-print records and photographs, ca. 1953-1974.

Computer Sciences Corporation. Near-print records, 1958-1970.

Arnold I. Dumey. Near-print records, 1949-1955.

Peter Freeman. Near-print records, 1961-1970.

General Mills, Inc. Photographs, 1959-1962.

Richard B. Heydinger. EDUCOM records, 1971-1977.

Carl Hammer. Papers, 1955-1983.

John Hamblen. Reports, 1960-1984.

Honeywell, Inc. ENIAC trial exhibits, 1964-1952.

George T. Jacobi. Photographs and near-print records, 1948-1959.

Kenneth Kolence, Boole & Babbage, Inc. Near-print records, 1947-1977.

Robert B Leisy. Near-print records, 1959.

Mae Stone Martin. Noel T. Stone papers, 1948-1975.

Massachusetts Institute of Technology. Near-print records, ca. 1959-1963.

Calvin Mooers. Papers, ca. 1930-1975.

Frank C. Mullaney. Near-print records, 1949-1968.

Paul M. Pair. Papers, 1962-1985.

Warren J. Pelton. Film, ca. 1960.

Wesley C. Simonton. Near-print records, 1960-1975.

Rick Smith. Near-print records, 1947-1963.

Dolan H. Toth. Near-print records, 1957.

Konrad Zuse. Photographs, 1936-1984.

CBI ARCHIVAL MATERIALS ON NON-U.S. COMPUTING

CBI is one of the few U.S. repositories which holds materials about the international development of computing. Our government collection includes reports from the Office of Naval Research branch office in London prepared in 1958-1961, 1967, and 1971. These include notes and longer reports on individual computers, companies, and conferences throughout Europe, and an extensive review of the British computing environment as of 1967. Our Product Literature Collection contains sales and marketing literature on products and companies of Canada, England, France, Israel, Italy, Japan, Netherlands, Scotland, Sweden, and West Germany.

However, most of our relevant materials (approximately 10 linear feet) are in our International Computing Collection. A file level listing is given below.

We would be pleased to hear from people who wish to use these materials, or who would like to donate additional materials to CBI.

CBI INTERNATIONAL COMPUTING COLLECTION

Britain

National Lending Library for Science and Technology, volumes 3, 4, 1961, 1962 (incomplete run).

G. M. Barratt, ed. *IBM at Hursley; The First 25 Years—A Festschrift,* 14 articles, separately bound, 1983.

National Physical Laboratory. Publications on the Automatic Computing Engine, 1948-1958.

EMI Electronics. Manual for the EMIDEC 2400 computer, April 1961.

Ferranti, Ltd. Manuals on Pegasus, Perseus, Orion, and Atlas, 1956-1960.

M. Wilkes. "Report on the Preparation of Programmes for the EDSAC and the Use of the Library of Subroutines." Cambridge University Mathematical Laboratory, September, 1950.

"Introduction to Programming for EDSAC 2." Cambridge University Mathematical Laboratory, August, 1957.

"Report on a Conference on High Speed Automatic Calculating Machines," 22-25 June, 1949. Cambridge University Mathematical Laboratory, January, 1950.

D. R. Hartree. *Differential Analyzer*. Permanent records of research and development, Ministry of Supply, 1949.

Marconi. Radar systems product announcement, 1970, MYRIAD III.

Computer Developments, Ltd. 1959 coding system.

Computer Consultants, Ltd. British computer installation enumerations, 1960.

ELBIT Computer, Ltd. Machine model description of ELBIT 100.

Elliot Brothers, Ltd. Manuals for Elliot 402E & F, 503, 803, 1958-1960.

Ferranti, Ltd. Atlas computer manuals, 1960-1963.

Ferranti, Ltd. Mercury computer autocode manuals, 1957-58.

Ferranti, Ltd. Sirius computer manuals, 1959-1961.

Ferranti, Ltd. Miscellaneous manuals, 1959-1963.

