



The Charles Babbage Institute
 For the History of Information Processing
 Sponsored by AFIPS and the information
 processing community.
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The Charles Babbage Institute Newsletter

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ARCHIVAL CATALOGS AT CBI

In an effort to heighten further the awareness about archival materials located both at CBI and elsewhere, we begin with this article a series on the topic. Besides its own archival collections program, CBI tries to learn of relevant collections elsewhere. We have a number of finding aids and catalogs to external collections already and can direct our users to additional resources. Below is a list of the finding aids and catalogs now held by CBI. Future issues will describe the contents of particular collections, both at CBI and elsewhere. Other archives with relevant materials are encouraged to send their catalogs to CBI.

List of catalogs available at CBI of archival collections relating to the history of information processing:

CBI Collections:

Oral History Sources in CBI. This report contains information on over 40 oral histories held by CBI.

Corporations Historical Collection, Corporate Information 1951-1982. This collection contains information on more than 700 small and medium size computer companies. The materials in this collection are from Gordon Goldstein, Charles W. Hastings, and E. F. Somers donations.

Contemporary Scientific Archives Centre, Oxford:

Papers of William Renwick (deposited in University Library, Cambridge)

Papers of Albert Percival Rowe (deposited in the Imperial War Museum, London)

Papers of Christopher Strachey (deposited in Bodleian Library, Oxford)

Papers of Stanley Gill (deposited in the Library of the Science Museum, South Kensington, London)

Papers of Alan M. Turing (deposited in the Library of King's College, Cambridge)

Papers of Douglas Rayner Hartree (deposited in the Archives of Christ's College, Cambridge)

MIT Institute Archives and Special Collections:

Papers of Philip McCord Morse

Papers of Gordon Stanley Brown

Papers of Norbert Wiener

Records of Office of MIT President, 1930-1959

Records of the Office of the Dean, MIT School of Engineering, 1943-1972

Records of the Office of the Director, MIT Computation Center, 1950-1962

Technical Publications File, MIT Servomechanisms Laboratory, 1944-1968

Records of the MIT Department of Electrical Engineering, 1969-1973

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Arthur L. Norberg, Director of CBI, and Erwin Tomash, Chairman Emeritus of CBF, at the Annual Meeting of the CBF Trustees and Directors.

Photo by Paul Archibald

FIFTH ANNIVERSARY SYMPOSIUM

Over sixty people helped to commemorate the fifth anniversary of the Charles Babbage Institute by attending the Symposium held at Rockefeller University on October 6. The festivities included a tour of IBM's new exhibit on the history of computing, lectures by Dr. Joshua Lederberg, President of Rockefeller University, and Mr. Frank Vigilante, President of AT&T Information Systems, and a reception and banquet.

The following day the Charles Babbage Foundation held meetings at Rockefeller University of its Trustees and its Board of Directors.

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Records of the MIT Digital Computer Laboratory,
1944-1959

Reports of the MIT Steering Committee on Ac-
creditation, 1978-1979

Oral History Collection, Computers at MIT
Core Memory Records

Other Catalogs:

Manuscript Collections at American Repositories, pre-
pared by the Center for History and Philosophy
of Physics, American Institute of Physics

Harvard University Archives, Records of the Comput-
ing Center

New York Public Library, Manuscripts and Archives
Division, Papers of John Shaw Billings

Dartmouth College Library, Archives Department, Pa-
pers of George Robert Stibitz

Malassis Chauvin Collection, Paris, catalog of 442 ma-
chines including typewriters, dictating machines,
cash registers, office machines, adding machines,
abaci

Gesellschaft für Mathematik und Datenverarbeitung
MBH, Bonn, "Sammlungen zur Geschichte der
Datenverarbeitung," catalog of manuscript sources
in German speaking regions related to information
processing. It contains entries about the location
of documents, photographs, and mainframe and
peripheral historic machines, with a brief descrip-
tion of the contents of the collections.

Notes on Other Collections:

Library of Congress

Papers of Werner von Braun, to 1970
Papers of Herman Hollerith, 1860-1929
Papers of Vannevar Bush, 1932-1960
Papers of Alan Tower Waterman, 1918-1967
Records of DuMont Laboratories, Inc, 1930-1960

Wayne State University

Papers of Nat Granley, 1903-1969
Papers of Samuel Jacobs, 1939-1957

Engineering Societies Library, New York City, Rec-
ords of Tripartite Committee, 1950-1970

American Philosophical Society Library, Philadelphia,
Papers of Warren S. McCulloch

University of Illinois Archives, Champaign-Urbana, Pa-
pers of Heinz Von Foerster

University of Virginia Library, Charlottesville, Papers
of James H. Michael, 1966-1976

Stanford University Archives, Papers of George Elmer
Forsythe, 1938-1972

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containing the copied material is sent to the Institute.
The Charles Babbage Institute for the History of Information Processing.