IBM/UK. PL/I Syntax and TSO Evaluation, 1957, 1966, 1972.

International Computers and Tabulators, Ltd. 1301 brochure, Orion brochure, 1963.

International Computers, Ltd. 1900 manual, news releases, 1968, 1971.

National Physical Laboratory. Papers presented at the First International Conference on Machine Translation of Languages and Applied Language Analysis at NPL, 1961.

National Physical Laboratory. Symposium on the Mechanization of Thought Processes, 1958. International Conference on Languages, 1961.

Infotech State of the Art Report II—Software Engineering, 1972.

UNESCO Reports on some computer problems studied in England.

Ole Immanuel Franksen. "The Uses of Macroprogramming Languages in Power System Design and Operation," presented at conference on Analytical Methods for Power System Design and Operation for Use with Digital Computers, University of London, September 1963.

A. F. Parker-Rhodes and Members of the Cambridge Language Research Unit. "A Lattice Model of Syntactic Description," July 1961.

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I. A. D. Lewis. "A Symbolic Method for the Solution of Some Switching and Relay-Circuit Problems," Institution of Electrical Engineer Proceedings, May, 1951.

Gabriel Horn. "Some Neural Correlates of AttentiveBehaviour", International Congress on Human Factors in Electronics, 1962.

France

Y. Bar-Hillel. Paper on decisions in natural languages, 1959.

Courrier Bull. Summary of Computer Industry in France, 12, 1958.

Companie Des Machines Bull. Gamma 10 manuals and supplements.

Companie Des Machines Bull. Gamma 10 manuals and supplements.

Indices, lexicons, exposes of information on computer research, 1964-1969.

CNRS. Reports on information processing and research, 1961.

Preface to the 2nd edition of R.C. Croi, J.C. Gardin, F. Levy. *L'Automatisation des Researchers Documentaires, un Mobèle Genèral: le Syntol*, 1968.

Manual for the Lab 500 and prospectus for the 3400 System of the Société d'Electronique & d'Automatique, 1959.

UNESCO papers on language standardization. Conference, 1959.

Programmer's manual for the IBM 7040/44 installation at Grenoble, 1964.

Papers on list languages and problem solving from Grenoble University.

U.S.S.R.

Academy of Science of the U.S.S.R. Computer Elements and Systems, a collection of papers, 1964, 1965.

Academy of Science of U.S.S.R. Miscellaneous papers, 1956-1958.

U.S. Department of Commerce reports on foreign developments in machine translation and information processing, 1961-1962.

Miscellaneous papers on machine translation, 1958.

Surveys on coding theory, switching theory, and logical design in the U.S.S.R., 1964, 1967.

UNESCO reports on computers in U.S.S.R. in the 50's.

Air Force sponsored studies on computer science developments in the U.S.S.R., 1965-1971.

Department of Commerce studies on computer developments in U.S.S.R., 1958-1962.

Miscellaneous studies and reports on computer developments in U.S.S.R., 1957-1962.

Naval Research reports on computer developments on U.S.S.R., 1958.

Eastern Bloc Countries

Czechoslovakia:
Reports on the computing center of the Slovak Academy of Sciences and developments in machine translation and processing, 1962.

East Germany:
Reports on computer development by the U.S. Air Force, 1970.

Hungary:
Reports on computer developments by U.S. Air Force, 1970.

Poland:
Report on computer system by U.S. Air Force, 1970, and a paper from the Computational Linguistics Conference, 1965.

Romania:
Reports on computer problems, 1959, and studies from the International Linguistics Conference, 1967.

Yugoslavia:
U.S. Air Force report on an accounting computer, 1970.

Japan

Reports on Fujitsu systems and products.

Reports on Hitachi systems and products, 1958, 1959.

UNESCO reports on some computer problems in Japan.

Miscellaneous studies on mathematical and computing problems in Japan, 1959-1973.

Miscellaneous

Australia:
Documentation of Australian Computer Conference, 1969.

Proceedings from the Conference on Data Processing, Australia, 1957.

Reports on equipment and problems in computing, Australia, 1955-1978.

Reports and studies in computing at Sydney University, 1960-1965.

Brazil:
Monographs on computer science, 1978-1979.

Canada:
Ferut Library routines and program notes, 1953-1956.

Papers and manuals from the University of Toronto's Computation Center, 1950-1958.

Manuals and papers from other Canadian school and projects, 1955-1969.

China:
Papers on machine translation and computing in China, 1962-1975.

International Surveys

Reports on the European computer technology, 1961, 1971, 1974.

Israel Hebrew University papers and reports, 1960-1964.

Other reports on computer developments in Israel.

Computer bulletins, South Africa, 1958-1960.

Report on computers, Turkey, 1960.

International Repertory of computational laboratories, 1961.

ALGOL Bulletins, Netherlands, 1959-1964.

Reports on European computer developments, 1966-1980.

IBI-IBC Newsletter, Italy, 1973-1976.

International Federation for Information Processing Congress 1965 and 1974.

International Conference on Computational Linguistics. Papers, 1965.

International Conference on Information Processing, UNESCO House, 15-20 June 1959.

International Conference on Scientific Information. Registration List, November 17-21, 1958.

Notes by Ted. F. Silvey. AFL-CIO on seminars and meetings held in Europe in September and October 1958 on electronic data processing.

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P. I. Berman. "Survey of Computer-assisted Writing and Editing Systems," NATO Advisory Group for Aerospace Research and Development, July, 1977.

Nelson Blachman. Office of Naval Research-London Branch Office, Technical Reports, 1959-1960.

J. Cowie, J. W. Hemann, P. D. Maycock. Office of Naval Research-London Branch Office, Technical Reports, 1967.

CBI Director Invited to Norwegian History of Technology Seminar

At the invitation of the Teknologihistorie-seminaret, Arthur Norberg visited Norway to deliver lectures on the history of electronics and data processing. Each year the seminar, which draws participants from all over Norway, focuses on a single area in the history of technology; this year the topic was data processing in Norway. The speakers described data processing from the punched card era to the organization of contemporary firms. Norberg delivered an address on historical issues in data processing from an international perspective. In addition to attending the two-day seminar, Norberg spoke to a group at the University of Oslo engaged in a national project on the history of electronics in Norway. This presentation reviewed developments in the United States from 1900 to the present as comparison data for the Norwegian study. During the course of his visit, Norberg was able to visit and talk with founders of several of Norway's computer companies.

RECENT PUBLICATIONS

- Howard Gordon, *The Mind's New Science: A History of the Cognitive Revolution.* (New York: Basic Books, 1985). $22.50. ISBNO465046347.

An analysis of cognitive science that is based on history of several specific disciplines in the field: artificial intelligence; linguistics; neuroscience; psychology; philosophy; andanthropology. Excellent bibliography.

- Michael S. Malone, *The Big Score: The Billion-Dollar Story of Silicon Valley.* (New York: Doubleday, 1985.) $18.95. ISBNO385183518.

A reporter's analysis of the development of microelectronics in Silicon Valley, using interviews, published reports,and earlier histories. This is the best book on the history of the valley to appear.

- W. R. Williams, ed., *Looking Back to Tomorrow.* (Wellington, New Zealand: New Zealand Computer Society, 1985.)

Essays on twenty-five years of computers in New Zealand.

- Michael R. Williams. *A History of Computing Technology.* (Englewood Cliffs, NJ: Prentice-Hall, 1985.) $34.00

A survey of computing from antiquity to IBM/360. Suitable as a textbook.

- Maurice Wilkes. *Memoirs of a Computer Pioneer.* (Cambridge, MA: MIT Press, 1985.) $19.95. ISBNO262231220.

The autobiography of one of Britain's most important computer pioneers.