CATALOGUE OF WILLIAM RENWICK'S PAPERS PREPARED BY CSAC

The Contemporary Scientific Archives Centre (CSAC), Oxford, has recently completed its catalogue of the papers of William Renwick. The catalogue, prepared by Jeannine Alton and Julia Latham-Jackson, provides an annotated list of Renwick's papers which have been deposited in the University Library, Cambridge University. Renwick was responsible for the direction and supervision of research and development in the Digital Computer Department at Cambridge University until 1958, was a member of the team which developed EDSAC, and held several management positions between 1958 and 1971 at the Plessey Company in the areas of computer and electronics research and development. Those with further interest should contact CSAC at 16 Wellington Square, Oxford OX1 2HY, England.

NEW CBI READING ROOM

With the number of visitors to CBI to use the archival facilities growing, the Institute has established a public Reading Room. The Reading Room is open Monday, Wednesday, and Thursday afternoon from 1:00 to 4:00, and at other times by prior arrangement. Professional staff are available to help locate materials, answer technical questions, and show how to use the various finding aids.

Because many of our materials are stored at another location in Minneapolis, and because it takes some time to find and collect materials, users are asked to give at least one day advance notice on requests to see materials. Requests to hear the tapes from the oral history collections (in addition to seeing the transcripts) should give at least a three day advance notice.

The archival collection includes oral histories, photographs, manuals and technical reports, product and company literature, and personal papers. Photocopy and photographic reproduction facilities are available. A schedule of charges and policies on archival materials are available from CBI upon request.

PAST ISSUES OF CBI NEWSLETTER

The Institute occasionally receives requests for back issues of the *Newsletter* from readers who wish to have a complete set. Since the first one was printed in 1979, the number of issues published each year has varied. For your information we have listed below the date, volume, and number of each *CBI Newsletter*.

Vol. 1, No. 1, 1 May 1979	Vol. 4, No. 1, 1 January 1982
Vol. 1, No. 2, 30 September 1979	Vol. 4, No. 2, 1 August 1982
Vol. 2, No. 1, 31 January 1980	Vol. 4, No. 3, 1 October 1982
Vol. 2, No. 2, 30 June 1980	Vol. 5, No. 1, 1 January 1983
Vol. 2, No. 3, 30 October 1980	Vol. 5, No. 2, 1 May 1983
Vol. 3, No. 1, 1 March 1981	Vol. 5, No. 3, 30 September 1983
Vol. 3, No. 2, 1 September 1981	

RESEARCH NEWS

Thomas M. Smith and Kent C. Redmond are preparing a book on SAGE. This historical study will concentrate on the research and development enterprise that designed the AN/FSQ-7 digital computer, which became the information processing center for SAGE. They are in the process of examining thousands of memos, technical reports, and letters that were generated during that time period. Information gathered from these sources will be supplemented by interviews. This work is a sequel to their book on *Project Whirlwind*, published in 1980, by Digital Press. For further information contact Professor Smith, History of Science Department, University of Oklahoma, Norman, Oklahoma 73069.



Paul Ceruzzi of Clemson University spent the summer at the Library of Congress and the Computer Museum verifying, annotating, and extending the list of the first one hundred digital computers. Ceruzzi's list was prepared from Martin Weik's famous surveys of computing machinery. The updated list will be used by the Computer Museum to plan its exhibits and acquisitions. For further information, contact Professor Paul Ceruzzi, History Department, Clemson University, Clemson, South Carolina 29631.



The Latin American Society for the History of Science was established last summer and now has 100 members. The objectives of the Society are the development of historical studies of science and technology in Latin America by promotion of the institutionalisation of learning and research in this field and the promotion of communication between historians of science through professional activity. The Council has representatives from Argentina, Brazil, Columbia, Cuba, Mexico and Peru. The president of the Society is Prof. Dr. Juan José Saldaña G., Universidad Nacional Autónoma de México, Facultad de Filosofía y Letras, Apartado Postal 21-873, C. P. 04000, México D.F., México.