- A. Michael McMahon. *The Making of a Profession: A Century of Electrical Engineering in America.* (New York: Institute of Electrical and Electronics Engineers, 1984.)

- Recent articles of interest in the history of computing:

Thomas J. Misa. "Military Needs, Commercial Realities, and the Development of the Transistor, 1948-1958," in *Military Enterprise and Technological Change.* Merritt Roe Smith, ed. (Cambridge, MA: MIT Press, 1985.)

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3. **Oral history must be conducted by informed interviewers.** Thorough research is essential prior to an interview; interviewers should be familiar with the range of information available on the subject of the interview. If this is not done, the oral history will likely duplicate information that is readily available elsewhere.

4. **Oral history must be focused.** Interviews that are too broad in scope will not contain sufficiently detailed information for historical research. Interviews that are too narrow may not relate to any other researcher's interests. CBI believes that the best interviews are likely to be produced within the framework of a project, such as a series of interviews on a particular computer application, company, machine, or other subject.

5. **Interviews must be made available to researchers.** This means that transcripts are produced for each interview and the interview will be opened to research as soon as practically possible. Currently CBI is improving the availability of descriptive information about its oral histories. The Institute has also relaxed the restrictions against photocopying transcripts of unrestricted interviews. This policy will give researchers easier access to much of CBI's oral history collection. Furthermore, interviews conducted by other researchers will continue to be solicited and accepted by CBI as long as they generally meet CBI's criteria.

The greatest impediment to an oral history program constructed along these lines is the cost involved. The Center for the History of Chemistry, whose program is similar to CBI's, estimated that processing costs alone amount to $350 per interview hour. CBI believes this to be a conservative figure. However, the current and near-future availability of "primary" sources in the history of computing is likely to be inadequate for historical research. Records from business and government (particularly previously classified documents) are difficult to secure, and many of those records will never become available to historians. Oral history is one means to get at "lost" information, but costs dictate that it be done only on a highly selective basis. In

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CBI's case, the decision to conduct an oral history is balanced between the potential of the interview for broad research use and the significance of the subject to the history of computing, as well as the subject's relation to CBI's own research interests. The result has been fewer but more usable interviews.

The scholarly debate about the value of oral history will undoubtedly continue. Yet, no amount of debate will deter researchers from using interviews if they are readily available and contain good information. As long as CBI is able to define and produce "research-grade" oral histories, the value of this program will be justified.

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ist in CBI. Over 60% of these are available for research; the remaining 40% are in various stages of processing and should be available soon. In the last year, nine new individuals were added to this list of subjects.

CONTINUING PROGRAMS

Chronicling Historical Developments

CBI has initiated a series of summaries of the major activities of the computing field in the years 1935 to the present, with good cross-indexing and verified lists of associated names and dates. Their purpose is to provide basic information about the growth of the field, the principal participants and relevant related contexts in a form suited to the needs of archivists and curators in making informed appraisal decisions.

Expanding Institute Archives

Three major collections were added to CBI's archives. Over 20 linear feet of machine manuals were donated by the Computer Sciences Corporations, and were added to the Near-Print Collection, CBI's largest inventory. Honeywell Corporation donated the ENIAC trial records from the Honeywell/Sperry Rand suit. With the cooperation of the MIT Archives, CBI acquired the papers of Calvin Mooers, including the records of the Zator Company. This is CBI's first acquisition of the records of a small business in the data processing industry.

Processing Collections

Processing of collections continued to ensure prompt availability of materials. Four records collections—Honeywell, CalComp, Association of Women in Computing (Twin Cities Chapter), and the Product Literature collection—received the most attention. Since the latter two of these continue to grow, they are considered active collections, and CBI maintains a working knowledge of their content. The CalComp and Honeywell collections are complete because of the topics they contain. Hence, a completed inventory was prepared for the CalComp vs. IBM litigation in this collection. Arrangement of the Honeywell materials has been completed and a complete finding aid will be produced in the near future.

Informing the Public

From its inception, CBI has maintained that knowledge is wasted unless it is shared. In that spirit, the Institute staff continued to distribute its quarterly newsletter to more than 3,000 people, published seven articles in regional and national periodicals, produced four new volumes in the CBIReprint Series, and provided editorial assistance to the MIT Press and the *Annals of the History of Computing.*

Eleven group presentations were made throughout the United States. Graduate courses were taught at the University of Minnesota and the Institute Reading Room was widely utilized by students and corporate representatives from local, national and international organizations.

Objectives for 1986

Short-range objectives for CBI are consistent with the long-range objectives noted at the beginning of this report. CBI staff will:

- continue its activities in archival collection and processing, collect oral histories, disseminate information, and provide background historical research;
- pursue the ERA project to complete related oral histories and the search for archival materials;
- coordinate activities among archives and museums that are necessary to initiate the National Collection Strategy. With sufficient funding, this multiphased program will begin in January, 1986.

FRIENDS OF CBI

CBI offers this special acknowledgement to the individuals listed below who support the programs of the Institute through their membership in the "Friends of CBI."

Patron Member: Mr. Walter M. Carlson

Sustaining Colleague Members: Mr. J. R. Woodhull, Mr. Charles A. Zraket.

Colleague Members: Mr. Robert D. Schmidt.

Participating Associate Members: Ms. Bernice Arnold, Mr. Morton I. Bernstein, Professor Joseph Bordogna, Dr. Allan G. Bromley, Mr. Don A. Christenson, Dr. Arnold A. Cohen, Mr. Charles A. Dickinson, Mr. Richard D. Dotts, Dr. Grady Early, Mr. Bruce F. Elchison, Mr. Robert P. Everett, Dr. John W. Fendrich, Professor Bernard A. Galler, Mr. Dr. George Gourrich, Mr. Alan Greenberg, Mr. Jerrier A. Haddad, Mr. J. Scott Hamilton, Commodore Grace M. Hopper, Dr. George Jacobi, Mr. Amos E. Joel, Jr., Mr. Kenneth W. Kolence, Mr. John W. Lacey, Professor Allen Newell, Mr. John E. Parker, Mr. Byron Phelps, Dr. Mina Rees, Ms. Rebecca Schatz, Science Museum of London, Mr. Andrew Scott, Dr. William Linder-Scholer, Mr. Aaron Seidman, Mr. Alfred W. Van Sinderen, Mr. Craig Solomonson, Professor Ryota Suekane, Mr. Garry J. Tee, Mr. Paul D. Weiser.

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CHARLES BABBAGE INSTITUTE
NEWSLETTER

The Charles Babbage Institute, The Center for the History of Information Processing, is sponsored by AFIPS and the information procesing community. Arthur L. Norberg, Director.

The Charles Babbage Institute *Newsletter* is a publication of the Charles Babbage Institute, University of Minnesota, 103 Walter Library, 117 Pleasant Street S.E., Minneapolis, Minnesota 55455, telephone (612) 376-9336. The *Newsletter* reports on Institute activities and other developments in the history of information processing.

MEMBERSHIP PROGRAM:

Your membership assists CBI's effort to assure the existence of an accurate record of the information processing field's evolution. If you are not currently a "Friend of CBI," please consider becoming one.

A Babbage Associate_____$30 donation_____besides supporting the work of CBI you will receive:

- the *CBI Newsletter*
- a 20% discount on the *CBI Reprint Series for the History of Computing.*

A Babbage Participating Associate_____$75 donation_____besides supporting the work of CBI you will receive:

- the *CBI Newsletter* and other occasional publications
- a 20% discount on the *CBI Reprint Series for the History of Computing*
- a years subscription of AFIPS *Annals of the History of Computing*; check the membership card if you already subscribe to *Annals* and we will extend it for one year.