HISTORY OF COMPUTING IN FINLAND

The following excerpts are taken from a report prepared for CBI by Mr. Pertti Jotuni of Finland. Mr. Jotuni has assembled a sizable private collection of computing artifacts and related documents, dating from the earliest devices to modern electronic machines. CBI asked him to acquaint us with activities in Finland. He described its more salient projects as follows.

Technological Museums

Material of interest from the viewpoint of the history of computing has been collected in the two existing museums of general technology in Finland, viz. in the Tekniikan Museo (TM) in Helsinki and in the Tampereen Tekniikan Museo in Tampere. Up to now there has, however, been no systematic trend to gather any special collections directed to this field. Today, the TM can unofficially be considered as the main museum of technology, and it is in a stage of active development. It is also regularly open to the public. The Tampereen Tekniikan Museo is smaller and it has, in the last years, led a rather quiet life.

As far as the TM is concerned, the situation is, however, improving presently since the KLY Museum Project is being intimately linked with the work of the TM. This project was started a year and a half ago by the trade association, Konttorikoneliikkeiden Yhdistys (KLY), The Association of Office Machine Trade, in Helsinki. The project is two fold: it aims, on one hand, at collecting old historical office machines and other related equipment to form a regular Museum of Office Technology. On the other hand, the project will result in the creation of a monograph on the history of office technology in general and especially in Finland, including a description of the first five decades in the history of the KLY. The book is due to be published by 1990 to celebrate the 50th anniversary of the KLY. The Museum of Office Technology will be inaugurated in connection with the Office Technology Fair Kt-84 in the Fall of 1984 in Helsinki. The inauguration of the Museum of Office Technology will celebrate the 50th Anniversary of Office Technology Fairs held in Finland.

The Museum of Office Technology is focused on office machines and equipment in general. But, since calculating machines of all kinds, office computers and later also desktop and handheld computers and calculators will become an essential part of its machine collections, the Museum will, to a certain extent, be playing also a limited role as a Finnish computer museum. It is this aspect, that lends it also some significance from the point of the history of computing and information processing.

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PUBLICATIONS

- Paul E. Ceruzzi, *Reckoners: The Prehistory of the Digital Computer from Relays to the Stored Program Concept, 1935-1945*. (Westport, CT: Greenwood Press, 1983). ISBN0313233829.

Ceruzzi discusses four of the earliest machine development projects: Zuse's activities in Germany; the Harvard Mark I; the Bell Telephone Laboratories' machine designed by Stibitz; and the ENIAC.

- James W. Cortada (compiler), *An Annotated Bibliography on the History of Data Processing*. (Westport, CT: Greenwood Press, 1983). ISBN0313240019.

This annotated bibliography contains almost 1500 citations divided into several chronological periods by subject.

- Engineering Research Associates, Inc., *High-Speed Computing Devices*. Vol. 4, CBI Reprint Series for the History of Computing. New introduction by Arnold A. Cohen. (Los Angeles: Tomash Publishers, 1983). ISBN0938228021.

This volume is a facsimile of the original edition published in 1950 by McGraw-Hill. Besides a new introduction, Dr. Cohen prepared biographical sketches for the principal people associated with the arrangements that led to the work.

- Recent articles of interest in the history of computing:

Marcia Ascher, "The Logical-Numerical System of Inca Quipus," *Annals of the History of Computing*, 5 (July 1983):268-278.

W. W. Chandler, "The Installation and Maintenance of Colossus," *Annals of the History of Computing*, 5 (July 1983):260-262.

Allen W. M. Coombs, "The Making of Colossus," *Annals of the History of Computing*, 5 (July 1983):253-259.

Thomas H. Flowers, "The Design of Colossus," *Annals of the History of Computing*, 5 (July 1983):239-252.

"John R. Pasta, 1918-1981, An Unusual Path Toward Computer Science." Memorial tributes to Pasta by several colleagues, with a bibliography of his writings. *Annals of the History of Computing*, 5 (July 1983):224-238.

"Special Issue: the IBM 701," *Annals of the History of Computing*, 5 (April 1983). Entire issue.

Alfred W. Van Sinderen, "Babbage's Letter to Quetelet, May 1835," *Annals of the History of Computing*, 5 (July 1983):263-267.

Michael R. Williams, "From Napier to Lucas: The Use of Napier's Bones in Calculating Instruments," *Annals of the History of Computing*, 5 (July 1983): 279-296.

Rina J. Yarmish and Louise S. Grinstein, "Brief Notes on Six Women in Computer Development," *The Journal of Computers in Mathematics and Science Teaching*. Part I - Winter 1982; Part II - Spring 1983. Ada Lovelace, Hopper, Avram, Sammet, Davis, Greibach.