A Babbage Colleague_____$250 donation_____besides supporting the work of CBI you will receive:

- the *CBI Newsletter* and other occasional publications
- one book of my choice from the *CBI Reprint Series for the History of Computing* and 20% discount on any other books from the Reprint Series
- a years subscription to AFIPS *Annals of the History of Computing*; check the membership card if you already subscribe to *Annals* and we will extend it for one year.

A Babbage Sustaining Colleague_____$500 donation_____besides supporting the work of CBI you will receive:

- the *CBI Newsletter* and other occasional publications
- two books of my choice from the *CBI Reprint Series for the History of Computing* and 20% discount on any books from the Reprint Series.
- a years subscription to AFIPS *Annals of the History of Computing*; check the membership card if you already subscribe to *Annals* and we will extend it for one year.

A Babbage Patron_____$1,000 donation_____besides supporting the work of CBI you will receive:

- the *CBI Newsletter* and other occasional publications.
- four books of my choice from the *CBI Reprint Series for the History of Computing* and 20% discount on any books from the Reprint Series.
- a years subscription to AFIPS *Annals of the History of Computing*; check the membership card if you already subscribe to *Annals* and we will extend it for one year.

I would like to become a Friend of CBI:

( ) Associate Member—$30 ( ) Colleague—$250 ( ) Patron—$1,000
( ) Participating Associate—$75 ( ) Sustaining Colleague—$500

( ) My company has a matching gift program or might be willing to support the work of CBI

My check for $_____ is enclosed payable to the Charles Babbage Foundation which is the support arm of CBI.
Current *Annals* subscriber: ( ) yes ( ) no

Name _____
(Please show Prof., Dr., Mr., Ms., as appropriate)

Title _____

Department _____

Organization _____

Address _____

City, State, Country _____ Zip/Postal Code _____ Telephone _____

I am interested in the history of information processing:

( ) From the standpoint of someone involved in information processing. ( ) Both of the above.
( ) From the standpoint of a practicing historian. ( ) For other reasons (Please state reasons).

_____

Return to the Charles Babbage Institute, University of Minnesota, 103 Walter Library, 117 Pleasant Street S.E., Minneapolis, MN 55455.

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Associate Members: Ms. Eva Anda, Mr. Paul Armer, Mr. Rolland B. Arndt, Dr. Morton M. Astrahan, Mr. Algonso C. Bellanca, Mr. John M. Bennett, Mr. David R. Brown, Dr. Tat-Hung Chan, Mr. Harvey G. Cragon, Professor Alvin M. Despain, Mr. and Mrs. John Diffenbaugh, Professor A. S. Douglas, Mr. John Dreyfus, Dr. G. A. Erskine, Professor Lloyd D. Fosdick, Professor Peter Freeman, Mr. Bruce Gilchrist, Mr. Gordon D. Goldstein, Professor Audrey Grosch, Mr. Carl Hammer, Mr. Jonathan A. Hill, Mr. L. C.Hobbs, Mr. Louis B. Horwitz, Dr. Ronald W. Hull, Dr. Melvin Kranzberg, Ms. Helen L. LaFlare, Professor Edwin Layton, Dr. Will E. Leland, Mr. Ronald A. May, Mr. Robert Mayer, Professor Robert J. Miller, Mr. William A. Minneman, Mr. Gary Mokotoff, National Federation of State Humanities Councils, Mr. Carl A. Niehaus, Mr. Jeremy M. Norman, Mr. Robert W. Pomeroy III Mr. John R. Riede, Mr. Tim Rowley, Dr. Linda C. Smith, Dr. Roland D. Spaniol, Dr. Joyce Statz, Mr. Thomas B. Steel, Jr., Mr. Robert Taylor-Vaisey, Mr. and Mrs. R. S. Webster, Professor Maurice V. Wilkes, Dr. Michael R. Williams, Professor Brian J. Winkel.

CHARLES BABBAGE INSTITUTE
NEWSLETTER

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