TOMASH PUBLISHERS AND MIT PRESS AGREE ON REPRINT SERIES

Tomash Publishers and MIT Press have reached agreement for joint publication of the *CBI Reprint Series in the History of Computing*. Tomash Publishers will continue to work with the Reprint Series Editorial Board on acquisitions, selection of authors, and quality of historical introductions. MIT Press will be responsible primarily for copy editing, printing, advertisement, and distribution. The first two volumes under the joint venture, *The Moore School Lectures: Theory and Techniques for Design of Electronic Digital Computers and Calculating Instruments and Machines* by Douglas Rayner Hartree, will appear in Spring 1984. The first four volumes in the series will also be available through MIT Press.

ARCHIVAL MATERIALS DONATED TO CBI DURING 1982-83

Articles elsewhere in this newsletter provide descriptions of increased activity in the collection and processing of archival materials at CBI during this past year. Listed below are people and organizations who have contributed to the CBI archives in 1982-83. We wish to thank them for these donations.

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CBI ANNOUNCES PREDOCTORAL FELLOWSHIP FOR 1984-85

The Charles Babbage Institute is accepting applications for a Graduate Fellowship to be awarded for the 1984-85 academic year to a graduate student whose dissertation will address some aspect of the history of computers and information processing. Thesis topics may be chosen from, but are not limited to, the infrastructure of the information processing industry, and specific technological developments in the information sciences, including both hardware and software. Proposals which deal with the economic and organizational milieu of the developments, or with the economic, legal or social history of computing are especially encouraged.

Residence can be at the home academic institute, other research facility where there are archival materials, the Babbage Institute, or some combination of these. There are no restrictions on the location of the academic institution which will be the venue for the Fellowship. The stipend will be \$5,000 plus an amount up to \$2,500 for tuition, fees, travel, and other research expenses. Priority will be given to students who have completed all course work and have completed all requirements for the doctoral degree except the research and writing of the dissertation. However, even incoming graduate students will be considered. Fellows may reapply for up to two one year continuations of the Fellowship.

Applications should include biographical data and a research plan or design. No specific application forms are required. Applicants should arrange for three letters of reference, certified transcripts of college credits and GRE scores (or their equivalents abroad) to be sent directly to the Institute.

Applications for the Predoctoral Fellowship should be sent to The Charles Babbage Institute, University of Minnesota, 104 Walter Library, 117 Pleasant Street S.E., Minneapolis, MN 55455, U.S.A. by January 15, 1984.

CBI ANNOUNCES NEW PROFESSIONAL INTERNSHIP PROGRAM FOR 1984-85

CBI is accepting applications for a Professional Internship to be awarded for a period of three to nine months between June 1, 1984 and May 31, 1985. The Internship is available to professional staff interested in an introduction to the history of information processing. Appropriate applicants might include, but are not limited to, historians and social scientists interested in the history of information processing and its infrastructure, academics interested in preparing new courses in this history, or librarians and archivists interested in related archival problems.

Residence is required at the Charles Babbage Institute, on the University of Minnesota campus. Interns are required to conduct a research project under the direction of the Institute staff. Support services include desk, secretarial and photocopy service, and telephone budget for CBI-related activities.

The stipend for the Intern Fellowship is \$1,000 per month. Interns may receive additional outside support from government, industry, or academic institutions, but must devote their full time to the history of information processing while the Internship is in effect.

Applications should include biographical data, a statement of interests, a proposal of dates during which the Internship would be held, and the names, together with telephone numbers and addresses, of three references. There are no specific application forms.

Applications for the Professional Internship should be sent to The Charles Babbage Institute, University of Minnesota, 104 Walter Library, 117 Pleasant Street S.E., Minneapolis, MN 55455, U.S.A. by January 15, 1984.

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The TKL Project for the History of Data Processing.

This project, which is most compatible with the goals of the CBI, was also started a year and half ago by Tietojenkasittelyliitto (TKL), the Finnish Data Processing Association. The Association is a central organization in the country for the entire field of information processing. It keeps itself strictly out of any commercial interests and it works as a self-supporting, non-profit organization. The aim of the project is to collect and systematically organize all available documents and other information relating to the use of computers and the development of data processing in Finland, especially after the advent of first commercial installations in 1958. The work is today still underway and its completion depends mainly on the availability of necessary resources.

Two characteristic features of this project are worth underlining. It is directed only to the collection of historical documents and reports that are created in various sources for the fulfillment of the project. Thus, there is no aim to collect computers or any other hardware equipment, neither does the project include the establishment of a computer museum. In fact, no actual computer museum is, as such, being planned in Finland at the present time. However, the KLY Museum can partly be considered as a limited computer museum.

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NEW CBF CHAIRMAN OF BOARD



Walter F. Bauer

At the October 6 meeting of the CBF Board of Directors, a new slate of officers were elected. The new Chairman of the Board is Mr. Walter F. Bauer. Mr. Bauer founded Informatics General Corporation in 1962 and served as president for 20 years. His career in computing began as a research engineer in 1951 at the University of Michigan and involved working on the SEAC at the National Bureau of Standards. Before forming Informatics General, he held a number of management positions at Ramo-Wooldridge Corporation.

Mr. Bauer is a long-time friend and supporter of CBI, is one of the Founders of CBI, has been a member of the Board of Directors since 1979, and has served as Chairman of the CBF Development Committee for the past year. We are delighted to be able to welcome him to his new position.

Mr. James W. Birkenstock was re-elected President of the Board. Before retiring from IBM in 1972, Mr. Birkenstock served as a vice president of IBM and was an elected director of IBM World Trade Corporation.

Mr. Erwin Tomash, the founder of CBI and Chairman of the CBF Board for its first five years, will continue an active role in CBF activities as a member of the Executive Committee and as Chairman of the Development Committee. We are pleased to have the continuing involvement of Mr. Tomash.

Mr. Tomash also serves as Chairman of the Executive Committee of the Board of Dataproducts Corporation, a corporation he founded in 1962 and for which he served as President and Chairman of the Board for many years. Mr. Tomash's experience in the computer field began in 1946 when he joined Engineering Research Associates.

NEW FOUNDER

Walter Haefner is the Charles Babbage Foundation's newest Founding Member. Mr. Haefner is owner/manager of Careal Holding AG in Zurich, Switzerland. He is founder of one of the first computer services organizations in Switzerland which expanded throughout Europe and merged in 1969 with

Wyly Corporation in Dallas, Texas. Mr. Haefner served for 20 years as a member of the Board of Union Bank of Switzerland and Volkswagenwerk Aktiengesellschaft, Germany.

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The other characteristic and limiting feature of the TKL History Project lies therein. It has been centered mainly around computer uses and applications in firms and to commercial and administrative systems. This fact—together with its time-line back in 1958 or so—leaves only little space to the historically most interesting period of research and development in the 1950s and to the later history of actual computer science.

The final result of the TKL project is the creation of a book on the history of information processing in Finland.

MEMBERSHIP DRIVE MOVES INTO HIGH GEAR

The FRIENDS OF CBI, CBI's individual membership association, is in the process of asking our current members to renew for another year. In addition, the FRIENDS organization is collecting names of prospective new members.

If you are not a current member of our FRIENDS OF CBI organization, we hope you will join. Also please send us names of individuals who are not current members, and we will send them information.

We will keep you posted on the progress of the drive. Our goal is 200 new members by June 1, 1984. With the continued good support of all our members, we will be able to make this goal. Keep in mind that membership contributions to CBI are tax deductible.

Current FRIENDS OF CBI:

Babbage Sustaining Colleagues: ADAPSO, George R. Stibitz, J. R. Woodhull.

Babbage Colleagues: ACM, San Francisco Peninsula Chapter, Scott J. Hamilton, John H. Morrissey, Thomas J. Myers, Robert D. Schmidt, Charles A. Zraket.

Babbage Participating Associates: Martin D. Alexander, Bernice Arnold, Otto Bernath, Allan G. Bromley, Don A. Christensen, Charles A. Dickinson, Richard D. Dotts, Bruce Francis Elchison, Robert R. Everett, John W. Fendrich, Henry Eric Firdman, Bernard A. Caller, George Gourrich, Jerrier A. Haddad, Grace Hopper, James W. Hunt, Pertti Jotuni, Kenneth Kolence, John W. Lacey, Harold W. Lawson, Jr., Katharine Kyes Leab, Robert McClenon, David P. Moffett, Gary Mokotoff, Allen Newell, John E. Parker, Byron Phelps, Mina Rees, John Sears, Michael J. Samek, Science Museum, London, Andrew Scott, William Scholer, Thomas Steel, Ryota Suekane, Thomas Taggart, Garry J. Tee, Alfred Van Sinderen, Paul D. Weiser, Peter D. White, Irving Wieselmann, Mike R. Williams.

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